

CONSIDERATIONS IMPLEMENTATION SYSTEMATICALLY CADASTRE

*Cornel PĂUNESCU - PhD University of Bucharest - cornelpaun@gmail.com
Ion Cosmin CIUCULESCU - engineer Technical University of Constructions
Ioana Elena BARBUSOIU - engineer Cornel & Cornel TOPOEXIM Ltd*

Abstract: *Cadastré is a recording system of the property based on a cadastral plan, the property deeds and fair tax system. In our country, is currently working on sporadically cadastre, or tabulation of each parcel separately. This mode has generated and generates overlapping property and land not stick. Also, parcels that is found in a different geographical location rather than real busy. Systematic cadastre is what makes these errors go away and plots to stick as well as every square inch of land have an owner. Systematic cadastre started, but at first bite the things are not like in theory.*

Keywords: *land area, parcel, owner, ownership limit*

1. General considerations

Cadastré is particularly important because is referred to the property. There is no other system for guarantee the property than entered in the Land book register and such into civil circulation. Certainly there are several ways to register the property since antiquity, but the well established system is Austro-Hungarian who founded the modern cadastre. Austrian Empire understood since 1720 that can collect taxes more easily, more efficiently and more accurately using the cadastre of all three functions: technical, legal and economic. Thus, connecting a municipalities cadastral plan with the property acts, reduce the risk of uncertainty to identifying the real property. Napoleonic system, based on the transcriptions - inscriptions was used especially in the Latin part of Europe, but has the same effect. A parcel has not clearly established its position and thus can be traded several times.

In Romania there were two types of cadastral records. Thus, the area occupied by Austria-Hungary was no evidence based on cadastral plan and property deeds as a whole. Otherwise, that Wallachia and southern Moldavia the system is based on transcriptions - inscriptions.

Property system in Romania has undergone several changes were passed too in the cadastral record. Thus, Alexandru Ioan Cuza secular monastic estates; after the First World War was divided land to the peasants who participated in the war; on March 6, 1946 were divided the land of aristocratic opulence and peasants were given; in 1962 ended cooperative process that resulted in land acquisition by the state and such was annihilated Romanian peasant sense of ownership. After 1991, the year was issued Law 18, the restitution of land owned prior to 1962, livery were made after the phrase "usually on the old site." Also initially found to return only 50 hectares, irrespective of the area that was entered in the cooperative. Later the surface returned increased to 100 hectares and in 2000 agreed to return the whole area that the owner owned it at the time of 1948. Livery in this way, the vast majority were made where land was free or in function of certain interests more or less objective.

2. Current situation

Given all these changes, the two systems of property records occurred dysfunction and irreparable damage. Thus, in the Land Register of type Austro - Hungarian Empire after 1962, the extravilan terrain did not have records only very isolated the recording becoming obsolete. In the same area, in intravilan the records were made. In the transcriptions - inscriptions situation was critical because the areas in the city cooperativized were left only 200 meters from the court, the rest was taken by CAP. Privilegiated areas were the high hills and mountains where there was no CAP.

Law 18/1991 anticipate in final the achievement of general cadastre. Unfortunately the government not initially realized the general cadastre and after applied the property laws and then there a lot of inconvenience to the enforcement the property laws:

- There were no technical guidelines of the practical application of the law that explains what to do and how;
- Personal use without adequate technical training in most cases; given the lack of a technical guide, each "expert" apply the law by his own knowledge in generally from other areas;
- Lack of appropriate technical equipment; so instead of using theodolites and tarla limits measurements to obtain accurate surfaces and limits were taken from surfaces balances CAP's that interest had not known the real surface and the base topographic plans were used to scale 1:5000 or scale 1:10000 artificially increased to scale 1:2000 or 1:1000; are known plans errors remain those of the original scale;
- Measurements were made with compasses opening of 2 meters ("goat"), or, in good cases roulette for each owner individually, and then limits of the amount tarla it is form each owner; was a fundamental mistake because the distance measured with compass and roulette, it is not the same distance in the plane that was reported; there are significant differences between these two entities due to slope;
- The powers of local commission for property law were granted without any penalties if the law is applied subjectively; generally people who have been appointed to these committees have given to him and close relatives, friends the land taken by cooperatives in the very beginning, without taking into account the other owners, the changes appeared between time in zone (construction of neighborhoods, of streets of industrial, etc.); the elected mayors who were promised to the citizens that will solve property laws and requested changing of the existing cadastral plans, so that there is a very curious sequence of such entry into possession;
- Professional staff, poorly paid, was changed with changing elected mayor; each of them go home with the cadastral plan.

After publishing the Cadastre Law officials still have not realized the necessity to realize the general cadastre as was defined in the law. Only in 1999, the Order of the National Office of Cadastre, Geodesy and Cartography President established cadastral documentation requirement to achieve any real estate transaction, legacies, donations, etc.. Were developed the technical and legal conditions. At that time the Cadastre Offices approved the technical documentation and gave cadastral numbers, tabulation being made by the owner to the Land Registry Books (placed administratively by the Ministry of Justice). In 2006 Land Registry Books were joined with the Offices of Cadastre, Geodesy and Cartography and together they formed the National Agency for Cadastre and Land Registration. Thus, citizens address one institution providing the cadastral grant number (technical verification) and registration of property (verification of the property act). This method is called *sporadic* registration of the Property register because it is registration property with property, then integrating a whole. This method is not feasible to achieve cadastre, especially technically. Before 2007 technical documentation could be carried out in stereographic 1970 coordinate system, most often in

the local system. The local system was chosen randomly, usually origin is somewhere closer to the parcel of measured and have coordinates $x = 1000$ m, $y = 1000$ m. When the parcel was higher when it will reach $x = 10000$ m, $y = 10\ 000$ m. The north direction was made of the map or given by the compass. Whether the work was done in stereographic system or local system, the solution was not feasible. In the local system does not know exactly where that parcel was measured in tarla. Only after he has decided the person that do work to bring a parcel plan of the tarla or even the parcel plan of the zone, the position became clearer. If the work done in the national system was a problem connecting to the geodetic network. By entering GPS method (ulterior GNSS) surveying were made from the point of uncertainty position, without additional measurements, only with a orientation also on doubtful points. Two parcels located side by side or overlapped or had a distance between them. The national geodetic network are precision of ± 15 cm and measurement errors inherent in determining the coordinates. With the advent of GPS receivers things have not improved since the receiver position was determined in the WGS84 system. Also, to determine the absolute position in this system was needed to do a fit to the EUREF network. Times until the year 2000 there were only 16 points connecting to these network. Each GPS user has created their own transformation parameters for each job or across the country. To determine the parameters was needed common points and the ellipsoid WGS84 and on the ellipsoid Krasovski. Cadastral offices were not prepared programs to check the accuracy of coordinate transformation and hence a proliferation of parcels positioning error.

Today, there is acute problem of correctly positioning properties because many of the parcels have entered into civil circulation and subsequent changes lead to conflicts with owners who do not understand why the area or position changes. Also, any project that is developed must be based on a parcel and this parcel must be identified as the position and have a clear owner. Thus was launched the solution of the general cadastre property records.

Law 7/1996 or the Cadastre law initially defined general cadastre, even in its beginning:
CHAPTER I: General provisions

Article 1. General cadastre is the unitary and mandatory recording system of technical, economic and legal through which the identification, registration, mapping and cadastral plans of all land and other real estate throughout the country, regardless of their destination and owner.

Basic entities of this system are parcel, construction and owner.

The property, according to this law, means the parcel of land, with or without buildings.

Article 2. General cadastre is organized in each administrative units: village, town, municipality, county and national level.

The general cadastre system is achieved:

- a) identification, registration and description in cadastral documents of land and other immovables by their nature, measurement and representation on maps and cadastral plans and computer data storage media;*
- b) assembling and integrating data from specialized cadastres;*
- c) identification and registration of all owners and other legal holders of land and other immovable property, to ensure their rights of publicity and enforceability against third parties;*
- d) provide the necessary data system for the correct tax and the tax liability of taxpayers.*

Today things have changed in Law 7, as amended, has disappeared the notion of general land cadastre and appeared the phrase sporadically cadastre. Changes in Law 7 state:

Article 2. - (1) cadastre is accomplished at the local administrative units on sector land. The sector land is bordered by elements acre stable linear time - roads, rivers, canals, dams, railways, etc.,- which includes one or more adjacent immovables.

(2) The system of cadastre and land book is done:

a) identification, description and registration in cadastral documents of immovables by their nature, measurement and representation on the cadastral maps and plans, and computer data storage media;

b) identification and registration of owners, other legal holders and owners of immovables;

c) provide the necessary data systems to determine the correct taxes taxpayers' tax obligations required by institutions.

(3) Cadastral Plan contains graphical representation of immovables limits inside of a territorial administrative unit, which are registered in the land book and their cadastral numbers. Cadastral plan is updated by inspectors of the land cadastre and land registration offices.

(4) extract of the cadastral plan is the section of the cadastral plan with the representation of the immovables and the neighboring, size of the sides and the dates for the graphics database managed by the National Agency of Cadastre and Land Registration.

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CHAPTER III

The organization of the works in cadastre and systematic registration the land book

Article 9. - (1) The technical function of the cadastre is performed by determining the cadastral boundaries of neighboring immovables, based on measurements. Work measurement is performed by any method graphic, numeric, photogrammetric or combined.

(2) the economic function of the cadastre stands out technical elements necessary for establishing the taxable value of immovables or, where appropriate, taxes or taxes on the property.

(3) legal cadastre function is achieved by identifying and registering real estate owners in the book registration land.

3. Case study

Systematic cadastre (general), overlapped on sporadic cadastre shows at the moment the weakness of the sporadically cadastre and the how poor in its design. Problems encountered are due to both specialists authorized by ANCPI and working specialists in OCPI (the cadastre and land book registration). Thus there are discrepancies between the technical part performed systematical sporadically. Also between acts and registration.

The biggest problem is the title of property which have errors of several kinds. The simpler they are the owner's name wrong (mismatch a letter or the initial letter or father), neighbors who do not meet (on the neighbor title is passed another neighbor at corresponding cardinal point). The most difficult errors are on the surfaces and the identification of the parcel and tarla. Thus, the title is issued in a place, but the owner has it, in fact, in another place. On the place of this title it is another owner.

4. Conclusions

From the above, but especially in the case study that achieving systematic cadastre (general) is a necessity. For the farmers who wants to trade their, or wishing to invest in strengthening a farm, land is vital to have the property tabulated and tabulated correctly, and

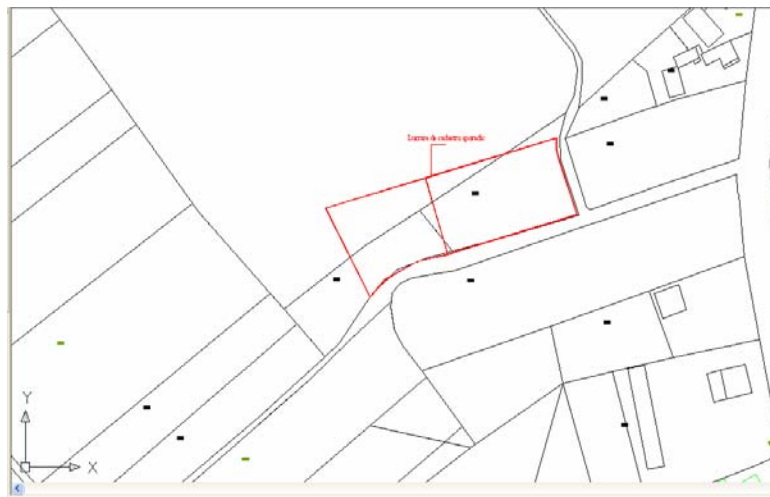
where it works. Many farmers have realized that their parcel, that the title was passed to some tarla, has no place there and have to move elsewhere.

Many of the peasants, as he calls APIA farmers, because they could not correctly identify their land on the orthophotomap lost grant or were not reported properly sanctioned culture, although they had declared correctly. In the control made by APIA their parcel being identified in different part, they checked on another site. A fair caster would be linked the identifications made by APIA and owner of nearly 100% accuracy.

Examples are many, but is only one conclusion: the general cadastre can only resolve property problems in Romania.



Figure 1 property in sporadic cadastre work overlapped on systematically cadastre (extravilan)



A. SUPRAFAȚA PRIMITĂ ÎN EXTRAVILAN										
NR. CRT.	CATEGORIA DE FOLOSINȚĂ	NR. TOPOGRAFIC		SUPRAFAȚĂ		VECINĂȚĂȚI				OBSERVAȚII
		PARCELĂ	Parcelă	nr	mp	NORD	EST	SUD	VEST	
1	ARABIL	CĂMĂRUȘA	0	5000	DRUM BOSNACEAN	BLINDUȚA	PARAU	SIRGHEȘTEAN	ANA IAL	
2	VII									
3	LIVEZI									
4	PĂȘUNI									
5	FINETE	ROȘIA	0	2500	BOSNACEAN	DRUM BOSNACEAN				
6	PĂȘUNI									
7	ALTE TERENURI AGRICOLE									
	TOTAL									1 0000

B. SUPRAFAȚA PRIMITĂ ÎN INTRAVILAN										
NR. CRT.	CATEGORIA DE FOLOSINȚĂ	NR. TOPOGRAFIC		SUPRAFAȚĂ		VECINĂȚĂȚI				OBSERVAȚII
		PARCELĂ	Parcelă	nr	mp	NORD	EST	SUD	VEST	
1	ARABIL									
2	VII									
3	LIVEZI									
4	PĂȘUNI									
5	FINETE									
6	CURȚI, CONSTRUCȚII									
7	ALTE TERENURI									
	TOTAL									

Figure 2 title of property issued (the neighborhood Bosnacean is a resident of the neighboring village Bosanci)

5. References:

- 1. Law 7/1996