

# FRAGMENTED AGRARIAN SPACE: BUILDING BLOCKS AND MODERNISATION TRAJECTORIES. THE CASE OF SLOVENIA

IRMA POTOČNIK SLAVIČ

University of Ljubljana, Oddelek za geografijo, Filozofska fakulteta, Ljubljana, Slovenia

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**ABSTRACT:** Production, processing and consumption within Slovenian agrarian space are fragmented due to physical constraints (72.4% of the territory categorised as ANC) and socio-geographic factors. Based on available data, five essential building blocks of contemporary Slovenian agrarian space (available land, change management, integrated circular economy, adjustable policies, and flexibility of institutions) are discussed. Interrelations among the building blocks shape the modernisation trajectories of approx. 70,000 agricultural holdings in Slovenia. The coexistence of three modernisation trajectories, i.e. practised autarky, various forms of pluri-activity, and small-scale intensive and innovative modernisation, creates a complex mosaic. The governance of multifunctional and multi-structured agrarian space is becoming more demanding.

**KEY WORDS:** fragmented agrarian space, pluri-activity, modernisation trajectories, Slovenia

*Irma Potočnik Slavič, University of Ljubljana, Oddelek za geografijo, Filozofska fakulteta, Aškerčeva 2, 1000 Ljubljana, SI-Slovenia; e-mail: irma.potocnik@ff.uni-lj.si*

## Introduction

Agricultural systems in capitalist economies have been restructured and farmers have been adjusting to change in different ways (Ilbery 1991). These adjustments have been significantly and traceably represented in the transformation of agrarian space. Damianos (1996) identified three main paths of farm business development in Greece: conventional (mainstream) farming, alternative farm enterprise development, and conventional farming with off-farm employment.

A research in the UK (Lobley, Potter 2004) concluded that while there was some evidence of disengagement from mainstream agriculture and

an increasingly diverse set of relationships between the occupation and management of land, commitment to agriculture remained strong amongst farming families.

During several decades, heterogeneous forms of alternative farm enterprise developments have occurred. A reduced (relative) emphasis on material production, combined with an increased emphasis on the provision of environmental services, characterised rural land use at the end of the 20<sup>th</sup> century in parts of the developed world (Mather et al. 2006). In this sense, post-productivism has slowly come into a reality, and should not be abandoned. It may have utility in relation to our understanding of land-use change in developed countries, but also in the former socialist countries. In the latter, over the last 25 years particular attention has been paid to the



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implementation of a land reform, the privatisation of collective and state farms, and alternative sources of income available for farmers and inhabitants of rural areas (Unwin 1997).

Farm diversification as a diverse form of on- and off-farm employment (Nienaber, Potočnik Slavič 2013) has been one farm adjustment strategy, supported by government policy. It is interesting that nearly three decades ago turning into diversification in the UK was still perceived as a source of pin money only and constrained by a set of resistance factors (Ilbery 1991). The French evidence suggested that *vente directe* (i.e. farms that valorise their produce with direct processing and sales) could help to support small, low-intensity farms in landscapes of a high conservation value (Battershill, Gilg 1998). The level of diversification was reported to be relatively low in the Czech Republic, Hungary and Poland (Chaplin et al. 2004), and there was a doubt that enterprise diversification by farmers was unlikely to generate sufficient new jobs to solve the problem of high rural unemployment. A survey on farmers' attitudes to agricultural production, diversification and policy support in five EU member states (France, Lithuania, Slovakia, Sweden, England) showed that a vast majority of farmers in the enlarged EU retained a productivist mind set, wished to maintain an agricultural focus, and strongly rejected notions of policy liberalisation (Gorton et al. 2008).

This paper focuses on the transformation of agrarian space in Slovenia. In a nation state at the important European crossroads, there are several indices of processes, common to the Western and Eastern European countries that have significantly reshaped the agrarian space. We collated a very descriptive comparative analysis on agrarian space in selected Central European states (Slovenia included; Renard 2005) in the early 1990s with the contemporary Slovenian agrarian space. Herewith, it is the aim of this paper: (1) to identify essential building blocks of the contemporary agrarian space, and (2) to elaborate the coexistence of three modernisation trajectories which have created a fragmented multifunctional and multi-structured agrarian space in Slovenia.

In the following, the issue of fragmented agrarian space will be discussed. After a short presentation of geographical settings and data relevant for this paper, building blocks and

modernisation trajectories are discussed. In the conclusion, positive correlations and bottlenecks which either support or hinder the modernisation of agrarian space are indicated, thus providing a relevant framework for Slovenia's future agrarian space development.

## Case study area: Slovenia

A heterogeneous mosaic landscape structure is a significant geographical characteristic of Slovenia due to its location at the crossroads of four European macroregions (the Alps, the Dinaric Mountains, Sub-Pannonian, Sub-Mediterranean). Forests cover more than 60% of its total area and 72.4% of the area is designated as areas of natural constraint (ANC; RDP 2014); agricultural space is small and fragmented. In Slovenia, agriculture contributes a mere 1.2% to the GDP and involves approx. 10% of total population (SORS 2016).

The basic characteristic of Slovene agriculture is the fact that for a long time it has developed in a very different direction from the EU agriculture. This is especially true in the case of the agrarian structure and its development, reflected in agrarian space. While in the countries with developed agriculture, together with the improvement of agricultural technology the processes of the enlargement of farms and the concentration and specialisation of production were going on relatively fast, the private sector of Slovene agriculture until the 1990s was characterised by a permanent decrease and fragmentation of land, by a low working intensity of production and, in some areas, by gradual abandoning of production (Cunder 2002).

In a comparative study of the transformation of agrarian landscapes and the agrarian structure of the world, Renard (2005) also addressed the agrarian structure of Slovenia, partly similar to that of Poland, since both countries mostly avoided mass collectivisation and preserved small private farms after the Second World War. As to the juridical type of agricultural holdings in several Central European states (Eastern Germany, Poland, the Czech Republic, Slovakia, Hungary, Romania, Bulgaria and Slovenia) and its changes between 1989 and 1994, it was noted that the slightest changes in ownership occurred

in Poland and Slovenia, where a vast majority of agricultural land was cultivated by juridical declared private (family) farms, a small proportion was devoted to public companies, while no new cooperatives and private agricultural companies were mentioned. We have to underline that co-operatives (neo-co-operatives as termed by Renard 2005: 167) existed in Slovenia, but were registered as public companies. Renard (2005: 174, 175) envisaged the trajectory of family farms towards the modernisation of resource use, and three possible options to be as follows: (1) keeping up with the practised autarky, (2) systematic pluri-activity, and (3) a transformation towards small intensive and market-oriented exploitation.

This paper analyses contemporary trends in the building blocks of agrarian space restructuring in Slovenia (i.e. the availability of farmland, change management, circular economy within agriculture, adaptable policy, and institutional flexibility). Their interrelations create a type of modernisation trajectories. In fact, the available data confirm a mosaic, multi-structured model of trajectories that has a significant impact on multifunctional agrarian space in Slovenia. We start with a brief data overview, continue with an analysis of building blocks (positive interrelations and bottlenecks), and the three prevailing modernisation trajectories of contemporary agrarian space in Slovenia. The paper concludes with governance issues of this deeply fragmented agrarian space.

## Data framework

In Slovenia, the term 'farm' does not come with a universally accepted definition. Legislation and official statistics instead use the term 'agricultural holding', which is determined with reference to a baseline of productive resource usage, e.g. the land area (a minimum of 1 ha of utilised agricultural area – UAA); or if an agricultural holding has less than 1 ha UAA, additional criteria are defined (the number of animals or the area under specialised cultures). Agricultural holdings can be organised in several ways: as legal persons, sole proprietors, family farms, or as common meadows and mountain pastures. Family farms make up a vast majority of agricultural holdings; the number of agricultural companies

is very low (SORS 2012). In the official statistics, (family) farms are those agricultural holdings that do not have the status of a legal person or a sole proprietor (Potočnik Slavič et al. 2016b). The Agricultural Census registered 86,467 in 2000, ten years later 74,646, in 2013 there were 72,377 and in 2016 a total of 70,063 agricultural holdings were registered in Slovenia (Agricultural Census 2000, 2010; *Splošni pregled kmetijskih gospodarstev* 2015; SORS 2016). This decrease in the number of agricultural holdings is associated with farmers' ageing, the abandoning of agriculture, and methodological changes in farm investigation.

Due to physical constraints (hilly and mountainous topography, karst terrain and inclinations), 72.4% of Slovenian territory is designated as ANC (RDP 2014). Additionally, several important socio-geographic factors (defavourisation of agriculture during the socialist regime, modest changes in land ownership during the last 25 years, increased conflicts of interest for arable land, CAP measures, continuous problems of the agrarian demographic structure, etc.) have shaped the constant loss of UAA in Slovenia. Based on actual land use (*Evidenca dejanske rabe* ... 2014), there are only 900 m<sup>2</sup> of fields available per citizen, giving Slovenia an unfavourable 25<sup>th</sup> position among the EU-27 in 2007 (EUROSTAT, quoted in Pintar et al. 2016). According to the SORS data, Slovenia has approx. 500,000 ha of agricultural land (a 2013–2000 comparison: index 93), of which 477,023 ha of UAA were cultivated in 2013 (2013–2000: index 98) and 476,682 in 2016. The available data confirm that the natural productive resource (land) remains mostly stable. Agricultural areas have decreased mostly due to the processes of overgrowing and the expansion of built-up areas. Accelerated urbanisation mostly took place on the best-quality agricultural areas; according to estimates, over the last fifty years, 10 to 15% of UAA has been lost (Cunder 2014).

Since the data registered a decline in agricultural holdings (by 16,404 in the period 2000–2016) and a quite stable size of UAA, one can expect that the average farm size in Slovenia has grown. In fact, an average agricultural holding cultivated 6.8 ha of UAA in 2016 (an increase of 1 ha of UAA in 15 years; SORS 2016): 2.51 ha of fields, 3.91 ha of grassland, and 0.38 of permanent crops. In addition, some improvements in the size structure

are evident: besides a very strong domination of small farms (60% of all agricultural holdings utilise up to 5 ha of UAA), the share of the biggest farms, cultivating more than 20 ha of UAA, has grown (4.8% of all agricultural holdings in 2013).

Woodland covers approx. 60% of the Slovenian national territory (SORS 2016) and has undergone extensive changes in ownership and size over the past two centuries. Private forests are dominant: private individuals own some 73% of approximately 1.2 million hectares (*Slovenia Forest Service annual report 2014*). The contemporary data underline the quantitative importance of small-scale forest owners: 89% of registered private forest owners have less than five ha of woodland. They own a total of 40% of the Slovene forest area (Pezdevšek Malovrh 2010). Out of approx. 70,000 agricultural holdings in Slovenia, on average each manages slightly more than 5 hectares of forest land (SORS 2016; Kumer, Potočnik Slavič 2017).

Due to their specific agrarian structure, most Slovenian agricultural holdings cannot survive on an income from farming alone: less than a fifth of them earn an income solely from agriculture, and the rest generate it from other sources on or off the farm (*Agricultural Census 1991, 2000, 2010*).

## **Building blocks and modernisation trajectories of contemporary agrarian space in Slovenia**

In the recent decades, agriculture and multi-functional agrarian space in Slovenia have faced numerous changes and challenges, and had to adapt to new economic and social conditions. The complexity of the natural and socio-economic environment in which agricultural holdings currently operate presents managers, their advisers and decision-makers with serious decision-making challenges (Potočnik Slavič et al. 2016b) related to the governance of key building blocks of contemporary agrarian space. How to access arable land, how to manage an agricultural holding in the conditions of constant changes (on the market, demographic changes within an agricultural household, climate change), how to optimise the circular economy, how to make policy more adaptable to various needs, how to improve institutional flexibility?

## **Interrelations: (non)available arable land – change management – institutional (in)flexibility**

Slovenian market-oriented farmers face the problem of lacking available arable land, since the available farmland and woodland are limited resources. The process of land concentration, disallowed in the socialist times, has visible results now: in the period 2000–2013 the share of agricultural holdings using more than 10 ha of UAA had increased from 12.7% to 15.7%, while the share of agricultural holdings with more than 20 ha of UAA, cultivating one third of all UAA, had doubled. Land concentration derives from the land of abandoned agricultural holdings, but of special value is the size of leased UAA. Several surveys (Lampič et al. 2013; Slabe 2015) point out the availability of suitable agricultural land at the level of an individual farm as becoming an acute issue for the Slovenian farmer. According to official statistics, leased agricultural areas comprise almost one third of the structure of UAA and they underline one aspect of so-called change management at the level of an individual agricultural holding. The planning of agricultural activity is more difficult, also risky, if a farmer does not have an assured basic productive resource – suitable agricultural land. The dynamics of land lease is significantly different at the level of statistical units: the more fertile areas experience vivid dynamics in the land leasing process (for example flat and fertile north-eastern and central Slovenia; Fig. 1).

The active lease process faces institutional (in)flexibility as well. This process includes both, individual farm holders and the state-owned Farmland and Forest Fund of the Republic of Slovenia (established in 1993 by the National Farmland and Forest Fund Act; Official Gazette of the Republic of Slovenia No. 10/93 and its subsequent amendments). The latter manages and disposes of state-owned farmland, farms and forests, and assures their rational use and cultivation. This includes entering into lease contracts based on public tenders for farmland leases and an active land trade policy. Its Department of Agriculture also ensures the maintenance of agricultural infrastructure, land redevelopment and amelioration. Following the adopted development policy and directions of the Republic of Slovenia, it provides interested farmers and farm enterprises with additional land

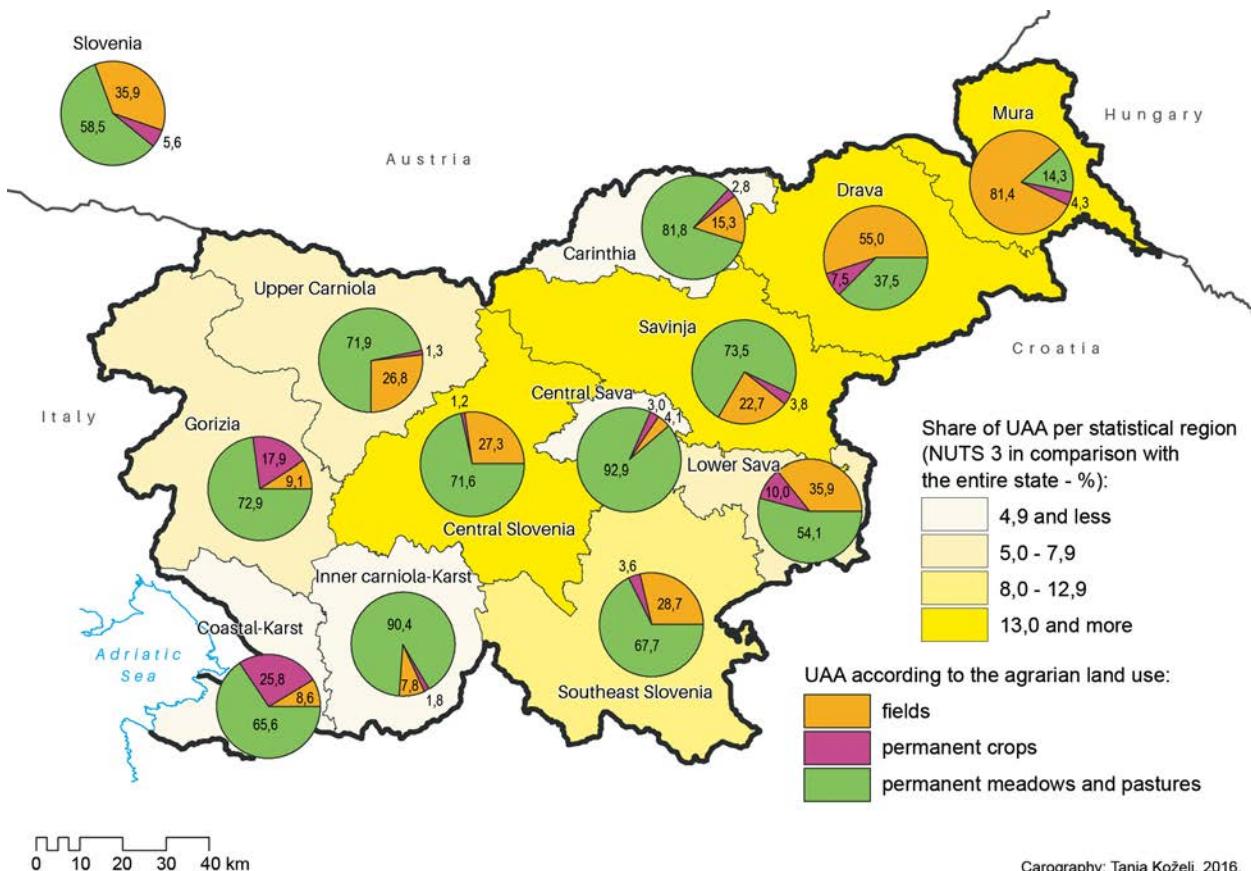


Fig. 1. Utilised agricultural areas in Slovenia (according to the NUTS 3 level).

Sources: SORS 2010; The Surveying and Mapping Authority of the RS 2015.

for farming activities, enables their enhanced production, and consequently higher incomes and development. It is not financed by the state budget; it is funded by its resources. In 2014 it managed 58,814 ha of agricultural land (8.7% of agricultural land in Slovenia; *Poročilo o delu...* 2015): 50,600 ha are UAA, 3,541 ha are under forests, etc. They lease 54,803 ha of land (with or without a fee), under 16,644 lease contracts (on average one person leases 3.3 ha). Legal persons made 476 contracts and leased 23,393 ha; individual persons made 16,033 contracts for 28,783 ha (an average of 1.8 ha). In July 2016, the Forest Department in the above-mentioned Farmland and Forest Fund of the Republic of Slovenia disintegrated, and a new management company was formed with state-owned forests, SiDG (Slovenian National Forests 2016).

## Modernisation trajectories

Interrelations among the above building blocks are reflected in a complex multi-structured

model of modernisation trajectories towards a market-oriented socio-economic system. This dynamic model confirms the simultaneous and interconnected existence of autarky, accelerated pluri-activity, and diverse small-scale market-oriented agricultural holdings that re-shape the fragmented agrarian space of Slovenia.

1. Almost 60% of small agricultural holdings (up to 5 ha of UAA, Table 1) produce exclusively or predominately for their own needs (subsistence farms); they mostly follow the trajectory of practised autarky acknowledged by Renard (2005). As a consequence, the contemporary Slovenian agrarian space is still fragmented, since they cultivate ca. 22% of the available agricultural land.
2. Due to changes in agricultural markets, agricultural policies, lifestyles and dominant social processes (e.g. globalisation, environment degradation, economic shocks), a significant proportion of small agricultural holdings in particular have deliberately started using their resources (productive, human, financial)

Table 1. Agricultural holdings by UAA in Slovenia (2013–2016).

	2013		2016		2016 / 2013 index	
	Number of agricultural holdings	Area (ha)	Number of agricultural holdings	Area (ha)	Number of agricultural holdings	Area (ha)
Total	72,277	477,023	69,970*	476,682	96.80%	99.90%
under 3 ha of UAA	29,105	46,887	28,170	45,736	96.80%	97.50%
3 to under 10 ha of UAA	31,786	176,602	30,044	165,834	94.50%	93.90%
10 to under 20 ha of UAA	7,882	107,004	7,942	107,669	100.80%	100.60%
20 to under 50 ha of UAA	2,999	86,272	3,228	93,428	107.60%	108.30%
50 and more ha of UAA	505	60,258	586	64,015	116.00%	106.20%

Source: SORS 2016.

Remark: \* without agricultural companies.

more rationally, to a greater or lesser extent, also through the registration of on-farm supplementary activities (4,642 farms in 2014; *Register ... 2014*). This is defined as a pluri-activity trajectory (Renard 2005). Their efforts are in part guided and promoted by the RDP. Due to slow and modest improvements in the agrarian structure and the continuous decrease in the number of family farms, it will be difficult for those left to fulfil the strategic functions envisaged in the Resolution on the Strategic Guidelines for the Development of Slovenian Agriculture (2011), and thus for most farms supplementary activities are primarily an existential feature. Several small agricultural holdings practise two of the above-mentioned trajectories: since they usually earn most of their income off-farm, they – as part-time farmers – combine autarky and modest market orientation via supplementary activities. It has to be noted that also bigger agricultural holdings engage in supplementary activities.

3. An important proportion of agricultural holdings follow a trajectory towards small intensive and market-oriented exploitation. According to SORS data on the structure of agricultural holdings, the total standard output of Slovenian farms in 2013 reached € 1,009 billion (an increase of 14% in the period 2007–2013), i.e. on average € 13,944 per agricultural holding. In 2013, almost two thirds of Slovenian farms created a standard output up to € 8000, and cultivated 28% of all agricultural land. Important is the group of agricultural holdings generating from € 8,000 to 25,000; it includes one quarter of all farms, cultivating 30% of UAA and 30% of the agricultural

working force. Only 10% of agricultural holdings exceed € 25,000 of standard output.

### An integrated economic cycle together with (non)adaptable policies create changing images of pluri-activity

Due to the specific agrarian structure, pluri-activity has always been an important characteristic of Slovenian agriculture and the rural economy, since approx. 80% of farms generate incomes from various resources besides agriculture (Udovč et al. 2013). Due to accelerated industrialisation (Klemenčič 2005) and polycentric spatial and economic development, part-time farming (i.e. regular off-farm employment parallel to the management of a small agricultural holding) is a broadly practised form of pluri-activity in Slovenia. The term ‘part-time’ has a very strong empirical resonance in Slovenia (Klemenčič 2002, 2005), despite the fact that a large body of west-European research prefers the term ‘pluri-activity’ (Fuller 1990).

Due to socio-economic changes, contemporary part-time farmers have become an ‘endangered’ category, with minor representation among the rural population. Part-time farmers had a crucial role in subsistence food provision, because they found consumers for their agricultural products in their employment milieu outside agricultural holdings. Part-time farmers were supplied with food and wood for heating from their land, while their employer paid their expenses on social and retirement insurance. All those factors enabled such farmers to invest most of their life savings into the farm: this resulted in a constant modernisation of the farm and in higher standards of living for its members (Klemenčič 2002, Logar 2013).

Their double employment was relatively broadly and easily maintained in socialism. After its decay, part-time farmers were forced to change their way of life and manage work on their farms differently. The diversification and specialisation of economic functions in both areas of employment, on farms as in other, non-farm, business, made the combination of employment more challenging. The diversification of agricultural activity into other agricultural activities is crucial from the financial and technical points of view, and extremely demanding; it strongly depends on an (un)adaptable (agricultural, taxation, etc.) policy. In a detailed survey of part-time farmers in the village of Voklo, the central and fertile part of Slovenia (Logar 2013), they were found to be able to do this because most of them lived on smaller farms with potato production and dairy farming. It is very hard for them to find customers nowadays because of a strong competition and imported goods at low prices. Part-time farmers faced the scarcity of time and capital, and were not able to adjust their offer to the market and to market their products intensively. And then there was the CAP with its administrative regulations, which brought several additional constraints for small part-time farmers. A diversion of agricultural activities for part-time farmers and the coordination of the double life immensely depends on the age structure of households, the area of farmland, and the innovativeness of landowners. Demographically vital agrarian households with bigger plots of land and a flexible attitude towards the changing market demands proved to be more resilient. Pluri-activity is not driven solely by financial pressure or policy measures aimed at farm diversification. Bateman and Ray (1994) underline that a policy aimed at the diversification of farm business may be less than successful, as many internal and external factors appear to work to restrict such activities. Most of the contemporary growth in pluri-activity has been in the form of off-farm jobs.

Several part-time farmers partly transformed their double-income strategy into other forms of pluri-activity. Quite often this trajectory has also been followed by full-time farms, i.e. into supplementary activities on agricultural holdings, often perceived as part of a farm's survival strategy, or rather a potential for better utilisation of its resources (considering the integrated economic

circle: production-processing-consumption-recycling) and thereby increasing its revenue. Furthermore, we found that the development of agriculture and supplementary activities was more relevant in areas more prosperous economically, which is in part probably due to the relative proximity to urban areas and thus better marketing opportunities, better infrastructure and natural production conditions, better employment opportunities for family members, a stronger business orientation in a more developed business environment, and, finally, also due to a better demographic and educational structure (Potočnik Slavič et al. 2016b). The dynamics of the development of supplementary activities was monitored over a ten-year period, from 2004 to 2014. The number of farms registered as having supplementary activities over the decade increased 3.3 times (from 1,406 in 2004 to 4,642 in 2014). During this time, the number of registered supplementary activities multiplied six-fold: registry data for 2004 recorded 2,215, while in 2014 there were 13,444 supplementary activities. In absolute terms, services using agricultural and forestry machinery, equipment, tools and animals were the most frequently registered supplementary activity in 2014 (4,268 registrations, or 31.7%). This reflects the specific nature of such types of activity, i.e. principally providing services to meet the needs of local communities (largely consisting of snow ploughing), seasonal demands (registration numbers increase in the cold half of the year), or else it reflects conforming to existing regulations that, in a formal sense, make it relatively easy to obtain an alternative source of income through registering such activities. The registered supplementary activities included the processing of farm products, honey and bee products, herbs, forest fruits, mushrooms and forest assortments (26.8%, or 3,603 registrations) and farm tourism (1,904, or 14.2% of registrations; Potočnik Slavič et al. 2016b).

### **Empowering young farmers and an important role of agri-cooperatives**

Setting up of young farmers (aged 18 to 40) was a part of the 2007–2013 RDP, with the intention to make them take over and manage agricultural holdings. The main objective of the adaptable policy measure was to improve the age

Table 2. General characteristics of the RDP measure of setting-up young farmers.

Public call	No. of applications	No. of applications granted	Approved grants (in €)	Area of transferred UAA (in ha)
1	355	319	6,768,800	2,373
2	443	384	11,337,200	9,365
3	662	549	7,568,600	4,869
4	519	392	3,027,800	1,622
5	434	389	5,661,200	4,275
6	210	190	13,139,000	8,612
7	392	367	8,523,200	5,522
Total	3,015	2,590	56,025,800	36,638

Source: *Poročilo o napredku ...* 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015.

and educational structure of farm operators and speed up the transfer of holdings to successors. On seven public calls in that period, 3,015 applicants submitted their applications, 2,590 were granted (86%), and others were rejected because their applications were incomplete, too late or not eligible under the call regulations.

In the period 2007–2013 more than every fifth (22%) young farmer came from the Savinja statistical region, followed by Drava (16%) and Mura regions (13%), all in the eastern cohesion

region, characterised by lower economic development and also prioritised in calls. In all, € 55,359,285.25 were paid for this measure, representing 4.7% of the Rural Development Programme expenditure in the period 2007–2013 (Measure 112, AKTRP 2016). Overall realisation reached 113%. Granted agricultural holdings mostly specialised in dairy and mixed vegetation-animal husbandry, on the average the recipient was 33 years old. Also 36,638 ha of UAA were transferred to young farmers. During that

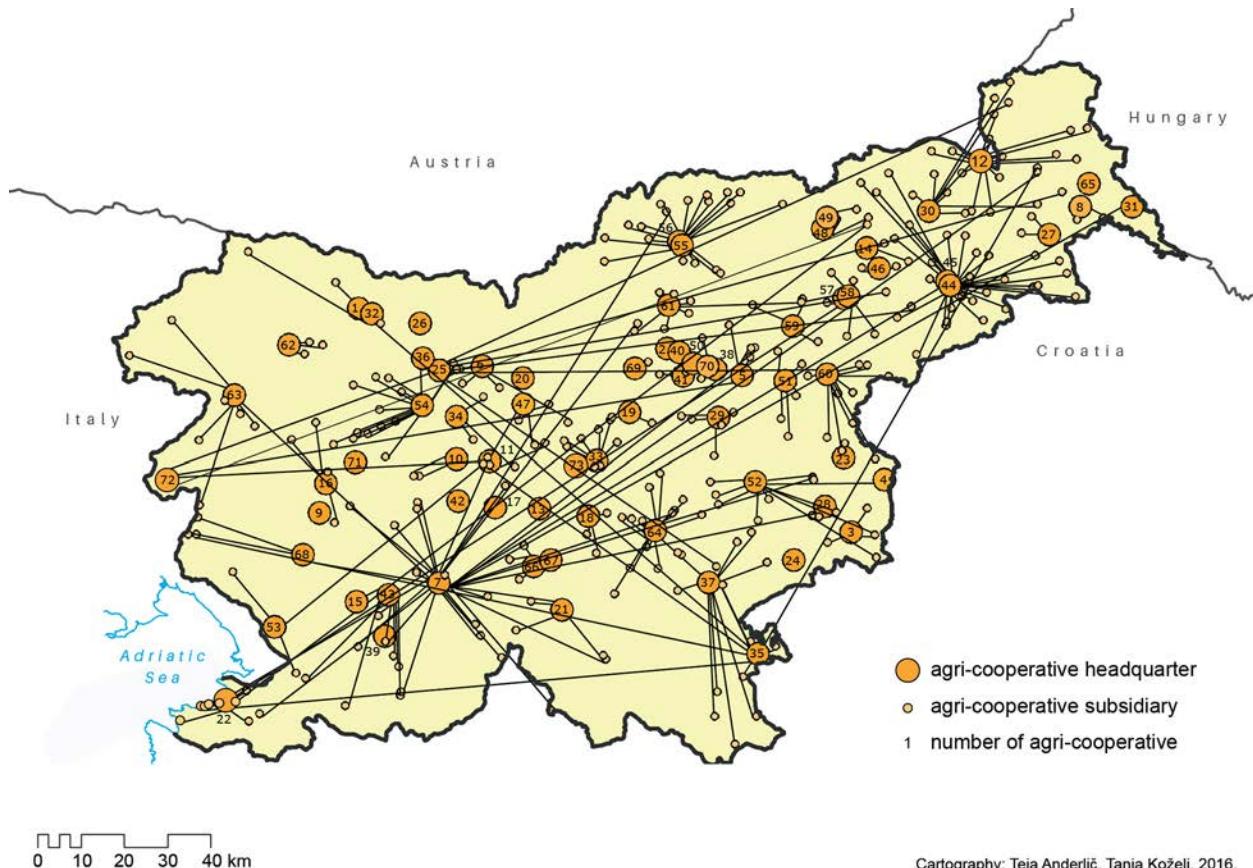


Fig. 2. Agri-cooperatives in Slovenia (headquarters and their subsidiaries).  
Sources: Surveying and Mapping Authority of the RS 2015; e-Zadruga (2015), Bizi (2015).

period, the conditions (general, specified for an agricultural holding or a potential young farmer) were changed and because of that, farmers complained (Flajnik 2016).

The above data confirm that the contemporary Slovenian agrarian space is still fragmented in terms of production, and more networking and cooperation among stakeholders is needed. Agricultural processing on farms is also practised at a small scale (either on subsistence farms, those with registered supplementary activities, or market-oriented ones). A special role in the production, processing and consumption of agricultural products is played by agri-cooperatives. They have an important role regarding the strengthening of the social, economic, and political status of Slovene farmers. An agri-cooperative is a company based on cooperative values and principles, i.e. self-aid, equal rights, democracy, fairness, and solidarity. They are owned and managed by their members in an entirely democratic way. According to the data of the Slovenian Agri-Cooperatives Association (2015), agri-cooperatives are the second most popular form of cooperatives in Slovenia; there are 86 cooperatives associated with agriculture, hunting, forestry and fishery (Fig. 2), a vast majority (71) being members of the Association. Their basic function is the repurchase and sale of agricultural products and supplying farmers with reproductive material for agriculture. They also offer the processing of agricultural (grape, meat, some dairy) and wood products, and they also run small shops in rural areas. Approx. 14,000 agricultural holdings are involved in agri-cooperatives, and about three times more farms cooperate with them. Several agri-cooperatives have financial and legislative problems, or are not technically and organisationally adjusted to market competition. Some cooperatives successfully engage in local and regional food initiatives, e.g. the introduction of green orders in public kitchens, thematic marketing, etc. to reach a broader audience.

## Conclusion

According to the official data, several important changes have occurred in Slovene agrarian space over the last 20 years:

- the number of agricultural holdings keeps decreasing (by 16,404 from 2000 to 2016) at a lower pace; but there is an interesting influx of new entrants into farming (Potočnik Slavič 2016a) with modest agrarian expertise, but important non-agrarian skills and networks;
- the average farm size has grown (by 6.8 ha of UAA; still extremely modest compared with the EU average); the share of agricultural holdings cultivating 20 ha and more has grown importantly;
- during the period of economic growth (the 1<sup>st</sup> decade of the 21<sup>st</sup> century) an important part of agrarian space was built-up; in the field of spatial planning, there is a strong professional support to make 'permanently protected agricultural land' a special land-use category (Pintar et al. 2016);
- a financial crisis and higher rates of unemployment have re-created new working opportunities on farms (part- or full-time);
- despite food expansion in the media, there is a modest improvement in the creation and integration of food networks; there are several good examples, but the total figures are still small; and
- several institutional and policy requirements do not meet the expectations and needs of agri-cooperatives and other forms of food-related networks.

An analysis of building blocks of the contemporary agrarian space of Slovenia (i.e. the availability of land, change management, an integrated economic cycle, adaptive policies, and institutional flexibility), and especially their interlinks, has revealed several positive correlations and bottlenecks which either support or hinder the modernisation of agrarian holdings. Quite often, issues are generated within an agrarian household (it cannot solve problems with household ageing, finances, react to market change, overcome capital shortages, etc.). On the other hand, farmers quite often complain that also policies addressing agriculture should be more adaptable (addressing the real needs of agrarian space, including and not excluding certain segments of farmers, creating a supportive farming environment, etc.). Sometimes quite inflexible institution frameworks hinder development opportunities (strict regulations on participation, non-resilient organisational structures, etc.), but on the other

hand also farmers are sometimes quite demanding and impatient. The fragmented agrarian space in Slovenia has been importantly modernised over the last three decades, trajectories of modernisation being shaped and affected by the above-mentioned push-factors and hurdles. There is no single trajectory of modernisation; our paper underlined the co-existence of at least three prevailing trajectories: autarky, pluri-activity, and small, intensive, innovative market development. This mosaic model interconnects an enormous number of stakeholders with different objectives and perspectives, therefore the governance of this deeply fragmented agrarian space is extremely demanding.

The RDP of the Republic of Slovenia for the period 2014–2020 puts at its centre the transfer of knowledge and innovation as a horizontal theme supporting all other priority policies. In this context, its key measures relate to raising skills, increasing access to specialist advice, and strengthening links between research and agricultural practice. This is intended to contribute in particular to greater direct applicability and a faster transfer of knowledge and innovation into practice. As in the previous periods, an important component of the 2014–2020 programming period is support and encouragement for diversification and cooperation. At this stage, we do not have suitable data to evaluate the ongoing programming period. But on the basis of the development trends of the last 25 years, we can conclude that triangular contiguity, i.e. the place where farmers' current investment positions, their reactions and visions, along with the future direction of rural development policy come together, hides a mechanism for development-orientated agrarian space.

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