

Micro and small farms – element from the model for revitalizing of rural areas

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Abstract

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The structural defining elements of the socio-economic model for the sustainability of rural development are closely related to the revitalization of the activities, processes and results of the functioning of economic units/actors in rural areas. We have used a double matrix socio-economic model that has the aim to determine what role do the micro and small farms have in socio-economic environment in Bulgaria, as well as how implementation of EU politics and national legislation affect them. Bulgarian agriculture has experienced major structural changes as a result of the restoration of ownership of agricultural land and in recent years, CAP policy the green deal, combined with COVID19 and the war in Ukraine has influenced heavily the processes happening to small and micro farms in Bulgaria and their role/place in agriculture.

Keywords: small farms, gardens, rural revitalization, short supply chains

Introduction

The structural defining elements of the socio-economic model for the sustainability of rural development are closely related to the revitalization of the activities, processes and results of the functioning of economic units/actors in rural areas. Given the communal agricultural policy that dominates production processes in agriculture as a sector, dichotomies have emerged in a number of countries with a unfavorable impact on the socio-economic pattern of rural communities. This, in turn, provoked the scientific community to propose analytical developments on the basis of which the legislature of the European community took steps to change the policy towards rural communities. The main focus in this regard is the economic units operating on the territory of rural areas (European Parliament, 2022a). In the literary analyses, there are scientific studies that show a harmonious stability between the natural conditions of a territorial feature, the

economic activity of the subjects and the state of rural areas.

Bulgarian agriculture has experienced major structural changes as a result of the restoration of ownership of agricultural land. The effect of restitution can easily be called the “Via ruptura”¹ or the way of division (breaking into parts). After the division of the land that had already been consolidated in the period 1944-1989, numerous owners of small plots of agricultural land appear. This is due to the appearance of a large number of heirs when returning the land in real boundaries. A new economic environment is created, and the old system of economic relations changes in order to respond to objective social and economic processes. The open capital market, for its part, greatly affected the classical chain of land-labor-capital, and with its neoclassical spirit shifted the gaze from land to capital, but only in appearance. In the primary sector and in land use and land tenure poli-

¹ Via ruptura” from Latin path of division, fragmentation

cies, significant processes of change are taking place, which mark and will mark Bulgarian agriculture and the secondary sector for decades to come. All of the above makes it difficult to accurately determine how many of the family farms are part of the number of operating small farms (less than 2 ha arable land) and determine what role in the socio-economic environment they have, including with the home gardens. Having taken in consideration the status of such farms and their evolution and role in other countries, our aim is to conduct a study for the Bulgarian environment.

In recent years it has been accepted that the role of small farms is decisive in the processes of the so-called “rural restructuring”. On one hand, the market approach follows global processes (globalization of markets and trade, climate changes, food safety requirements), and on the other hand, territorial differences (of resources, historical development, population characteristics) cannot be solved only with purely market actions. Home gardens have been identified as one of the possible ways of producing food and offer great solutions to some of the issues surrounding poverty alleviation and improving food security in rural areas (Mdiya & Mdoda, 2021).

Historically, small farms are the first and most sustainable representatives of family and small businesses in the world. In order to understand today’s situation, we are going to do an overview of socialist and post-socialist development in Bulgarian agriculture. With the law on the restitution of agricultural lands of 1991 in Bulgaria, decollectivization took place and the land was returned in the hands of their previous owners or their heirs. This created an array of problems, because of the change of the socio-economic background of the ones inheriting the land and also because of lack of tradition in knowledge of agricultural practices. During the period from 1991 to 2007, drastic changes took place in Bulgaria in the appearance of agriculture, the village as such and the value system of Bulgarians. Depopulation of the villages and permanent migration of the main workforce (young people) to the city begins is one of these changes. The social order in the preceding period and the planned economy led to the detachment of the young people from the village and made the process of returning the land difficult. After restitution in real borders, agricultural land becomes the responsibility of a generation that has a different social profile and whose main livelihood is no longer the land. Like other capitalist countries, the youth are directed to the service sector and thus the land remains uncultivated. Social premises during this period acted as a catalyst for land relations. As a result of these processes, the appearance of the Bulgarian reality has/is undergoing significant changes. Part of them is the depopulation of villages, the reduction of those employed in

agriculture, which inevitably reflects in the GDP created by the sector and the added value in the national economy. Going back in time, we find that small farms are important not only for people in rural areas, but play a significant role for the whole society. The hypothesis we are basing this research on, is that not unlike the gardens and micro and small farms in the world, Bulgarian gardens and small farms contribute to economic and social sustainability and mitigation of risk from crisis and food insecurity. Our main aim is to understand how gardens and small farm sustain the survival of people in rural areas, help them economically and contribute socially. They produce a variety of products, ensure the food security of the population, help preserve biodiversity, etc. It is the personal economy and the relationship of generations of Bulgarians with agriculture that is related to solving crisis periods in the life of the population.

The new CAP policy 2023+ will seek to ensure a sustainable future for European farmers, provide more targeted support to smaller farms, and allow greater flexibility for EU countries to adapt measures to local conditions. Of high importance for revitalizing the rural areas in Bulgaria will be three key points part of the new CAP policy: 1. Redistribution of income support: EU countries will have to dedicate at least 10% of their direct payments to the redistributive income support tool, to better address the income needs of smaller and medium-sized farms; 2. Rural development: at least 35% of funds will be allocated to measures to support climate, biodiversity, environment and animal welfare; 3. Market orientation: the new CAP maintains the overall market orientation from the previous reforms, encouraging EU farms to align supply with demand in Europe and beyond.

Methodology and Methods

In the beginning we start with detailed theoretical overview of the problem. The idea is to review and understand the process that is the focus of this article. The study uses both qualitative and quantitative approaches. Graphic method of representation will be utilized for better understanding the current situation of the problem and its socio-economic aspect. A double matrix of social and economic factors will be used to explain every process and help us research how the two reflect on each other. A critical review of literature sources was performed; Desk Research, logical, expert method, etc. were used to reveal the potential of gardens, micro and small farms.

Analog for this model is another’s author model: “Model of Social Interrelationship” by Yovchveska (2022). Her conceptual model uses the principle of the structural organization of multilevel systems. In the context of the macro-social

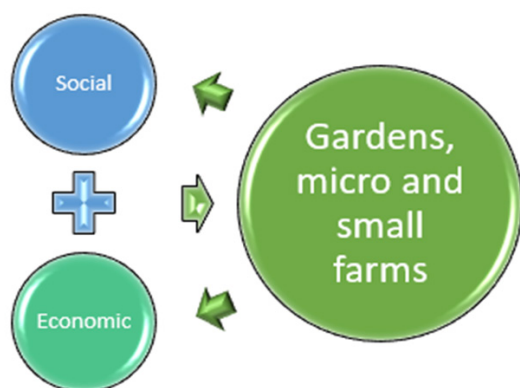


Fig. 1. Social-economic interaction

Source: created by the authors

transformation in Bulgarian agriculture, the social interaction model focuses on the basic elements on which the revitalization of rural areas depends.

For the purpose of this study, we accept the definition of “Home gardens” as homestead farm following Hailu (2008). Brownrigg (1985) defines the term ‘home garden’ as ‘a supplementary food production system by and for members of group of people with rights to the land, who eat meals together regularly’ and Kumar & Nair (2004) describe home garden as a traditional form of privately managed land-use system where a clearly bounded piece of land immediately surrounding the dwelling house is cultivated with diverse mixture of plants. Home gardens are considered one of the oldest subsistence farming systems practiced by rural communities in many parts of the world, consisting of multilayer systems of trees, shrubs, and herbs around homesteads (Idohoua et al., 2014; Kabir & Webb, 2009; Kumar & Nair, 2004; Salako et al., 2014; Barbhuiya et al., 2016). Home gardens are generally multifunctional and play key roles in providing goods and ecosystem services and numerous benefits for sustaining the livelihood of local inhabitants as they maintain plant genetic resources and are potential hotspots of agricultural biodiversity (Agelet et al., 2000; Clarke et al., 2014; Galluzzi et al., 2010; Reyes–García et al., 2012). Small-scale domestic agriculture, aimed at self-sufficiency, continues to be a mass practice among broad segments of the Bulgarian population and provides a sustainable way of food security and additional income for a significant segment of the population in rural areas and in times of crisis even for their families in the cities (Yovchevska, 2014). A cohesive definition of family farms doesn’t exist and in Bulgarian case many of the family farms can be included in the small farm bracket of 2 ha, because of their average size of 5-6 ha. In Bulgaria, the administration of the CAP is applied canonically, too of-

ten the decisions of the administrative body dominate, which leads to the marginalization of the attitude of the production subject to the ongoing business processes in the agricultural holdings of this type of producers (gardens, micro and small). In Bulgaria’s case, family farms are still small farms and they should have a survey system of their own the same way it is done in Poland. The Polish governmental institutions collect two types of data, one for EU and one that is traditional of Poland and then use the traditionally collected data to further policy agenda and research. Our opinion as researchers is that small and micro farms should be a focus of special monitoring as they are the subject of which the revitalization of rural areas is dependent and are not covered by the FADN since most of them are not market oriented and has an income of less than the stated for data gathering.

Preliminary field research so far supports the team’s observations that **small households** can be classified into five groups:

- **In the case of the first group, the home is in the village.** There is a strong attachment to agriculture and the land, especially on hereditary family farms. Strongly preserved traditions, transfer of experience, desire, charge to grow from a personal farm to a small or medium-sized farm. In village culture is unacceptable that the land they own is not cultivated and miss the opportunity to produce something that can help their children and families live better. Knowledge transfer and strong community ties as well as barter between families is normal for this environment. A really small portion of food is stored and everything is produced either organically or using sustainable ways of production that are in line of green policies and land preservation for next generations. The challenges these small farms are facing, are often associated with finding the balance between the valuable knowledge and vast experience of previous generations and the attitudes of new generations to use new knowledge and new technologies. This first group of small households plays pivotal role for preserving the biodiversity in rural areas, incl. the genetic diversity of crops and animals, and to produce healthier and environmentally friendly food. Because of that, keeping them resilient and encouraging them to grow sustainably is important not only for the food security but also for revitalizing Bulgarian rural areas.
- **Second group** - farms of people employed in the tourist industry, which offer tourist accommodation in guest houses or other specific tourist products in rural areas such as visiting farm demonstration centers, testing various food and non-food products, and are entirely business-oriented. These entrepreneurs settle

in their ancestral country houses or often they prefer to buy their own property in the countryside, which meets their very specific requirements. In such farms, the yard is divided. One part is for economic activity, i.e. garden farm for the production of fruits, vegetables and animal products. This farm gives its guests the opportunity to approach the agricultural production “live”, through demonstrations, observations and even through direct participation of the guests in the work processes. Keeping the traditions help for marketing practices in the economic aspect and preserve the social environment. Many of these small farms use the production for creating traditional cuisines and indigenous plants alive or to diversify their economic activities into non-farm activities like production of cosmetic products, food supplements, etc. Often such farms attract not only new visitors to the rural areas but also new investments in new related business activities that all together could play crucial role for the successful marketing of a particular rural tourism destination and for the resilience of the rural areas as whole. In this view, the role of these farms to rise and diversify the tourist offers in rural areas and the socio-economic value they could bring as guardians of traditions in agriculture and at the same time as drivers of innovation, become closely linked themes. Through targeted policy measures and clustering approach, the interaction between the first and the second group small farm households can contribute to the successful development of agritourism as well as other emerging forms of sustainable tourism in rural areas, that could significantly contribute to the sustainable development and economic growth of rural areas.

- **The third group is mainly driven by the change of residence** – the search for a quieter life, away from city noise, overcrowding and polluted air. The lifestyle of rural areas has been considered to be moving in a slower pace (Canoves et al., 2004) and thus often this group is represented by people who support the concept of slow living and slow food, both representing the International Slow Movement. The Slow Food movement is a global initiation concerning social and environmental effects of a largely industrialized food system (Petrini, 2003). The desire to care for small-scale agriculture for one’s own needs, the purpose of which in many cases is not only the production of food resources, but also the healthy diet which requires the production of food that is “clean”, grown in a natural way without the use of artificial fertilizers. For this group, the right model is to develop family and eco-

logical farming. They use their production only for their own consumption and sell a very small part of it on local markets or sell it on the Internet through specialized sites. The lockdowns during the COVID-19 pandemic significantly contribute to the growing number of this type of small family households. Often representatives of this type of small rural households are well educated young people, whose family members are working freelance, home office or their workplace isn’t far way from the rural area they moved to live in. Among the representatives of this group, we can observe people with an exceptional entrepreneurial spirit, people who already are or can become leaders of positive changes in Bulgarian rural areas. There are also people that have lived abroad and have brought their international knowledge and experience, which if used properly could be beneficial for the revitalization of rural areas.

- **The fourth group is based on social exclusion and economic coercion:** loss of job, family support; main income in the household is mainly from old-age pensions and pensions due to disability and illness, social benefits, etc. In this case on-farm activities are directly associated with food security and new off-farm activities are very rare and regarded as alternative income sources. This group of people faces enormous challenges and difficulties reintegrating into the socio-economic life, which require an integrated approach and practical social inclusion measures to clearly address their needs and to ensure that “no one will be left behind” as stated in the 2030 Agenda for Sustainable Development.
- **The fifth group is the people that live in villages near big cities.** This group is composed by fairly young demographic (20 – 45 years old) that still wants to be part of the city life but also values peace and quiet and have gardens and use them not only for food supplementation but for mental health purposes. The growing trend to move from big cities to villages near the big cities is more often associated with a better quality of life. Similar to the representatives of the third group, this group is formed by well-educated young people who seek better quality of life and better work-life balance. If efforts are focused on keeping this group of people in rural areas for a longer period of time, they could influence other young people to experience the rural life and to try traditional gardening practices, that could attract new capital and social investments in rural areas and could lead to rapid economic growth in rural areas near big cities.

Results and Discussion

Small farms have a special place in the economic and social ecosystem of Bulgarian agriculture. Smallholder plasticity makes them highly flexible and helps them be pillar of support in times of crisis. Most of gardens and small farms can't afford to be polluters and have mostly closed the cycles of productions so food and resources are not wasted. Small farms remain a cornerstone of the Union agriculture as they play a vital role in supporting rural employment and contribute to territorial development. In order to promote a more balanced distribution of support and to reduce administrative burden for beneficiaries of small amounts, Member States should have the option to design a specific intervention for small farmers replacing the other direct payments interventions. In order to ensure better targeting of that support, a differentiation of the payment depending on the farm size and the location of the farm should be possible. To enable small farmers to choose the system that best suits their needs, participation of farmers in the intervention should be optional.

In view of the acknowledged need to promote a more balanced distribution of support to small and medium-sized holdings in a visible and measurable way, Member States should implement complementary redistributive income support for sustainability and dedicate at least 10% of the direct payments envelope to such support. To allow for a better targeting of this complementary support and in view of the differences in farm structures across the Union, Member States should have the possibility to provide different amounts of complementary support for different ranges of hectares as well as to differentiate the support by regional level or by the same groups of territories as set in their CAP Strategic Plans for the basic income support for sustainability ((EU) 2021/2115). Two periods with economic crisis have proven that garden economics has a special place in Bulgarian socio-economic system and are a way of surviving in economic climates where risk of poverty is high. It's proven, that it is the personal economy and the relationship of generations of Bulgarians with agriculture that is related to solving crisis periods in the life of the population. Small-scale food producers are the center of next year's global food system summit convened by the UN Secretary-General António Guterres who also thinks that sustainability of food production is highly dependent on small farms. This means putting agriculture – and the needs of small-scale farmers – high on the global political agenda and high on the list of recipients of global investments, the implementation of the new CAP policy is another marker that the role of small farms in EU and Bulgarian economy alike is significant.

Small-scale farmers and their organizations need to be

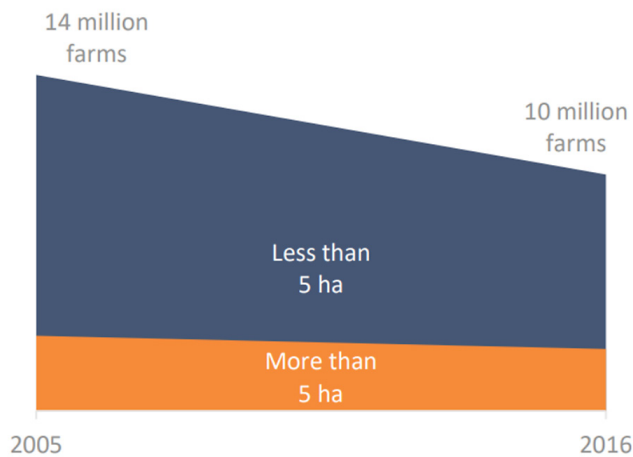
linked to relevant policy and planning processes – especially those around food systems in both rural and urban areas. This new CAP policy can be instrumental for maintaining the balance in Bulgarian agriculture.

Many of the research on small farms and gardens conclude that rural sustainability and livelihood strongly depend on small farms and mainly gardens, micro and small once. The sustainable development goals (SDGs) are orientated towards greener, more responsible and better agriculture. The best at maintaining the environmental, social and economic balance are the small farms with all their emerging forms and typical characteristics, as well as their unexplored potential for revitalizing rural areas. The role of the gardens and micro and small farms for food security and social sustainability is high. Natural resources use for food production helps alleviating poverty in rural areas (Reyes-Garcia et al., 2012; Salako et al., 2014), and can help in reducing hunger and malnutrition in the impending world food crisis, climate change. Gardens and micro/small farms create a large number of socio-economic benefits (Cruz-Garcia & Struik, 2015; Galhena et al., 2013). Benefits from having micro, small farm or a garden include that whatever you choose to have a garden, poultry farming, pastoral farming, or bee-keeping facility, they all affect each other in positive ways and could contribute to put the circular economy model in practice. Owning pigs is great for enhancing gardening soil, and growing your own produce allows you to waste less food by giving the scraps to your backyard farm animals. Bees can pollinate your flower bed as well as produce a natural sweetener for the food you grow. Raising poultry in your backyard is also beneficial for gardens because they like to eat weeds and insects that may be damaging your crops. Many of the small farms have mixed agriculture production (House, 2016), that could meet their basic nutritional needs, taking into consideration the following assumptions:

- Most cows produce 8 gallons of milk per day.
- One cow gives you 490 lbs. of trimmed beef.
- One pig gives you over 100 lbs. of meat cuts.
- The average goat produces 1 gallon of milk per day.
- A hen can lay 1 egg almost every day.

The successful development of agriculture (namely the crop productive agrosystems) is determined by the interaction between the production(soil fertility) of the agricultural land and the respective regional agroecological structures of the crop growing, through which the land, as the main factor of production, is used under market conditions (Yovchevska, 2021). These conditions are especially fulfilled by gardens, micro and small farms. Despite their vital role for the food security and the ecosystem in Europe's rural areas as whole, over the years, the structural change has led to a sharp decline

in the number of farms, a consolidation of farmland, and an increase in average farm size. The EU's smallest farms have experienced the strongest decline compared to other farm sizes (Graphic 1). This consolidation process, which sees the growth of the largest farms and their farmland, is occurring nearly all over the EU, although differences do exist among countries with different starting points and agricultural settings. Bulgaria is strongly affected by the process and CAP policy has had a big role in it.



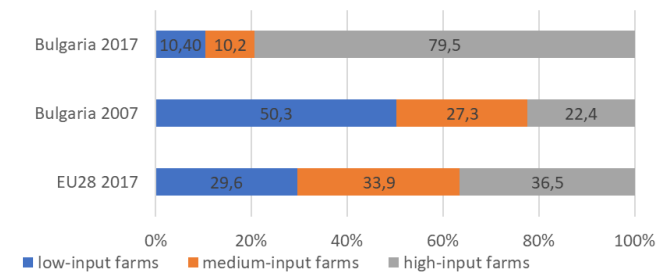
Graphic 1. Contraction of small farms in EU

Source: Eurostat

Intensification of farms in Bulgaria CAP first pillar and its direct payments have been an incentive for Bulgarian agriculture to produce less and less types of crops, which lowers the crop diversification and can lead to bad land governance and overuse of land resources. The intensification of farming is one of the main culprits for lower socio-economic indicators in rural areas. Big farms have higher use of machine and are mainly producing cereals in Bulgaria. The investments made through the support of the second pillar of the CAP, including those related to physical investments for modernization of Bulgarian agriculture, processing of farm products, adding value to primary agricultural production or diversification of the economic activities in rural areas, do not lead to the expected socio-economic revitalization of rural areas and employment growth in those areas. Neither the first, nor the second pillar of the CAP in Bulgaria managed to reverse the negative trends of depopulation in rural areas, rural poverty and loss of indigenous plant population. To counter this process 2023+ CAP period introduced small farm support.

The idea of sustainable agriculture and secure food chain can't be realized without the existence of small farms. This is

shown in Graphic 2 where Bulgarian's distribution of small and medium farms is far worse than that in EU28 countries, where traditional farms and family farms are still a priority, and have more sustainable approach towards agriculture. Each farm is classified according to the level of input use per hectare, which is calculated on the basis of the spending (in constant euros) on purchased inputs per hectare of UAA. The inputs considered here are purchased fertilisers and soil improvers, pesticides (plant protection products), other means for protection such as traps and baits, bird scarers, anti-hail shells, frost protection and purchased feed. Traditionally small farms have lower-input and are more sustainable than medium and high input-farms. The decision of EU to support small and micro farms is another indicator for that. The process of intensification of farms have put the integrity of the food supply chain in question. Many of the problems that exist have been exacerbated by COVID19 and the energy crisis created by the war in Ukraine. In Bulgaria in particular an unfunctional legislation is also a contributing factor of what is happening.



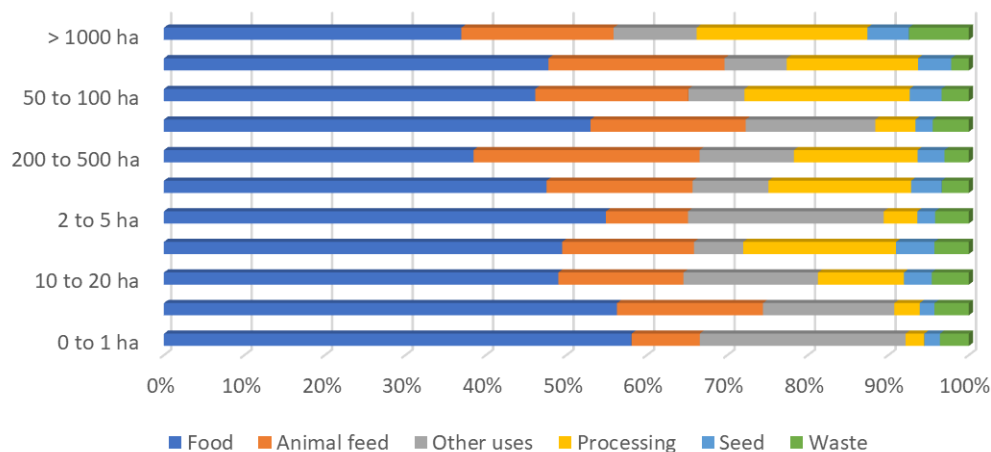
Graphic 2. Intensification of farming by % of utilized agricultural area (2007-2017)

Source: EU Bioeconomy Monitoring System dashboard

When we talk about food security and sustainable production of food the chart shows the distribution of the allocation of crops to their end use by farm size. In other words, how much of crops grown are allocated towards human food, animal feed, and industrial uses such as biofuels. This data is sourced from Ricciardi et al. (2018), which mapped the distribution of global food production by farm size. The smallest farms (those less than 2 ha) tend to allocate the greatest share – between 55% to 59% – of their crop production to direct human food and several reports (ETC 2009; Maass Wolfenson, 2013; FAO, 2014) estimate that small farms produce 70–80% of the world's food. In a new study is found that these farms account for an even greater share of the world's food supply – one-third (32%) of it. This is because smaller farms tend to allocate a larger share of their crops towards food, rather than animal feed or biofuels (Ricciardi

Graphic 3. Global allocation of crops to end uses by farm size

Source: Ricciardi et al. (2018).
How much of the world's food do smallholders produce?
Global Food Security.
OurWorldInData.org/farm-size



et al., 2018). This is still a huge percent of the food produced and these statistics should be interpreted taking into account many factors (Graphic 3).

While it is true that gardens, small and micro farms need very labor-intensive work; smaller farms get higher land productivity, but lower labor productivity, they have been a sustainable way of production of food in times of crisis and have better environmental and social impact on society than big farms. In their study Ricciardi et al. (2018) discuss that the in FAO categorization of small farms, that allocate 60% of food production to small farms, they include family farms that can't always be categorized as small using how much land is allocated by farm. In Bulgaria's case, family farms are still small farms. The smallest family farms, with an average size of between 1 and 6.5 ha were in Malta, Cyprus, Romania, Greece and Bulgaria (EU: Average Size of Family Farms, 2016). As farm size increases, more production tends to be allocated towards animal feed and processing into other products. Farms in the range of 200 to 500 ha allocated the greatest share towards animal feed (16% to 29%). The largest farms (greater than 1000 ha) allocated 12% to 32% to processing. The role of small farms can't be measured only by food production. Small farms play a key role in rural economies. They help to keep remote rural areas alive by keeping up services and social infrastructure, they help to preserve the identity of regional products, and they offer employment in regions with fewer job opportunities. They are typically associated with protecting landscape features and biodiversity and the notion of providing public goods. They help to maintain lively rural and remote areas, help preserve the identity of regional production, and offer employment in regions with fewer job opportunities. Yet, the pace of disappearance of small farms has been quite rapid in recent decades. Unfavorable demographic change in rural areas and the

effects of market liberalization and globalization which are leading to ever increasing competition are part of the explanation, and in Bulgaria's case, also CAP policy that stimulate big farms and cereal production combined with bad national law practices. In addition, it is small farms that suffer most from the challenges the agricultural sector is facing, such as market pressures and weather extremes, and they have to invest greater effort to engage in innovation and new technology (EU Parliament, 2022b).

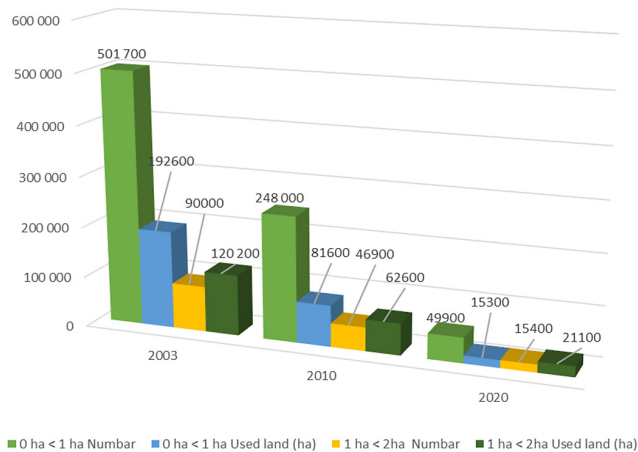
With the relatively modest national support for agricultural production and expanded opportunities of foreign trade, Bulgarian agriculture is increasingly acquiring a monocultural appearance. Large farms industrialize production processes, cultivating crops with fused surface and modernizing technological solutions with the help of support from European funds. The increased modernization, the higher competitiveness, the achieved volumes of production with high quality indicators are positive effects for the improvement of the economic situation in the Bulgarian agriculture and increase of the value created by the sector in the national economy. At the same time, the number of small farms is declining, a process that can be interpreted as the normalization of the economic environment after the numerous problems in the transformation of the social model three decades ago and the restitution of the land to the former owners "in real boundaries". Given the specifics of Bulgarian agriculture and the monopolistic quality of natural resources for growing crops, this phenomenon of dichotomy in the sector is the reason for a number of issues burdened with socio-economic content. This process also hinders crop diversification (Yovchveska, 2021).

As researchers is our opinion that the integrated territorial approach should have a central role in this planning process as integration is the basis of sustainable food and agriculture.

Research shows that the implementation of the CLLD strategies of LAGs in Bulgaria as integrated territorial approach have led to more innovative practices in farm households and in rural areas as whole. Among other benefits, the implementation of the integrated territorial approach would create opportunities for small-scale farmers to sell their products to people in large towns and cities and provide via short food chains opportunity for population to eat healthy and sustainably sourced food while helping rural economies and areas to thrive. As well as creating new income-earning opportunities, the involvement of small and micro farms would contribute to meeting food and nutrition needs in cities and preserving local/indigenous varieties and culture. One of the solutions to support small farms to innovate is the integrated territorial approach, and in particular the Community led local development approach as a driver of innovation in rural areas. Small-scale farmers need to be able to get their goods to market and to earn decent incomes from selling them, which in Bulgaria is highly hindered by regulation, we strongly recommend revision of national legislation for short food chains, certification of small farms and access to markets. This also means investing in storage and transport infrastructure to enable market access and investing in new technologies and processes to reduce CO₂ emissions and prevent waste generation. It also means investing in digital technologies so that farmers can access market information and sell their products online – especially important during times of pandemic. In general, legislation regulating SFSCs should be applied according to European law and should be directed towards supporting small-scale producers, including through investment measures for on-farm and off-farm diversification. Thriving small-scale farmers and sustainable and inclu-

sive food systems contribute to a brighter future for rural and urban populations alike across the planet (Graphic 4).

The rapidly falling numbers shown in graph 4. show that there are problems in our agri-food chain. Selling their products along short supply chains increases substantially, especially within the ‘very small businesses’ category. Greater participation in short supply chains is found in organic farming and in agricultural businesses led by younger farmers, small farms and family farms which are the research object of this study. Moreover, the analysis shows a stronger development of short supply chains in sectors with very marginal processing, such as eggs and fruit, but also some vegetables, plants, and flowers. Regulations and support should be better adapted to the needs of small-scale food producers and processors. The emerging of new consumption trends points out the need of relevant legislations on artisan food. Farmers and consumers should consolidate in alliances for the development of small-scale farming, that could receive targeted support through the CLLD strategies of LAGs in Bulgaria. Farm food should be promoted at fairs, events and among young people (Dimitrova, 2013). As mention before, Markov points out 3 big challenges for SFSCs in Bulgaria: the flaws in the legislation, the lack of network and the lack of staff. The legislation regulating SFSCs is currently not applied according to European law and doesn’t support small producers (Markov, 2017). Article 2 of Regulation (EU) No 1305/2013 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD), which entered into force with the reformed Common Agricultural Policy for 2014-2020: a short supply chain means ‘a supply chain involving a limited number of economic operators, committed to cooperation, local economic development, and close geographical and social relations between producers, processors and consumers’. This definition is complemented by Article 11 of European Commission Delegated Regulation (EU) No 807/2014 supplementing the Rural Development Regulation, which stipulates that ‘Support for the establishment and development of short supply chains shall cover only supply chains involving no more than one intermediary between farmer and consumer. In Bulgaria many of the people using short supply chains have to have the same certification as big farms. The disproportionately high requirements and other problems hinder the small and micro farms as well as some of the family farms that fall under the same classification by allocated land. The Farm to Fork Strategy is at the heart of the European Green Deal for available translations of the preceding aiming to make food systems fair, healthy and environmentally-friendly. Food systems cannot be resilient to crises such as the COVID-19 pandemic if they are not sustainable. We need to redesign our food systems which

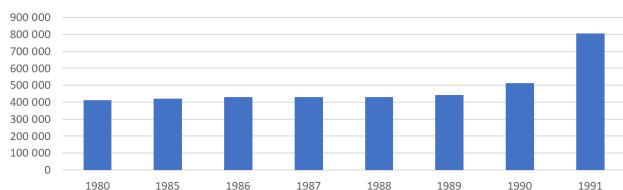


Graphic 4. Small farms in Bulgaria

Source: FADN data, preliminary data for 2020 count of farms

today account for nearly one-third of global GHG emissions, consume large amounts of natural resources, result in biodiversity loss and negative health impacts (due to both under- and over-nutrition) and do not allow fair economic returns and livelihoods for all actors, in particular for primary producers. Putting our food systems on a sustainable path also brings new opportunities for operators in the food value chain. New technologies and scientific discoveries, combined with increasing public awareness and demand for sustainable healthy food, will benefit all stakeholders.

Home gardens are essential for rural dwellers. This form of farming is the traditional one in which rural inhabitants were taught by their great parents and less expensive farming, which is mainly for home consumption. Home gardens have proved crucial in rural areas in reducing poverty, food insecurity, and generating income. Their role in food production and availability also depends on their involvement in local food systems: when they are well connected in the supply chain, small-scale producers tend to leave less space for self-provisioning and their businesses are more viable (Graphic 5).



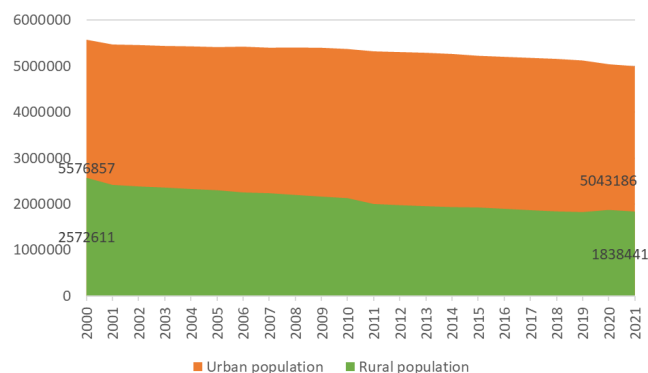
Graphic 5. Gardens (ha) 1980-1991

Source: Yearly statistical of Bulgaria 1989-1991

After the beginning of the transformation the goal was ensuring a stable social transition to a market economy in democratic way. These goals proved difficult to achieve in the past years, as they were accompanied by a number of problems - high levels of inflation, unemployment, crime, looting of enterprises and the destruction of the already economically declining agriculture. An essential source for the formation of income in the period 1990-1998 was the income from gardens both from cash and in as trade commodity.

Returning to the local level in the way we produce, process and distribute food can help transform our economy and help provide better social environment in rural areas so that we can cope with climate change and biodiversity loss, as well as rising levels of social and economic inequality. This type of consumer demand cannot be met by industrial agriculture, which cannot provide small lots of diverse produce, but can be fully met by small local farms. Therefore, users see them as a gathering place for

families, neighbors and friends, an environment where inspiring connections can be made and they can get closer to their roots (Graphic 6).

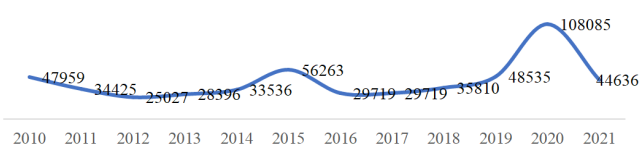


Graphic 6. Bulgarian rural population

Source: NSI

Between 1989 and 2001, the rural population decreased from 3 to 2.4 million (a 20 percent decline) while the urban population decreased from 5.8 to 5.5 million (5 percent decline). The interaction of these dynamics resulted in an increase of 3 percent in the urbanization levels to reach 69 percent in 2001. Between 2001 and 2014, the rural population further declined to 1.9 million (a 20 percent decline) while the urban population went down to 5.3 million (a 3.6 percent decline). For the period 2003-2021 urban population decline -8.82% but rural population declines by -28.34% (2003 taken as basis year). In 2020 – 2021 NSI data shows that there is reversal of the downward trend and from 26.27% in 2019 – 27.09% of the population is rural in 2020 and 26.88% in 2021. For the same period the Internal migration stats show that in time of crisis COVID19 and then war of Ukraine and destabilization of the economic conjuncture more and more people turn towards rural dwellings and return to rural areas (Graphic 7).

The depopulation changed the appearance of the Bulgarian village and forced the closure of a large part of the social infrastructure that was available (schools, health facilities, kindergartens, pharmacies, etc.). The deterioration of the in-



Graphic 7. Internal migration towards rural areas

Source: NSI

frastructure, made the return of the younger generation and their stay in the village unattractive in later years. Much of this generation lost their connection to the land and the inherited land was left unused and tended. The legislation in this period and its lack of specification are one of the reasons for the exacerbating the problem. The social environment in Bulgaria during the period 1991-2007 is a prerequisite for the emergence of a new type of problems provoked by the new institutional norm. The change in legislation combined with the opening of the country's borders to Western Europe led to the relocation of the working population to the cities in and out of the country in search of a higher standard of living and better living conditions. In 1997, the income of the population drastically decreased, and the sharp decline lowered the purchasing power of the population for most of basic foods (sour and fresh milk, cheese, apples, milk oils, bread, cheese, cured sausages, eggs and poultry). This wave of demand for basic food products was taken over by the home economy and mainly by the gardens this can be seen in the trend of increase of home gardens until 2000.

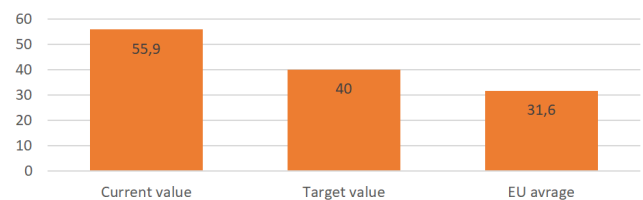
By their nature, semi-market/subsistence farms (the 1st and 2nd group) are both a farm and a household, on the one hand they resemble both subsistence and family farms in terms of the social element they possess, and on the other hand market farms due to the fact that part of their production is sold. They usually develop mixed agriculture - animal husbandry and crop husbandry, because they look at different crops and animals to meet their needs. Characteristically, labor productivity is low and depends on how many people are in the household and how many days a year they do agricultural work, since such farms usually rely on personal labor, do not use hired labor and cannot pay wages. Their production consists mainly of fruits and vegetables, milk and cheese, honey, eggs in small quantities - everything that can be produced at home. In most cases, the budget spent on the family and the agricultural activity is the same, and that is why the owners of these farms are not considered entrepreneurs (1st group only). In example of tourist farm 2nd, we observed is the unique tourist product offered in the Bulgarian village of Solnik, municipality of Dolni Chiflik. In the demonstration center managed by the well-known grandmother Radka and her family, tourists from all over the world can experience the true rural life of the Bulgarian countryside. In addition to the unique ethnographic center built up in the family house, the tourists can visit the orchard and vegetable garden of the family, which keeps the secrets of Bulgarian agriculture since ancient times. After the tour the visitors can enjoy the delicious homemade food and spice blends, and the rich folklore program. However, these are structures which activity is more a way of life than a means of earning

income. However, this type of holding is also not neglected by the CAP and is subject to special support measures. These holdings that act as a buffer against complete depopulation of rural areas and provide at least minimal levels of subsistence and income. They are a socio-economic safety net that supplements household incomes, sometimes simply by providing them with food, as rural areas have the highest unemployment and the lowest incomes.

During the period 2000 - 2007, various programs started working in the country aimed at integrating EU policies and aimed at familiarizing agricultural producers with the policy for the development of rural areas; building capacity for sustainable land management and promotion activities and trying to revitalize the rural areas. The Common Agricultural Policy of the EU and, in particular, the Rural Development Program provides an additional incentive for the development of farms. In the policy aimed at the village and agriculture, it is assumed that the real way to improve the economic situation of agricultural households is the diversification of the economic activity, as well as an increase in the area of cultivated agricultural land. As previously mentioned, the new CAP period 2023+ is aimed at small farms and rural area's stabilization and revitalization.

In Graphic 7 we very clearly observe an active process of settlement in the villages, which continues from the end of 2018 and reaches its peak in 2020. Whether socio-economic crises and society change trends or if these are short-term personal decisions this is the process that we observe in recent years. And in order for these processes to be sustainable, the regional policy for rural areas in Bulgaria must be aimed at: development of a vibrant agricultural sector; diversification of the structure of the economy in line with the local potential, creation of alternative sources of employment and income; stabilization of demographic and settlement development; reducing unemployment, increasing incomes; improving access to social infrastructure, etc. (Graphic 8).

In recent years there have been change in mindset of the population towards rural areas. The higher mobility provided by work from home, more cars and better stand-

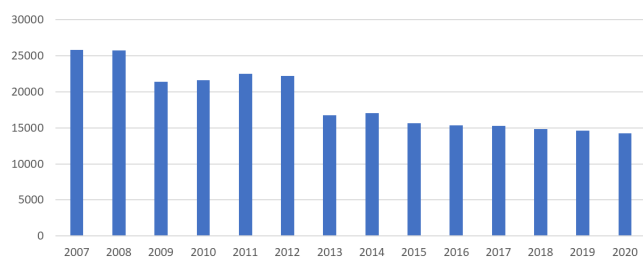


Graphic 8. Population at risk of poverty in rural areas (after deduction of housing costs) %

Source: Bulgaria 2030

ard helped the process and some of the young population moved to rural areas in the years of COVID in search of freedom, better mental health and work/life balance this population is part of our fifth group. This are high earning individuals that want healthier lifestyles that are more in line with nature. Many of the younger and working population treat rural areas near big cities as suburbs. They can revitalize them buy having higher paying capacity and moving young children that will than have sentiment and connection to the land and rural life.

Inflation during the studied period also changed the economic environment for agricultural activity in several directions. It exerts a strong influence on the size, dynamics and structure of personal consumption, primarily through consumer spending. The flexibility of small farms combined with their potential for supplementing the family income was incentive for our 3rd and 4th groups to move. There are times that 3rd and 4th group overlap as demography but the motivation for the move is different. While many of the 4th group retired people are moving to the rural arias because they no longer can afford lives in the city due to rent, cost of living and so on, the motivation for the move in the 3rd group is quiet, quality of life, health benefits and community. Rural communities tend to be tighter knitted and helpful than city once. In Graphic 9 the process of stagnation of gardens for the implementation of the firs budgetary and program period of CAP (2007-2013). In the second half of the graphic shows the decreasing of gardens in the 2014 CAP period. This process is symptomatic and poses some questions regarding about the social model and revitalization of rural arias.



Graphic 9. Gardens (ha) 2007-2020

Source: NSI

In recent years the decline of gardens, micro and small farms is a big problem for social and economic sustainability in rural areas. A change in politics, laws and social infrastructure is necessary to combat the death of the Bulgarian village. The role of this small holding in social and economic aspect of live in rural areas is very high and

further investigation of all aspects is needed. In this study another big part that hasn't been discussed is environmental sustainability and the role of small farms and gardens.

In this general context, the following research questions should be posed: What types of agricultural property or what types of management of this property have been established in Bulgaria in recent years? What are the processes of redistribution and transformation of this property? What social actors take part in these processes? Can the process in Bulgaria be reversed to normal EU level? What is the interest of different types of farmers in European funds and agricultural subsidies? To what extent and whether European funds and agricultural subsidies will stimulate the development of market agriculture and will they contribute to the development of rural regions? Has COVID19 changed the attitudes of young people towards a cleaner and healthier lifestyle? How big is the role that rural population allocate to small farms and gardens? For now, it is too early to expect definitive answers to these questions and further studies will be made.

Bulgarian society shows a significant interest in the origin of food and healthy nutrition, which opens up an opportunity to expand the market of local products of traditional origin and quality and use the short supply chain to do so. This unequivocally shows that working in the gardens and small farms is becoming an alternative for many households, who are trying to reduce the negative effect of the economic crisis on their budgets, looking for opportunities to satisfy their needs for the consumption of basic food products that have higher notorious value and are sustainably made. Many people are moving towards rural life and liking it. The multifunctionality of the agricultural sector can have a stabilizing role in terms of the rural economy, as family farming and gardening is not just an occupation, but rather a way of life compared to most other occupations.

Returning the young generation to partake in agricultural activity will lead to the recognition of the primary importance of small farms and for the sustainable development of rural areas. Younger generation tends to be more innovative, have a positive and tangible impact on living conditions, quality of life, the environment, groups or communities apply modern models with a sustainable effect. Involving the younger generation in farm ownership and small business development is vitally important for rural areas, as in most of these areas' agriculture continues to be the mainstay of economic activity and social structure. This rational behavior of a large part of people living in the countryside is not only a motive for the manifestation of an entrepreneurial spirit, but is also a potential source of synergistic effects.

Conclusions

In Bulgaria the socio-economic role of the small and micro farms as well as gardens is significant. They are pillar of sustainability first economically in times of crises and then socially, revitalizing rural areas and creating better communities. The food systems existing in rural areas support local economies and people. They can improve the viability of small farms, reduce carbon emissions from food distribution and strengthen household food security by giving people access to good, healthy food, including for people with low incomes. The process in Bulgaria shows that work in the home economy is becoming an alternative for many households, which in this way are trying to reduce the negative effect of the economic crisis on their budgets for the increased opportunities of Bulgarian households to satisfy their needs for the consumption of basic food products.

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