

SMALL FARMS MANAGED BY YOUNG FARMERS UNDER NEW „FARM-TO-FORK” STRATEGY



Edited by

Wawrzyniec Czubak, Karolina Pawlak, Pavel Kotyza

 CEDEWU



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7.1. Determinants of development for farms run by young farmers: economic, social, environmental and political factors

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Czech Republic

The Czech Republic has a relatively high proportion of land under cultivation, but this area is gradually decreasing. Agricultural holdings in the Czech Republic utilized over 3.5 million hectares in 2020 (Ministerstvo zemědělství ČR, 2022). Land is a factor of production that is limited in quantity and therefore access to it is difficult (Zagata et al., 2017). About one-third of the total land area is managed by individual farmers. More than 28 000 enterprises are smaller than 10 hectares farmed and they utilize about 8.4% of agricultural land (Ministry of Agriculture, 2022). A characteristic feature of the Czech Republic, in European terms, is the ownership and use of land. More than a quarter of the agricultural land area is owned by farmers who farm the land. In the case of natural persons' holdings, the share of owned land is almost half of the area farmed by them. Corporate enterprises often farm the land of their members, partners or shareholders. Therefore, corporation enterprises have no need to own farmland (Ministerstvo zemědělství ČR, 2021). Land leases can be based on long-term contracts and access to land can be a determinant of development for young farmers. Seeman et al. (2020) reported that 80% of farmers in that country lease land, so rent increases are becoming a problem for many farmers.

Economic factors affecting the development of farms run by young farmers include the level of agricultural wages. According to the data for 2021, the average gross monthly wage in the agriculture, forestry and fishing sector was CZK 29 973. Wages increase annually; however, the average wage in the Czech economy as a whole was CZK 37,903 in the same year (Český statistický úřad, 2022a). Farmers' wages are therefore roughly 25% lower, which may reduce the attractiveness of the agricultural business in terms of income security. However, according to a study by Šimpachová Pechrová (2022), in

the case of young farmers income does not play such a significant role and is not a major reason why young people start farming. According to the analysis of Hloušková and Prášilová (2020), enterprises managed by young farmers (in crop production or large enterprises) achieve very good economic results.

Young farmers may be limited in their enterprises by access to capital. In addition, if they are starting an agricultural business, they may not have sufficient business history, which can be a negative factor affecting the potential granting of credit or loans by the bank. This may make it difficult to obtain any funds for starting or developing the business (investment). On the other hand, Šimpachová Pechrová (2022) stated that the motive for starting an agricultural business is not primarily interest or access to modern technologies.

In 2021, 92.8 thousand people were employed in agriculture. However, the agricultural workforce is declining (CSO, 2022b). Therefore, working in agriculture cannot be considered prestigious and there may be problems in recruiting employees. According to Šimpach (2017), there are fewer than 1 200 young farmers in the Czech Republic, which is less than in Slovakia (1 910). According to Spěšná et al. (2009), there is also a relatively low interest in working in agriculture among agricultural students.

Šimpachová Pechrová (2022) stated that the age structure (of managers) is also unfavourable. It is not desirable that the lack of young managers threatens the survival of the sector itself. There is still a need for someone to take over the business. In the Czech Republic there has been a decline in the share of all age categories due to the increased number of the oldest farmers (over 65 years old, i.e. 20.5% in 2020). The proportion of young managers under 35 has not changed significantly (10% in 2020). Zagata et al. (2015) stated in their article that the Czech Republic is not among the group of countries that are so much affected by the ageing problem. In addition, there are not so many apparent differences between the holdings of young and older farmers.

Family tradition is an important motive for young people to continue or start a farming business. The desire to take over the family farm and thus continue the tradition is very important (Šimpachová Pechrová, 2022). Other social factors mentioned by Šimpachová Pechrová (2022) are love of nature, working with animals and being independent (being masters of one's time). Related to this is the generational turnover, which is desirable and addressed within the family (Petrů, 2018).

Environmental factors include concern for the environment, the landscape, and sustainable management. According to research by Šimpachová Pechrová (2022), young people care about the appearance of their surroundings, maintenance and care for nature.

Political factors include subsidies. In the Czech Republic, young farmers have the opportunity to take advantage of special programmes under the Agricultural and Forestry Support Fund (PGRLF), for example. There are also indirect supports in the form of tax breaks on business transfer tax or advice and training (Šimpachová Pechrová, 2022). Advice is provided under the Ministry of Agriculture's Policy (i.e., subsidies under the Agriculture Act). Another form of support comprises subsidies under the Rural Development Programme, i.e. support for young and beginning farmers, subsidies for start-up enterprises of young farmers. According to Šimpachová Pechrová (2022), subsidies did not prove to be one of the important motives for young people to start a business in agriculture.

Slovakia

The necessity of generational change in agriculture has been discussed in Slovakia for many years. The largest share of employees in agriculture is in the age group of 55 to 59 years, and the share of those over fifty is still growing. The situation is worsened by the gradual migration of young farmers to the industry. Of the nearly 45,000 workers in Slovak agriculture, only 28 percent are under the age of 40, which is below the EU average of 31 percent. As for agricultural managers less than 20 percent of them are in this age group. On the other hand, in the entire economy of Slovakia, the share of employees under the age of 40 is 45% and managers 42% (Koreň, 2020).

In the programme statement, the current government is committed to developing a long-term concept of agriculture and food industry. Greater support for young farmers should be one of its priorities. In the basic document, the government mainly promises changes in the redistribution of state land, but also European subsidies. The rules of the EU common agricultural policy make it possible to increase direct payments (the first pillar of the CAP) for young farmers. About 800 young farmers in Slovakia received direct payments, which is about 4.3% of total number of beneficiaries of direct payments in the EU. The state can set a hectare limit for the special surcharge in the range of

25 to 90 hectares. For the last programme period, Slovakia chose one of the lowest limits in the entire Union – 26 hectares (Koreň, 2020).

In addition, the previous executive programme took advantage of the opportunity to tighten the subsidy conditions for the measure related to set up young farmers by requiring beneficiaries to obtain adequate education and experience in farming. As a result, Slovakia allocated one of the lowest quotas in the EU for young farmers within the first pillar of the CAP.

Compared to the other EU countries, Slovakia also lags behind the other countries in supporting young farmers from the second pillar of the CAP, i.e. the Rural Development Programme (RDP). Due to high investment needs and lower returns in the initial phase of business, beginning farmers have a problem accessing bank loans. Project support from the RDP can help them fill the financial gap.

Doing business in agriculture in Slovakia has been complicated for a long time by the dysfunctional land market. According to government analysts, it has the worst effects on young farmers. Due to fragmentation, there are high transaction costs for the transfer of land to more efficient farmers either by sale or lease.

Land in Slovakia is extremely fragmented and it can be represented by numbers: one land plot, which has an average area of 0.5 hectares in Slovakia, is owned by an average of 12 people, and there are more than 99 million land ownership relationships in total. At the same time, the government should consider new schemes for preferential access of young farmers to state land in the administration of the Slovak Land Fund (SPF). Such a scheme already exists today, but according to analysts, it does not work in practice. The SPF can preferentially rent vacant land - of which there is a shortage - to a young farmer only after the lease contracts in the given cadastre have been terminated (Koreň, 2020).

Poland

The determinants for the development of farms managed by young farmers in Poland can be divided into internal and external categories. Internal determinants characterise farmers and include factors that are within the control of young farmers. Education and training are one of them. Farmers with professional knowledge broadened by continuous improvement of

qualifications are better equipped to manage their farms successfully. This includes training in agricultural practices, business management, and financial planning. Skills and experience should follow with knowledge as necessary factors to run a farm are more likely to be successful. The ability to combine in-depth theoretical and practical knowledge allows farmers to adapt to the changing market as well as the formal and legal requirements of agricultural operations. It should be noted that young farmers have significant advantages in these aspects. This is due to their ability to learn quickly, acquire new knowledge, openness to novelty, and willingness to take risks. In addition, their mobility allows them to participate in study tours, exchange ideas with other farmers and attend presentations, fairs, trainings and courses. This is a credit of larger motivation and entrepreneurial spirit. This includes being willing to take risks and try new things. Young farmer have a much broader planning horizon and are much more involved in the development of the farm they manage (Rudnicki at al., 2017).

External determinants include factors that are outside the control of young farmers. In Poland, young farmers often face limited access to land and capital, which are essential for starting and developing a farm. The low supply and availability of land is compounded by high land prices and difficulty obtaining loans. A number of obstacles are related to the initial stage of farm business creation when financial resources are severely limited. The main problem that a young farmer taking over a farm usually encounters is the high costs of starting a business (Adamowicz and Szepeluk, 2016). On top of that, bank credibility is limited by the lack of a long-term history of business stability and high costs of starting a business. This is also related to the second of the exogenous factors, which is the agricultural market conditions. The profitability of agriculture can vary depending on market fluctuation. With globalising markets and economic changes, prices of inputs on the cost side and the prices of final products are unpredictably changing. This can make it difficult for young farmers to plan for the future and invest in their businesses. In Poland, we have observed (unfinished yet) market changes for many years. These affect both wholesale and retail trade. Unfortunately, these changes are increasingly disadvantaging farmers in the food chain. One of the strongest determinants is the impact of the agricultural policy. National and European policies can significantly impact the development of young farmers' businesses. On one hand, policies provide financial support or other resources to young farmers to help them start and grow their businesses. At the same time, the

growing expectations of sustainable agricultural development require a series of costly investments. It is particularly difficult for young farmers to meet these requirements at the beginning of their operations.

In addition to these general determinants, there are several specific factors that can impact the development of young farmers in Poland. The average age of farmers in Poland is increasing, and many young people are leaving rural areas. This means there is a shortage of young farmers willing to take over existing farms. This is due to a kind of fashion and the development of non-agricultural sectors capable of absorbing surplus labour. Another factor, definitely characteristic of Poland, is the fragmentation of agricultural land. The agrarian structure is dominated by small farms, which is the result of historical conditions and transformations leading to the size disparity of utilised agricultural areas in terms of hectares (Hornowski et al., 2020). This means that the situation of small farms remains unchanged. For the young generation, taking over a small farm makes it difficult to achieve economies of scale. Under Polish conditions, even a medium-sized farm does not guarantee a parity income. At the same time, the weakness of many rural areas is low economic development and few opportunities to supplement income from non-agricultural activities, both for the young farmers and their family members. As Czekaj et al. (2020) concluded, demographic changes combined with growing opportunities to find work outside agriculture, cause them to leave farms and take up employment outside agriculture or even outside rural areas.

Despite these challenges, there are a number of young farmers in Poland who are successfully starting and growing their businesses. These farmers are often innovative and entrepreneurial, and they are using new technologies and approaches to agriculture. They are also taking advantage of government support programs and other available and dedicated resources for young farmers.

The following are some specific measures that can be taken to support the development of farms of young farmers in Poland:

- provide financial assistance to young farmers, including grants, loans and taxes;
- invest in agricultural education and training programs to prepare young farmers for the challenges of managing a farm in the European competitiveness;

- promote consolidation of agricultural land to create larger and more efficient farms;
- develop off-farm employment opportunities in rural areas, giving young farmers more options and helping to support their incomes.

In some of those indicated measures young farmers are in a privileged position (due to internal factors), but to a large extent their situation does not support competitiveness compared to farms managed for many years by experienced farmers. The role of both agricultural policy and farmers themselves is to define key determinants that build advantages and strengthen the possibility of maximizing the use of opportunities.

Lithuania

Agriculture in Lithuania plays a vital economic, social, environmental and ethno-cultural role and it is a particularly important sector of the country's economy. Rural areas account for about one third of the country's population, and agriculture employs just over 15% of the working population.

Different factors contribute to favourable conditions for the creation of young farmers. Lithuania has favourable natural conditions and good quality, low-hill farmland for the development of different types of agriculture (Svarbiausi žemės..., n.d). Generational renewal, changing attitudes to farming and the education of young farmers ensure the continuity of agricultural development in the long term. According to the statistics, the proportion of young farmers remains similar at around 17%. In terms of structure, there are no major changes, but according to the experts the second generation of farmers in family farms is already entering the business (Šeimos verslo..., 2022). A significant proportion of the older generation of farmers had/have practical farming experience. According to the Centre for Agricultural Information and Rural Business, young farmers are more educated compared to farmers in the other age groups. New farm managers bring with them innovative ideas, adaptability to market changes and an entrepreneurial approach to farming. Higher education is associated with the productivity and economic viability of managed farms.

Financial support instruments plays an important role in farm economic development. The objective and priority of the financial support instrument is to increase viability and competitiveness of all agricultural activities in

all regions and to promote innovative farm technologies. According to the President of the Lithuanian Union of Young Farmers and Youth support for the establishment of young farmers is now more attractive, because in the past you had to have a large amount of land to be an eligible applicant (Jaunieji ūkininkai..., n.d). According to the rules for the implementation of the support measure (Dėl Lietuvos..., 2019), the economic size of the holding must not be less than EUR 8 000 and not more than EUR 70 000 per year.

Also a well-developed business infrastructure is needed. In Lithuania there exists an extensive network of agricultural advisory services, training and research institutions, creating and developing a nationwide agricultural advisory and training system. Farmers can sell products grown on the farm not only in numerous farmers' markets. In Lithuania the supermarket chains are also keen to work with local producers, such as "Maxima" or „Iki“. Their brands "Greetings from the countryside" or "Iki ūkis" are easily recognisable and appreciated by consumers. Farmers can also sell their products through the unique e-shop "Kaimas į namus", managed by the Public Institution Rural Business and Markets Development Agency.

Hungary

The operation and success of farms, agricultural operations and businesses are influenced by a number of factors that create and induce constantly changing conditions. In the process of adapting to changing conditions, businesses also have to change, i.e. they have to manage the changes and constantly respond to challenges. This is a rather complex task, involving many different activities, actors and circumstances.

Below, we have collected factors influencing the development of farms managed by young agricultural producers in line with the four economic, social, environmental and political aspects. Influencing factors can be both internal and external, strengths and weaknesses, as well as threats and opportunities. The individual factors are not independent from one another, they influence the development of young farmers' farms and their development opportunities together and interdependently. Complexity therefore prevails in relation to development. Adequate management of these factors presents significant challenges to the policy-making process and to the agricultural policy itself, and of course to young farmers as well. It is therefore necessary

to properly evaluate the effects and to continuously review the agricultural policy in accordance with the changing conditions.

When identifying the factors affecting the farms of young farmers, we relied on the following literature sources: Halmai, ed. (2020), Privóczyki (2020), KSH (2013), KPMG (2016), Kis and Gál (2012), Zondag et al. (2015), fi-compass (2020), Varga and Biró (2020) and Nagy et al. (2022).

Economic determinants seems to be crucial in providing the environment for young farm development. Income expectations or prospects, which are significantly influenced by incomes available through other activities, impact the decision-making process as the opportunity cost of agricultural activity (incomes from agricultural production and farm activity, and profitability of the activity). Incomes available through other activities influence the decisions of young farmers depends also on the situation (attributes or determinants) and performance of the rural economy. The existing, functioning, available family farm background (through taking over the farm or the cooperation established with it) is also important. In undertaking a farm business a high entry barrier for starting agricultural activities (capital, financial assets, land market) play a role. In the market dimension it is necessary to have sufficient equipment, land resource and technological assistance. Implementation of innovation requires access and ability to obtain subsidies (the system of agricultural subsidies, amount and form of available subsidies, etc.). In terms of subsidies young farmers need access to credit lines, meeting the operational characteristics of the agricultural financing system, its development and its compatibility with agriculture (investments, financing of current assets). Similar needs are formulated for the information system, which mean the availability, quality, and efficiency of Agricultural Knowledge and Innovation Systems (AKIS), i.e. possibilities and standards of professional consulting, training, and the transfer and acquisition of knowledge. Improving efficiency and competitiveness of farms run by young farmers is stimulated by mechanization and technological developments (e.g. the use of precision technologies, which on the one hand affects economic efficiency and on the other hand, has a positive effect on environmental performance), ability to apply ICT, digital and smart solutions.

In turn, young farmers face the problem of access to land and the resulting increase in land costs and land prices. The escalation of the unfavourable situation for agricultural producers is also observed on the production level, when – compared to the common base – the level of industrial prices

(inputs) increases at a faster rate than that of agricultural prices (outputs), i.e. the industrial and agricultural exchange rates develop unfavourably for agriculture. At the same time, the effects of occasional large price volatility and price fluctuations emerge on the input and output markets. Those factors force farmers to diversify their operations (various agricultural activities and additional activities (e.g. agritourism) and increasing value added (e.g. processing, further processing, direct sales).

Those economic factors finally affect agricultural productivity in terms of total factor productivity (TFP) and labour productivity and those in turn determine farm competitiveness and farmers' income.

Apart from many social disadvantages, farming provides prestige and shows attractiveness of agriculture and the countryside (in terms of lifestyle and as a source of livelihood). Models provided by one's parents, parents' education and continuation of family farming (based on knowledge, experience, qualifications as well as beliefs, a sense of identity) constitute a very strong social factor for young farmers. Rural areas offer innovation culture, openness and a specific attitude to life. They create social capital, cooperation and networking. Thus many young farmers can build their individual vision and prospects for personal career (predictability and reliability of agricultural career opportunities).

On the other hand, many social disadvantages may affect the intention to leave the farm and the rural area. In many cases, lack of digital knowledge and skills as well as insufficient business, management or organizational knowledge may lead to a potential failure. Together with higher incomes in the other sectors and different living and working conditions it may cause migration of young people from the countryside to the cities. In that case an effective protection of interests is needed (e.g. strong and powerful young farmer associations). A growing support for environmental sustainability (respecting ecosystem services, practicing circular economy principles) can be seen as a long-term disadvantage, because it generates additional costs for individual farmers. In the changing social environment young farmers face inadequate planning for future operations (lack of vision, strategy, business model). Thus, a change of attitude is necessary, e.g. incorporation and integration of pro-environmental aspects into agricultural production, food safety and supply chain approach (F2F concept). Otherwise the lack of a stable perspective will result in the progressing aging of the farming population.

Environmental determinants cover an extensive range of external and internal factors for young farmers. First of all, agro-ecological conditions and their changes (e.g. topographical factors, soil characteristics, climatic characteristics, especially with regard to climate change) are affecting agriculture (obviously not only in Hungary). Agriculture is exposed the most to climate change consequences (inundation, drought, weather extremes and anomalies: ice damage, storms, etc.) and the resulting degradation of soils (acidification, reduction of organic matter content, soil compaction, etc.). Thus, protection of natural resources is necessary (soil protection, habitat protection, air quality, groundwater protection, nutrient conservation, reduction of pesticide use through integrated agricultural production). On condition it is done, the ecosystem services will be present, while local and global benefits will be provided by the natural capital to people. In line with that there are increasing expectations regarding environmental and climate performance. Environmental and climate protection measures are increasing and the producer performances expected in their framework are becoming more and more important. Changes in the environmental expectations are also formulated by the agricultural policy. Optimizing agricultural production needs to incorporate a direct connection with sustainability (resource load and emissions, energy efficiency, reduction of GHG emissions). Agricultural environmental programs and environmental management are implemented to integrate the nature conservation aspects into the production activity and enhance eco-management. Understanding and implementing those elements can be done with the young rather than the older generation of farmers.

While the role of young people in agriculture is indisputable, the policy creates and corrects the market by a support system. Starting from the knowledge-related elements, the set of institutions and measures for the development of management, business and organizational capacities and competences necessary for the operation of agricultural farms is dedicated for young farmers. It should change the situation and readiness of agricultural training and practical education (development of professional knowledge, skills and abilities). The expected effect is to activate the potential and effectiveness of agricultural knowledge and innovation system (e.g. expert advice, mentoring, knowledge creation and transfer, stimulation of agricultural innovation). Regarding agricultural and off-farm activity the start-up support for young agricultural producers may provide a positive environment for business operations. If the policy support (coordinated measures: legislation,

subsidies, early retirement, transfer of property, regulation of inheritance) is effective, then the generational change may favour rejuvenation. Other political factors, which can support those processes, include taxation and business frameworks, bureaucracy and the legal environment. It will be even more efficient if it goes in line with a fair and socially acceptable distribution of agricultural subsidies. Generally, the institutional system – related to the implementation of the agricultural policy – must be stable, long-term, properly managed in order to be efficient and favour young farmers.

7.2. Opportunities for development of non-agricultural activities

Zdeňka Náglova

Young farmers are aware that in the current condition affected by market uncertainty and linked to climate change, non-agricultural activities have an important role to play. They also contribute to sustainable economic and social development in rural areas. According to Held (1980) and Chaplin et al. (2004), farmers' dependence on agriculture is reduced and non-farm activities are being developed. This is because the returns from non-farm business activities are higher than those from agricultural production. Diversification into the food industry, light industry or tertiary sector is common. Due to the creation of new non-farm enterprises and consequently job creation, diversification of activities is considered as a rural development strategy. However, this diversification can be spatially uneven (McInerney and Turner, 1991). Greater diversification has been observed in more accessible and wealthier rural areas. This is mainly diversification into leisure and recreational activities. However, diversification is more needed in areas that are remote and lower income (Chaplin et al., 2004). Diversification is therefore becoming a key strategy for more and more businesses to improve their economic performance and income (Barnes et al., 2015).

According to the case studies, the most common activity that young farmers engage in is processing their production. Processing of basic farm goods can already be seen as a spill-over into the food industry, as more value is added