The institutional framework of land consolidation – comparative analysis between Slovenia and Norway

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Key words: land consolidation, reallocation, land administration, Norway, Slovenia.

SUMMARY

The study is aimed to compare the institutional framework of land consolidation in Slovenia and Norway. The traditional meaning of land consolidation is that is a comprehensive reallocation process in a rural area that suffers from fragmentation of agricultural and forest holdings or their parts. Nowadays, land consolidation has to be seen in a much broader sense and could be an integral part of rural as well as urban development projects. Nevertheless, the focus of our study is on land consolidation in rural areas, where the legal background as well as organizational part of land consolidation projects in Slovenia and Norway is introduced and compared. In both countries, rural land consolidation projects are of national importance due to limited areas for advanced agricultural production and problematic land fragmentation of agricultural holdings. Since development of the procedures has been influenced by the historical trends, tradition, legislation, and land administration systems in the countries, a special attention has been given to the historical overview of land consolidation in Slovenia and Norway. All these aspects have to be considered when comparing land consolidation procedures between different countries. The research includes historical background, organization, objectives, procedures and the development prospects of land consolidation in Slovenia and Norway. Based on literature research and knowledge from the practical examples, the objective of this article is to discuss the similarities and differences in the rural land consolidation procedure in Slovenia and Norway.

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1. INTRODUCTION

The process of land consolidation, the method of reversing the action of land fragmentation in the rural area, is not new. Some of the earliest attempts at consolidation, as a method of land reform, took place in Scandinavia in the 18th and 19th centuries. From that period, Dutch and German attempts to improve the conditions for agricultural productions by land consolidation are also well known (Olschowy, 1955; Bullard, 2007). These experiences had influenced the practice in the other European countries. Traditionally, land consolidation means a comprehensive reallocation procedure in a rural area consisting of fragmented agricultural or forest holdings or their parts. In addition to land exchange aiming to form land plots that are better adapted to their proper use, improvement of the road and drainage network, landscaping, environmental management, conservation projects, and other functions may be implemented in land consolidation (Vitikainen, 2004).

Nowadays, land consolidation is often understood in a much broader sense. According to FAO (2003) it is a sequence of operations designed to reorganize land plots in an area, regrouping them into consolidated holdings of more regular form and with improved access, which is intended to provide a more rational distribution of land to improve the efficiency in farming. Land consolidation can promote improved management of natural resources and support better land use planning and land management, including solving potential conflicts over changes to the use of land. Moreover, land consolidation is being seen as an important part of rural development projects which are impacted by the large number of small and fragmented farms. While the emphasis of our discussion is on rural areas, in recent years land consolidation has been used more and more also on urban fringe land and in urban areas, where the objective of land consolidation has remained the same: to bring fragmented units of land together to promote efficient and appropriate use of land and buildings.

The land consolidation procedure is regarded as administrative decision-making, and in the most of the countries it is entrusted to the administrative authorities. Vitikainen (2004) identified two basic models regarding the execution responsibility of land consolidation project in Europe: the "cadastral surveyor model" (e.g. in Austria, Finland, Germany and Sweden) and "committee model" (e.g. in Belgium, France, the Netherlands and Switzerland). From this perspective, Slovenia and Norway as study cases of our research are denoted with some particularities. Slovenia inherited some characteristics from the traditional cadastral surveying model but the privatization of surveying services in the past decades has highly influenced the current practice. In Norway, land consolidation execution and decision-making body is in the European context a unique court, called Land Consolidation Court.

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2. GENERAL INFORMATION ABOUT SLOVENIA AND NORWAY

2.1 The problem of agricultural land fragmentation in Slovenia

Slovenia, positioned at the junction of different climatic and geomorphologic features as well as of different cultural influences of the Alpine, Mediterranean and Pannonian landscapes, is a rather small European country with the total area of 20,273 km². Nearly 90 % of the territory lies at altitudes exceeding 300 m, while plain areas in the shape of contiguous valleys and basins represent only about 20 % of the entire territory. The relatively unfavourable yet vivid natural conditions have a direct impact on the dispersed and large number of small settlements, specific structure of land use, high level of natural and biological diversity and cultural diversity. With the population of 2 million, Slovenia is relatively sparsely populated European country (RDP, 2007).

In the land use structure of Slovenia the predominant part is covered by forests (over 60 %), whereas their share has gradually increased. Agricultural land represents less than 30 % of the total territory (Table 1). Characteristic of agricultural land is high absolute grassland and pastures share (57 %), and a relatively low arable land (37 %) and perennial crops (6 %) share. Due to the dissected surface arable land is mainly situated in plain areas in valleys and basins, with the exemption of the Pannonian area to the Northeast representing the most important crop production area in the country. The majority of agricultural land (over 70 %) is situated in less favoured areas. The unfavourable conditions do not make agricultural activity entirely impossible, but they cause lower production capacity of the farms. Slovenia is a traditional vine and fruit growing country; due to its geographical position, which is partially Submediterranean and partially Subpannonian, the share of agricultural land adequate for cultivation of vineyards, orchards and olive groves is relatively high. But the terrain there is much dissected and the areas are hilly, which limits the options for setting up plantations.

Type of statistical data		Slovenia	Norway
Surface – land use	Total area	$20,273 \text{ km}^2$	323,787 km ² (without
			Svalbard and Jan Mayen)
	Agricultural land	27.8 %	3.2 %
	Forest	66.0 %	38.2 %
	Barren land	0.7 %	44.4 %
	Other land	5.5 %	14.2 %
Population (1. 1. 2012)		2,052,496	4,985,900
Population density		99 inhab. /km ²	15 inhab. /km ²
Arable land per capita		0.08 ha per capita	0.18 ha per capita
Average arable land plot size		0.3 ha	1.5 ha

 Table 1: General statistics about Slovenia and Norway (Source: Statistical Office SI, 2012; Statistics Norway, 2012)

The most agricultural land is privately owned. In agricultural land area per capita (0.28 ha) Slovenia is close to the European average, whereas in arable land area per capita (0.08 ha) it is at the bottom of the European scale. In spite of the concentration process in the last decade the average size of Slovenian agricultural holdings with 6.3 ha of utilized land is still nearly three times smaller than the EU average. The characteristics are small agricultural units, which are

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mainly geographically dispersed. The utilized agricultural area of farm holdings is divided into over 1,700,000 land plots¹. This makes in average 22 agricultural land plots per agricultural holding, which are generally dispersed on several locations. The unfavourable parcel structure is a considerable structural obstacle in further development of agriculture in Slovenia (Lisec et al., 2011).

2.2 The problem of agricultural land fragmentation in Norway

Norway is the northernmost country in Europe. The whole territory of mainland Norway is approximately 323,787 km². Stretched along the western side of the Scandinavian peninsula, one fourth of Norway lies north of the Arctic Circle. Nevertheless, its climate is much milder when comparing to other territories from the same latitude thanks to the effect of the warm water of the Golf Stream. The unfavourable climatic and topographic conditions have influenced the heterogeneous settlement patterns and specific structure of farm holdings. With the population of 4.9 million, the country's population density is 15 inhabitants per square kilometre (Table 1), the second lowest in Europe (Statistics Norway, 2012).

Norway is characterized by high share of barren land (44.4 %); only 3 % of the Norwegian total area is arable land, 38.2 % is covered by forest. The cultivated agricultural area is small relative to population, and the rather marginal conditions for many types of agriculture production make the figure even weaker, compared to more southern countries. Arable land is located in three main regions: South-East, South-West and central areas of the country. Only one third of arable land is suitable for cereal production. Due to climatic and other conditions, the remaining arable land is only suitable for fodder production. This land is generally located in the fjord and mountain areas and in the northern part of the country. The main agricultural productions are dairy and meat products, while only one quarter of farm income is derived from crop production. In a country with a 20,000 km coast length, the primary sector has always been closely linked to fishing. Besides traditional fishing, coastal areas are places for fish farms, which number has increased noticeably in the last years.

The most agricultural land is privately owned. The predominant rural pattern in Norway was, and still is, single farms, or small groups of farmsteads, with infields (nor. *innmark*), arable and semi-arable land for annual and intensive cultivation, usually the closest lands to the site of houses, and outfields (nor. *utmark*), uncultivated and undeveloped land, such as forests, grazing areas, mountains etc. Nowadays, farms are relatively small: a few hectares crop fields, a few hectares of nearby grazing land, larger acreage of forested areas, and commons of different types. With 0.2 ha of arable land per capita Norway is at the bottom of the European scale. The average farm holding consists of 16 ha of arable land, while the average field size (land plot in the central European context) of 1.5 ha (Sáurez Fernández, 2008).

¹ A land plot refers to a physical property unit, which is shown as a closed polygon with the uniform ownership in the cadastral map. In Slovenia, a land plot is equivalent to a land parcel, which is a legal property unit. While Slovenia has the parcel based land administration system, the Norwegian land administration system follows the Scandinavian tradition, where a land parcel is a legal property unit, which may consists of several plots.

3. LAND CONSOLIDATION IN SLOVENIA AND NORWAY

In Slovenia, the land consolidation (slo. *komasacija*) legislation as well as land administration system was strongly influenced by Austrian and German experiences since the territory used to be under the Austrian and later Austrian-Hungarian Empire till the beginning of the 20th century. However, there is no evidence about land consolidations in the area of today's Slovenian territory before the WWI. There have been more breaking points in development of the institutional framework of land consolidation in Slovenia due to the political and economic changes in the last century. In Norway, land consolidation (nor. *jordskifte*) activities started on a small scale already in the 18th century. The approaches have gradually developed and nowadays land consolidation has an important role in the Norwegian land management.

3.1 Land Consolidation in Slovenia

3.1.1 Historical background of land consolidation in Slovenia

First land consolidation projects were carried out in the beginning of the 20th century but in a small scale. Before the WWII, only 772 ha of land were consolidated despite problematic rural land fragmentation, which was the consequence of the historical rural overpopulation, solutions of common land problems in the 18th and 19th century and subdivisions of farms due to inheritance. The main aim of land administration system in the Habsburg monarchy and later Austrian empire was efficient taxation but after 1848 the importance of legal security became important as well. Systematic cadastral mapping from the beginning of the 19th century, known as Franciscean Cadastre (mapping was carried out in the period 1817–1828) brought, beside the basis for land taxation, an important background for clarification of property rights. During the centuries, the problem of farm holdings fragmentation got worse, which is evident also from the old cadastral maps and Land registry, the register of property rights which has been linked to the cadastral data since 1871 in Slovenia (Lisec et al., 2011).

After the WWII, the government (at the federal Yugoslav as well as at the republic Slovenian level) tried to cope with the problem of agricultural land fragmentation more systematically. In the first period, i.e. till 1973, land areas of a total of 1333 ha were consolidated. The Farmland Act from 1973 and later from 1979 brought changes in the financing of land consolidation. The most intensive land consolidation period was 1976–1990 when 54,344 ha of agricultural land were included into land consolidation (Lisec et al., 2011).

The political changes² in the beginning of 1990s brought the modification in the process of land consolidation. Firstly, the uncompleted land consolidations from the former era had to be solved in the following decade. Due to often enforced land consolidation projects and

 $^{^{2}}$ Here, it has to be mentioned, that similar to other countries in transition a land denationalization process was undertaken in Slovenia at the beginning of the 1990s, to compensate the landowners, whose property had been nationalized by the Yugoslav government after WWII. The Slovenian particularity was that only big farms were nationalized, however the prevailing small farms (with approx. 10 ha of arable land) were never fully nationalized and most of them survived also under the socialist regime, despite the unfavourable regulatory regime and policy measures, such as the constitutional restriction on the maximum farm size (Lisec et al., 2008).

negative environmental (at least from the landscape point of view) consequences of the parallel implemented melioration projects, the moratorium on agrarian operations, including land consolidation, was introduced in 1990. The Ministry of agriculture prepared Program for sanitation for unfinished land consolidation projects in 1995. There are still some land consolidated areas, where the process has not been finished yet. The extent of new land consolidation was very limited in the 1990s. One of the reasons is also negative connotation of land consolidations from the past experiences.

In 1996 the new Agricultural Land Act came into force, which is still valid with later amendments. Nowadays, the Slovenian government supports the implementation of new land consolidations in the framework of the rural development programmes. In the last decade, almost 10,000 ha of agricultural land have been consolidated, in average 5 cases per year. There are two main reasons for land consolidation implementation. Besides land consolidations along the new linear objects in the space like the highway and railway, the initiatives of the farmers and local authorities is increasing because of the inappropriate plot structures for the advanced agricultural production. To date, approximately 64,000 ha of rural land have been consolidated, which corresponds to almost 300 land consolidation areas, projects, where the average land consolidation area is 200–300 ha (Lisec et al., 2011).

3.1.2 Legal framework of land consolidation in Slovenia

In Slovenia, the agricultural land consolidation is mainly regulated by The Agricultural Land Act (1996), which has been changed several times. The latest change was in June 2011 when the official consolidation act came into force. It defines the procedural framework of all agrarian operations, including land consolidation, complementary to The General Administrative Procedure Act (1998). In The Real-Estate Recording Act (2006) as well as in The Agricultural Land Act (2011) and Spatial Planning Act (2007), land consolidation is defined as the procedure, which can be implemented on land plots of different land use (also building land). Two approaches are known to implement land consolidation in Slovenia:

- [1] the administrative land consolidation with prescribed level of concordance of parties involved; it was the only option of land consolidation according to The Agricultural Land Act till 2011 and is the topic of our paper;
- [2] contracting land consolidation where all parties have to agree with the project; this is a relatively new approach with no practice in the rural areas to this date.

One of the results of land consolidation is the new land plot structure, which has to be registered in the official land evidences. The Slovenian land administration system is a dual one consisting of the Land and Building cadastres³ (slo. *zemljiški kataster, kataster stavb*), maintained at the Surveying and Mapping Authority of the Republic of Slovenia, and Land registry (slo. *zemljiška knjiga*), which is a part of the local courts and is mainly regulated by The Land Register Act (2003).

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³ The Land cadastre was established at the beginning of the 19th century, when Slovenia was part of the Austrian Empire, and Land cadastre is derived from that origin. With the new real-property recording legislation, the new Building cadastre was established in 2000, which includes data on buildings and parts of buildings.

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3.2 Land Consolidation in Norway

3.2.1 Historical background of land consolidation in Norway

Land consolidation in Norway dated back to the 18th century. The first legislation for land consolidation was as early as in 1821. Land consolidation activities from the 19th century had the narrow classic land consolidation objectives: to solve the problems related with land fragmentation and to develop the proper infrastructures and the like. In 1857 a second Land Consolidation Act was passed. It came into force in 1859 and, with later amendments, formed the real foundation for land consolidation. To carry out its task the organization Udskiftningsvæsen, later Jordskifteverk was established within which the Land Consolidation Court operated (Sky, 2002). The main task of these courts was implementation of land consolidation: to consolidate fragmented holdings and to dissolve or otherwise reorganise the land use, including the use of farm commons that belonged to farms according to their shares. These phenomena, fragmentation and farm commons, and the solutions of those problems, are at that time not specific Norwegian, we find it in most of Europe. The way of organizing an agency for its solution as a special court is, however, a Norwegian specialty caused by special traditions and situations. There were practically no maps on the proper scale available so surveying and mapping of land boundaries as well as clarification of rights if necessary by passing formal court rules became a routine. The tasks of the Land Consolidation Courts have been expanding during the decades (Sevatdal, 2007; Sevatdal and Bjerva, 2007).

In Norway the congested, village like settlements, disappeared gradually with the implementation of land consolidation schemes in the past (Jacoby, 1959). Until well into the 1960s the farmers in Norway usually owned the whole unit they farmed, maybe some few were renting a little additional land. The number of land consolidation cases is more or less stable in the course of the last decades. After the WWII, the development activities were focused in urban areas but in 1970s the importance of rural development came to the fore. Consequently, the number of land consolidation cases increased according with the increase of the agrarian activities that period. A slightly decrease in the number of cases related with the rearrangements of land plots is observed in the last two decades – from approximately 350 cases in 1997 to 250 cases in 2006 (Sevatdal, 2007; Sáurez Fernández, 2008). Since 1960s many owners of farms have left active farming but the majority of those and their family successors have kept the ownership to the farm and rented out the farmland to neighbour farmers. Most active farmers nowadays rent additional land and at least one third of the total agricultural land today is used on a renting basis.

3.2.2 Legal framework of land consolidation in Norway

The execution and decision-making body on public land consolidation, which is the topic of our discussion, is organized as a special kind of court, the Land Consolidation Court, which has become a permanent public institution within the framework of the judicial system. The Land Consolidation Act (1979) defines the Land Consolidation Courts geographical and legislative mandate and limitation. Numerous changes to this act have been undertaken since its adoption. The Land Consolidation Court was traditionally tailored for resolving land

disputes and implementing land consolidations (readjustments) in rural areas. The court was reorganized in 2003, when it was decided to keep the judicial based organisation. The legal changes enabling urban land consolidation were implemented in the land readjustment legislation in 2006/2007. Still, the land readjustment legislation is under revision (Ramsjord and Røsnes, 2011). Land consolidations in the rural area, which is the topic of this paper, took different forms in current practice: rearrangement and adjustment of farm commons, consolidation of fragmented holdings by pooling and redistribution of parcels, and complete individualization in the form of layout of individual land plots. Furthermore, introduction of new forms of relationship could take place, most notably in the form of common infrastructure roads, fences, drainage, water supply and so one (Sevatdal and Bjerva, 2007).

The decisions of the Land Consolidation Courts have to be introduced in the land evidences. Traditionally, the Norwegian land registration system has two main parts, the Cadastre (nor. *Matrikkel*) and the Property register (nor. *Grunnbok*). Until 1985 the Property register was maintained as a loose-leaf manual archive when it was decided to convert analogue form into a digital database. The data conversion was completed in 1993. The Property register used to be a distributed organization comprising 87 local courts (under Ministry of Justice) but based on the legal provision, the land registry has been organized in the framework of the National Mapping and Cadastral Authority since 2004.

4. LAND CONOSLIDATION PROCEDURE IN SLOVENIA AND NORWAY

In Slovenia, the consolidation scheme is drawn up by the private licensed land surveyor, respecting spatial planning legislation and other environmental and cultural regimes in the consolidated areas, in contact with the participants, who establish a kind of cooperative society and represents the farmer interests. The technical execution of the project is also left in the hands of a private surveyor; however the official procedure (decisions about the procedures) is carried out by the local office for general public administration.

In Norway, the establishment of the consolidation scheme is depending on the request of at least one of the participating owners and decision of the Land Consolidation Court, who is also responsible for decisions and execution of land consolidation. The Land Consolidation Court traditionally integrates judicial decisions with planning competencies concerning property issues. The technical execution of the project is also left in the hands of the Land Consolidation Court.

4.1 Preparation stage, application

A precondition for land consolidation in both countries is the fact, that the benefits gained are considered larger than the costs of implementation. In Slovenia, the land owners, who own at least 67 % (80 % before 2011) of the acreage of the land consolidation area, shall subscribe to land consolidation. In Norway, there is no precondition in the form of the fact that certain group of land owners in an area subscribes to the implementation. It is enough that one landowner or even owner of usufruct rights in an area applies for land consolidation – the others can be opposed it, but if The Land Consolidation Court finds the request justified, and

that none of the parties will suffer economic loss, the case proceed. Although the main purpose of land consolidations in rural areas is the improvement of rural land division and construction of the needed infrastructure, the readjustment area may also include the central area of the settlement (in accordance to the spatial planning acts) in both countries.

Persons, who can apply for land consolidation, are the land owners (in Slovenia, the applicant might be also the local community or other organization representing the owners based on the contract; in Norway, some public agencies have the power to apply for a case without ownership of the land). In Slovenia, the application with the proposal of the land consolidation plan, subscriptions of land owners, estimated benefits of the project, the representatives of land owners (so called land owner board), has to be submitted to the local Public administration office – the preparation stage is therefore a great pretention and is often dependent on the initiatives and interests of land owners, private surveying company and / or local community. In Norway, the application for land consolidation may be submitted to the Land Consolidation Court. In Slovenia, the local Public administration office, and in Norway, the Land Consolidation Court, decide weather the case shall proceed. After the acceptance of the case, the notice in the Land Cadastre and Land registry is introduced in Slovenia.

4.2 Inventory and valuation

In Slovenia as well as in Norway, the decision of the competent authority about the proceeding of the case is followed by the inventory tasks, which include the surveys of the extent of the real properties, including clarification of boundaries and if necessarily mapping of land consolidation area. The main difference is that the execution of the inventory stage is entrusted to a surveying company in Slovenia, while in Norway the Land Consolidation Court is responsible for this stage. Here, the participation of the land owners is very important in order to clarify the real property rights.

In both countries, land consolidation follows the principle, where the financial situation of any of the land owners must not change due to the reallocation – if though, the change must be proportional (e.g. land for the public infrastructure). In general, each land owner shall get land, so that the value of the land transferred is equal to the value of the land obtained. The assessment of agriculture land and forestry is based on the natural productive capacity while the market valuation methods are usually used for building land and buildings.

4.3 Land consolidation plan, implementation

Based on inventory plan (in Slovenia together with the proposal of land consolidation plan) and valuation data, a draft consolidation plan is prepared – in Slovenia by a private surveying company, in Norway by the Land Consolidation Court. The number of the holdings does usually not change. Different plots are pooled or put together. The partitioning can be departed to a lesser degree for reaching appropriate division – this modification is than the subject of compensation. The draft of land consolidation plan is presented to the parties for discussion. In Slovenia, the Public administration office together with the surveying company gathers and investigates the expedience of the comments and suggestions – the procedure

might be iterative. The alterations on the bases of comments and proposals are followed by the final consolidation plan, which is accepted by the official decision of the Public administration office (similar procedure in the form of public hearing is also in the earlier stages for inventory (situation) plan and valuation plan, but there are usually less iterations). Like in Slovenia, land owners have the right to be heard in legal procedure also in Norway, while the decision itself rests with the Land Consolidation Court. How and to what extant the judge seeks consensus through a mediation process is up to the individual judge (the approaches to find consensus in Slovenia also differ among the cases and decision-makers).

The formal adoption of the land consolidation plan, made by administrative decision in Slovenia and court decision in Norway, is the basis for marking out the new boundaries in the field and taking into possession of new property units, calculation of compensation between the landowners. The primary improvements of infrastructure networks are usually implemented in this stage.

4.4 Appeal system

In Slovenia as well as in Norway, the experiences have shown that land consolidation can be effective if the initiative to introduce land consolidation comes directly from farmers. This particularly applies if the support involves the land improvement and the arrangement of the traffic infrastructure in the consolidated area. In Slovenia, each decision of the Public administrative office (about inventory (situation) plan, valuation, consolidation plan, final decision) might be appealed. The final decision on new land partition can be appealed to a ministry, responsible for agriculture. However, in practice a lot of efforts are given to solve conflict and avoid appeals. In Norway, legal issues can be appealed to the ordinary courts of appeal, but other issues have to be appealed to a special Higher Land Consolidation Court.

5. CONCLUSIONS

The small and fragmented land plots, sometimes scattered over different administrative boundaries, with different legal regimes and unclear real property status might strongly affect land use and rural development especially in terms of land administration and land management. The Slovenian agricultural sector is still affected by land fragmentation. Not only that the majority of farms are very small, but they are frequently divided into many land plots, which are often badly shaped for the agricultural purposes. Because of the extensive nature of fragmentation and the growing importance of rural space for non-agricultural purposes, land consolidation has remained an important instrument in strategies and projects to enhance the quality of rural life also in Norway, even though the country has more convenient farm structure comparing to Slovenia. The common characteristic for both countries is however the *limited arable land*, which is *very small relative to the population*. For this reason, both countries are trying to improve the conditions for agricultural production by adapting to current situation (decrease of rural population and farm holdings, rural population aging, modern technology etc.) aiming to *ensure national food security, sustaining the viability of rural areas* and *safeguarding the environmental and cultural qualities*.

The "colourful" political regulations and economies in the past two centuries are the reasons, why Slovenia had constantly have to coupe with the problem of changeable development of institutions concerning land administration and land tenure. The current system of land consolidation implementation is criticized due to unsystematic organization of public services, which should professional and administrative (the last is partly supported by the local administration office) support the implementation of the whole procedure. The main activities are dependent on the limited number of professionals⁴, licensed land surveyor, in the private surveying companies, which inherited the needed knowledge from the past public or publicprivate surveying institution by privatization of surveying and cadastral services in the 1990s. They are overworked and can not follow the demands. The second weak point of the current system is the problem of time-lasting sectorial decisions about consolidation solutions, spatial interventions (protection of environment, nature, cultural heritage, natural resources, building permits for infrastructure etc.). There are several good practices in some agricultural intensive areas, where the local public administration office, municipality, local cadastral office, local land registry office and regional sectorial institutions actively cooperate with the surveying company and the land owners. However, we can not say that this is a systematic institutional solution which efficiently support the needs of the agricultural and other sectors involved.

On the other side, in Norway there has been a more or less continuous legal and cultural development of institutions concerning land tenure, including land consolidation, in the past two centuries. The Land Consolidation Court traditionally integrates judicial decisions with rearrangement decisions. The judge must have a special degree from the Norwegian University of Life Sciences in Ås. It is also expected that a prospective candidate for a judgeship will have gained some practical experiences as a surveyor in the Land Consolidation Court before appointment. The tradition on one side and competences of the Land Consolidation Court on the other side are evidently benefits of the current land consolidation institutional framework in Norway when comparing it with the Slovenian experiences.

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⁴ In Slovenia, there are over 300 licensed land surveyors with the surveying degree from the Faculty of Civil and Geodetic Engineering at the University of Ljubljana, but only a few of them have practice in the field of administrative land consolidation; these projects are usually huge, referring to hundreds hectares of land (in average 200–300 ha), where hundreds of land owners are involved in the procedure.

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