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Small farmers in the Romanian dairy market: Do they have a future?

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Abstract of the paper

This paper investigates various modes of vertical coordination, with the focus on small farm integration in the Romanian dairy chain. It draws on results from a World Bank study based on semi-structured interviews conducted in spring 2009. The findings indicate that large and prosperous dairy chains fortify their chain efficiency by partner selection and provision of sophisticated assistance to relatively larger farmers. On the contrary, many barriers exist for small and medium-sized dairy chains (processors and farmers). The main factors hampering their potential exploitation are restricted access to inputs markets (capital, know-how) as well as poor quality of input service (agricultural service delivery, veterinary issues). The majority of cow's milk in Romania is still delivered by small farmers who have difficulties fulfilling the requirements of the modern procurement systems. However, small farmers are a relatively heterogeneous group. Hence, different development paths can be expected. In addition to working with retail chains via strengthening horizontal integration, another opportunity for small dairy farmers is to occupy a market niche. Nevertheless, some small farmers will have to leave the dairy market.

Keywords: vertical coordination, small farms, Romania, dairy.

1 INTRODUCTION

The increasing demand for high-value dairy products as well as the activities of branded retailers and manufacturers are the main driving forces for higher product and processing standards and hence for restructuring of the supply chains in the European Union (EU). These developments are progressing especially quickly in the new member states (NMS) of the EU due to the intense activities of foreign investors in processing and retailing as well as the adoption of the minimum safety standards of the EU. Considerable overall effects on the domestic agricultural sector can especially be observed in NMS with dominance of small production structures. In Romania, a majority of raw milk deliveries still come from smallholders. At the same time, purchasers (retailers, processor) requiring a certain quality of raw materials apply their standards equally to all suppliers, regardless of their size. For structural reasons, small-scale farmers often face more difficulties fulfilling these requirements. Usually this results in a relatively slow compliance process. Consequently, small-scale farmers face the additional risk of losing market access or access to modern supply chains. It is possible that the development accompanying vertical coordination will drive small farmers - especially in sectors with increasing relevance of scale economies (e.g. dairy) - out of the chains.

The aim of this paper is to (i) analyze the vertical coordination between dairy farmers and the downstream businesses and (ii) identify opportunities and challenges, as well as possible development paths, for different types of dairy chains and farmers. The main part of the paper and our recommendations focus on small dairy chains/farmers because smallholders face major challenges regarding integration within modern supply chains.

The remainder of the paper is organized as follows. The next section elaborates on the position of small farmers in modern supply chains, and some relevant aspects of common agricultural policy (CAP). The third section presents the survey methodology and discusses the results. The fourth section concludes and provides recommendations.

2 BACKGROUND INFORMATION

2.1 Small Farms

The agricultural sector in the NMS is still a mixture of small-scale – even household – production and large-scale farming. Across the NMS, three different land and animal distribution patterns stand out: (i) large-scale-farming-dominated structures (e.g. the Czech Republic), in which large-scale farms cultivate most agricultural land and/or hold the majority of livestock units, (ii) mixed farming structures (e.g. Poland), and (iii) a farming structure dominated by small-scale-farming, which is especially the case in the Romanian dairy sector. Many of the farms in Romania are even labeled as subsistence-oriented farms.

However, there is no common definition distinguishing small subsistence-oriented farms from larger and commercially oriented farms in transition economies. Examples of indicators used to distinguish those farms are the percentage of sold production and the share of consumption needs covered by self-production or the cultivated acreage because the more commercialized farms are generally larger.¹ However, due to heterogeneity in production and consumption structures, it remains difficult to make a general distinction between the different farm types using these indicators. Moreover, most small farms do not keep books and their land is often unregistered, which makes it difficult to provide exact descriptive figures.

¹ For a more detailed discussion of the definition of small and semi-subsistence farms, see e.g. Fritzsch et al. (2008).

For the implementation of EU policy measures, the member countries introduced their own definitions. In Romania, semi-subsistence farms were defined as those with an economic size between 2 and 8 ESU (European size unit). This comprises approximately 359,000 holdings with an average area of 4.9 ha for the farms between 2 and 4 ESU, and an average area of 9.4 ha for farms between 4 and 8 ESU (NRDP Romania, 2008)². Subsistence farms were defined as holdings smaller than 2 ESU. About 45% of the agricultural area in Romania belongs to such subsistence farms (NRDP Romania, 2008)³.

There was an immediate and strong increase in individual farms during the first phase of transition in Romania, and on average, agricultural labor use also increased. Further, some of the collective land was returned to members and workers of collective farms. In the second phase, labor use in agriculture began to decline and the shift to individual farms slowed (Swinnen, 2005). Many households already possessed small plots and some animals for their own production before transition.

One reason for (semi-) subsistence farming in transition economies is the buffer function: people rely on (semi-) subsistence agriculture due to high uncertainties, unemployment, and inadequate social security and pension systems (Caski 2000). Fritzsche et al. (2008) show that semi-subsistence farm households do not form a homogenous group and characterize different types of semi-subsistence. Semi-subsistent farm households, which have a clear orientation toward agricultural production, are one type. In addition, there are many poor households with members of retirement age, households that began agricultural production after the transition, and others that mainly try to earn additional income from non-farming activities.

In general, small farms use simple technologies, have a low degree of mechanization, and usually have no assets. Furthermore, because of high risk and a lack of securities, they have little access to credit. However, farmers need affordable access to various production factors and input and output services to upgrade the production technology. As Hazell (2007) indicated, "If one element of the set is missing, then investments in all the others will be lost or significantly reduced". Moreover, the advanced age, traditional orientation, and lack of human capital of many smallholders results in limited capabilities to adapt to changing market conditions and to meet the increasing quality standards. Smallholders are rarely organized in associations, which also contributes to their low market power and political influence. Furthermore, land market and land rental market imperfections due to missing exit options, the dualistic farm structure, and land fragmentation (Ciaian/Swinnen 2006) impede the overall structural change.

We can conclude that smallholders generally seem to be disadvantaged in the areas of on-farm efficiency, obtaining welfare and grant scheme benefits, securing off-farm employment, training, and improving their skills.

2.2 Opportunities for small farms' developments

Even if vertical coordination favors larger agricultural producers (Swinnen, 2005) small farmers still prevail in transition countries. Thus, two questions arise regarding the future development of those farms: (1) Can they meet the requirements of vertical coordination and successfully integrate in the modern retail chains? and (2) What are the alternative solutions for small farmers?

The above considerations indicate that not all farmers have the opportunity to integrate into the output market. However, those who intend to remain in or access (new) markets have

² NRDP: Romanian National Rural Development Program.

³ In contrast, Bulgaria defined semi-subsistence farms being between 1 and 4 ESU.

principally two options: (i) forming or joining a horizontal cooperation or (ii) focusing on niches.

i) Horizontal cooperation: Small farmers face two main obstacles to integrating with modern supply chains. Small farmers are incapable of single-handedly producing the demanded quantities. Furthermore, they often lack the resources to produce the quality that is demanded, by retailers, for instance, because they often lack the required knowledge and necessary resources such as capital to buy high-quality seeds and agro chemicals. Theoretically, horizontal collaboration could help to overcome these problems. However, there are major drawbacks to horizontal collaborations (Cook, 1995).

Besides general problems in transition countries many studies show that based on the bad experiences with forced collectivization in the past, people from the former Soviet Union are significantly less willing to cooperate and have a lower level of trust compared to people from other countries.

Overall, we conclude that horizontal collaboration such as farmer organizations or associations, producer groups, or even joint limited liability companies might enable small farmers to overcome the barriers of vertical coordination. However, horizontal collaboration – regardless of the legal form – also bears great obstacles. In order to overcome them, the property rights must be clearly defined and governance structures that are capable of dealing with the such problems must be in place. In this context, particular emphasis should be placed on hiring external professional management so that the collaboration can compete in the marketplace with investor-owned firms.

ii) Niches. For some farmers and processors, an alternative to mass marketing (and joining modern supply chains) is providing more “individuality” and focusing on a market niche. In his seminal work, Porter (1980) showed that in addition to differentiation and cost leadership, there is a third strategy – focusing on niches providing a product or service not offered by mainstream providers.

A niche must include a clear cost leadership or differentiation strategy. In transition countries, the focus on cost leadership can lead to production of low-quality products that are sold on the black market. A differentiation strategy might be based on unique - usually local - product characteristics, such as traditional technologies (receipts, animal breeds) or unique cultural and environmental values of the region.

In small communities, providers of niche products bear the whole responsibility for brand quality and reputation. Loss of the reputation can lead to losing the whole market. Hence, partner selection, creation of trust-based relationships, and application of advanced quality management systems and rules are extremely important for a successful product differentiation in the niche market. In other words, a complex network must be created and managed.

We conclude that if small dairy chains (farmers /processors) choose a niche market, they must still work out a clear strategy to decide whether to be a cost leader or to work out a differentiation proposition.

2.3 The Role of the Common Agricultural Policy

Prior to EU accession, the SAPARD⁴ program in particular focused on the agri-food sector and rural infrastructure, and under this program both the agricultural administration and the beneficiaries (farmers, processors) gained first-hand experiences with measures similar to

⁴ SAPARD: Special Accession Program for Agriculture and Rural Development.

those provided under the CAP. The majority of these funds were allocated to particular stages of the marketing channel. For example, the support focuses on investing in agricultural holdings and food processing (i.e. to facilitate the adoption to minimum [mandatory] quality standards), setting up producer groups (horizontal integration), or improving vocational training for actors in the agri-business (knowledge transfer). However, few financial resources have been allocated to foster the relationships between producers and downstream businesses to create sustainable partnerships. Additionally, some studies indicate that mostly large units (farmers, processors) benefited from these measures due to their improved access to information and possibilities to pre-finance and/or co-finance the investment projects (Luca, 2007). On the contrary, for most of the small and medium-sized units, the reduced capacity to co-finance the investment was one of the main limiting factors that delayed the absorption of the SAPARD funds, especially in the first period of the program's implementation.

Since Romania's EU accession, agricultural policy implementation has been based on the CAP structure (two pillars). In each country, the organizational structure follows the administrative requirements of each of the two pillars.⁵ For the NMS, additional transitional measures have been introduced into the second pillar, such as supporting semi-subsistence agricultural holdings undergoing restructuring and setting-up producer groups. Romania and Bulgaria, the newest member states, can potentially benefit from these measures until 2013.

3 EMPIRICAL RESULTS

3.1 Methodology

The empirical findings are based on desk research and semi-structured interviews conducted with different stakeholders in the Romanian dairy supply chain and representatives of the Romanian agricultural administration in early 2009.

The representatives from the dairy sector were generally processors, producers, and experts in relevant organizations. Overall, 22 interviews were conducted. The goal was to identify the design of vertical coordination and the use and sources of farm assistance to provide access to production factors such as know-how/information, capital, and specific inputs. The survey was also intended to identify opportunities and challenges for smallholders.

The survey of agricultural administration representatives was designed to assess the quality of service provided to Romanian farmers within the CAP, the quality of back-office support to policy makers and planners, and the quality and client orientation of technical and socio-economic advisory and extension services. Semi-structured interviews with representatives of key organizations involved in CAP implementation were conducted.

3.2 Characteristics of the Romanian dairy market

The economic, legal, and political adjustment processes induced by globalization and EU integration have had a considerable effect on the dairy sector, a market with 21.5 million consumers and more than 1 million dairy producers. The average consumption of dairy products is still far behind the European average, but is constantly growing as consumer purchasing power increases. Additionally, roughly 55% of raw milk (about 3 million tons) is classified as individual consumption and losses. However, the majority of that quantity is thought to be sold on the black market. These figures indicate that there is a considerable demand for milk products, and hence an unexploited potential for high-value products.

In the retail sector, German (Metro, Rewe, Real, Kaufland), French (Carrefour, Auchan, Interrex/Intermarche Group), and Belgian (Cora) retailers, all of which require IFS standards, dominate the Romanian market. Meanwhile, multinationals are increasingly switching their

⁵ Council Regulation (EC) No 1290/2005, Regulation (EC) no. 1698/2005.

focus from Bucharest and other large cities (which have already reached a certain degree of saturation) to other regions, and they are also targeting smaller towns, depending on their profile. In the processing sector, top international dairy producers have already entered the domestic market via Greenfield investments (Danone, Tnuva) or acquisitions (Lactalis, Campina, Nordex Food) or both (Friesland, Hochland). Some dairies from eastern European countries (e.g. the Hungarian company Sole-Mizo) are also considering investing in the Romanian dairy market.

Consolidation and quality upgrading remain challenging issues. For example, in 2007, the MAPDR⁶ reported that there were 1.1 million dairy producers, but 93% still hold just one or two cows and can be regarded as subsistence or semi-subsistence farmers. Many dairies, especially small dairies in mountainous areas, still procure their milk from these farmers, who are usually older, have no successor, and provide milk whose quality is below the mandatory EU standards.

At the same time, it can be said that in areas such as South Romania (around Bucharest), the higher demand for quality products and hence the respective activities of retailers and leading companies have had a significant influence on consolidating the procurement base. For example, today Danone procures raw milk directly from (relatively large) farmers; it outsourced the procurement of raw milk via collection points prior to Romania's EU accession. Likewise, other foreign investors prefer to deal with a few larger suppliers to reduce transactions. Consequently, large dairies (usually FDI) use two measures to improve the efficiency of their supply chain: they select their partners and provide them with farm assistance, including advisory service and financial assistance for inputs and investments. In general, a good business plan is the decisive eligibility criteria for partnership. However, the best business plans usually provided by the largest dairy farmers, who can afford a professional, private consultancy service.

Thus, we conclude that increasing demand for new quality, the activities of foreign investors, the great need for restructuring are the major challenges facing the small and medium-sized dairy processors and farmers.

Despite those challenges, Romania, through negotiations with the EU, obtained brand recognition and protection for the name of origin (PDO) and geographical designation (PGI) of several types of products. In January 2009, 397 dairy products have received one of those certifications. The products usually are based on milk from cows, goats, and sheep. The majority of the products are white cheese, fresh cheese, and yellow cheese (Branza, Telemea, Cas, Cascaval, Burduf). Roughly 1% of the products are milk, yogurt, sour cream, and butter. There is also a small percentage of certified ice cream products (urda, inghetata). The number of certified products is increasing and about 100 additional products are in the certification process.

Many PDO-PGI producers operate on a local market. Generally, the registered products are produced by small processing units. The respective milk suppliers usually hold small numbers of cows (one to three) as well as sheep and goats. Just a few supply chains producing traditional products are large in size; Those providers have a good recognized brand and distribute their products to the entire domestic market using modern retail chains as the dominant distribution channel. The branded producers are usually located in mountainous and sub-Carpathian areas and have a long tradition in this field, beginning before 1990; Those chains enjoy a good reputation and high level of trust around the country.

⁶ MAPDR: Romanian Ministry of Agriculture and Rural Development and Forestry.

3.3 Vertical coordination and access to production factors

The surveys indicated that vertical coordination takes very heterogeneous forms in the Romanian dairy market. The most sophisticated instruments are provided by chains governed by an FDI as an initiator of contracting. Domestic companies still lag. Small dairy chains have restricted access to all production factors (capital, inputs, know-how), and hence show quite loose partnerships along the chain, or they tend toward vertical integration. The results indicate that the majority of domestic dairy chains still have a large need for any type of support. The main findings are summarized below.

1. The enormous demand for basic quality controls has not yet been met.

The interview results reveal that small chains (farmers, processors) have particularly restricted access to any kind of veterinary support and quality control, even those which are required by law. The production holdings should undergo periodic inspections to ensure that the nationally-regulated hygiene requirements for the production of raw milk are fulfilled. For example, a milk holding is given an appropriate health certificate after a positive inspection. To our knowledge, only a small share of farmers possess an appropriate certificate, which indicates considerable quality risks at the procurement stage. Farmers in Romania generally have three alternatives for the control of raw materials. The farmer can receive the respective service (i) free from the milk processor, (ii) from the Veterinary Sanitary County Department (DSV), or (iii) from independent labs. Our findings indicate that because quality controls in independent institutions are both efficient and equally beneficial, the establishment of similar independent labs should be encouraged.

2. The more sophisticated the dairy chain, the better its access to know-how.

The provision of a technical advisory service appears to be more effective in well-functioning supply chains. Whereas the top companies usually provide a well-structured extension service and vocational training, the large and medium-sized domestic dairies focus on “informal information exchange” and usually give “...oral advice to farmers who wish to expand their milk holdings and specialize stronger in milk production,” (respondents’ answers). It also holds that the larger the farm, the larger the processor’s willingness to advise the farmer. Respondents who represent small chains claimed that neither processors nor farms receive any kind of technical advice. It is interesting to note that the majority of small and medium-sized processors did not consider providing and do not wish to provide education to their suppliers. They indicated, however, that “...the system should solve the major problems first,” while providing more extension services and vocational training to the farmer. In some cases, they indicated that even education on basic farm economics and business culture is needed.

3. Access to capital is strongly skewed among dairy chains.

Contract initiators require sufficient funds and cash flow to finance the arranged instruments with suppliers to exploit the full potential of the value chain. Again, the prosperous dairies have better access to financial sources originating from both private and public providers.

We found that farmers and processors linked to foreign investors have the best access to capital. International foreign investors (Danone, Firesland) have access to their own companies' capital. Furthermore, we found that domestic processors who have links to international finance through contracts with international companies (such as Fiesland/Napolact and Covalact/Campina) can more easily access money from the parent company. Our findings suggest that only a portion of domestic companies and farms benefit from governmental support. The interviews indicated that small and medium-sized dairies have restricted access to governmental programs because not all domestic companies were or are eligible for these programs.

Some of the initiatives were again hampered by the lack of capital needed to cover the farmer's own participation in the investment. Commercial banks usually refused to provide credit to finance the farmer's participation. The banks did not accept the farmers' pledge or mortgage as a loan guarantee. The respondents also mentioned that banks did not consider livestock, equipment, or buildings owned by farmers as eligible criteria for credit. The only factor increasing the farmers' ability to secure credit was a large area of land. Hence, the majority of farmers are unattractive to banks. In some cases the dairies offered to provide respective pre-financing to the affected farmers. An interesting issue is that some of the farmers did not accept this offer, because they were afraid of "...becoming too dependent on both the processor and the bank".

4. Producers' associations seem to be less attractive partners for the processors.

Our survey suggests that those who initiate contracting in dairy chains prefer to invest in partnerships with trade companies, rather than farmers' associations. Some respondents indicated that "...due to the lack of solidarity among farmers' associations it is difficult to build a strong lobby or any kind of umbrella organization". Thus, the Romanian government should rethink how to more effectively support the establishment and functioning of producer organizations to make them attractive to partners in dairy supply chains and strengthen their 'articulation power'.

5. Small chains face additional challenges that are not just due to the heterogeneous support in the past.

The investigated small and very small dairy chains usually provide generic products at the cheapest possible prices. They usually distribute their products via their own outlets (60%), wholesalers and food services, and small shops, usually "...by its own car from gate to gate of the purchasers". Oral contracts dominate. Some of the chains are not registered, as was the case of one investigated farmer-processor involved in black market operations.

These products are not competitive and are marketed to small shops due to the low quality of raw materials. The respondents indicated that many of their suppliers are not certified producers, and they provide milk that is far below EU quality standards. Additionally, the quantity produced is low, because there is a lack of both specialized dairy cow breeds and "...prospective to grow for small farmers". Quality control is a challenging issue for these chains. Some of the dairies provide a 'trusted' man at the collecting point who supports the dairy while controlling for quality and preventing fraud. However, "...even if at the collecting point the quality of delivery is controlled (fat, protein) it does not restrain some small suppliers from ongoing cheating" e.g. by adding water to the milk. To reduce the hazards of providing low quality products, some small processors provide certain financial assistance to farmers (e.g. financial support to renovate farmers' residences), to improve the goodwill and loyalty of the suppliers.

5. Market niches are still in the low stages of development.

Our study indicates that small farmers have an option to occupy a niche (in the local/regional market). It is the opinion of a director of the department of certification of food products in the Romanian Ministry of Agriculture (MAPDR)⁷ that PDO-PGI production as a market niche is 'the' solution for small farmers and dairy chains. Thus, the ministry provides support to encourage the farmers and processors to upgrade their production and target the market niches (traditional products, PDO, PGI). Thus far, the majority of instruments have addressed improving know-how by placing information on the Internet, organizing seminars, or holding informal experience exchange meetings organized by the local representatives of the ministry

⁷ MAPDR: Romanian Ministry of Agriculture, Forestry and Rural Development.

(DGA/DADR). An important element is to guide the producers and processors through the particular certification steps and help them apply for respective financial support (certain projects, EU funds, national programs, etc.).

Despite these efforts, the interviews indicate that there are just a few successful chains targeting market niches so far. They are generally located in tourist areas, especially in the Bran-Moeciu zone, Bucovina area, Maramures area, South of Transilvania, and Apuseni Mountains. This indicates attractive tourist regions, with their natural resources, cultural values, and easy access for both native and foreign visitors, provide competitive advantages. The majority of chains providing traditional products are in the very early stage of development. The products are usually sold at local markets (e.g. bazaars, farmer markets) in both rural and urban areas and are very seldom sold in specialty shops or modern retail chains in the cities. The hypermarkets usually refuse to contract with the providers of traditional food products because of the small quantity, but the refusal is sometimes due to the low quality (safety) and trust issues associated with the production process.

Nevertheless, there is still a large demand for the products procured at the local markets. The Romanian consumers seem to value those products as a niche market because in their view the products address a need for a characteristic or service that is not being addressed by mainstream providers, such as taste, freshness, health (no additives), and direct contact with the suppliers at the local markets (trust, social aspects). On the other hand, the consumers' willingness to pay for the additional value (e.g. branded local products) is still very low. One result is that there is no relevant price differential between the traditional and conventional products (industrial processed goods) offered at local markets. Thus, it is likely that the market provides very weak incentives (added profits) for producers of local dairy products to change something, e.g. to adapt higher production and management standards and provide certified products at those markets.

At the same time, some respondents indicated that the general low level of know-how and experience, as well as the complexity of applying for aid, are still the major challenges to the development of marketable regional food production. Additionally, many small farmers are rather passive and do not want to be advised on how to change their traditional production techniques and habits. The priority for the majority of those farmers is still to sell their small production on the local market, usually to their relatives, neighbours, and friends. Many small farmers do not understand the real dimension and idea of the certification process at the EU level and are not aware of the details of the national regulations. However, a group of young, well-educated farmers successfully targeting market niches is emerging. Additionally, a respondent from the Romanian Foundation for Investments argues that the associations of small producers are more aware of opportunities related to targeting market niches, and thus, they search for ideas, consultancy, and opportunities to finance the projects.

3.4 Institutional development

The responses of the representatives of the Romanian dairy market argued at many stages that the institutional framework should still be improved to support the efficiency of market coordination mechanisms. In this portion of the study we consider how the business environment works.

3.4.1 General institutional framework

Our findings suggest that there are major impediments regarding the scale of the black market and contract enforcement.

1. The black market is not effectively addressed by governmental institutions.

The increasing requirements implemented in the course of EU accession have intensified dairy milk operations on the black market. Additionally, certain farmers and small processors avoid paying taxes, and hence avoid registering their business activities. Some respondents mentioned that the numerous middlemen especially contribute to the persistence of the black market. Many of the interviewees indicated that governmental institutions must provide instruments to reduce the scale of the black market. It is interesting to note that the call for such solutions was not very intensive and was very seldom, even though the share of raw milk sold on the Romanian black market is considerable (30% to 40% of milk production).

2) Contract enforcement is (still) difficult but essential.

Enforcement is crucial to make any of the contracts or supplier-assistance programs sustainable. Enforcement is especially problematic in environments in which public enforcement institutions are essentially absent. Evidence from the interviews suggests that all dairies – regardless of their size – face contract enforcement risks. For example, some farms diverted their pre-paid inputs for other uses. In other cases, despite receiving assistance instruments on a contractual basis, the suppliers sold all or part of their produce to other companies or traders.

Trust is also often lacking within the large chains, and even within the small chains, contract enforcement is still a challenge. The small dairies usually use short-term (monthly) contracts with small (one or two cows) and medium (11 or 20 cows) farmers. The biggest farm is seldom larger than 40 cows. Contracts are mainly trust-based, even if they are written. The respondents indicated that they do not pay much attention to formal (written) contracts. The low contract enforcement is also one reason why the small chains see vertical integration via the establishment of farms as one solution to overcoming delivery problems within one firm (internalization of market transactions). Thus, the government should be encouraged to create the proper institutional conditions for successful contracting. Alternatively, the initiators of contracting must find an innovative way to design self-enforcing contracts. This, however, requires extensive knowledge of the local partner.

3.4.2 *Quality of agricultural service delivery*

Additionally, the surveys regarding the quality of the delivery service provided the following main results:

1. CAP measures not targeted to small farmers require conditions that are difficult to fulfill for smallholders.

Two specific challenges are advising and delivering information to small farms, because these issues depend completely on personal advice, which demands a substantial amount of administrative resources. Small farmers do not have proper records, their land is often unregistered, and they are not accustomed to formal paperwork; thus, advising them on applications ties up much of the agencies' capacities at both the county and local levels. For instance, field checks have to be repeated for revising failures in land declaration, and the fieldworkers, not the farmers themselves, complete these application forms.

2. There are still many structural obstacles regarding the functioning of the public agencies that provide service to farmers.

For example, agencies at the county level are sometimes found in multiple locations. This makes the contact that farmers do have with the administration more cumbersome and increases farmers' transaction costs, e.g. for requesting information. In addition, this may also lead to incoherent information provided by the agencies, because the distance hampers direct and informal communication. Moreover, at the county level there exist four different agencies

responsible for CAP implementation. However, the delegation of tasks is sometimes unclear. This leads to coordination failures in policy implementation and higher administrative costs.

Additionally, agencies are challenged by human resource management, which results in less motivated and less qualified staff. The main obstacle of human resource management seems to be the wage system. First, due to low wages, qualified employees leave for the private sector after receiving training and insight into public administration. Low salaries also hamper the recruitment of qualified employees.

3. A lack of producers' associations and their feedback lead to low enforceability and little participation.

The strongest organizational body in the dairy market at the national level is APRIL,⁸ which associates the largest processors providing 70% of the procured raw milk in Romania. Small dairies are usually not associated with any organization. In general, farmers do not have clear means of claiming their interests and there is a lack of farmers' associations that represent small (dairy) farmers. Due to their experience with cooperatives during the socialist era, most farmers are skeptical of associations or producer groups. Farmer and expert interviews revealed once again that lacking trust is still a problem for increased cooperation among farmers. Nevertheless, there are some success stories, and some newly-founded farmers' associations such as the LAPAR⁹, which represent farmers' interests at the national level, but thus far they represent mainly large farms (Marquardt et. al., 2009). However, since 2004-2005, among small farmers there is a slightly increasing positive attitude regarding creating or joining different associations. This holds primarily for the sheep and goat milk producers, however, and is mostly a reaction to changes in the operational environment (e.g. governmental policy to reduce and stop the direct selling and selling of unprocessed milk). The respondents indicated that the small farmers increasingly see the need to cooperate, but because they are very skeptical about any success of cooperation at the beginning, they need a help to overcome the 'sticking point' prohibiting any cooperative action.

4. There is still a low level of understanding of the role of NGOs, even in the authority.

In Romania, NGOs in the milk market as well as in the entire agricultural market still play a minor role. The cooperation with NGOs or between/with associations grew stronger after the EU accession; however, the cooperation between NGOs/other associations and authorities remains at a very sketchy level and the dialogue between the parties was labeled as "awkward" by one respondent. This is because the authorities do not recognize the NGOs' role in the economy and try to force the decisions and hence determine the result of the 'negotiations'. All in all, associations and NGOs play a minor role in the farmers' business. Both activities and the farmers' courage to change something (e.g. to improve implementing CAP measures) are generally still missing.

4 CONCLUSIONS AND RECOMMENDATIONS

The results indicate that the dairy market, like the whole agri-food business in Romania, is characterized by a dualistic production and processing structure. In dynamically changing market conditions, the relatively small chains (farmers, processors) are usually disadvantaged regarding access to input and output markets. The development of (dairy) farmers requires sufficient access to different production factors, i.e., land, labor, technical skills and information, purchased inputs, and fixed and working capital. We found that growth for some large dairy producers, especially in relatively prosperous regions (Bucharest area) is

⁸ APRIL: Romanian Dairy Processors Association.

⁹ LAPAR: Romania Agricultural Procedures Associations League.

increasingly restricted by access to additional land. On the contrary, the majority of farmers and dairy chains are restricted by almost all other production factors. The majority are small or medium-sized units, each demanding a complete set of these factors of production and input and output services on reasonable terms. Some have gloomy prospects for meeting any requirements to be integrated in output markets. Additionally, especially large purchasers are streamlining the procurement system by reducing the number of transactions. Thus, even if small farmers are able to provide high-quality products, they are usually the first to be selected out of the chain.

When elaborating on the future of the small dairy farms in the Romanian dairy sector, two aspects must be considered: (1) How can agricultural policy measures adjust to the unique circumstances of the NMS and what are the unique service demands of the different groups of farms? and (2) What strategies are needed to help the small farmers meet the requirements of vertical coordination or exit from agriculture?

Our first conclusion is that two years after accession, the CAP has successfully supported many investments to upgrade the dairy chain in Romania. However, this support seems only to facilitate the development of relatively large and financially strong farms and firms, which usually have sufficient financial means to access modern agricultural supply chains. At the same time, the traditional financial instruments do not help establish mechanisms to connect small producers and producer organizations with food processors, marketers, and traders. Thus, the gap between the prospering chains and small or medium-sized dairy chains seems to have increased over the last two years. This result makes the effectiveness of the traditional CAP instruments, which seem to be unsuitable for the dualistically-structured NMS, questionable.

Since EU accession, the NMS have additionally benefited from transitional measures such as aids for semi-subsistence farmers and support for producers' groups. However, the effectiveness of these measures in the Romanian case seems to be low or should be questioned. We argue that these measures rather encourage some nonviable small farms to stay in agriculture (in the dairy market). Because the majority of these farmers do not comply with mandatory EU standards, their existence contributes to the persistence of the black market, which hinders the allocation of resources (i.e., land) to more effective units, and hence the competitiveness of the Romanian dairy supply chain.

The need for governments to support commercially-oriented small farms (chains) to exploit growth opportunities is less obvious. In functioning markets, one expects that the government should stand back and let the 'invisible hand of the market' coordinate the behavior of economic agents. In theory, this process should ensure the optimal allocation of production factors to the most efficient commodities, regions, organizational forms, and farm sizes. Hazell et al. (2007) argue that in this case, "...policy interventions would focus on providing an enabling economic environment for market-led development, typically by providing stable and undistorted economic incentives and essential public goods and services". However, our results indicate that both Romanian institutions and markets show many failures, which can lead to discriminatory and inefficient outcomes.

Generally, the importance of improving the delivery of service in Romania to reduce market distortions is obvious. However, even with effective institutions, transaction costs cannot be reduced to zero. Looking at the various marketing channels in the Romanian dairy chain, a self-enforcing dualism exists: The large supply chains (and commercially-oriented farmers) that use direct marketing channels usually face lower transaction costs (higher quality, lower transportation costs per unit, and quality risks). In contrast, small farmers whose production does not considerably exceed the subsistence level incur relatively high (per unit) transaction costs when selling their produce at local markets or via collecting points.

Our study confirms that the small dairy producers usually use simple technologies, have a low degree of mechanization, and usually possess few assets. However, there is not a typical smallholder; instead small farmers are a very heterogeneous group, for example the willingness to change their thinking and their business (e.g. willingness to and cooperate, modernize). Hence, there is not a unique approach to help them.

Facilitate horizontal collaboration in e.g. producer groups or cooperatives. Today retailers demand constant delivery of products that meet international quality standards. Because small producers cannot provide the demanded quantity by themselves, they must form groups to commonly provide the quantity. Thus, horizontal collaboration of small farmers can be understood as the key to participation in retail chains and even in the policy making process. However, the willingness to cooperate is still weak in Romania. Smallholders, especially, are rarely organized in associations. Therefore, we first recommend that the government work out ways to enhance the general cooperativeness of the farmers e.g. by providing a legal framework or promoting cooperatives or producer organizations. Besides financial support, such horizontal collaborations also need to have clear hierarchies and professional management to be able to provide the demanded quality. In this context, the managerial assistance is needed to build up the necessary organizational structures.

Help to seize niches e.g. local brands or protection for the name of origin (PDO). The findings indicate that besides linking small farmers to retail chains, another opportunity for small farmers is to occupy a niche. However, some respondents indicated that the low level of know-how and experience, as well as the complexity of applying for aid, are the major challenges to the development of marketable regional food production. For the producers it is important to change the thinking from production orientation to market orientation to successfully target the market niches. Moreover, additional capital is needed to first invest in the local brand and later to collectively promote the local products. Thus, in this case, cooperation (NGOs, associations) can also play an active role not only in promoting the products but also in co-financing of EU projects, assisting with product certification, etc. However, effective policy measures (extension, financial support) should target active farmers or newcomers (business starters) with a high level of entrepreneurial skills and good business concepts. In other words, investing in the education of farmers who are averse to any change is a waste of money.

Not all of the small farmers will survive; provide social security. Our studies also show that some groups of small farmers neither have the chance to occupy a niche nor will ever be vertically integrated into modern supply chains. Hence, they rather represent a social problem being in need of functioning social security nets, exit or retirement options from farming and alternative non-farm job opportunities. In this context the EU should consider an expanded range of eligible measures under Pillar II geared toward these needs of smallholders who do not qualify for farm payments.

5 REFERENCES

- Caski (2000). "Back to Basics: Household Production in Russia", *Journal of Agricultural Economics* 51:155-173.
- Ciaian, P. and Swinnen, J. F. M. (2006), "Land Market Imperfections and Agricultural Policy Impact in the New EU Member States: A Partial Equilibrium Analysis", *American Journal of Agricultural Economics*, 88(4), pp. 799-815.
- Cook, M.L. (1995). The Future of U.S. Agricultural Cooperatives: A Neo-Institutional Approach. *American Journal of Agricultural Economics*, 77: 1153-1159.
- Fritsch, J., Wegener, S., and G. Buchenrieder (2008), Sustainability of Semi-subsistence Farming Systems in New Member States and Acceding Countries (S-FARM). Final report (Project-No. 150652-2006 F1SC-DE). Sevilla, Spain: JRC-IPTS (mimeo).
- Hazell, P, Poulton, C., Wiggins, S., Dorward A. (2007): The Future of Small Farms for Poverty Reduction and Growth, International Food Policy Research Institute (IFPRI), Discussion Paper 42.
- Luca, L., (2007), Romania: Large Semi-subsistence Farm Sector, Result of Wrong Strategic Approach? in: Csaki, C., and Forgacs, C. (eds.) *Agricultural economics and transition: What was expected, what we observed, the lessons learned. Studies on the Agricultural and Food Sector in Central and Eastern Europe*, Vol. 44: 253-264.
- Marquardt, D., Dirimanova, V., and Csongor, A. (2009), "Review of Public Service Delivery in Agriculture for Bulgaria and Romania. Results of surveys among farmers about the Public Service Delivery in Agriculture in Romania and Bulgaria". Mimeo, Leibniz Institute of Agricultural Development in Central and Eastern Europe (IAMO), Halle.
- NRDP Romania (2008), "National Rural Development Programme 2007-2013", Government of Romania, Ministry of Agriculture and Rural Development, consolidated version of 21.07.2008.
- Swinnen, J. 2005. When the Market Comes to You – Or Not. The Dynamics of Vertical Coordination in Agri-Food Chains in Transition. Final report on "Dynamics of Vertical Coordination in ECA Agri-Food Chains: Implications for Policy and Bank Operations". The World Bank.