# IMPLEMENTATION OF AGRICULTURE CADASTRE IN AN ADMINISTRATIVE TERRITORY

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Abstract: The importance of the general cadastre is that it provides the real-world data of a real-estate needed in all branches of the national economy. At the same time, the cadastre is a very important tool for market economy because it provides documents that give security to transactions that take place on the real estate market. The attributions of the agricultural cadastre are the basis for obtaining information on the quantity and quality of the land, serving as a purpose to solve financial problems such as investments, modernization, taxation and the other like this. The realization of the agricultural cadastre at national level is made by determining the parcel areas, taking into account the land use categories, the holders, the owners, the forms of exploitation and the administrative territories, this thing being possible by drawing up the agricultural cadastral plan and the writable cadastral documentation based on technical norms and instructions.

**Keywords:** agriculture cadastre, Administrative Territory, real estate, surface, cadastral plan

# 1. Introduction

The General Cadastre is a unitary and compulsory technical, economic and legal record system that identifies, records, describes and represents on the maps and cadastral plans all the buildings throughout the country, regardless of their destination and the owner. [1], [2]

A cadastral evidence system is characterized by the following aspects:

- it is Objective because it refers to the reality of the field, regardless of the external factors;
- is Unitary because it is done after a set of unique rules;
- has Historical character being influenced by social laws, from the perspective of property, which differs as an organization for each society;
- it is Dynamic due to permanent changes in the field, requiring continuous maintenance:
- is General because it applies to all economic sectors;
- is Mandatory because it applies across the country, for all users of immovable property.

The purpose of the cadastral works is to provide true and complete information at any time to: [3] [4]

- carrying out economic activities;
- establishing tax rates;
- start of the projects for the territorial systematization;
- the management of agricultural activities;
- carrying out statistical studies on the land fund;

- hydrographic network planning;
- maintenance of the road and railway infrastructure;
- guaranteeing ownership.

The role of cadastre is to provide information on: [5], [6]

- surface determination;
- the configuration and position of the buildings;
- establishing the destination and categories of use;
- identification of the property and registration in the cadastral acts;
- inventory of land on various categories of national importance: land requiring improvement, landscaping, etc.

#### 2. Materials and Methods

The realization of the cadastral works is a prerequisite for the development of the informational systems of the territory, which in turn provides real data on the land situation at a given moment. [7], [8]

The organization of the cadastre is based on the evidence subsystems of technical, and economical and juridical inventory of real estates. These records subsystems form specialized cadastres that are based on surface, utility and owner data, resulting from the general cadastre. [9], [10]

The agricultural cadastre is a specialized cadastre, being a subsystem of technical evidence (position, size, configuration), economic and legal of lots, plots, land plots, bodies, cadastral parties etc. owners, irrespective of the title of ownership. [11] The activity of introducing the agricultural cadastre is based on the norms developed by National Agency of Cadastre and Land Registry - ANCPI. Thus, the following steps go through: [12], [13]

- documentation regarding the general cadastre, agricultural cadastre, cartographic materials (topographic, cadastral, specialist cartridges, etc.) previously executed;
- recognition of land and existing boundaries on the ground;
- identifying the boundaries of the different plots;
- establishing the categories of land;
- carrying out topographic surveys;
- drawing up or re-drawing up the cadastral plan, by the case;
- cadastral numbering of parcels;
- surface calculation;
- establishment of cadastral registers;
- qualification and classification of agricultural land by quality classes, plots, categories and subcategories of use and owners.

In order to carry out the present work, the following materials are held, namely: [14],

[15]

- cadastral plan for the Administrative Territory Unit Rapoltu Mare;
- overall cadastral plan;
- Layout sketch.



Fig. 1. Cadastral Plan



Fig. 2. Generally cadastral plan

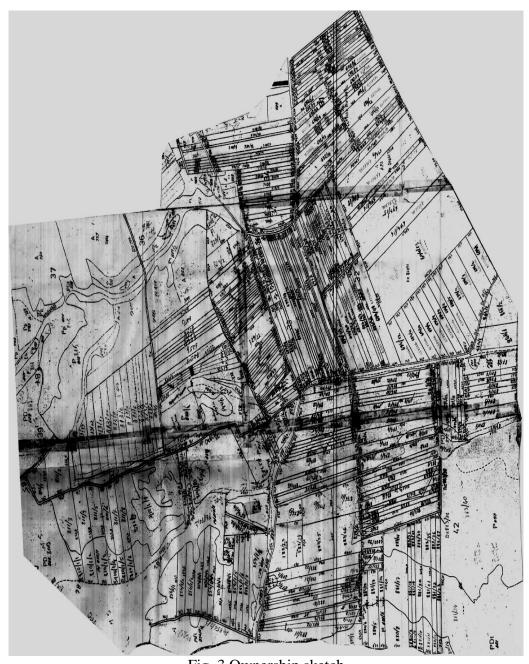


Fig. 3 Ownership sketch

The following files were also generated:

- Registry cadastral numbers (formal .xls);
- Parcel Reports (.xls format);
- Property titles (.pdf format);
- Owner Documents (.pdf format).

# 3. Results and Discussion

The realization of the parcel plans is done in order to assign the cadastral numbers to all the buildings included in the land. The parcel operation was performed automatically using the topographical software that allows this operation. [16], [17]

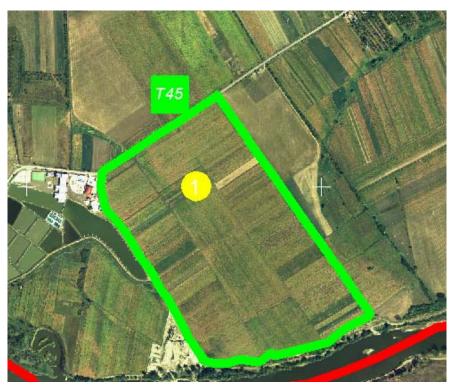


Fig. 4 Agricol field 45 – Rapoltu Mare UAT

After crossing the entire zone, will result the parcel plan for the 45th Field Rapoltu Mare, as well as the data base for these immovables.

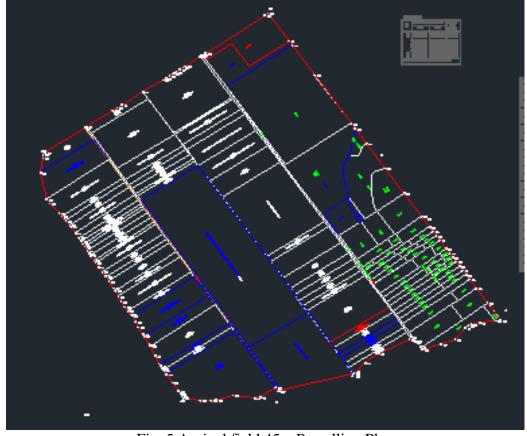


Fig. 5 Agricol field 45 – Parcelling Plan

The resulting database will include information on:

- cadastral number of the title;
- surface in square meters;
- category of land;
- owner;
- Property Title Number;
- release date of Property Title;
- property law under which the title was issued.

PNO	Surface (m²)	Category of use	Owner	Property Title	Release date	Law
521/43	8604	A - ARABIL	FILIMON MARIOARA	72663/311	28-02-2003	L 1/2000
521/5	1421	A - ARABIL	BUDESCU GHEORGHE	5552/4	01-08-1994	L 18/1991
521/57	2582	A - ARABIL	VIRAG VALERIA	5552/17	07-05-1994	L 18/1991
521/16	2870	A - ARABIL	STĂNILĂ IOSIF	5552/38	15-12-1994	L 18/1991
521/20	8488	A - ARABIL	BAKÓ MARIA	5552/88	08-05-1995	L 18/1991
521/5	2746	A - ARABIL	BIRIŞ LINA BIRIŞ NICOLAE	5552/52	27-11-1995	L 18/1991
521/8	1877	A - ARABIL	MAGDA MARIA	14008/5	02-07-1995	L 18/1991
521/28	3605	A - ARABIL	DAVID IOSIF	14008/8	06-07-1995	L 18/1991
521/40	5765	A - ARABIL	CĂRPINIŞAN CORNELIA	14008/28	13-03-2000	L 18/1991
521/42	8566	A - ARABIL	JURJ PETRU	21106/26	15-01-1996	L 18/1991
521/50	3666	A - ARABIL	BUCIUMAN SOFIA	72663/108	23-05-2003	L 1/2000
521/24	11455	A - ARABIL	FILIMON VASILE	47300/16	04-06-1997	L 18/1991
521/36	80785	A - ARABIL	BORZA HOREA	47300/21	04-06-1997	L 18/1991
521/20	8488	A - ARABIL	STEFAN PIRI SZENAŞI IULIU	5552/88	08-05-1995	L 18/1991
521/55	2536	A - ARABIL	RAD SOFIA	13723/83	05-07-2002	L 18/1991
521/13	2634	A - ARABIL	JURJ EMILIAN	21106/85	21-01-1997	L 18/1991
521/21	3035	A - ARABIL	BORZA SABINA	14008/16	02-08-1995	L 18/1991
521/52	2521	A - ARABIL	JOSAN AURORA JOSAN PARTENIE	14008/55	25-10-2001	L 18/1991
521/53	17387	A - ARABIL	GIURGIU EVA	13723/18	04-04-1996	L 18/1991
521/11	2852	A - ARABIL	DUDAŞ MARTIN	21106/16	11-01-1996	L 18/1991
521/36	80785	A - ARABIL	NADOLNIC DORINA- TATIANA	47300/21	04-06-1997	L 18/1991
521/43	8604	A - ARABIL	FILIMON ROMULUS	72663/311	28-02-2003	L 1/2000
521/15	2547	A - ARABIL	TUDOR AUGUSTIN	72663/356	15-05-2004	L 1/2000
521/10	1421	A - ARABIL	ARCAŞ ION	5552/60	31-05-1995	L 18/1991
521/12	2725	A - ARABIL	CÂNDROI PARASCHIVA	21106/67	04-06-1996	L 18/1991
521/18	5523	A - ARABIL	TAŞNADI SUSANA	14008/5	07-07-1995	L 18/1991
521/2	11545	A - ARABIL	OANA DUMITRU	14008/20	05-10-1995	L 18/1991
521/40	5765	A - ARABIL	CIGMĂIAN VICTORIA	14008/28	13-03-2000	L 18/1991
521/3	10655	A - ARABIL	FILIMON CRISTIAN	14008/35	17-03-2000	L 18/1991

Fig. 6 Content of the database - extracted

# 4. Conclusions

The Government of Romania has proposed that our country should have a complete systematic cadastre until 2023. At the beginning of this work there were 8,000,000 buildings managed by the integrated cadastre and land- a total approximate number of 40,000,000 buildings across the country. That being said, it was decided to carry out and launch a program, namely: The National Cadastre and Land Book Program 2015-2023, through which all the buildings on a certain administrative territory are inventoried and registered in the Land Registry.

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