

## **LAND CONSOLIDATION IN KOSOVO AND ITS IMPACT ON RURAL DEVELOPMENT**

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### **1. INTRODUCTION**

Land consolidation is known as agricultural-technique process for land regulation respectively parcels creation in geometric regular form. Land consolidation in Europe is known since XVIII- century. In France the first land consolidation is known since 1702 when villagers made initiative for land consolidation of one village. While in next hundred years the land consolidation was made by hundreds in the other villages in France. In Sweden Law for land consolidation was promulgated in 1749. Land consolidation is hold in states like Scandinavia, Russia, Germany etc. In general after second world war land consolidation as best way for land regulation was developed in all European states regardless of politic system.

The first project for land consolidation in Kosovo started since 1983. Rapid citizen's growth in Kosovo and development of new families influences in parcels separation that was evident lessening of their area. This had also negative influence in agriculture land.

Important element for land consolidation in Kosovo is regulation of property-judicial reports.

### **2. LAND REGISTRATIONS PERIODS IN KOSOVO**

Land registration in Kosovo was done in different according as interim. Before 1912 year during the Turkish domination in Kosovo land registration was done in so-called Tapi. System land-patent was used in different manners until the end of Second World War. Regulation of property- rights relation or as it was called civil juridical relation was regulate by Yugoslav legislation (state with socialist politic system) were in a lot of cases the private property right was taken from owner and was transferred in state property according the different reforms. This private property confiscation especially one-sided was used to the prejudice of Albanians making their land colonization with Serb colonists. Until 1941 there were two types of property.

- Private property,
- State property

After 1945 year there had started compilation of cadastre based on geodetic survey and aerophotogrametric survey, that property registration was made according that cadastral survey. Different promulgated laws were base for construction of cadastral documentation for property evidence. Than, for this reason after 1945 there have been created three types of property as follows:

- State property,
- Social property,
- Private property

After Kosovo war (1999), Kosovo Cadastral Agency has draft law drafts for Immovable Property Right Registration, law on Mortgage and then that were approved by Kosovo Assambly and was signed from Special Representative and Secretary General of UN. This legislation base creates necessity opportunity for making of land consolidation.

The main difficulties regarding property in land consolidation will be created only in cases when there is missing cadastral documentation that was thief from Serb Government.

Now we have easiness for land consolidation because all Kosova territory surveyed by aerialphotogrametric, it is done correctly and fulfils the requests for geodetic works.

### 3. WORK DEVELOPMENT OF LAND CONSOLIDATION IN KOSOVO

Work on land consolidation developments based on research and geodetic cadastral documentation that refers with necessity survey in terrain. All this has influence in general charges and in exactness of project realization.

Based on that documentation have to be:

- Projection and planning agricultural-complexes development inside the municipalities or more.
- Infrastructure projection, for irrigation, road projection.
- New centres projection for production or for collection of agriculture productions.
- Projection of forestation and creation of new plantations.
- The other planning for electric, telephone net. Water- supply, canalisation for agricultural centres etc.

Works for lands regulation with land consolidation in Kosovo had started since 1983 and lasted until 1986.

Foreseen land area for land consolidation in Kosovo about years are presented as follows:

<i>Year</i>	<i>Area</i>
1983 .....	4 650 ha
1984 .....	15 420 ha
1985 .....	15 327 ha
1986 .....	3 234 ha
<b>Total .....</b>	<b>...38 631 ha</b>

From total area foreseen for land regulation with land consolidation are included 78 cadastral zones in 8 municipalities. While realization of land regulation with land consolidation was made in 26 927 ha, from total area above- mentioned.

Regulation of agriculture land with land consolidation in Kosovo were foreseen to be done in two manners:

- Land consolidation with irrigation (melioration),
- Land consolidation with no irrigation

Land consolidation with irrigation was applied in the municipalities that are in the irrigation system “Iber” and “Radoniq”. In Viti municipality with land consolidation were involved areas out of irrigation.

Irrigation system “Iber” inclusive the land regulation with land consolidation in municipalities:

Mitrovicë	5 cadastral zones
Vushtrri,	21 cadastral zones
Prishtinë, [ Kastriot (Obiliq), Fushë Kosovë],	11 cadastral zones
Drenas (Glllogvc),	21 cadastral zones

Irrigation system “Radoniq” inclusive works for land regulation with land consolidation in municipalities:

Prizren,	5 cadastral zones
Rahovec,	11 cadastral zones
Gjakovë,	16 cadastral zones

Land regulation with land consolidation, in Viti municipality is out of irrigation system that means just regulation parcels.

Viti	10 cadastral zones
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In some other municipalities, there had been done activities for collection of information for land regulation with land consolidation. There have been done activities for prearrangement for land consolidation in municipalities of Ferizaj, Lypian, Burim (Istogut) and in Deçan.

The main documentations used for land consolidation were:

- Land consolidation zone,
- Decisions for property separation,
- Graphic maps before and after the land consolidation,
- Lists for land consolidation,
- Coordinate of land consolidation tables and parcels,
- Separation table in the land consolidation size,

Involved territories, in land regulation with land consolidation are presented in Kosovo map as in fig. 1.

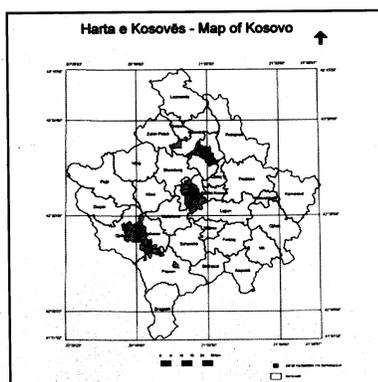


Fig. 1. Municipalities included in land consolidation

#### 4. PRINCIPLES OF MODERN LAND CONSOLIDATION

- The objective should be to improve rural livelihoods rather than to improve only the primary production of agricultural products.
- The end result should be community renewal through sustainable economic and political development of the whole community, and the protection and sustainable management of natural resources.
- The process should be participatory, democratic and community-driven in practice and not only in concept.
- The intervention should be to assist the community to define new uses for its resources and then to reorganize the spatial components accordingly.
- The approach should be comprehensive and cross-sectoral, integrating elements of rural and broader regional development including the rural-urban linkages.

Legislation on land in Kosova is done on light and harmonization of European Union legislation. So it is helpful for agriculture, also it helps for the land consolidation in Kosovo.

The above-mentioned modern principles in land consolidation (FAO, 2003) are accepted for the land consolidation in Kosova.

## 5. INFLUENCE OF LAND CONSOLIDATION IN RURAL DEVELOPMENT IN KOSOVO

Rational use of agriculture land is connected directly with urban plan of settlements with spatial planning and environment protection. Due to the lack some of these documents comes until the usurpation and transformation of agriculture land into construction land. This considers loosing of agriculture land. Application of land consolidation is so important because it is fixed by law the land use, prohibition of its separation, prohibition of culture exchange, prohibition of construction in the land consolidation zone etc.

Kosovo has trend of population growth and trend of parcels growth. According the data in Kosovo Cadastral Agency there are 2 million parcels, around 400 000 owners. There certainly have changes because every day there are the new separations that are registration in the cadastral documentation but there are also such that separates but don't make registration in cadastre.

### ***Obstacles for realization of agriculture productions in Kosovo in the light of land consolidation.***

Properties in general in Kosovo are private property, social property and state property. All these are reiterated in the cadastral documentation, in possession list, cadastral maps, sketches etc.

For higher agriculture production in private property there are a lot of obstacles like:

- Irregular area of parcels,
- Parcels with small area,
- Dissipated parcels of one owner,
- Lack of enough ways for development of agriculture work,
- Lack of irrigation system and water drainage,
- Wider bindery with trees or bush that obstructs in the agriculture works.
- Construction, enlarge or creation of new settlements in agriculture land,
- Lack of condition in accordance with cadastral documentation with the exact condition in terrain.
- Lack of up - to- date property- juridical reports.

Kosovo has good conditions for qualitative and ecological agriculture production. This is special stimulation for agriculture producer so there must establish necessity conditions and infrastructure.

Irrigation system in Kosova is based in open canal system from river Iber.

Land consolidation is an effective instrument in rural development to facilitate the creation of competitive agriculture production, see fig.2 and fig.3.

Parcels after land consolidation process will be larger and better shaped. Therefore using agriculture machinery for working land is easy and chipper.

### 5.1. DEVELOPMENT OF PILOT PROJECTS FOR CREATION OF DIGITAL CADASTRE IN LAND CONSOLIDATION ZONES

From chapter 3 of this project it looks like land consolidation in Kosovo is developed in some cadastral zones. Properties in cadastral documentations are from the old condition that means that owner takes the possession list for old parcel. That was lack for realization of owners right for credit advance or for the other transaction that owner want. For this reason Kosova Cadastral Agency developed some pilot projects in different zones of Kosovo municipalities where it was done land regulation by land consolidation and those lands are used according to the condition after the land consolidation.

The aim of pilot project was completely analyse for creation of cadastral documentation in the regulated zones with land consolidation for documentation use in digital cadastre. In the same time in the pilot project was done the evaluation of work capacity, exactness and cost for technical operation that has to be finished for cadastral zone involved in land consolidation. Measure for value was take parcel after the land consolidation.

For this was inspect, advanced and analysed juridical - technical documentation for different cadastral zones. Through GIS are made the connection of juridical- technical documentation, with textual database, with realization of digital model for parts of regulated cadastral zones regulated with land consolidation.

The project was realized from experts, technology and software of KCA. For this reason was used software: GeoMedia, \_GeosPro, Image Professional and KCID 2.0.

#### ***Achieved results from Land Consolidation in Kosovo.***

Land Consolidation in Kosovo has special importance for economic development in rural zones. With land consolidation in Kosovo arrives to approach the development of rural zone with urban zones. Making of road infrastructures and optimal conditions for agriculture development activities in their property or area enlargement for growing the fruitfulness create security and

resistance of population in the rural zones. Rise of profit from agriculture productions enables authentic rural making conscience of owners for rural zones importance.



Fig. 2. Cadastral maps of area after land consolidation

All this was realized through land regulation with land consolidation in Kosovo and there are arrived results:

- Creation of new cadastral documentation,
- Regulation of juridical property reports for parcels in land consolidation,
- Grouping of owners parcels,
- Growth of parcels area,
- New road creation of infrastructures system
- Regulation form creation of parcels area,
- Land fund rise from regulate binderies,
- Regulation of river, creek bad etc.
- Creation of geodetic base for new surveys,
- Remove of different obstructions and terrain flattening as necessity,
- Creation of opportunity for watering alternately
- Capacity and quality rise of agriculture and ecological productions,
- Consciousness rise of villagers for land value in the new conditions after the land consolidation.

Some data from pilot projects developed from Kosovo Cadastral Agency in the cadastral zones with land consolidation and achieved results:

Cadastral zone	Owners	Nr of parcels before LC	Nr of parcels after LC	Area (m <sup>2</sup> )
Pirana - Prizren	168	377	192	128 55 24
Krusha e Vogel Prizren	263	950	219	337 46 30
Vilance	79	286	155	91 39 19
Kramovik	46	274	199	127 98 12
Çifllak	96	792	287	132 87 26

In this table it seems the parcels number in land consolidation zones is diminished at least for half. This has positive influence for land reforms and managing of their rights.

The made analyse in Drenas for number of family economies it come out that 48% of them are depended from agriculture production from their property, fig. 3., but in conditions as that parcel area has at least 3 ha. Whereas after the land consolidation and making of conditions for irrigation this minimum comes in 1 ha agriculture land.



Fig. 3. Photo by Irrigation system and production on area near by Drini river

## 6. SUMMARY

Land consolidation as agricultural –technical action gives opportunities for economic development in rural zones. Economic development based on quantity and quality rise of locative agriculture productions encourage the farmers for enlargement of their activities.

Created legislation for property in Kosovo is good base and enough for land regulation with land consolidation. In the same time new cadastre for input property in land consolidation and definitely determines juridical property reports

Pilot project from Kosovo Cadastral Agency for digital cadastre development in cadastral zones were lands were regulated with land consolidation gives a good results. During our exposition of cadastral documentation in villages were land consolidation was in assignment villagers requested to continues with land consolidation also in the other zones.

There is need to be done land regulation in Kosovo with land consolidation because parcels area diminishes continuous. Resistant base for economic development in Kosovo is agriculture because industry doesn't have any progress or has a slowly progress.

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