

## ANALYSIS OF LAND INTER-AREAS IN LATVIA

**Anda Jankava**

Latvia University of Agriculture, Department of Land Management and Geodesy

E-mail: [anda.jankava@llu.lv](mailto:anda.jankava@llu.lv)

**Ilze Jankava**

„Latvijasmernieks.lv”, Ltd.

E-mail: [ilze.jankava@latvijasmernieks.lv](mailto:ilze.jankava@latvijasmernieks.lv)

### ABSTRACT

*As a result of land reform the problem of land inter-areas is described in the article. “Land inter-area” is a land parcel owned by public persons. Its area is smaller than the minimum size of a land parcel defined in the binding regulations of a municipality or configuration of which does not allow the use of the parcel according to the approved territorial planning or access is not provided. According to the data of the Land report of January 1<sup>st</sup>, 2014 from the State Land Service of the Republic of Latvia the number of land inter-areas is 11 307 and the total area occupied by land inter-areas is 10 624.1 ha. In the current study land inter-areas by ownership, size and structure in recent years are analysed. In the presented examples the territorial distribution of land inter-areas has been analysed and the solutions to this problem are sought after.*

**Key words:** land inter-area, land use, land parcel, public person

### INTRODUCTION

Both in the theory and practice of land use planning, one of the main shortcomings in land use land inter-area is mentioned. In accordance with the Land Survey Act (Land Use Planning Law, 2006) the land inter-area is “a separately situated land parcel which is separated from the main land parcel by land owned by another person.” The existence of land inter-areas result in land fragmentation. Increasing the distances between these separate land plots, conditions of land management are made worse. The costs of transportation and time spent to cover the distances increase. Extra capital investments increase and, in addition, it results in the necessity to cross over other farm land. This failure of land use and its evaluation, as well as the necessity of avoiding it has been researched by various authors and scientists (Demetriou, 2014; Platonova, 2010; Maasikamäe, 2005; Thomas, 2012

et. al.). Avoiding land fragmentation and land inter-areas is one of the main challenges of land management and has always been included in the legislation of the Republic of Latvia.

In our previous study (Jankava, Jankava, 2013) the analysis of the concept of land inter-area in various laws and regulations of the Republic of the Latvia according to ownership, size and other factors (Table 1) was carried out.

As can be seen, in the first three established regulations, the land inter-area is defined as a land plot owned or used by natural person or juridical person that is separate from the main land plot with other owners' (or users') land plot. This concept is also used in a number of textbooks in Latvia and abroad (Butane, Lasteniece, 2000; Locmers, 1999; Волков, 2013) and studies (Platonova, 2010).

**Table 1**

**Provided aspects in definitions of inter-area by various Latvia laws and regulations**  
(Jankava, Jankava, 2013)

No.	Regulation, date of establishment	Provided aspects				Regulation, law in force
		ownership	area	configuration	Access	
1.	Regulations of Land use planning (1924)	individual and legal person	more into small parcels	string-shaped, wedge-shaped	not specified	null and void
2.	Cabinet Regulation No.52 „Regulations regarding Cadastral Assessment of Rural Area Land”(05.03.1996)	individual and legal person	unlimited	unlimited	not specified	null and void
3.	Land Use Planning Law (2006).	individual and legal person	unlimited	unlimited	not specified	in force
4.	Law on Expropriation of the Public Person Property (edition of 21.10.2010.)	state or municipality	less than area provided by municipality	do not conform to proper use	do not have access to	in force

Nonetheless, at the moment in Latvia there are two different existing interpretations of the concept of land inter-areas with different meanings.

This situation has been in existence since 2007, when the Amendments to the Law on Expropriation of the State and Local Government Property (currently - Law on Expropriation of the Public Person Property) were adopted where a different explanation of land inter-area was given, defining it as “a land plot owned by public person, whose area: a) in cities is less than a minimum area of a building plot approved by the municipality in Building Regulations or whose configuration does not allow the use of the land for a building, or which can not be provided with access to a public road.

b) in rural areas is less than a minimum area of a land plot in the Binding Regulations approved by the municipality or whose configuration does not allow the use of the land according to the approved land use plan, or which can not be provided with access to a public road. (Publiskas personas mantas..., 2010).

Obviously, the main difference in definitions in these two laws (Land Use Planning Law, 2006; Law on Expropriation of the State and Local Government Property, 2010) is connected with land ownership and some other aspects.

Land inter-areas owned by public persons have mostly been developed during the land reform, as a result of shortcomings in land formation. These land inter-areas are registered in the State Land Service National Real Estate Cadastre Information System and every year their number increases.

## MATERIALS AND METHODS

Public person in this country is the Republic of Latvia as an initial public law legal person and municipality as a derived public person. The aim of the study is to carry out an analysis on the land inter-areas owned by a public person in the Republic of Latvia. In accordance with the Law on the Expropriation of the Public Person Property inter-area is a land plot owned by a public person, that is not assigned as a property to natural person or juridical persons. For the analysis of land inter-area and data from The State Land Service of National Real Estate Cadastre Information System on 01.01.2014 were used.

For the evaluation of the placement of separate land inter-areas, orthophoto maps with connected cadastral land boundaries as well as other materials were used. Analysis and synthesis, induction and deduction methods, document analysis, as well as other methods were used in the study.

## RESULTS AND DISCUSSION

According to the data of the Cadastre Information System of 01.01.2014 in the Republic of Latvia there are 11 307 land inter-areas owned by public

person with a total area of 10 624.1 ha, inter-area agricultural land of 4 976.6 ha. 7 032 inter-areas with a total area of 8 334.1 ha are land cognizable to municipalities, but 4 275 inter-areas (total area of 2 290.0 ha) are included in the reserve land fund of Latvia (Table 2).

**Table 2**  
**The count and total area of land inter-areas in Latvia as of 01.01.2014**

Indicators	Land inter-areas		
	land cognizable to municipalities	reserve land fund	total
Number	7032	4275	11 307
Total area, ha.	8 334.1	2 290.0	10 624.1
Agricultural land, ha.	4 285.0	691.6	4 976.6

The total area of land cognizable to municipalities registered in the National Real Estate Cadastre Information System of Land is 220 169.4 ha and land inter-areas of this makes only 3.8 %. As shown in Table 3, the greatest part of the count of land-parcels cognizable to municipalities (57.8 %) and its total area (69.2 %) has the group named “Land for Agriculture”, the average area of this land parcel is 1.4 ha. 5 % of the count and 14.8 % of area of the land parcels makes up Forestry land (average area 3.5 ha).



**Figure1.** Land inter-area in the city of Jurmala between two building land plots with accessibility, land area 0.0151 ha

Another significant amount of land parcels (1 247 land parcels or 18.7%) cognizable to the municipalities occupy inter-areas on individual dwelling houses' land. Since these parcels are small (average 0.1 ha), they do not take up much area (only 1.4%) from the total area of the land of municipality. Figure 1 and 2 show that as a result of land surveying in the territories of individual

dwelling houses, between surveyed properties there developed land plots - land inter-areas, whose areas are less than the minimum area of the building plot approved by the municipality building regulations and sometimes they are not provided with access. (Figure 2).

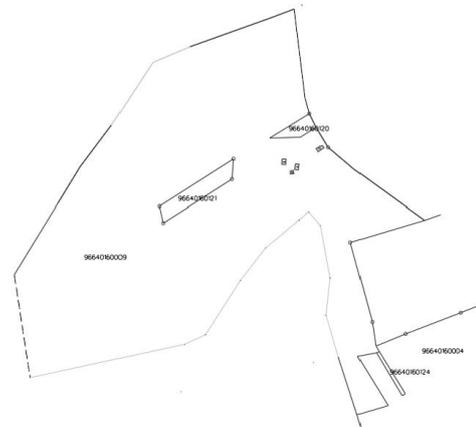


**Figure 2.** Land inter-area in the city of land area 0.0110 ha

Also in the reserve land fund, the number of such land inter-areas located in on individual dwelling houses' lands is relatively high (754 parcels or 17.6%) (Table 4).

The analysis shows that leading position in the structure of inter-areas in the reserve land fund according to groups of use of real property by the count of inter-areas and total area is held by the group of purpose of use of real property - Engineering Communications object utilization land. The area the group occupies makes 46.9% of the total area of inter-area and count of inter-areas cognizable to the state makes 38.2% of total count. The average area of inter-area is 0.7 ha (Table 4). This group could include forest land under high voltage power lines, which in accordance with the regulation at the beginning of the land reform was included in the territory assigned for use by the power lines holder, but later the Stock Company "Latvenergo" refused to formulate these lands on the property. Therefore, these lands were included in the reserve land fund. Thus a situation has occurred that in the rural areas a part of this land under the power lines is the property of farmsteads, but the other part is recognised as a reserve fund land. This situation has arisen in a number of the parishes in the Vidzeme region, as an example on the property of land for agriculture in Kocēni parish (Figure 3). Inter-areas in the reserve land fund whose purpose of use of real property is Land for agriculture are slightly behind the previous group (respectively 34.6% of the total count of inter-areas cognizable to the state and 39.8 % of total area). From the 129 land inter-areas cognizable to the municipalities and reserve land fund the purpose of

the use of real property for 33 inter-areas is "Water object land". A part of these are lakes in rural areas, which have a boundary along the coastline (Figures 4 and 5). As shown in Figure 4 and 5, when land properties and boundaries were formed near lakes, lakes were separate land parcels.



**Figure 3.** The placement of the reserve land fund in Kocēni parish: on top – on the cadastral map, on the bottom – the cadastral map is connected with orthophoto map

In addition, if these parcels which are occupied by a lake are registered as a land owned by municipality, the problem is not solved, because access to these lakes are provided only by the border line landowners.

The illustrations show only a few examples of this problem which emerged during the land reform by the formatting and surveying of land property boundaries. As shown in Table 3 and 4 the land inter-areas developed on different types of land, both in rural areas and cities.

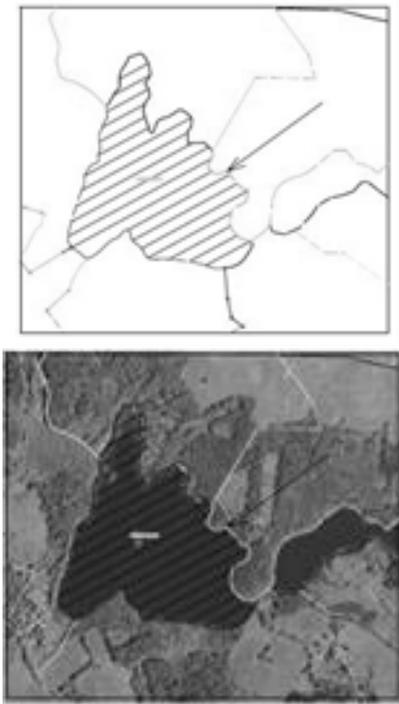
According to the types of land use, more than half (51%) of the land inter-areas in Latvia are agricultural land, which are almost not used (Table 5). The existence of land inter-area as such is not related to the rational use of land, so it has to be avoided. It means that every case of more than 11 thousand of land inter-areas will have to be solved in the future.

**Table 3**  
**Structure of land inter-areas cognizable to municipalities according to the groups of purposes of use of real property**

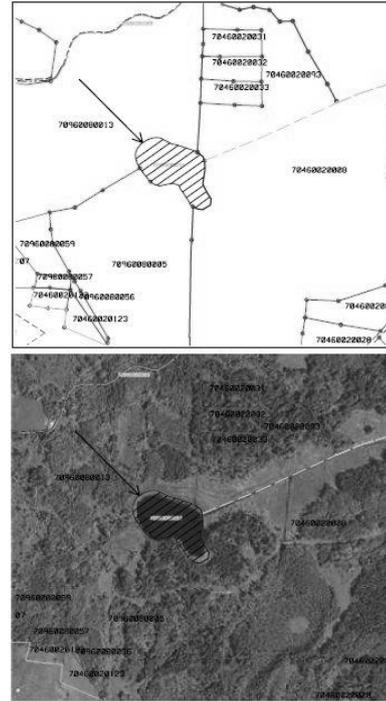
No.	Groups of purposes of use of real property	Count of land inter-areas	% of total count of land inter-areas cognizable to municipalities	Total area, ha	% of total area of land inter-area	Average area, ha
01	Land for agriculture	4064	57.8	5766.3	69.2	1.4
02	Forestry land and specially protected nature territory, where economic activity is forbidden with normative act	350	5.0	1236.7	14.8	3.5
03	Water object land	129	1.8	373.8	4.5	2.9
04	Mineral deposit territories	3	0.0	6.7	0.1	2.2
05	Land where the main land use is natural growth territories and land only for recreational use	447	6.4	466.0	5.6	1.0
06	Territory for construction of individual dwelling houses	1313	18.7	115.5	1.4	0.1
07	Territory for construction of multi-level dwelling houses	47	0.7	8.6	0.1	0.2
08	Land for construction of commercial objects	38	0.5	6.0	0.1	0.2
09	Land for construction of objects for public use	72	1.0	49.2	0.6	0.7
10	Land for manufacturing buildings	84	1.2	35.5	0.4	0.4
11	Traffic infrastructure utilization land	279	4.0	159.5	1.9	0.6
12	Engineering Communications object utilization land	179	2.5	93.5	1.1	0.5
13	Purposes of use of real property not assigned	27	0.4	16.8	0.2	0.6
Total		7032	100.0	8334.1	100.0	1.2

**Table 4**  
**Structure of land inter-areas in the reserve land fund according to groups of purposes of use of real property**

No.	Groups of purposes of use of real property	Count of land inter-areas	% of total count of land inter-areas cognizable to the state	Total area, ha	% of total area of land inter-area	Average area, ha
01	Land for agriculture	1481	34.6	911.0	39.8	0.6
02	Forestry land and specially protected nature territory, where economic activity is forbidden with normative act	86	2.0	80.6	3.5	0.9
03	Water object land	34	0.8	75.0	3.3	2.2
04	Mineral deposit territories	8	0.2	8.7	0.4	1.1
05	Land where the main land use is natural growth territories and land only for recreational use	33	0.8	4.8	0.2	0.1
06	Territory for construction of individual dwelling houses	754	17.6	63.8	2.8	0.1
07	Territory for construction of multi-level dwelling houses	17	0.4	4.6	0.2	0.3
08	Land for construction of commercial objects	4	0.1	0.3	0.0	0.1
09	Land for construction of objects for public use	17	0.4	3.3	0.1	0.2
10	Land for object manufacturing building	51	1.2	22.4	1.0	0.4
11	Traffic infrastructure utilization land	124	2.9	35.1	1.5	0.3
12	Engineering Communications object utilization land	1633	38.2	1074.2	46.9	0.7
13	Purposes of use of real property not assigned	36	0.8	6.2	0.3	0.2
Total		4372	100.0	2297.8	100.0	0.5



**Figure 4.** Sietnieki lake (Vestiena parish, Madona county) as a land inter-area without accessibility, land area 26.5 ha



**Figure 5.** Žautrītis lake (Vestiena parish, Madona county) as a land inter-area without accessibility, land area 2.7 ha

One of the easiest solutions might be the merging of land inter-areas with a neighbouring land parcel. However, each case should be considered individually, because this solution will not always be useful, for example in the case if boundary properties are more than one. Also the elimination of the previously mentioned lakes as land inter-

areas will not always be resolved in that manner. As the examples show, possession of the land inter-area to one or other group of purposes of use of real property makes it possible to classify the solutions of land inter-area elimination, thus making this process easier.

**Table 5**

**The structure of inter-areas in Latvia according to groups of types of land use (on 01.01.2014.)**

Group of types of land use	Total area, ha	% of total area of land inter-area
Agricultural land	4285	51
Forests	1379	17
Bushes	751	9
Swamps	441	5
Water facilities land	457	5
Yards	149	2
Roads	127	2
Other uses	746	9
Total	8335	100

## CONCLUSIONS

- 1) During the land reform, as one of the shortcomings in the land property formation process land inter-areas were developed, owned by public persons. These are land plots, the area of which does not conform to the use of land in the approved land use plan, or which cannot be provided with access to a public road.
- 2) Causes of emerging of the land inter-areas are various, though they are mostly due to the errors in the formation of land properties.
- 3) Land inter-areas do not facilitate a rational use of land, so the respective municipalities have to evaluate potentialities for their elimination.

## REFERENCES

- Butane A., Lasteniece V. (2000) Lauku saimniecību formēšana un konsolidācija. – Jelgava: LLU. 77 lpp.
- Demetriou D. (2014) *The Development of an Integrated Planning and Decision Support System (IPDSS) for Land Consolidation*: Doctoral Thesis accepted by the University of Leeds, UK. Springer International Publishing Switzerland. 340 p.
- Jankava A., Jankava I. (2013) The Problem of Land Inter-area in Latvia. In: *Baltic Surveying 2013: Proceedings of the International Scientific Methodical Conference*. Kaunas, Akademija, p. 76 – 82.
- Land Use Planning Law: (2006) [online] [accessed on 14.10.2014.]. Available: <http://www.likumi.lv/doc.php?id=144787>.
- Locmers M. (1999) Zemes ierīcības uzdevumi, saturs un nozīme. Jelgava: LLU. 100 lpp.
- Maasikamäe S. (2005) Assesment of Land Fragmentation. In: *VAGOS: Research papers 67 (20)*, 1, LUA, p. 75 – 82.
- Platonova D. (2010) Analysis of Land Fragmentation in Rural Areas. In: *Research for Rural Development: Proceedings of the International Scientific Conference*. Jelgava: Latvia University of Agriculture, p. 110 – 114.
- Publiskas personas mantas atsavināšanas likums (Law on Expropriation of the State and Local Government Property): (2010). [accessed on 14.10.2014.]. Available: <http://www.likumi.lv/doc.php?id=68490>.
- Thomas J. (2012) Verfahrensablauf der Flurbereinigung. In: Kummer K., Frankenberger (Hrsg.) *Das deutsche Vermessungs- und Geoinformationswesen*. Berlin: Wichmann, S. 437 – 521.
- Волков С.Н. (2013) Землеустройство. Учебники и учебные пособия для студентов высших учебных заведений. Москва: ГУЗ. – 992 с.