

Kosovo case study

Land consolidation in the creation of a cadastral model and its influence in the economic development of Kosovo

Murat Meha and Qemajl Kadiri
Kosovo Cadastral Agency, Prishtina

Abstract

Kosovo is in the southeast of Europe in the middle of Balkan Peninsula. The Kosovo economy is based on agriculture activity, a little bit in the industrial sector and in the development of small and medium-sized enterprises. Agriculture development based on land consolidation will create new conditions for employment and competition for agriculture products in the regional market but also extent. Land consolidation together with irrigation is a very good opportunity for the realization of those objectives. The establishment of cadastral documentation and regulation of juridical ownership of the existing situation on the ground according valid regulation laws creates long-term stability with positive effects in politic for land administration.

Introduction

Land consolidation is known as an agricultural-technique process for land regulation, respectively parcels creation in a geometric regular form. Works for lands regulation with land consolidation in Kosovo had started since 1983 and lasted until 1986. From a total area of 38 631 ha foreseen for land regulation with land consolidation are included 78 cadastral zones in 8 municipalities. However, land regulation with land consolidation was made in 26 927 ha.

The 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

The main documents used for land consolidation were analogue:

- Boundary of the land consolidation zone,
- Decisions for property separation,
- Cadastral maps before and after the land consolidation,
- Lists for land consolidation before and after LC,
- Coordinates of land consolidation tables and parcels,
- Separation table in the land consolidation size.

Land consolidation and irrigation systems in Kosovo

An analysis of the irrigation system in Kosovo is essential because the irrigation channels are exploitable and the need of the farmers for irrigation is growing. The irrigation systems of agriculture land in Kosovo currently are organized into two types:

- Irrigation system from the rivers

- Irrigation system constructed by channels

Irrigation systems from the rivers for the agriculture lands was organized a long time ago. The irrigation system from constructed channels (Iber and Radoniq systems) is a result of land consolidation works by melioration.

The open channel, which comes from river Iber northern part of Kosovo, starting from Zubin Potok, has the length of 142 km, and the volume of 361 mil. m³ (volume = surface of cross section multiplied by length). The channel was constructed in 1976.

The open channel of Radoniq starts from the river Radoniq (western part of Kosovo, some kilometres from Gjakova) has a length of 23 km, volume of 1,472 million m³ and was constructed in 1983.

Land consolidation should lead to the successful use of rivers and channels for the irrigation of agriculture land in Kosovo. Weather conditions and rivers in Dukagjini part as well as results achieved by the previous land consolidation create possibilities for a new restart of land consolidation in Kosovo.

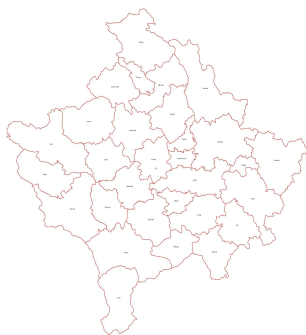


Fig.1. Irrigation system

Obstacles and difficulties of irrigation without land consolidation

The Drini's river bottom is not regulated but is partly suitable for irrigation with free fall. Obstacles for irrigation from the rivers are:

- Owners of the parcels near the river do not let others far from the river use the water and they do not let the irrigation pipes cross through their properties.
- Disorders in the river bottom because of sand use from properties around the river.

Elimination of these obstacles for agriculture land use and the creation of optimal conditions for competitor products at the region market can be done by the regulation of land consolidation.

Researches from public discussion with small farmers

The modern principles in land consolidation (FAO, 2003) are accepted for the land consolidation in Kosovo. Rational use of agriculture land is connected directly with urban plan of settlements with spatial planning and environment protection.

Kosovo has a trend of population growth and a trend of parcels growth. According to the data in Kosovo Cadastral Agency there are 2 million parcels and around 400 000 owners. Cadastral data shows there are 1 389 954 agriculture parcels in Kosovo that cover 5 744. km² (here agriculture land includes all types of parcels except forestry).

There certainly have changes because every day there are the new parcels divisions and subdivisions that are registered in the cadastre but there are also others that are not registered.

The development of public discussion from the Kosovo Cadastral Agency in some cadastral zones of Rahovec municipality where land consolidation was finished in 1986, establish new cadastral documentation based on existing decisions of that land consolidation. Discussions with farmers and KCA analyses brought some interesting and valuable data to restart with land consolidation in Kosovo.

Analysis of the fact that documentation for land is still not adjusted this is for the reason of documents being out-of-date, non-registering of inheritance and illegal transactions etc. Development of conditions for credit for development of agricultural farms or also for the other conditions on the mortgage base were the main requests of farmers to restart with land consolidation. The request by farmers in appointed zones to restart land consolidation is encouraging for Kosovo and international institutions with regard to:

- Increasing financial funds for land consolidation
- Studying the financing manner, and
- Appointing the first zones for land consolidation where the effect will be most rapid

Support from FAO and donors for development of pilot project of land consolidation in Kosovo will create the new conditions for development of a stabile economy. While the Kosovo Cadastral Agency in coordination with Ministry of Agriculture with full responsibility, effective and with profesional people will realize such a project with great success.

Projected effects of land consolidation in Kosovo

Based on achieved effects on regulation of agriculture land with land consolidation in Kosovo, with analyses and discussions made with Ministry of Agriculture and also with the existing cadastral documentation in Kosovo, the projected effects with land consolidation realization are as follow:

- New road network
- Parcels with regulation geometric form
- Increase of parcels area respectively decrease area of parcels number included with land consolidation
- Effects increase for irrigation system use
- Agriculture products increase
- Decrease of the number of legal disputes over property, currently very high.
- Transaction registration in the cadastral model
- Verification and cadastral documentation homogenize with factual condition on the ground

- Definitive establishment of the cadastral model for the zone in land consolidation
- Properties definitive input in possession of properties gained according land.

Realization of land consolidation now will be faster and effective based on database that we had established from last aerial photogrammetry and with available measurement technology.

Figures 2 and 3: Parcels view before land consolidation in one cadastral zone and also view after area regulation with land consolidation.

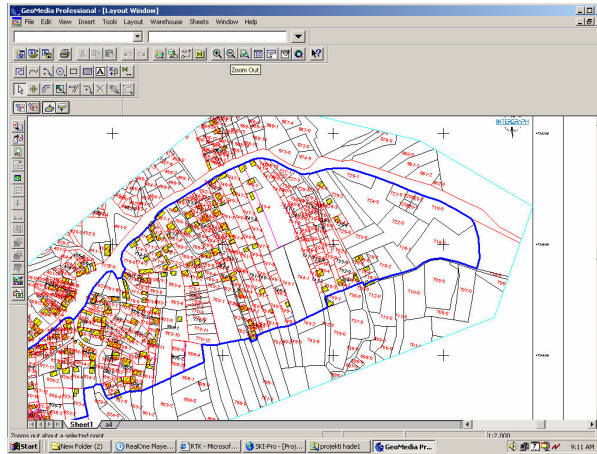


Fig. 2. Parcels before land consolidation

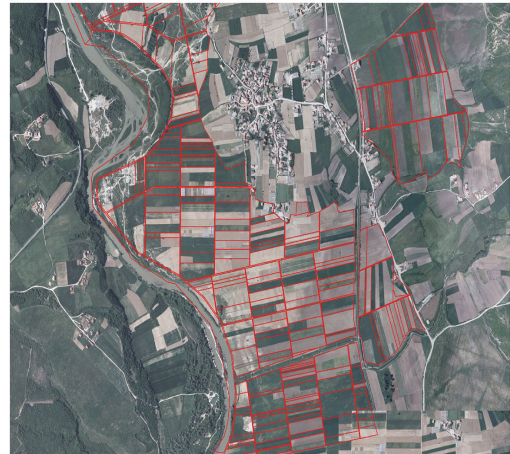


Fig. 3. Parcels after land consolidation

Literature

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