Cadastral Data and Land Administration in a Border Region

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Key words: Cadastre, land management, boundary region, ownership, CLIS.

SUMMARY

Generally, land administration is relevant for economic development of a country. Based on the way of use and administration, lands may be classified to: urban land administration, rural land administration and forest land administration. All the above land types have been registered in the cadastral documentation, developing Cadastre and Land Information System (LIS). In terms of the extension of the country territory, it can be classified into internal regional lands and boundary regional lands. Internal regional lands have several specific characteristics, distinguishing them from the country internal region. Boundary regional land characteristics are complex both in political, security, administrative, cadastral and definitely economic aspects.

The establishment of secure and stable property rights has been a key element in the rice of the stable local economy as it was in the West countries as good base for modern economy. Inter-state border between the two neighbouring countries has been defined as a physical non-latitude line and embodied with pyramids of determined sizes under the Inter-State Commission agreement.

The paper aims outlining the previous land administration system in the boundary region and management strategy in the future. In conformity with the task by the Government of Kosovo, the data will be provided on conducted researches in the border demarcation process between the R. of Kosovo and the R. of Macedonia initiated in April 2008.

TE DHËNAT KADASTRALE DHE ADMINISTRIMI I TOKAVE NË RAJONIN KUFITAR

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Fjalët kryesore: Kadastri, menaxhimi i tokave, rajoni kufitar, pronësia. SITK.

PËRMBLEDHJE

Administrimi i tokave ne përgjithësi ka rendësi për zhvillimin ekonomik te shtetit. Bazuar në mënyrën e shfrytëzimit dhe administrimit tokat mund të klasifikohen në: administrimin e tokave urbane, administrimin e tokave rurale dhe administrimi i tokave pyjore. Të gjitha këto toka janë të regjistruara në dokumentacionin kadastral duke e krijuar Sistemin e Informimit Kadastral të Tokave (SIKT). Ndërsa nga aspekti i shtrirjes se territorit të shtetit, ai mund të kategorizohet në toka të regjionit të brendshëm dhe në toka të regjionit kufitar. Tokat e regjionit kufitar kanë disa karakteristika të veçanta qe i dallojnë ato nga regjioni i brendshëm i shtetit. Karakteristikat e regjionit kufitar janë komplekse: si të aspektit politik, të aspektit të sigurisë, të aspektit administrativ, të aspektit kadastral dhe gjithsesi të aspektit ekonomik. Zhvillimi i sigurt dhe stabil i të drejtave pronësore duhet të jete çelësi kryesor në ngritjen e ekonomisë lokale stabile sikur ishte në shtetet perëndimore si bazë e ekonomisë moderne. Kufiri ndërshtetëror në mes të dy vendeve fqinje është i definuar si një linje fizike pa gjerësi dhe e materializuar me piramidat e madhësive të caktuara nga marrëveshja e komisioneve ndërshtetërore.

Punimi ka për qellim ta beje prezantimin e deritanishëm te sistemit te administrimit të tokave në regjionin kufitar dhe strategjia e menaxhimit në të ardhmen. Në pajtueshmëri me detyrën nga Qeveria e R. të Kosovës në këtë punimi do të ofrohen të dhëna nga hulumtimet e bëra në procesin e demarkacionit të kufirit në mes të R. se Kosovës dhe R. se Maqedonisë i cili ka filluar në Prill të vitit 2008.

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1. INTRODUCTION

Republic of Kosova is one of the newest countries among 193 countries in the world. Its independence is declared on 17th February 2008. For that in the center of Prishtina capital city is big statue with capital letters "NEW BORN". Each new country needs to define border with neighbors. The best records for definition of the border and border region are cadastral data.

Cadastral data, GIS and maps are available for the overall territory of the Republic of Kosovo. It establishes ownership and demarcation of the borderline between the two countries. A large amount of the cadastral documentation was looted during the war time (in 1999) by the Republic of Serbia. This lack of documentation has been also observed in the demarcation of the inter-state borderlines.

Mobilisation on land administration in the boundary region is mostly focused on the poverty mitigation strategy. Along this land administration criterion and their management system, there should be established a cross-border cooperation, which supports property security with free access for all. The sentence "Each country is equal in front of the law" brings to the conclusion that the land management of boundary stripe has been legally and economically treated on the sustainable development. This is not case in socialistic countries. The best records for the border region are cadastral data, which will be treated in this article. In regards to this area, due to his multi-disciplinary knowledge in geodesy, cadastre, mapping and geo-information, a surveyor gets involved in all economic development levels of the boundary areas. Therefore he needs to know and meet legal defined criteria and the required accuracy of surveying measurements. The surveyor should develop a land information system in the boundary area CLIS within GIS. This study aims to determine factors related good administration of land together with all other factors on boundary region as new approach.

2. STATE BOUNDARY AND LAND ADMINISTRATION

2.1. State boundary

The boundary is best defined as line of no physical width dividing one state from an adjacent state (Archer, 2006.). The 1933 Montevideo Convention defined as a state as possessing:

- a defined territory,
- a permanent population within that territory,
- a method of organization-government
- a capacity to enter into relations with other states.

Republic of Kosova fulfills all factors defined by Montevideo Convention. Based on those four components and on international law, where is "each state is equal in the eyes of the law" concluded that the state is recognized from other states and its territory is defined. There has to be treated as a new steps, territory principles, boundary of state and nationality, public and private rights, demarcation of boundary and maintenance in legal form and in technical form. The fourth factor is in direct connection with the land administration in the border region especially on mountain region where circumstances are totally different than in rural area.

2.2. Definition of border region and land administration

The borderline which divides the Republic of Kosovo and the Republic of Macedonia mostly crosses through a mountainous area, and also through high mountains up to 2500 m above zero sea level. The border demarcation between these two countries has commenced in April 2008 and it has not been completed yet up to the preparation of this paper. The basic documentation on border demarcation, such as rule book and technical specification has been prepared in the inception period.

In the Article 4 of the Rulebook for the work of the Joint Kosovo –Macedonian Commission for the demarcation and marking of the state border between the Republic of Kosova and Republic of Macedonia is written:

"During the marking of the border line on the field, in parts where the description is prepared on the basis of the agreed documentation, the Joint Commission shall follow the data contained in the cadastre plans (Meha, 2008). At the same time and starting from the local (including the local population) geographical, orographic and economic conditions as a whole, with mutual agreement, to make necessary and balanced corrections that deviate from the textual description of the state border in the depth of 150 meters".

Article 4 provides that one of the necessary and quite important factors on supporting the borderline demarcation are local inhabitants of the settlements located along the borderline. Local inhabitants are a very relevant factor on locating old points and placing the new ones, considered as solid and undisputable points by all relevant factors in the boundary regions. There are all types of lands of the territory of the Republic of Kosovo in the boundary area with the Republic of Macedonia. Their variety, from cadastral, agricultural aspect, etc. will be clarified in the following chapters of this paper.

Land administration in the boundary region must be developed with poverty mitigation strategy. In the boundary region, there should be developed cross-border cooperation, supporting by government, supporting property security with free access for all. The establishment of secure and stable property rights has been a key element in the rice of the stable local economy. In the West it was good base for modern economy growth as argued by (North 1990). That experience and lessons learned are very important for a new state. Due to his knowledge on geodesy, mapping and geo-information, a surveyor gets involved in all levels of planning and development of cross-border cooperation.

The sentence "Each country is equal in front the law" brings to the conclusion that land management of the boundary stripe has been legally and economically treated on the sustainable development. Cross-border cooperation has its own specifics, which vary from other collaborations between two countries.

3. LAND ADMINISTRATION IN THE BORDER REGION

Good governance in land administration is central to achieving good governance in society. Factors associated with governing land administration are numerous and complex (Burns and Dalrymple 2008). All mentioned factors are referrers for all state territory, which means also for the border region.

Local economic development; in the border region as in other places need to be focused on: urban and rural planning; land use and development; control standards; Local environmental protection; Provision and maintenance of public services and utilities, including water supply, sewers and drains, sewage treatment, waste management, local roads, local transport and other important schemes, family and other services; public housing; public health, food, lodging, markets, street vendors, local public transportation and taxis.

Author Grindle in the article (Grindle 2007) made very important relation between the main objectives and developments of the indicators in terms of land administration 'best practice', but what is "good enough governance" and what alternatives may be more applicable. Reduction of poverty in border region is linked on land administration and good governance. South part of territory of border of Kosova region is mostly covered by diversity of trees.

Mobilizing the land sector to the border region is considered a principle focus for poverty reduction and a key development strategy for that area. Land administration and management systems in particular inter border cooperation, are responsible for providing tenure security and free access to land for all.

Rural and forest land on the border region is coming under increasing pressure due to the new rapid requirements for a new development. Traditional concept of land use is based on local old fashion, but not on modern and creative circumstances. Concept of modern and creative way of land administration on the border region should be based on forest tourism, hunting, vacation, arboriculture, livestock farm etc. which is now missed.

The surveyor is involved in most stages of development of boundary demarcation and land administration in border region. Surveyors as professionals must fulfill certain legal framework and required accuracy from the state. (Martin 2008, Meha 2008) Multidisciplinary knowledge of surveyor on geodesy, cadastre, surveying, mapping modern geo-informatics and GIS, serves as an integrator of the overall area and among all the participating factors.

Geographic information can be defined as information about the nature and locations of certain border area. That information's with all attributes and features are going to present

clear current situation. The process of creating GIS as a tool for land administration for border region is complex and expensive.

The focus of the land administration project of the border region is on Change Management. The project's overall objective is to assist in stimulating further rural and mountain economy in the border region, reducing rural poverty and ensuring food security and ensuring the sustainable management of region natural resources. Central and local institutions need to develop policies and practices that are relevant current situation.

4. ANALYZE OF LAND ADMINISTRATION ON THE BORDER REGION THROUGH CADASTRE DATA

Land administration in the border region along the border with R. of Macedonia is focused on developing conditions for poverty mitigation or even its eradication in that territory. We take cadastral data as one example of change modelling in Balkan region as new states for cross-border cooperation. This is on line to catch new options and respond with high quality of management including transparency and concern for social cohesion on both side of border line.

There are 38 cadastral zones meeting the borderline with Macedonia. These cadastral zones are located in six municipalities. Next data should clarify more the role of the land administration and governance of land in border region see table 1.

The distances of houses in Kosova territory from the border line in five cadastral zones are between 11m and 77m. The distances of houses in next six cadastral zones are between 400-1000m. The similar situation is in the other side of the border line in Macedonian territory. This means that houses are very close with the border line and the interest of local inhabitants is the same, in both sides of the boundary. Nine cadastral zone's centers from the border line are distanced up to 1.5 km. Next ten cadastral zone's centers are far away from border up to 5km. The distance in the rest cadastral zones is from 5 km up to 12 km.

Land parcels on the border region are with different attributes and features. Parcels are with different shape and size, different cadastral cultures-using. Owners of the properties are private or public owners (Meha 2007). All these data are taken from the Cadastre and Land Information System. Data of cadastral zones are along the borderline with Macedonia are given in the following tables. In table 1 is shown area of cadastral zones, number of parcels and their uses. It shows that there are many possibilities for cross border cooperation. In table 2 are given data about length of border line for each cadastral zone which is important to analyse cooperation between local inhabitants and cross border cooperation.

These cadastral data and records for the cross border cooperation are fundamental for the first step on the land development. These data will bring clear factors as follow:

- ownership and property rights;
- cadastral cultural for all parcels or group of parcels;
- maps will present what is the infrastructure there;

- what kind of economical stimulus is needed there;

Cadastral data should give courage to improve environment and commitment to move forward economical development at border region.

| Т | Table 1. | | | | | | | | |
|--------------|----------|-------|----------|--------|---------|--------|--------|------|--------|
| | | Total | | | | | | | |
| | | area | | | | | | | |
| | | | Total nr | | | | | | |
| | | of CZ | of | | | | | | |
| | | | private | | | | | | |
| Municipality | CZ | (ha) | parcels | Arable | Pasture | Meadow | Forest | Yard | Others |
| Dragash | 9 | 22250 | 17618 | 3119 | 2291 | 6462 | 1007 | 1836 | 2903 |
| Prizren | 6 | 10408 | 21206 | 3775 | 2124 | 8539 | 2883 | 1199 | 2686 |
| Shterpce | 6 | 12236 | 21500 | 7023 | 1731 | 6619 | 1958 | 1066 | 3076 |
| Kacanik | 9 | 8492 | 5057 | 1477 | 661 | 411 | 1413 | 456 | 639 |
| Viti | 6 | 4972 | 6774 | 2747 | 752 | 1122 | 669 | 614 | 870 |
| Gjilan | 2 | 2401 | 3268 | 427 | 450 | 664 | 1410 | 129 | 186 |
| Total | 38 | 60759 | 75423 | 18568 | 8009 | 23817 | 9340 | 5300 | 10360 |

Data on table 1, shows that n the area of 60759 ha, are 75423 parcels. This means, that there is 0.81 ha per parcel, which is very small for a farm. Based on these data there is necessary, better approach to the Land administration and management with following activities:

- Establish detailed land inventory over whole certain border area;

Table 2

- Identify priority areas on the border region
- Agree with the relevant institutions and local inhabitants on the practical co-operation of land administration and management;
- Encourage land related projects on rural development to integrate design and financing part.

| 14010 2. | | Length |
|---|-----------------------------|--|
| Municipality Dragash Prizren Shterpce Kaqanik Viti | CZ 9 6 6 9 6 | (km) 46.2 20.2 15.0 54.2 21.7 |
| Gjilan Total length of border line | 2 38 | 13.6 170.9 |

Total length of border line between Republic of Kosova and Republic of Macedonia is 170.9 km see table 2. Projects on land administration strategy in this area is valuable, because there are 38 cadastral zones or settlements in Kosova side, and the same number of settlements are in Macedonian side. Cross border cooperation, and regional land development on this area is very useful for the future economic development. There is need for readjusting unfavourable land division, than promoting the appropriate use of the real property without changing the status of ownership. In case, that there is no ownership updated, must be immediately and fulfill demands of farmers/owners. In this border region, land, traditionally is used as pasture, forestry and less as agriculture land. Until now, this development on border region had less impact in improvement of the land administration and land management.

5. CONCLUSIONS

Land is an essential asset to human existence. As it is known: no land without state and vice versa. Land in the border region with R. of Macedonia is used in inefficient and improper ways as deforestation, bad infrastructure, lack of cadastre etc.

The paper has aimed to show assets on border region, and the needs for the cadastral information to decision makers. Based on examples and more not mentioned lead as to next conclusions:

- The land in Kosova is highly fragmented. This is due in large part to rural unemployment. The fact is that thousands of farmers are tied to their land mostly focused on mountain area in order to maintain their livelihoods. Fragmentation of land and other problems could be partly overcome by establishing a free land market, few small businesses and allowing free moving in both side of the border line.
- The needs for necessary land reforms, starting from the land property rights to spatial planning. Land Administration on the border region will be developed through open discussions, case study pilots in a sample of diverse countries and analysis of the field results.
- The Geographic Information can be defined as information about the nature and locations of certain border area. That information's with all attributes and features are going to present clear current situation. The process of creating GIS as a tool for land administration for border region is complex and expensive but will have positive impact on poverty alleviate.
- The possibility of land consolidation on agriculture land and-or to the forestry land is new chance for cross border cooperation.

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BIOGRAPHICAL NOTES

Murat Meha is a University Professor and Deputy Head of the state Demarcation Commission. He has been teaching at the University of Prishtina - Kosovo since 1988. He has also taught for ten years at Tetova University (FYR of Macedonia). He worked for five years as Manager of SEO Ferronikeli, for three years as a CEO of Kosova Cadastre Agency, in different funded EAR projects, USAID project, KTA etc.

His teaching and research concern survey, cadastre, Land Administration and Land management. and related educational and capacity building activities. He is currently the member of Kosova Surveyor Association..

Main publications of Mr Meha are on survey, cadastre, Land Administration and Land management. He published two University books, two books for Kosovo Cadastre Agency, one book translated, and several school geographic atlases and maps. More than 75 professional and science papers in different professional magazines, symposiums, conferences etc. Most of those articles are available on Internet at: FIG, ICC, Euro Geographic, WPLA, CELKCenter, FAO GIM International etc.

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