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Interfaces

MAP Position Paper

CHANGE IN PRODUCTION AND DIVERSIFICATION OF THE RURAL ECONOMY



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Topic and headline messages

Diversification is an important element in the development of agriculture as well as non-agricultural activities within the rural economy. It is essential for economic growth, improving income and employment opportunities, and the overall resilience of rural areas to long-term trends and shocks. The following gaps in improving the potential for diversification in rural areas were identified during the SVARUN workshops:

- Lack of reliable data on the situation in rural areas and comprehensive research on the diversification of rural economies, including consumer research. Horizontal and vertical knowledge transfer and the involvement of all institutions in the development of new skills also need to be strengthened.
- Weak horizontal and vertical integration (along value chains and between industries); the need for greater added value in conventional and new value chains, the strengthening of the circular bioeconomy, the economy of experiences and the consideration and exploitation of society's growing demand for greater sustainability - nature conservation marketing and sustainable tourism; the need for greater digital, entrepreneurial and financial literacy
- Inadequate basic services, which are a prerequisite for living and working in rural areas
- The need to open up institutions and establish appropriate public policies and a stable support environment that offers start-up funding and knowledge and supports entrepreneurship and (cross-sectoral and cross-sectoral) integration.

Problem being addressed and key questions

*Diversification, understood as the spreading out of income sources either on an individual farm or in a certain area, is an important **element in the development** of agriculture as well as non-agricultural activities within the rural economy. It is essential for **economic growth, improving income and employment opportunities**, and it also has a significant impact on the **overall resilience of rural areas** to long-term trends and shocks, most recently the COVID-19 pandemic.*

*The **aim** of the present position is to shed light on the topic from different perspectives of stakeholders in the field of agricultural policy and rural development, discussed in the workshops organised on September 2nd and 10th, 2021. In the workshops we tried to pinpoint new mechanisms to strengthen the diversification process and answer the following questions:*

1. Which **strategies for the diversification of the rural economy** have the greatest potential for meeting the needs of the Slovenian countryside?
2. How can **public interventions** support these diversification strategies, taking into account the solutions and measures needed at local and national level and the related implications for the wider public policy framework (CAP and other public policies)?
3. What are the **research needs and gaps** in understanding and guiding the diversification of rural economies?

1. Introduction – starting points and methodology

Diversification can be defined as increasing the diversity of economic (as well as non-economic, when social services are in question) activity, i.e. diversifying income sources on an individual holding or in a certain area. In the light of the formulation of development public policies, its purpose is to improve the economic situation and resilience of economic entities.

The question of whether to specialise or diversify is always present. In economics, according to David Ricardo's classical theory of comparative advantage (1817), specialisation has long been thought to ensure success. In the context of regional development, the concept of cumulative causality (Myrdal, 1957) derives from the consideration of comparative advantages, according to which further development leads to diversification, as the introductory impulse for economic development leads to the development of other activities – services and support industry, which is a prerequisite for economic development. An agglomeration forms that attracts resources from neighbouring regions and also has a positive impact on the development of peripheral regions.

Modern economic-geographical theories bring to the fore other concepts that are closer to diversification. Green growth, resilience and post-structuralist theories speak more about diversification and consider not only market forces but also a wider range of factors influencing economic structure; this is also confirmed by research. Diversification is fostered by spatial and development policies, industrial policies (the part of development policies aimed at changing the economic structure) and the meta-process of tertiarization, i.e. replacing industry with service activities.

In Slovenia, the diversification of the rural economy is still closely linked to agriculture and the need to improve farm income. Here it can be understood as a more efficient use of the resources we have on the farm or elsewhere – we speak about the economy of scope; it can be understood as an extension of the basic activity (adding value) or a focus on a new, possibly also non-agricultural activity (usually related to innovation).

Due to the importance of the agricultural aspect within the rural economy, in the present position the topic of diversification is addressed in two central sections. Namely, the text is divided into a general ("macro") part, where we address the rural economy in general, and a specific part, where we focus on diversification strategies with a focus on agriculture. Finally, we address digitalisation as a horizontal theme, as it is an increasingly important element of economic development, entering the economy at all levels as an important challenge, but also as an accelerator of development.

The position is based on the work conducted in workshops that followed the above division into general and specific ('agricultural') parts. It should be pointed out that domestic literature on diversification, especially in the field of agricultural activity, is relatively scarce. In the workshops, carried out in hybrid format, following the introductory theoretical lectures, we divided the work into smaller groups, which tried to answer thematic questions as to the vision, appropriate measures and obstacles (challenges) in areas concerned. On the basis of the workshops, a draft position was prepared, which was discussed by the SVARUN MAP at an additional workshop on 17 November 2021.

2. General information on the diversification of the Slovenian rural economy

2.1. Key scientific evidence

In Slovenia, the process of industrialisation began in the second half of the 19th century and led to concentration, specialisation and emergence of the first urban areas. In 1948, the industry was strongly focused in the so-called industrial crescent (Jesenice-Ljubljana-Maribor), and in addition, there were smaller industrial plants based on local raw materials or energy resources. The process of industrialisation was more centralised after the Second World War, and in the 1970s a polycentric development and spatial policy paradigm began to be implemented, which also had a significant impact on the countryside. From 1971 onwards, the development of less developed areas was encouraged, with industrialisation being the key approach and, in part, the development of other economic activities; services were lagging behind. At the height of industrialisation in 1984, industry was distributed throughout Slovenia, with a few areas of concentration – there were two urban areas, rural towns and even industry in small settlements, which was the result of the polycentric understanding of development and significantly contributed to the diversification of the rural economy. At the end of 1989, despite investment into development, there remained marginal areas with a distinct agrarian structure or a combination of agrarian and industrial activities, but industry did nevertheless play a major role in rural areas. Today (Nared et al., 2020) rural areas show a transformation of the economic structure from agrarian to agrarian-industrial to predominantly service-based or service-industrial and service-agrarian (Figure 1); the process of tertiarization continues.

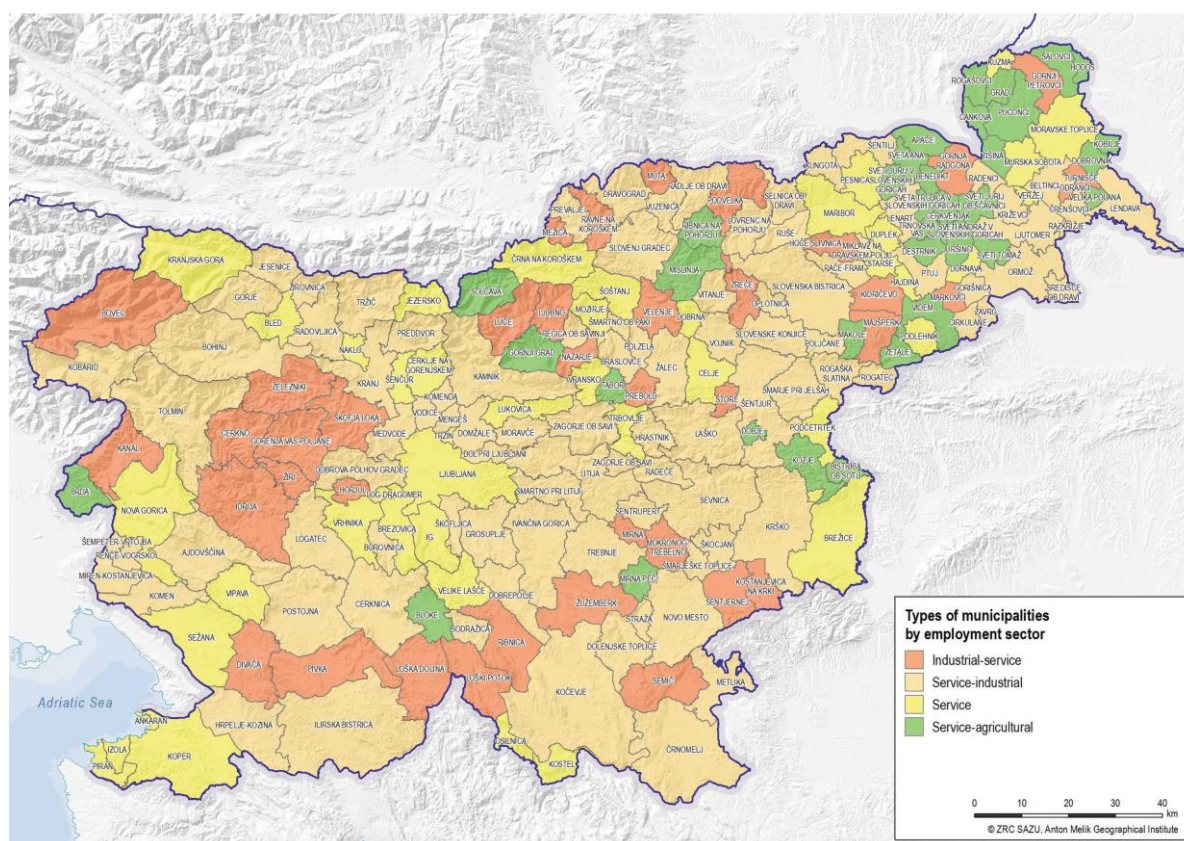


Figure 1: Employment sectors per municipality. Source: Nared, 2020a

Slovenia is characterised by large differences in economic development, both between and within regions (Nared et al., 2020a); while these are still relatively low compared to other OECD countries, there is a

traditional sensitivity to this issue in Slovenia. The Development Threat Index shows large regional differences. The eastern cohesion region (NUTS 2 level) is significantly less developed than the western one. At the NUTS 3 level (statistical, but not administrative regions), the most developed are the Osrednjeslovenska, Gorenjska region and SE Slovenia. In the least developed regions, such as Pomurska, Zasavska, Podravska, Koroška and Primorsko-Notranjska, the most problematic elements are productivity, disposable income, high unemployment (especially among young people), unfavourable educational and demographic structure, low GDP per capita, very low share of gross fixed capital formation and research funding, low investment and sparse population (MAFF, 2020).

Differences between municipalities and the absence of an intermediate regional administrative level, or at least strong development coordination, cause difficulties in carrying out individual tasks of regional importance, such as public transport, spatial planning, waste management and natural disaster management. Some tasks are too small to be carried out at national level, and at the same time are too much for municipalities. Effective implementation of more demanding tasks is a problem especially for smaller municipalities, which face a lack of staff and resources. Since 1999, there have been several attempts to introduce administrative regions, but all have failed due to different notions regarding their number, size and powers. As small municipalities are relatively weak, this has also encouraged strong centralisation, which is reflected in the growing role of Ljubljana and the Osrednjeslovenska statistical region in the economic and social life of the country (Nared, 2020b). Economic development (Figure 1) largely coincides with the degree of urbanisation (Figure 3).

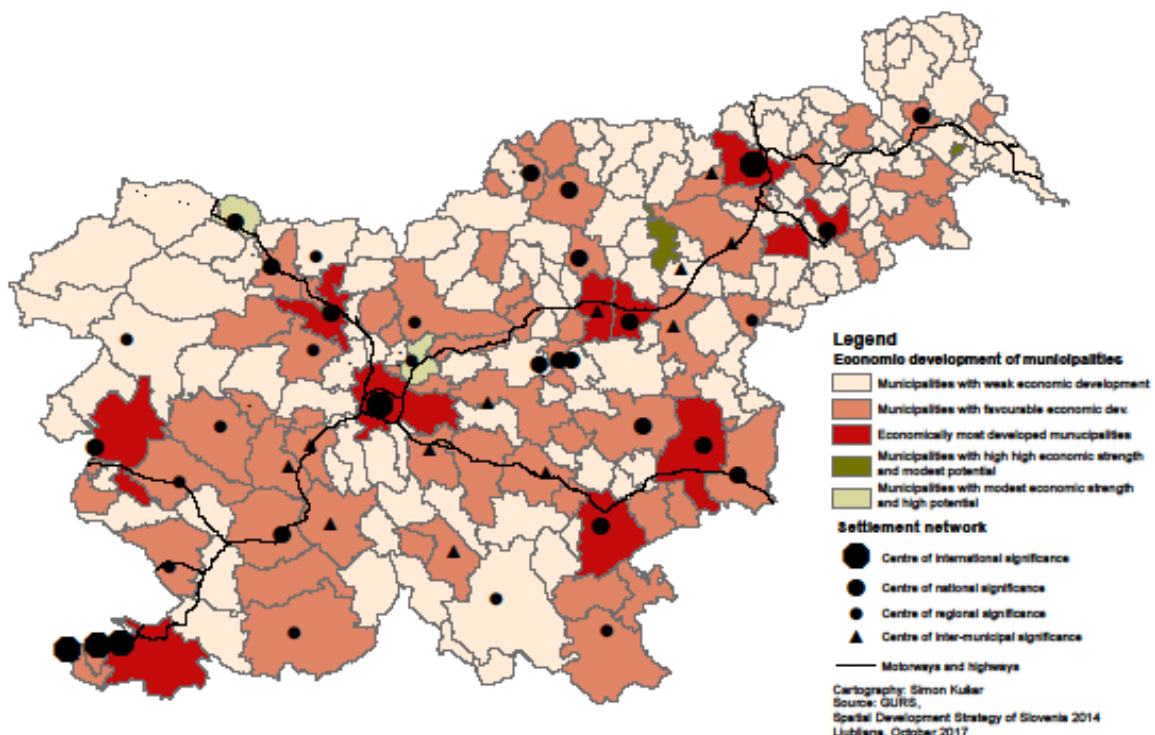
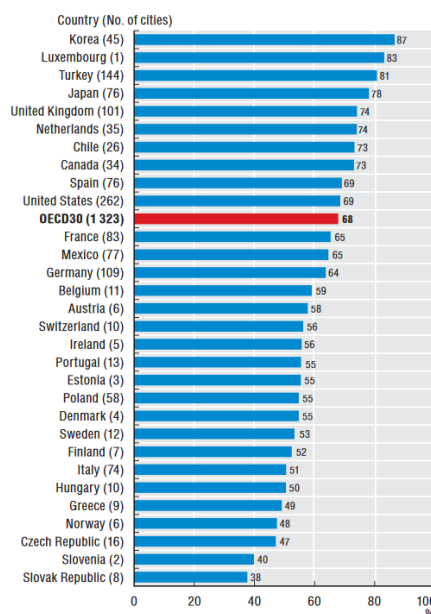
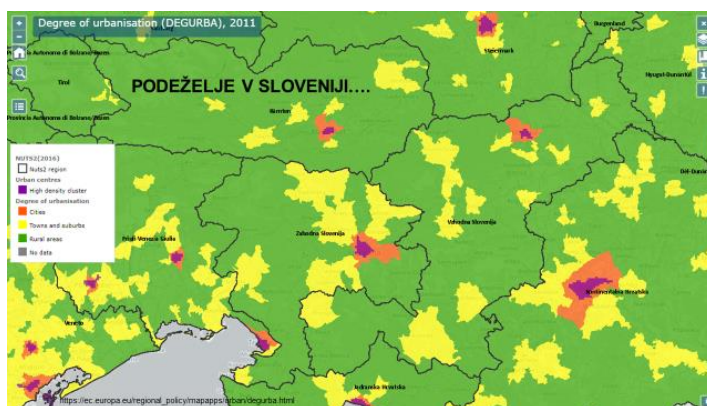


Figure 2: Differences in the economic development of municipalities. Source: Kušar, 2017

What represents the countryside in Slovenia? There are several different classifications of rural areas, but none define it functionally; they mostly rely on density of settlement, degree of urbanisation or on the concept of functional urban areas (i.e. urban centres and their zones of influence; Eurostat, 2018). Looking at the degree of urbanisation (Figure 3) we could say that the countryside is everything except Ljubljana and Maribor; even the OECD classification treats only these two cities as metropolitan (urban) areas (OECD, 2021). In 2012, 40% of the population of Slovenia lived in functional urban areas (Figure 4). Experts believe

(Wostner, 2021) that the subjective perception of the population is similar. Further concentration of the population in central Slovenia and along the highways is also shown by projections for the future (Nared et al., 2019), but at the same time we can expect an increase rather than a decrease in the economic development gap, as became apparent during the 2008/09 economic crisis and the COVID-19 pandemic that started in 2019. Digital transformation can play an important role in preventing a disproportionate increase in these differences and is even crucial for areas outside the capital (IMAD, 2020).

Understanding rural areas is more complex than the rural-urban duality that generally characterises Slovenian logic. Since the publication of Rural 3.0 (OECD, 2016), the OECD has taken on a new philosophy, understanding and approach to rural development, focusing on the well-being of citizens while recognising diversity, complexity of socio-economic systems, and rural-urban connections (OECD, 2020). Rural areas are seen as intertwined with urban areas, sometimes within functional urban regions, sometimes close to them, and some times in more remote areas. Their specificities are different – opportunities are different depending on distance from the city. To be sure, distance from the city remains one of the key factors determining the performance of individual rural areas. Historically, more successful regions, in terms of reducing disparities, (convergence) are those with a high percentage of tradables (OECD, 2016).



Figures 3 and 4: Left – Slovenian areas according to degree of urbanisation (DG REGIO, 2011); Right – share of inhabitants in urban areas in 2012 (OECD, 2013)

In addition to digitalisation, innovation (including social) and entrepreneurship offer new opportunities to improve employment, productivity and income of the rural population. The exploitation of new forms of work (especially teleworking), which, by taking advantage of comparative advantages through activities such as tourism and green jobs, can lead to the further diversification of economic activities, and thus to the desired increase in the well-being of the rural population. This requires comprehensive and integrated policies and stakeholders, a systematic approach to investment and direct addressing of the territorial dimension (e.g. business environment), including the provision of access to services of general interest and digital infrastructure. While there are positive initiatives by some services and ministries that address the biggest problem (i.e. marginal areas) and individual strategies, such as the draft Spatial Development Strategy, which conceptually address individual issues appropriately, a more comprehensive cross-sectoral approach, promoting horizontal and vertical integration and foresight are needed.

Sustainable development is a fundamental policy direction that also sets defined diversification strategies. These can occur in all three areas of sustainability – economic, environmental and social. The definition of new strategies also requires creative and innovative solutions that improve value added and the economic position of rural economies in the fields of agriculture, industry and services.

Holistically, we may speak of entrepreneurship, which is a process in which individuals pursue opportunities (alone or in a team) – sometimes within existing organisations and even in the public sector. Thus, at least two elements are important for successful strategies of diversification – opportunity and enterprising individuals (Kotnik, 2021), to which tradition, culture and preserved natural and human resources may be added. Examples from practice and research show that there is no shortage of the former in the Slovenian countryside, and there are increasing numbers of the latter.

The global survey Global Entrepreneurial Monitor (GEM Slovenia) for 2019 showed that in Slovenia, despite the growing social acceptance (which is not a given in Slovenia, considering the psychological design and value system, in turn a consequence of historical property relations, in which managers and industrialists were mainly foreigners, and a legacy of the previous socio-economic system; see Dimovski and Žnidaršič, 2011) of entrepreneurship and confidence of individuals in their entrepreneurial capabilities, there is no growth of early entrepreneurial activity, resulting in untapped entrepreneurial potential. According to GEM Slovenia, in 2019, 47.6% of people in Slovenia perceived promising business opportunities in their environment. In 2019, 16.6% of the adult population in Slovenia intended to start a new business in the next three years. However, the gap between entrepreneurial intentions and their realisation is large (4.4% of the adult population was among the emerging entrepreneurs last year), which means that more attention should be paid to promoting entrepreneurship while improving the conditions for it (MAFF, 2020).

Table 1: Number of enterprises and their incomes per year – Slovenia and rural areas. Source: MAFF, 2020

Year		2008	2010	2013	2015	2018
Number of firms	Slovenia	152,541	165,595	182,089	191,863	200,174
	Rural areas	77,173	84,162	93,496	98,228	102,205
Enterprise income (000 EUR)	Slovenia	95,786,283	86,805,208	90,625,516	95,298,760	117,040,613
	Rural areas	31,409,116	28,023,511	29,993,978	32,597,798	40,773,495
Income/firm (000 EUR)	Slovenia	627.94	524.20	497.70	496.70	584.69
	Rural areas	407.00	332.97	320.80	331.86	398.94

The number of enterprises in rural areas increased by 32% in the period 2008-2018. On average, in 2018 in Slovenia there were 944 companies per municipality – in rural municipalities there were 521 companies per municipality, and in others 6,123 companies per municipality. The average monthly gross earnings per employee in 2019 in Slovenia were EUR 1,754, while in rural areas they were approximately 12 percent lower (MAFF, 2020). Income per firm, too, is on average a third lower than in the Slovenian average.

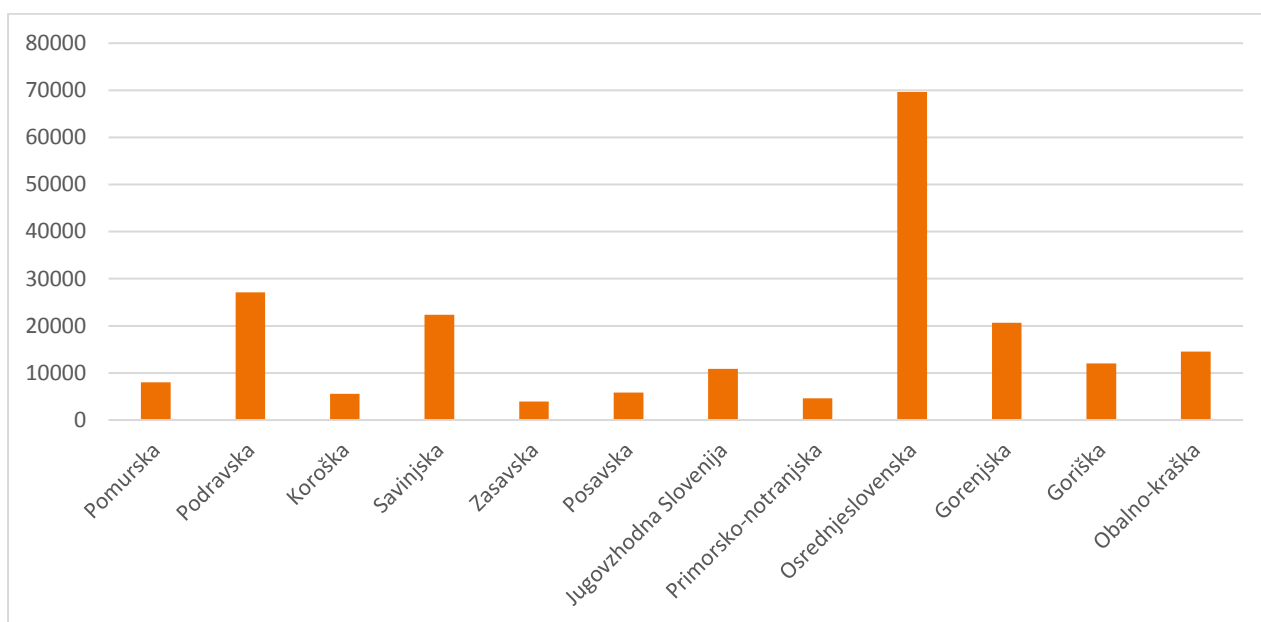


Figure 5: Number of enterprises per statistical region, 2019. Source: SORS, 2021

2.2. Summary of the position of MAP SVARUN

Opportunities, Challenges & Recommendations

The Slovenian countryside is marked by differences between areas. There is no single definition of what rural areas actually are. It seems apt to divide them at least into suburbs (suburban rural areas) and remote rural areas (though even this is too simple a categorisation given the diversity of Slovenia). In Slovenia, the latter is especially distinguished by its uniqueness, natural and cultural environment – either for leisure activities or for work and living. It can be an attribute of the quality of living, but also a potential attribute of adding value to products and services. Slovenians have an innate affinity for living in the countryside, which enables a quality living space – even the infrastructure, comparatively speaking, is not so poor as not to allow for dispersed settlement.

The countryside offers the population a range of commodity and non-commodity goods. In addition to local food, it also offers space for leisure, recreation and living. A noticeable trend is also the growing role of rural work for young families or for the elderly. This also increases the demand for relevant services, including cultural services, which are generally less accessible in the countryside. Part of the population is also choosing to work remotely, which can help reduce migratory pressures and keep the countryside vital. Thus, a crucial opportunity is offered by inclusive digitalisation, which can, given the appropriate cost-effective digital solutions, bring about 'smart decentralisation'. In parallel, sustainable mobility must be supported.

In the Slovenian countryside, we have significant economic potential in the form of unused human and natural resources, as well as unused building stock and business zones.

Agriculture cannot be the only bearer of the development of the countryside, but can contribute to it by keeping the space functional and enabling the development of other activities, e.g. tourism. An important or even key determinant of development is fostering quality jobs in rural areas. These could be in industrial activities that will be based on added value and thus also attract a younger, educated workforce to settle in the countryside; industrial policy must also be strengthened in its territorial dimension. Service activity is also important, as well as services in the field of health and care for the elderly, in addition to tourism, as well as improving the quality of life of all age groups. All this requires a strategic approach of the state, spatial planning and synergy of various public policies and initiatives of local communities.

Sustainable rural development is an objective that needs to be adapted to individual areas and their potential. We see a special opportunity for the diversification of economic activities and thus rural development in sustainable entrepreneurship in an economic, environmental and social sense. This is based on knowledge, creativity and a supportive environment, and above all on human resources. The Slovenian countryside also has many excellent stories and entrepreneurial solutions, but unfortunately too many of these are individual and too few collective. Thus, potential for growth and resilience may also be sought in the stronger cooperation of economic entities within areas, which can build on the experience of local leaders and pioneers.

The vision of some workshop participants is that young people would 'take over the Slovenian countryside' and that a leap in mentality must take place. Regardless of the need for generational renewal (especially in the peripheral Slovenian countryside), it is important to establish an innovative environment for young and not-so-young people throughout the countryside, where entrepreneurial mindsets and ambitions can find fertile ground. This includes overcoming psychological limitations and promoting innovative good practices. When all is said and done, this must allow for a decent income and the holistic development of the individual and society.

Measures (enablers) and obstacles

Diversification of economic activities can be a useful tool to improve the well-being of the rural population, if innovative and directed towards such an improvement. It can be understood both as the creation of new employment opportunities or changing the existing ones. We take it in a positive sense, that is that changes in the production structure bring benefits in terms of employment, increased added value, and the achievement of sustainability goals. Positive diversification is the fruit of institutional and individual innovation, often also public and local support, and relies heavily on the creativity of individuals. However, not every increase in the diversity of economic activities brings a positive result. Successful diversification is the result of directed strategic work of private and/or public organisations and individuals, which requires investment, knowledge, creativity and a suitable environment for stimulating bottom-up entrepreneurial initiative.

The economy in the Slovenian countryside is characterised by silo thinking in terms of the lack of horizontal and vertical integration (in the industry and between industries). Regardless of certain excellent individual cases, the situation reflects rigidity when looking for something new – we are good followers and slightly worse innovators. It is therefore necessary to develop public policies and a support system for the design and transfer of knowledge that encourages and derives from creativity.

It is necessary to take advantage of the bottom-up interest and help it come to life with a clearly defined spatial and economic vision of development, which requires an inclusive attitude of stakeholders and innovative approaches. It is very important for changes in approaches that there are also changes in the government sector and educational institutions. There is a need to overcome the narrow sectoral focus of individual ministries and other rural development stakeholders, and, at the policy level, to have the vision, courage and consensus to introduce new approaches (such as the territorial approach), which may also require a reallocation of resources away from existing beneficiaries. In adopting concepts such as 'circular smart communities', rural policy and public interventions must also take account of the differences between different segments of the countryside, as different terms may mean different things in different areas. This means a stronger opening of institutions to receive information from the field and stronger participation of local stakeholders into decision-making on all relevant levels. Policies must also establish communication and cooperation of conflicting interests in the countryside, where strong disagreement can be found especially in terms of spatial use.

The role of public policies in the establishment of a supportive environment also includes very tangible preconditions for living and working in rural areas, namely the targeted direction of funds and measures in

the establishment and maintenance of transport, public utility, energy and other infrastructure. At the same time, it seems necessary to learn from the experience of past policies, such as e.g. LEADER / CLLD, and identify where there are gaps that prevent better exploitation of existing potentials. This requires an in-depth and comprehensive, multidisciplinary analysis of the effects of current policies and other mechanisms already in place in rural areas, including the functioning of institutions. Only on the basis of such an analysis will it be possible to develop coherent, targeted, data-supported policies with clear objectives and resources, based on a realistic picture of the situation in rural areas.

The focus should be on establishing new value chains that enable adding value. But first, they need to be recognised and their potentials identified. If these exist, they should be supported by a suitable programme if they are unable to advance by themselves. Supportive solutions and investments need to be identified and encouraged, which would also enable a qualitative leap in the use of resources. Policies should also promote sectoral and cross-sectoral cooperation. We place special emphasis on the strategic development, promotion, and expansion of the experience of local champions who are located and operate in a rural environment. As a rule of thumb, these are export-oriented companies involved in international value chains that demand new technological products and encourage cross-sectoral cooperation by generating demand, while also having positive effects on the social and demographic structure of the Slovenian countryside.



Figure 6: Results of workshop – Measures for stimulating entrepreneurial activity in the countryside

Particular emphasis should be placed on promoting entrepreneurship and innovation in rural areas. Support should provide for empowerment of small entrepreneurs, financial literacy, support in obtaining start-up funds and reducing business risks, and promotion of entrepreneurship through the cooperation of support institutions (e.g. in the field of agriculture, the Agricultural and Forestry Chamber, Chamber of Commerce and Industry, Chamber of Craft and Small Business, Association of Rural Youth, and the Cooperatives Association). In addition to two-way vertical (between creators, transmitters and users) knowledge transfer, the horizontal (peer to peer) exchange of knowledge between rural economic entities, especially farmers and through a mentoring system, especially in terms of the transfer of useful knowledge and good practices (as well as information on bad ones), should be encouraged.

Research gaps

From the point of view of the general framework for the diversification of rural economies, the following issues ought to be explored:

- Definition of concepts of developmentally capable value chains and economic champions in connection with rural development.

- Approaches and tools for greater integration of different policies in support of diversification and rural development (improvement of the work of the state administration, cross-sectoral cooperation, new approaches).
- New models of education and training in support of entrepreneurial development in rural areas.

3. Individual and group strategies of diversification in agriculture

3.1. Key scientific evidence

Subsidiary activities on the farm

When talking about agricultural holdings, diversification can be defined as “the expansion of the use of the resources of an agricultural holding for commercial purposes”. It pertains to the development of new activities that generate the income of the agricultural holding or enable a more efficient use of production capacities. This may include expanding the core business (adding value) or focusing on a new, possibly non-agricultural activity (usually related to innovation). Diversification can take place within the framework of a subsidiary activity (SA) or a company (including the status of private entrepreneur) (Juvančič, 2021). Farms often carry out SA as long as the scope and nature of the activities, as well as the legal frame, allow it. In case of a substantial growth of activity, it must be organised as a company or under the status of private entrepreneur.

The growing interest in additional income sources is due to several factors. Agricultural production in Slovenia is characterised by relatively low and unstable incomes and limited opportunities for obtaining additional resources, especially land. At the same time, there is a growing demand for products and services related to subsidiary activities resulting from changed consumer habits and social change. This demand also goes beyond current SA and requires the creation of and entry into new value chains. New technological possibilities and the social desirability of integrating biomass into value chains and closing material and energy loops within the circular bioeconomy are also becoming increasingly important.

SA and new value chains enable farms to improve the efficiency of the use of production factors, improve the income position of farms by adding value, and create new jobs in rural areas. Some SA are also important in a cultural sense, as they help to preserve tradition and cultural heritage. In addition, they help to diversify risks and sales channels and increase liquidity. In more direct contact with customers, it is necessary to approach their mentality, which can sensitise to untapped opportunities, and, last but not least, people who are engaged in SA are often more personally fulfilled, as the activity is a way of life and not just a source of income. Community responses can also be positive in terms of emulating successful models, especially in tourism; on the other hand, cannibalism, commensalism or even rejection from the local community is also possible, especially in the case of larger-scale projects. When it comes to locations attractive to tourists, this can lead to a life cycle of tourism development in the region, pressure on real estate prices, unpredictable side effects for ‘natives’, young people, etc.

Sustainable resource management and tourism

Many opportunities for income diversification are offered by the growing interest in society for more sustainable living, which includes more sustainable forms of production on the one hand and the desire for more frequent and authentic experiences in nature on the other. Farms are important users of ecosystem services provided by agricultural and other ecosystems in rural areas, and on the other hand, supporters of the provision of ecosystem services to society at large. These include e.g. traditional farmed landscapes, the possibility of enjoying natural values, as well as e.g. preserved long-term capacity of agricultural land for food production, etc. However, these services are often not properly valued in the market and are often tied

to smaller farms with more extensive production systems. The challenge, then, is how to achieve their more appropriate evaluation through public policies and market mechanisms. There are several options for adding value through the market:

- **Certification schemes** – these can be public (e.g., the Organic Farming Certificate and other schemes denoting above-standard farming practices) or private (e.g., Fair to Nature, in which the grower undertakes to devote 10% of his area to nature conservation). They are based on built-in rules, as well as consumer awareness and confidence that the product is produced in a certain way.
- **Marketing with the use of charismatic species or special areas** – opportunities for individual or collective market differentiation, e.g., dairy products of Dutch farms cooperating in measures for the conservation of farmland birds; in Slovenia, the dairy Planika uses the Soča trout in its image, while Piranske soline market salt from a protected area.
- **Marketing of services** – e.g., tourist farms, bee-tourism etc. ... all these farms market a nice landscape, serenity, nature, sustainably-grown produce and home-made food, etc. There are conservation farms as well in Slovenia, where farmers conduct their activity so as to support the functioning of protected areas, management of natural reserves, etc.

The marketing of environmental services in this way must be clear, transparent, reliable and conscious in terms of preserving the elements that are the subject of marketing (e.g., the actual conservation of the populations of the species marketed) and achieving environmental objectives. At the same time, it requires the development of appropriate skills in terms of developing appropriate agricultural production practices that are both environmentally and economically sustainable. The latter is related to achieving economies of scale on the one hand (which in some cases also requires horizontal integration to meet demand) and on the other hand to knowledge on market characteristics, consumer preferences and purchasing power. The development of such sustainable models must therefore be accompanied by an appropriate support system that can help manufacturers seize the opportunity and stay in the market.

Tourism represents a special category of marketing of environmental (as well as other) services. This has been a fast-growing industry in Slovenia in recent years – in 2019 it accounted for 9.9% of GDP and 10.3% of all employment. The largest share of all overnight stays by type of municipality is represented by mountain municipalities (almost 40%), followed by spa municipalities and seaside municipalities (approx. 20% of overnight stays each) (STO, 2020, cited in MAFF, 2020). In 2018, the majority of overnight stays were in rural areas and rural tourism is ranked among the ten leading tourist products in Slovenia at the national level (MAFF, 2020).

A major challenge for rural tourist destinations is the level of appropriate load on the areas, especially if tourism has not been highly developed before and there is no basic infrastructure. On the other hand, there are rural areas where tourism is already quite developed, which are quite burdened with domestic tourism. The question, then, is how some potentially interesting destinations might relieve the more congested areas and develop the countryside in the process. It is necessary to determine the carrying capacity, assess tourist flows and assess how a particular area should develop. There are several ways to determine this, considering the carrying capacity, social capacity (satisfaction of the local population and subjective assessment of when limits are reached), perception of the destination by tourists (if well developed, they can accommodate many tourists and still satisfy visitors). Modern diagnostic models contain an economic, social, environmental and political-participatory pillar. On this basis, a model can be built that includes all the important elements of measuring the carrying capacity of a destination (Knežević Cvelbar et al., 2021; Schuh et al., 2019). Tourism performance and territorial context are considered as two related dimensions of the concept of carrying capacity. Thus, we can see the effects of tourism, whether we can still develop, manage or reduce it or transition to higher-quality tourism. With few exceptions, destinations in Slovenia are not yet congested; the problem is seasonality, which the countryside still has the potential to reduce – destinations can contribute to the even development of tourism, especially through inter-destination cooperation, where tourists are redirected to other destinations.

Collective action

The *fil rouge* of improving the income level of Slovenian farmers is the need for collective action. The problem with most stories in Slovenia is that they remain small and need some leverage (e.g., public rules and financial mechanisms, professional starting points) to develop larger stories from the bottom up. The OECD (2013) divides the factors influencing farmer behaviour, including willingness to act collectively, into three groups, namely external (benefits or reduced costs), internal (habits, experience, perception), and social (norms, culture, cooperation, mutual trust, etc.) factors (Figure 7). Institutional features that promote long-term cooperation are alignment of interests, good governance, and clear and detailed rules.

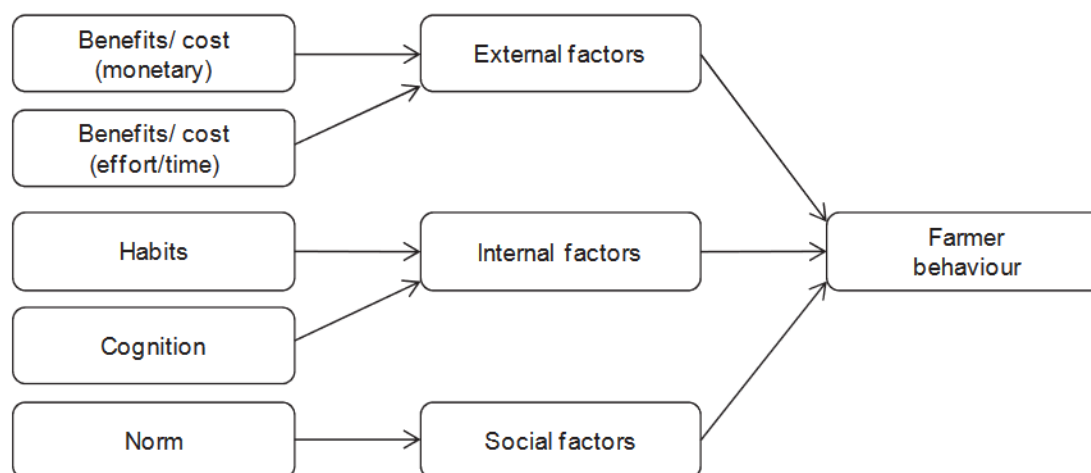


Figure 7: Factors affecting farmer behaviour (OECD, 2013)

Collective action can take place:

- bottom-up (participation of peers, may also rely on local leaders), top-down (with the help of external actors helping to coordinate interests, such as the state or other organisations (e.g. regional development agencies or individuals);
- in formal (e.g., cooperatives – Slovenia has a rich history and a functioning cooperative system, various peasant associations, but also economic and interest grouping is important, e.g. the Agricultural chamber and Chamber of Commerce) or informal organisational forms;
- territorially (e.g., at local community level) or in relation to value chains (vertically or horizontally).

Good practices

The Slovenian countryside has a rich set of good practices on all the topics outlined above, which we also discussed in the workshops. These are agritourism, agri-food chains, cooperatives, as well as the marketing of ecosystem services. However, new entrepreneurial stories that combine different economic activities, agricultural production, processing, rural tourism etc., stand out the most. The most advanced ones also have branded products (geographically protected products as well as their own brands), are looking for niche markets and additional marketing channels (e.g., internet meat sales, open days). The common features are that they are mainly young and educated individuals who have the good support of previous generations, but often also come from other backgrounds. Upgrades were sought mainly in the field of complementary activities (additional processing and tourism), with special emphasis on marketing and promotion. These individuals also received a lot of education and took the best examples at home and especially abroad. Interestingly, regardless of their performance in the local environment, there are not that many who follow their examples.

However, good stories of local integration are also emerging more and more, in the framework of which individuals organise and perform together in the market; examples are smaller common shops and the like. It would also be sensible to build on the existing tradition of informal integration, which is relatively strong, and try to bring informal structures closer to the business standards that apply in larger markets, thus improving the competitive position of domestic producers.

3.2. Summary of the position of MAP SVARUN

Opportunities, Challenges & Recommendations

Opportunities and challenges of agricultural diversification are found in the development of subsidiary activities, construction of new and integration into existing value chains, marketing of ecosystem services, tourism and especially enhanced integration and cooperation.

The future of rural development in the field of diversification lies in dynamic and enterprising agricultural holdings, especially family farms, including the smaller ones. Individuals and groups need to be encouraged and supported, especially the “champions” in several dimensions. First of all, it is about creative individuals who, through innovative diversification solutions, enable the increase of added value and employment in rural areas. Even more important will be those who will develop collective solutions – that is, vertical linkers who will form producer organisations and modern cooperatives. It would be sensible to encourage all those who already have good contractual relations in resilient value chains.

Namely, entire value chains must be optimised, a qualitative leap in integration and cooperation must be achieved, which must be adequately supported by public policies (agricultural, economic, regional/industrial, educational, etc.), receptive to the dynamism of value chains. In addition, a supportive environment must be provided that can encourage the creation, development and integration of various entrepreneurial initiatives at the individual and collective level of agriculture and in conjunction with other economic (and certain non-economic) sectors, especially services.

Farms looking for their future in diversification and innovation face a range of challenges. We highlight legislative and public-support barriers. With their new activities, they quickly find themselves outside the scope of basic agricultural activity (e.g., number of seats in excursion tourism, new forms of processing, sale of promotional material from farms), which forces them to look for new organisational forms, which complicates their activities and increases their administrative burden. Tenders are not adapted to such champion farms, which must therefore combine different tenders and also artificially adapt to the tender conditions. Also, due to rigid and production-oriented agricultural education and consulting systems, there is weak knowledge on marketing, finance, administrative procedures, food safety rules and more.

One of the major obstacles to achieving higher value added and a higher level of professionalisation is the unfavourable age structure in agriculture, which is related to the lack of a social safety net for those who decide to transfer the farm to successors. In order to bridge the generation gap and more intensively transfer the benefits and burdens of farming to young people, which should enable a dignified life for all generations on the farm, it is necessary to establish appropriate social protection mechanisms for those who hand over the farm. Farms with younger successors find it easier to apply various diversification strategies, including more innovative ones. More work should be done with young people on farms (including new ones) in terms of promoting agriculture as a way of life, profession and economic activity. In any event, the farm should be treated holistically as a respectable entity. The value-added present in the quality goods of Slovenian farms should be properly recognised, valued and rewarded by the consumer, which means appropriate labelling and promotion.



Figure 8: Vision of diversification in agriculture

Measures (enablers) and obstacles

SA as one of the forms of income diversification on farms should be more accessible, which means simplification of support activities that should enable SA and the empowerment of the farmer as the decision-maker regarding his farm's business orientation.

The current legislation is overly rigid and complex, especially in terms of administration and tax treatment, so it would make sense to simplify tax treatment (flat-rate taxation and similar measures) and unify support systems modelled on the »e-vem« system for entrepreneurs, where all the necessary information can be obtained and administration conducted in one place. This also means stronger inter-ministerial cooperation and a reduction in the fragmentation of activities across different line ministries, as well as the unification of the definitions of farmers in the legislation on taxation, social security, etc. Some grey areas need to be regulated and databases updated to make them more useful for decision-making. One of the barriers highlighted is also the current level of political culture and dialogue, which hinders systemic shifts.

When eliminating administrative burdens, we especially emphasise the field of social service SA. The legal basis in this area is not yet sufficiently developed to allow these subsidiary activities to be carried out to a greater extent on farms. A more appropriate way of taxation should also be considered. A flat-rate taxation could also be introduced for food processing, which would speed up the introduction of SA and thus ensure a decent income for smaller farms as well. In general, the current set of subsidiary activities is restrictive and it would be advisable to consider abstract legislation (as opposed to the current exhaustively listed options), or at least in the direction of expanding the permitted set.

In addition to greater flexibility in the definition of SAs, agricultural policy measures also need to be adapted. Combining tenders for investments in agriculture, processing and tourism should be considered. Measures for young farmers should also support diversification into SAs, in particular tourism. Special attention needs to be paid to joint marketing, the development of collective brands, joint promotion and stores. It is also necessary to develop models of nature-oriented farms that will be able to market this appropriately.

Other parts of the support environment should be developed as well – the advisory service and the cooperative system should be further upgraded, services supplemented and additional training provided. Under the cooperative system, joint promotion should be strengthened, the share of farms participating in the cooperative system should be increased (there are currently 13 000, while about 50 000 are thought to have market potential) and the crops of those already participating should be better included in the system. The Public Agricultural Advisory Service should upgrade its content to follow current topics and dilemmas, offer special knowledge and adequately support farmers with the necessary knowledge. We highlight special knowledge in the field of finance, marketing, administrative procedures, food processing requirements,

communication and promotion. Secondary and higher education programs also need to be adapted; generally, cooperation between all stakeholders in the creation and implementation of educational programmes in the field of agriculture and food should be strengthened.

Research gaps

In the field of individual and group diversification strategies, it would be good to explore the following issues:

- innovative business models of diversification in rural economies - what we can learn and how to support their emergence;
- legal and institutional barriers to the diversification of rural activities;
- possibilities for the development of nature conservation agriculture;
- models of strengthening the integration of agricultural holdings and building modern value chains.

4. Digitalisation and diversification of rural economies

4.1. Key evidence

The diversification of rural economies can be significantly supported by digitalisation. We treat it separately at the level of rural areas and agriculture.

Rural areas

Slovenia is very well covered by broadband internet, but there is a significant gap in skills and in the public services available. Infrastructure is a basic condition, but this is just the beginning. A supportive environment is needed – in the field of digital innovation systems, there is a lot of support in urban centres but significantly less in rural areas. If we want to reduce the gaps that have widened recently (and will only increase them further with the measures currently proposed), we will also need to have adequate digital innovation systems in rural areas – not the same as in cities, but able to address challenges and needs in rural areas. The most important factor is people – who need to be provided with lifelong learning and competencies for success in the labour market. In strengthening digitalisation in rural areas, it is necessary to think holistically and not focus on agriculture alone. Important aspects are also e-health, e-care, education and culture and teleworking.

Digitalisation is made possible by data. Their collection, analysis and interoperability are important. Equipment (sensors, computers) is not enough, there must also be new business models that will exploit digitalisation. Technologies and public services will need to be user-friendly and accessible. In rural areas in particular, it is important not only to focus on economic growth, but also on social innovation in the areas of environment, relations, governance and democracy. These innovations often also stimulate economic ones. It is in rural areas that technological innovation is usually the result of solving a social problem. Experience shows that the introduction of innovative approaches requires local leaders or coordinators – intermediaries who understand the needs of the local environment and help to tailor and implement appropriate solutions. It is crucial to take into account the knowledge and experience in the field that the proposed solutions are relevant.

Agriculture and food systems

In the future, we will have to produce more food with fewer resources, while increasing our attention to the environmental acceptability of food production. New technologies, especially digital ones, may be helpful, but they are a challenge in themselves, and the central point is, of course, the human being, who cannot be replaced. Farmers, food producers and consumers must be brought to the fore. The Nordic Council of Ministers (2020) described the following 8 megatrends, which can also be transferred to the Slovenian environment:

- Technology will penetrate all areas of social life.
- Food systems will be redesigned with a new set of goals.
- Digitalisation is opening new horizons.
- Society will become increasingly polarised.
- Products will be valued based on the amount of waste they produce.
- A new appreciation for the environment will develop.
- Anxiety and fear will become pervasive in our society.
- New lifestyles will emerge and redefine our value systems.

Strategic planning requires understanding of these trends. On the one hand, there are strategies like Farm to Fork, on the digital transition, biodiversity, smart specialisation etc. All of them are also related to technologies, but they require an understanding of the functioning and thinking specific to agriculture and agricultural holdings. Farmers need to be linked into smart supply chains, and a common infrastructure, data (blockchain, other open data and capture systems) and knowledge networks are needed. This requires one-stop shops that can facilitate the transformation of target groups through these approaches, where the common infrastructure is also emphasised (most farmers do not have the capacity to develop traceability systems, etc.); such common infrastructure often does not have a business model because it is a common good, or it is limited to a specific topic.

Important areas for the introduction of digitalisation in agriculture are:

- *Raising awareness* - in digitalisation, especially in agriculture, there is a fear of the unknown and of the associated costs. We need to first talk about why introduce new technologies at all, and start communicating appropriately.
- *Identification and transfer of technologies*. Technological solutions for all problems already exist, they only need to be identified and adapted and introduced, taking into account the specificities of Slovenian agriculture.
- *Development of strategies and business models* – any change in technology affects the way business models are implemented. This is particularly sensitive in agriculture. It is necessary to start from this point of view and then introduce technologies.
- *Financing and investment* – new technologies are expensive and risky, so public funding must be provided, especially in the early stages of adoption.
- *Mentoring and training* – knowledge. Classical training models are no longer sufficient; new ways of transferring knowledge through demonstration farms, pilot approaches, etc., need to be developed, where the farmer is brought to the technology so that he can see, touch, become acquainted with it and overcome fear and see the effects of implementation. Therefore, living labs are needed, and collaboration with other networks is crucial.

The transformation into digital agriculture and agri-food chains must be adapted to Slovenian characteristics, conditions, the local environment and individuals, and not blindly import models from elsewhere without

rational consideration. It makes sense to differentiate ourselves, specialise regionally and sectorally and take advantage of comparative advantages. We do not need new strategies to follow global trends, but we must use existing ones to connect Slovenian manufacturers and compete at the European level, which requires cooperation in data exchange, sharing machinery and equipment, good practices and common solutions.

Good practices

Slovenia has quite a few good practices, both in organising the process of digitalisation in agriculture and in the form of pilot projects. One such example is the DIH Agrifood Digital Innovation Hub, which provides services to facilitate the digital transformation of agri-food target groups. It is the largest DIH for the agri-food sector in Europe and is reflected in a number of farm projects, in the field of the Internet of Things, production services and traceability. DIH promotes awareness of digitalisation, identification and transfer of theories, development of business models, mentoring and more. Along with it, there are quite a few other individual projects that can be found in the field of plant protection, e-sales and other fields.

4.2. Summary of the position of MAP SVARUN

Opportunities, Challenges & Recommendations

To promote diversification and rural development, knowledge is required: use of basic digital tools for their business, use of digital services, digital marketing, website editing, knowledge of digital tools for advertising and product offering, ability to analyse data, secure data management, identification and exploitation of trends, knowledge of existing user platforms in tourism, sales, post office, e-banking, etc. There are also many digital options that can reduce dependence on physical mobility and facilitate rural life, such as social services, e-shopping, universal access to digital identity, e-procurement, digital rural health centres, etc., and enable work from home.

The vision of SVARUN is that in 20-30 years, people will be able to use digital tools that will simplify their life, not burden them. Quick and easy access to systems such as e-government, mail and banking is needed. It is necessary to connect platforms that would enable the digitalisation of public procurement (including group supply, and thus improve the negotiating position in the value chain), eliminate duplication and enable the provision of all necessary services and obtaining relevant information in one place. Above all, digitalisation is not an end in itself, but a tool for diversifying activities, fostering innovation, entrepreneurship and, finally, life, so the right level of digitalisation must be observed in rural areas, especially in tourism, where what is expected is actually a retreat into nature and away from technology.

In the field of agriculture, the transfer of technologies must be encouraged and special emphasis must be placed on collective solutions that are inclusive for all farm sizes. Digitalisation can also support different forms of cooperation between farms and in value chains and make them more effective and interesting.

Measures (enablers) and obstacles

The problem of inadequate internet infrastructure is still present in some rural areas. Therefore, it is first necessary to provide quality access to the internet. In agriculture, especially in agricultural institutions, knowledge in the field of digital technologies is rather weak – educational and advisory institutions do not have adequate staff to transfer knowledge to farms. Therefore, they need to be provided with adequate knowledge and staff, and at the same time new models of knowledge transfer need to be developed. It is also necessary to consider reorganising school and study programs in the field of agriculture and improving infrastructure at all levels. The availability, comparability and connectivity of key agricultural data need to be

strengthened centrally. It is advisable to create demonstration centres, where people can see for themselves what they would get from digitalisation and how it could make their lives easier.

It is thus necessary to overhaul the system of formal education for the acquisition of competencies in the entire vertical of knowledge and professions in agriculture, forestry and food. Training on the concrete use of digital tools for rural economies (not just agricultural ones) also needs to be strengthened. However, educators themselves need to be trained so that they can pass on knowledge in an appropriate way; it would make sense to create centres where people can access knowledge. Undoubtedly, the local population must be involved – even if the responsibility for this is transferred to the municipality, they must ensure decentralisation within the municipalities. It is essential to ensure adequate data security and public awareness, as well as introduce appropriate legislation in the field of ownership of the variety of increasing amounts of gathered data. There is a lack of expertise, competencies, financial resources and a large diversification of stakeholders in this area, and consequently responsibility.

Research gaps

In the field of digitalisation, it seems necessary to fill research gaps mainly on the following issues:

- Overhaul of education systems in terms of strengthening digital knowledge and competencies.
- Models of knowledge transfer in the field of digitalisation in agriculture.
- A smart countryside that is digitally inclusive.
- Digitalisation and support to the diversification of rural economies.

Annex 1: Key scientific evidence or activities cited by the Multi-Actor Platform

DG REGIO, "Degree of urbanisation," 2011.

https://ec.europa.eu/regional_policy/mapapps/urban/degurba.html

EUROSTAT. (2018). *Glossary: Functional urban area*. https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:Functional_urban_area

Grivins, M., Halloran, A., & Kale, M. (2020). *Eight megatrends in Nordic-Baltic food systems*. Nordisk Ministerråd 2020. <https://pub.norden.org/us2020-453/#>

Kušar, S. (2017). Economic development of municipalities in Slovenia. *Geographical Review*, 38, 95–109.

MKGP. (2020). *Strateški načrt skupne kmetijske politike 2021–2027. Specifični cilj 8: spodbujanje zaposlovanja, rasti, socialne vključenosti in lokalnega razvoja na podeželskih območjih, vključno z biogospodarstvom in trajnostnim gozdarstvom analiza stanja analiza swot opredelitev potreb*. Ministrstvo za kmetijstvo, gozdarstvo in prehrano. https://skp.si/wp-content/uploads/2019/09/8_SN_SKP_21-27_Spodbujanje_zaposlovanja_socialne_vkljucenosti_lokalnega_razvoja_biogospodarstva.pdf

Myrdal, G. (1957). *Economic theory and under-developed regions*. Duckworth London.

Nared, J. (2020a). Regional Development in Slovenia. In D. Perko, R. Ciglič, & M. Zorn (Eds.), *The Geography of Slovenia: Small But Diverse* (pp. 291–302). Springer International Publishing. https://doi.org/10.1007/978-3-030-14066-3_19

Nared, J., Bole, D., Razpotnik Visković, N., & Tiran, J. (2020b). Slovenian Economy. In D. Perko, R. Ciglič, & M. Zorn (Eds.), *The Geography of Slovenia: Small But Diverse* (pp. 181–192). Springer International Publishing. https://doi.org/10.1007/978-3-030-14066-3_12

OECD. (2016). *RURAL 3.0*. OECD. <https://doi.org/10.1787/9789264260245-en>

OECD. (2013). *Providing Agri-environmental Public Goods through Collective Action*. OECD Publishing. https://scholar.google.com/scholar?hl=sl&as_sdt=0%2C5&q=Providing+Agri-environmental+Public+Goods+through+Collective+Action+oecd+2013&btnG=

Povšnar, J., Sodja, U., Stare, M., & Jemec, N. T. (2020). *Poročilo o produktivnosti 2020*. UMAR/IMAD. https://www.umar.gov.si/fileadmin/user_upload/publikacije/Porocilo_o_produkktivnosti/2020/slovenski/PoP_2020_splet.pdf

KNEŽEVIĆ CVELBAR, Ljubica, et al. *Smernice za management turističnih destinacij na podlagi modelov nosilnih zmogljivosti in turističnih tokov*. Ljubljana: Ekonomska fakulteta, Založništvo, 2021. Znanstvene monografije Ekonomske fakultete.

Udovč et al. (2018) *Zaključno poročilo (CRP: V4-1631) Potenciali in ovire za razvoj dopolnilnih dejavnosti na kmetijah v Sloveniji*.

Annex 2: Additional sources

- Myrdal, G. (1957). *Economic theory and under-developed regions*. Duckworth London.
- OECD. (2021). *Metropolitan areas*. <https://stats.oecd.org/viewhtml.aspx?datasetcode=CITIES&lang=en>
- Dimovski, V., Znidarsic, J., & Penger, S. (2006). Dimensions of entrepreneurial activity: The case of Slovenia. *International Business & Economics Research Journal (IBER)*, 5(5). <https://clutejournals.com/index.php/IBER/article/view/3477/3524>
- Juvančič, L., Arnič, D., Berne, S., Grilc, M., Hočevan, B., Humar, M., Javornik, S., Kocjan, D., Kocjančič, T., Krajnc, N., Križnik, N. B., Likozar, B., Lovec, M., Mavsar, S., Mešl, M., Mihelič, R., Novak, A., Osojnik Črnivec, I. G., Oven, P., ... Ščap, Š. (2021). *Zaključno poročilo CRP Premostitev vrzeli v biogospodarstvu: Od gozdne in kmetijske biomase do inovativnih tehnoloških rešitev*. Biotehniška fakulteta.
- Organisation for Economic Co-operation and Development. (2020). *Rural Well-being: Geography of Opportunities*. OECD Publishing. <https://www.oecd.org/cfe/rural-well-being-d25cef80-en.htm>
- Schuh, Bernd, Gaugitsch, Roland, Derszniak-Noirjean, Martyna, Sedlacek, Sabine, Zekan, Bozana, Dan, Daniel, Gunter, Ulrich, Weismayer, Christian, Mihalič, Tanja, Kuščer, Kir, Novak, Miša. (2019). *Carrying capacity methodology for tourism : inception report*. Luxembourg: ESPON. European Regional Development Fund, ESPON Cooperation Programme, EU
- SURS. (2021). *Podjetja po kohezijskih in statističnih regijah, Slovenija, letno*. <https://pxweb.stat.si/SiStatData/pxweb/sl/Data/Data/1418806S.px/>



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