FOREST MANAGEMENT - PART OF THE CADASTRE IN ROMANIA

Prof. Dr. Ioan Ienciu[1]

[1] „1 Decembrie 1918" University of Alba Iulia, **Romania**

ABSTRACT

After the social revolution of 1989, Romania started a revolution of "forest fund" through the application of laws regarding the property restitution related to the forestry former owners or their heirs. But these actions have generated a number of legal economic and technical issues related to the forest management by the new owners. Among the legal issues, the most important was to find the new owners by documents proving the Land Registry or Agricultural Registry, but also by making wills, lawsuits or other actions of a legal nature which have only served to delay the deadline for applying the property laws. Another legal issue concerns to the logging operations, in this regard it had to be set up Private Forest Ranges to ensure judicious exploitation of wood in conjunction with cinegetic fund and closely related environmental norms. Economic problems came when it was necessary to establish new forest arrangements which led to the valuation of land and wood. But the biggest problem is the technical side of cadastre where it is imperative to execute large-scale engineering works such as: identifying the land and the owner, creating the graphical products and generated the documents of property.

Keywords: forest fund, topographic measurements, cadastre, property deeds, cadastral plan, forest plan

INTRODUCTION

In order to manage the forest fund is essential to create a current databases on forest land issue. This aspect requires the completion of the action for the reconstitution of property right and the issuance of real estates owner in accordance with legislative requirements mentioned in the property laws. [1], [2]

Analyzing the cadastral pattern introduced in Romania, to Transylvania, during the Hapsburg Empire, it observed that when the cadastre works with the Land Registry as a unified system, there is a continuous progress of the company in terms of real estate. Also the aim of the general cadastre and land registers is to serve both the owner with his real property and administrative territorial units that have in their task the management of all land, including forest, located on the reach of respective territorial administrative unit. [3], [4]

From a historical perspective, they appeared in the interwar period, subsystems of cadastre evidence, respectively specialized cadastres related to land perimeters - mining cadastre, water - water cadastre and forest - forest cadastre based on Autonomous House of State Forests (figure 1). After the finalization of the Second

ASPECTS REGARDING THE REALIZATION OF REAL ESTATE CADASTRE IN ROMANIA

Prof. Dr. Ioan Ienciu[1]

Assoc. Prof. Dr. Luciana Oprea[1]

Lect. Dr. Miruna Tudorașcu[1]

Lect. Dr. Larisa Filip[2]

[1] **"1 Decembrie 1918" University of Alba Iulia, Romania**
[2] **University of Petroșani, Romania**

ABSTRACT

Achieving the real estate cadastre work for an administrative territory respectively a locality, involves the administrative stages of this work. Starting of this work is the responsibility of the City Hall as a Chief Authorising Officer and the organizer of procedures for awarding the work to be executed. Once the award procedure cadastral work finished, it proceed to the realization of cadastral documentation that will be made by respecting the legal and technical regulations valid at the time and the provisions of product specification.

Considering the need to involve owners in the practical implementation of these services, is required the carrying out of a local advertising campaign to stimulate the interest of owners to support the provider when they are visiting by the field teams to collect data on their property.

In this context, this paper has as purpose the presentation of work that are necessary to achieve the real estate cadastre work for a city respectively an administrative territory.

Keywords: real estate cadastre, geodetic network, topographic network, cadastral numbering, database, owner

INTRODUCTION

Due to special importance of cadastral information, for real estate cadastre stages in localities, the law no. 7/1996 - "Cadastre and Land Registration Law" - defines the following fundamental concepts for this activity[1]:

- the general cadastre is the unitary and obligatory system for evidence of technical, economic and legal aspects through which are realized the identification, recording and representation on map and cadastral plans of all land and also all other real estate from the country, regardless of their destination and owner;
- the basic entities of this system are parcel, construction and owner, when parcel means the land with or without buildings;

THE REALIZATION OF EXTRAJUDICIAL CADASTRAL EXPERTISE IN ROMANIA

Assoc. Prof. Dr. Ioan Ienciu[1]

Lect. Dr. Miruna Tudoraşcu[1]

Lect. Dr. Luciana Oprea[1]

[1] „1 Decembrie 1918" University of Alba Iulia, **Romania**

ABSTRACT

Ownership is a real right, typically the fullest, whereby the holder may exercise his prerogative of a good provided by law. In the event that the ownership of a property can not be determined due to adverse legal conjuncture, the property in question is subject to extrajudicial or judicial cadastral expertise, according to court actions initiated. Areas for which beneficiaries require extra technical expertise are varied: topography, land, real estate advertising (land registry), construction of any kind, territorial planning, agriculture, etc..

In the process of implementing property laws regarding the retrocession of immovable property, may be cases in which the owners are dissatisfied with the technical aspect of reinstating the possession. In this case, they can appeal to a person skilled in the topography and cadastre, person who will make an extrajudicial expertise report. In this report, the expert will answer to the questions regarding the location, shape, size, surface, limitation of real estate etc. and suggest conclusions of resolving disputes.

At this juncture, topographical and cadastral technical expertise is a complex work, with various work steps which are executed with adequate topographical equipment and most of the time in difficult conditions. Solving targets in the spirit of the law, requires the full competence of expert through the technical and legal knowledge and right attitude of impartiality towards the parties. These are the only argument that can lead to appropriate solutions, real and true, in terms of the real owners of the properties in litigation.

Keywords: extrajudicial cadastral expertise, reinstating the possession, owner, Property Title, topographic measurements

INTRODUCTION

Land resources includes all land areas between borders, including submerged lands, buildings and communication routes and it represent the basic condition of the existence of a nation or state.

Ownership according to the Civil Code, it is right that you have someone to enjoy and dispose of a thing exclusivelly and absolutely, but within the limits determined by law. Acquisition of ownership and other real rights shall be governed by law. „Real property is acquired and transmitted by succession, by convention and tradition" by law and by occupation. [1]

SURVEY MAPPING OF ROMANIAN FORESTLAND AND ITS UPDATE THROUGH LOW-COST APPLICATIONS

Assoc. Prof. Dr. Ioan Ienciu[1]

Lect. Dr. Luciana Oprea[1]

Assoc. Prof. Dr. Cosmin Popescu[2]

Assoc. Prof. Dr. Iosif Vorovencii[3]

Lect. Dr. George Emanuel Voicu[1]

[1] "1 Decembrie 1918" University of Alba Iulia, **Romania**
[2] Banat University of Agricultural Sciences and Veterinary Medicine Timisoara, **Romania**
[3] "Transilvania" University of Braşov, **Romania**

ABSTRACT

Since ancient times, people have needed to record various information about the activities considered of utmost importance. At first, these records were held privately by each family. As society developed, records began to be kept in a centralized manner. The property that was best recorded was the land, as it presented a special interest not necessarily for the owners but for their state government, which began to levy land tax.

The efficiency of the decision making process depends largely on an accurate and complete knowledge of the existing situation in the territory, which implies an appropriate information apparatus that is composed of specialized personnel, equipment and appropriate legislation. Given these premises, cadastral survey, namely survey mapping of Romanian forestland must meet the requirements for a national system administered by the relevant national authorities as well as the requirements related to forestland management and gathering of taxes for the public administration within each territorial administrative unit.

Keywords: general cadastre, survey mapping of forestland, cadastral map, territorial and administrative unit, low-cost applications

INTRODUCTION

General cadastre is a unitary and compulsory system for the technical, economic and legal recording of real estate property all across the country. It is organised in each administrative-territorial unit, at the following levels: village, town, city, county and national [1]. The general cadastre system allows us to identify, describe and record real estate property in cadastral documents by their nature, to measure and represent them on maps and cadastral plans and to store data on IT support; it also allows us to identify and record all owners and other legal holders of property, in order to record it for an indefinite time in the Land Book; it provides data required for taxation and the tax liability of taxpayers requested by authorized bodies [2].

Journal of Environmental Protection and Ecology 14, No 3, 980–985 (2013)

Environmental protection and sustainable development

URBAN DEVELOPMENT OF MOUNTAIN AREAS WITH THE AIM OF DEVELOPING LOCAL TOURISM

I. IENCIU[a], I. VOROVENCII[b], L. OPREA[a]*, C. POPESCU[c]

[a] *'1 Decembrie 1918' University of Alba Iulia, 5 Gabriel Bethlen Street, 510 009 Alba Iulia, Romania*
E-mail: *lucii_oprea@yahoo.com*; *iienciu@yahoo.com*
[b] *'Transilvania' University of Brasov, 29 Eroilor Blvd., 500 036 Brasov, Romania*
[c] *Banat University of Agricultural Sciences and Veterinary Medicine of Timisoara, 119 Calea Aradului Street, 300 645 Timisoara, Romania*

Abstract. A growth of the economic and urban potential of mountain areas can be achieved through tourism development, linked with the exploitation of natural and environmental conditions particular to the different parts of the country. In order to have a technical basis for launching investment projects, topographic and cadastral projects have to be carried out first, in order to identify landowners, the destination and current status of these lands, and especially, if they are suitable for these types of urban projects: a suitable slope for winter sports, access roads, mountain tracks, and the possibility to urbanise these areas without or with minimum impact on the surrounding environment. Once these requirements are met, the practical implementation of the urbanisation project can begin. An identification of the topographic location of tourist attractions is mandatory, so that they can be integrated into the tourist circuit as soon as possible. Also, it is necessary to identify the opportunities for an environmental-friendly development of the area and the risks that can cause such projects to fail, in order to prevent failure.

Keywords: tourism, urban development, topographic surveys, maps, mountain areas.

AIMS AND BACKGROUND

Romania needs more mountain tourist resorts and winter sports facilities in order to become a viable tourist destination in Europe. In such circumstances, it is mandatory to implement and monitor the compliance with international standards so as to ensure all requirements for comfort and safety and an emergency response in case of accidents.

For Romania to become a tourist destination for winter sports and attract foreign tourists, new resorts must be developed in mountain areas best suited for such activities[1].

Given this premise, we chose to focus our research on the Sureanu mountain area, resulting in the mapping of the Sureanu ski area. The urbanisation process

* For correspondence.

INTRODUCEREA CADASTRULUI GENERAL ÎNTR-UN TERITORIU ADMINISTRATIV

Lect.univ.dr.ing. LUCIANA OPREA, conf univ.dr ing. IOAN IENCIU,
lect.univ.dr.ing. GEORGE EMANUEL VOICU, lect.univ.dr. MIRUNA TUDORAŞCU
Universitatea „1 Decembrie 1918" din Alba Iulia

ABSTRACT: Introduction of general cadastre in an administrative territory. *General cadastre is an indestructible part of the economy, agriculture, construction, systemization and has an important role in the rational use of the land. The progress made in recent years in the field of cadastre require approach of this issue from a modern perspective of structuring information in accordance with the methods and apparatus used, the ultimate goal being the realization of general cadastre work of Romania.*

Keywords: *general cadastre, administrative territory, ownership, Land Registry, cadastral plan.*

1. Introducere

Pe parcursul timpului, teritoriul ţării noastre a fost supus diferitelor condiţii politicc, sociale şi economice, fapt care nu a permis realizarea lucrărilor de cadastru în special extravilanul, aşa cum s-a întâmplat în marea majoritate a ţărilor dezvoltate. Având în vedere că tranzacţiile imobiliare s-au intensificat odată cu trecerea timpului şi cu retrocedarea terenurilor, acest lucru a impus o cât mai justă evidenţă a imobilelor din punct de vedere al cadastrului.

Importanţa eadastrului constă în faptul că prin intermediul lui sunt oferite informaţii reale privitoare la bunurile imobile - poziţie, mărime, folosinţă, proprietar - informaţii necesare în toate ramurile eeonomiei naţionale.

2. Cadastrul general

Legea 7/1996, legea cadastrului şi publicităţii imobiliare, defineşte eadastrul general ca fiind „un sistem unitar şi obligatoriu de evidenţă tehnică, economieă şi juridieă prin care se realizează identificarea, înregistrarea şi reprezentarea pe hărţi şi planuri cadastrale a tuturor terenurilor, precum şi a celorlalte bunuri imobile de pe întreg teritoriul ţării, indiferent de destinaţia lor şi de proprietar".

Totodată, importanţa luerărilor de cadastru este prioritară pentru întocmirea sistemelor informaţionale ale teritoriului, acesta oferind posibilitatea furnizării rapide a datelor realc ale bunurilor imobile, date necesare tuturor organismelor de gestionare şi planificare a bunurilor imobile din diverse sectoare ale economiei naţionale.

3. Realizarea lucrării de cadastru general

Introducerea cadastrului general, datorită densităţii mari a obiectivelor, se face pe planuri la scările 1:2.000; 1:1.000 şi chiar 1:500; cu stipularea suprafeţelor în hectare şi metri pătraţi, efeetuând totodată inventarierea şi înregistrarea tuturor clădirilor şi terenurilor pe eategorii de folosinţă şi posesori şi elemente constructive ale elădirilor.

Etapele care concură la realizarea unei lucrări de eadastru general se pot clasifica în două mari categorii şi anume: etapa de teren şi etapa de birou.

Etapa de teren cuprinde aspectele referitoare la:

– preluarea amplasamentului obiectivului

Journal of Environmental Protection and Ecology 13, No 1, 345–351 (2012)

Computer application on environmental informatic systems

DYNAMICS OF THE RILL AND GULLY EROSION USING GIS TECHNOLOGIES

I. IENCIU[a]*, L. DIMEN[a], N. LUDUSAN[a], C. GRECEA[b], T. BORSAN[a], L. OPREA[a]

[a] *'1 Decembrie 1918" University of Alba-Iulia, 11–13 Nicolae Iorga Street, Alba Iulia, Romania*
E-mail: *iienciu@uab.ro*; *iienciu@yahoo.com*
[b] *'Politehnica' University, 2/A Traian Lalescu Blvd., Timisoara, Romania*

Abstract. The Zlatna area is confronted with serious problems of environmental pollution as a result of forced industrialisation policy; the environment factors like air, water and soil are permanently subjected to the aggressiveness of human activities. The most important ore processing industrial objective, the Ore Processing Industrial Complex, an industrial unit specialised on copper metallurgy and chemistry is the company mainly responsible for the pollution present on the entire area of the Ampoi river hydrographic basin. Three emission columns functioned within the works, which continuously released gas and solid particles into the atmosphere, which makes the vicinity of the factory and the valley where it is located permanently wrapped in smoke and vapours, vegetation on the hill sides almost destroyed. Progressive deterioration of environmental components quality has induced also the phenomena of erosion upon the fact of distructing the vegetation. Erosion can be considered as a major environmental problem in the area. In this study, geographic information systems (GIS) were used to establish an information data base to characterise a watershed, and locate potential erosion areas using proximity analysis and modelling.

Keywords: erosion, GIS, environment, modelling.

AIMS AND BACKGROUND

Romania, as other parts of the world, is confronted with serious problems of environmental pollution as a result of forced industrialisation policy; the environment factors like air, water and soil are permanently subjected to the aggressiveness of human activities. Progressive deterioration of environmental components quality[1] has induced for the communities living in the vicinity of industrial platforms, a number of unfavourable aspects and drawbacks in relation to the state of environmental components.

The analysis of the spatial system for the Zlatna depression, as a central element for the present study must follow after a contiguity analysis of a 'relational conglomerate'[2] through which causality plays an important part. Causality has been defined by relating to temporal, space, contiguity and interaction criteria,

* For correspondence.

Journal of Environmental Protection and Ecology 12, *No 4*, *1925–1934* (*2011*)

TOPOGRAPHIC SURVEYS TO RE-INTEGRATE WASTE-ROCK INTO THE NATURAL CYCLE

I. IENCIU[a]*, M. POPA[a], C. GRECEA[b], L. OPREA[a], S. VARVARA[a]

[a] *'1 Decembrie 1918' University, 11–13 Nicolae Iorga Street, Alba Iulia, Romania*
E-mail: *iienciu@uab.ro*; *iienciu@yahoo.com*
[b] *'Politehnica' University, 2/A Traian Lalescu Street, Timisoara, Romania*

Abstract. Within a hyper-centralised economy, the environment has been 'seriously harmed' from the point of view of landscape and polluting elements as waste-rock is spread over a wide area. Topographic surveys are required to re-integrate waste-rock into the natural cycle. They are the starting point of environment projects in agreement with nature and scenery. In this context, the waste-rock relief, its surface and the chemical composition have to be known in order to be able to act through methods and means that are specific to each particular type of waste-rock. The paper aims at two important objectives: to assess the heavy metal soil contamination in the Zlatna area (Romania) and to suggest the required topographic surveys to re-integrate waste-rock into the natural cycle.

Keywords: topographic survey, waste-rock, natural cycle.

AIMS AND BACKGROUND

Underground mining to exploit mineral resources is used on a worldwide scale, up to 30–35% of the total volume of the world mining industry. It is used in ore and rock product extraction, copper ore and coal mining[1]. Underground mining technologies are used almost all over Romania and they require access by adits, declines or vertical shafts, all of which generate a high volume of waste-rock stored in piles.

The extraction process has the following stages: ground location of the ore, geological prospects, exploration, mining design and operation, and finally beneficiation – preparation. After the extraction of useful mineral ores and after their processing by various processing techniques, the waste material which results is stored as piles of waste-rock inside the mining area[2].

After the mine is shut, the land must be reclaimed and rehabilitated (for agriculture) at a higher soil level or at least at the initial level before mining began. The rehabilitation of this land and of waste-rock piles in particular can only be done through re-ecologising (covering with fertile soil) and planting agricultural crops in order to prevent land movement (landslides, erosion, etc.).

* For correspondence.

TRAINING YOUNG ROMANIAN LAND SURVEYORS IN AN INTERNATIONAL CONTEXT

Ioan Ienciu, Romania
Luciana Oprea, Romania

Abstract

The integration of Romania into an international context implies the harmonization of new requirements regarding cadastral activities and their organisation. New legislation has been issued regarding cadastral activity, of which we can mention the following: The Agricultural Real Estate Law on the retrocession of lands to the former owners or to their inheritors, the Cadastre and Land Registration Law tackling the provisions for all landed property to be registered in the Land Book ad the Forest Fund Law with the later additions on the system of retrocession of forests to their previous owners.

These laws are now in harmony with the European legislation through a generalised cadastral record keeping system for lands registered in the Land Book. The Romanian system is based on the Austrian system, which is at the basis of most cadastral systems in Europe.

We should remind you that Romania has until recently had two separate cadastral record keeping of real estates. One was based on the Austrian system and it was used in northern, western and central Romania. The other was based on the French system of Records Registries valid for the south and east of Romania. This situation lead to a series of discrepancies that caused problems in meeting deadlines, in the citizens – administration relationship and that was in the end, a waste of human and material efforts. There are also many cases in which different institutions store and use similar data on an administrative territory but they have their own means of data gathering and storing, which leads to different entries for the same record.

In this context of transition in the field of cadastre and land registration, the training of future specialists in cadastral record keeping organisation activities, such as The Owners' alphabetic index, the Registry of Parcels, the Registry of Property Items and etc allows the young degree holders of this field to work in an international context. They are also introduced into cadastral and land registration service providing and they are encouraged to acquire competences to manage a new cadastral database and a computerised system that records land books.

The software designed by the Romanian National Agency for Cadastre and Land Registration is also part of their curricula. Such software is the 'Property Item' that generates a database for each owner. This database will then be part of the general cadastre of Romania, materialized in 'E-Terra,' which has been designed to manage the cadastre and land registration activities in all Romanian regions.

The computerized record keeping system implies geodetic aids that can be included in the management of Land Books. Thus, CAD and similar software and Romanian cadastral software such as Mapsys are included in the students' curricula.

The practical training of students includes practical activities carried out in Romanian companies active in the field of land measurements and cadastre, in local public administrations and in the branches of the Romanian National Agency for Cadastre and Land Registration. The national Ministry of Education has issued a decision by which institutions and companies are required to receive students for practical activities so as to create the link between theory and practice. The Romanian companies are encouraged to give private study scholarships for the best students.

Another opportunity for students in higher education are student mobility programmes, which offer them the chance to study or to have practical, training in Universities or private companies or partnerships abroad. Thus, a future professional of a field that has specific characteristics in each country encourages experience sharing and contacts between the experts.

Study Concerning the Construction Behavior Tracking – Applied Aspects

Luciana OPREA, Romania
Ioan IENCIU, Romania
Nicolae LUDUŞAN, Romania
George Emanuel VOICU, Romania

Key words: construction behavior tracking, optimization, vibrations

SUMMARY

In sight of a projection works of construction behavior tracking is followed the optimization processes of achieve the measurements and remaking datas. Regarding of the measurements process, the optimization is achieved through choice apparatus in depending on the conditions from ground and to the remaking datas is followed the use of best softwares. The present paper is adverted to the realization measurement for a thermal power station, carry through his functionality inducts the vibration grounds and the measurements achieved in the many cycles of observations, with the utilization of modern levels instruments and the classic levels instruments, in the conditions which the systems was in continous activities.