

# THE CADASTRAL CHANGES THAT OCCURRED IN TIME OVER THE PARCELS OF THE VINEYARD UNIT VINIFRUCT COPOU COMPANY – LIMITROPHE TO THE INSIDE OF THE CITY OF IASI

## SCHIMBĂRILE CADASTRALE SURVENITE ÎN TIMP ASUPRA PARCELELOR DIN UNITATEA VITICOLĂ SOCIETATEA COMERCIALĂ VINIFRUCT COPOU – LIMITROFĂ INTRAVILANULUI MUNICIPIULUI IAȘI

HUȚANU CR.<sup>1</sup>

e-mail: hutanucrst@yahoo.com

**Abstract.** *Key objectives for the vineyard unit Vinifruit Copou Company are drawing the location and cadastral delimitation plan and achieving the database of agricultural cadastre, based on topographic measurements and cadastral documentations, accordingly with the standard of the Cadastre and Land Registration Office Iasi. The update of the existing cartographic documents for the studied area is required in order to observe the changes that occurred in time over the parcels cadastral situation. For example, the most obvious changes have occurred since the inclusion of the vineyard unit in the inside of the city of Iasi, due to the process of urbanization of the area.*

**Key words:** agricultural cadastre, cadastral plan, cadastral parcels.

**Rezumat.** *Obiectivele principale pentru unitatea viticolă societatea comercială Vinifruit Copou constau în întocmirea planului de amplasament și delimitare cadastrală și realizarea bazei de date a cadastrului agricol, pe baza măsurătorilor topografice și a documentațiilor de carte funciară, avizate de Oficiul de Cadastru și Publicitate Imobiliară Iași. Actualizarea documentelor cartografice existente pentru zona de studiu este necesară pentru a se putea observa modificările survenite în timp asupra situației cadastrale a parcelelor. De exemplu, transformările cele mai evidente au apărut din momentul includerii unității viticole în intravilanul Municipiului Iași, datorită procesului de urbanizare al zonei.*

**Cuvinte cheie:** cadastru agricol, plan cadastral, parcele cadastrale.

## INTRODUCTION

The case study is the vineyard unit Vinifruit Copou Company, with an area of 111 hectares. The unit is located in the North-West of the City of Iasi, between Viticultori Street at North, Didactic Resort Adamachi Farm Iasi at North-East, the former buildable area of Iasi at East, South and South-West, the commune Valea Lupului at South-West and the former pasture of The Cooperative Farm at West and North-West. The form of management and organization was still preserved after the privatization of the Copou State Agricultural Enterprise, because it has

---

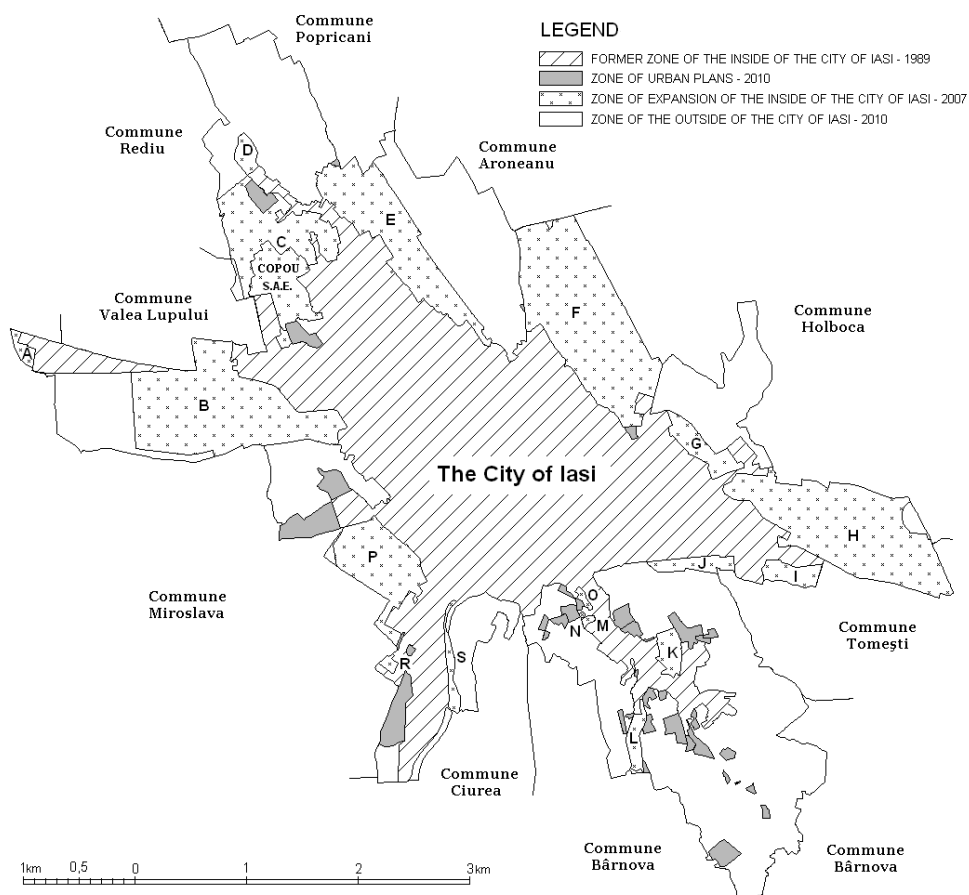
<sup>1</sup> University of Agricultural Sciences and Veterinary Medicine Iasi, Romania

been taken over the lease contracts of the owners to which it was recognized the right of ownership, according to the Law No. 18/1991.

## MATERIAL AND METHOD

According to the cadastral records of the City Hall of Iasi, in 1989, the built-up area of the City of Iasi was 3679 hectares, so that afterwards the territory of Iasi Municipality was modified, in the following steps (figure 1):

- in 2005, the total area of the City of Iasi was 9366 hectares, following some changes of the outside and inside of the City of Iasi limits, related to the year 1989;
- in 2007, the inside of the City of Iasi expanded with 2382 hectares, by creating 18 expansion areas, denoted by letters from A to S;
- until 2010, the buildable area of the inside of the City of Iasi has increased with another 248 hectares, by approving of 37 urban plans;
- in 2010, the area of the expanded inside of the City of Iasi has reached 6309 hectares, and the area of the outside of the City of Iasi has reached 3057 hectares, dispersed in 14 areas.



**Fig. 1** - The map of the areas of the inside and the outside of the City of Iasi

By including the expansion areas and urban plans in the former inside of the city, the occupation degree has reached to 67.36% in 2010, related to 39.28% in 1989.

Based on the topographic measurements from 2004 (Huțanu Cr., Nistor Gh., 2010) and on the identification of the numbers and categories of use of the parcels from the 1989's cadastral plan were obtained, for the studied vineyard unit, the topographic and cadastral data presented in figure no. 2 (Huțanu Cr., Moca V., 2010).

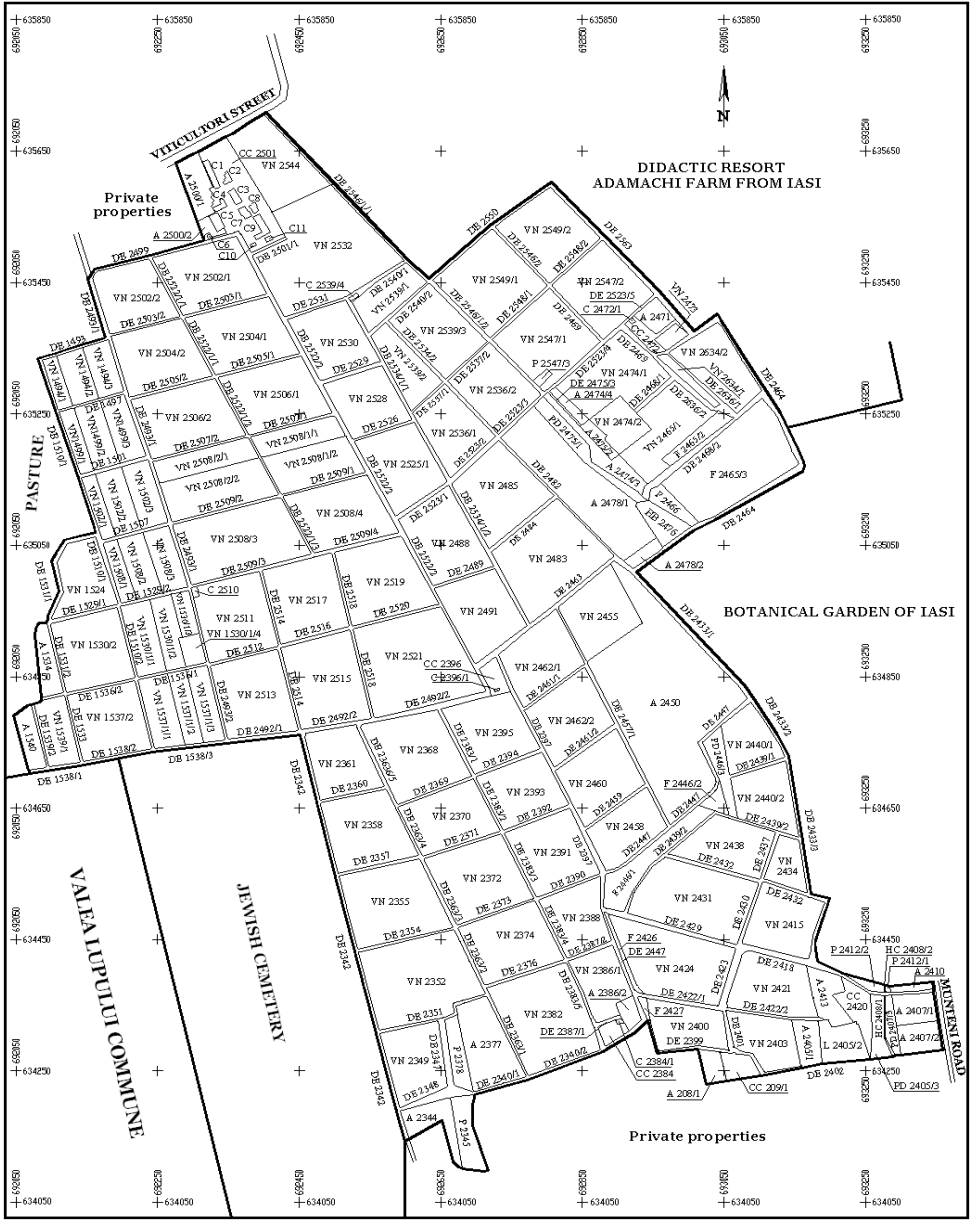


Fig. 2 - Drawing the location and cadastral delimitation plan for the vineyard unit

## RESULTS AND DISCUSSIONS

Updating the location and cadastral delimitation plan and the cadastral situation for the vineyard unit (1989 – 2010):

### ➤ The initial cadastral situation (1989)

According to the cadastral plan from 1989, for the 111 hectares under management and operation of the former Copou State Agricultural Enterprise was obtained the cadastral situation of the parcels presented in the table 1.

Table 1

**1989's Cadastral Situation of the Parcels from the Vineyard Unit by the Category of Use of the Land**

| No.                           | Use category of the land       | Plots number | Plots area      |               |
|-------------------------------|--------------------------------|--------------|-----------------|---------------|
|                               |                                |              | ha              | %             |
| 1                             | Arable (A)                     | 20           | 6,0107          | 5,41          |
| 2                             | Pasture (P)                    | 5            | 0,6828          | 0,61          |
| 3                             | Hay (F)                        | 7            | 2,9216          | 2,63          |
| 4                             | Noble vine (VN)                | 67           | 88,7598         | 79,92         |
| 5                             | Orchard(L)                     | 1            | 0,3641          | 0,33          |
| 6                             | Forest(PD)                     | 4            | 0,8941          | 0,81          |
| 7                             | Lakes and natural puddles (HB) | 1            | 0,2511          | 0,23          |
| 8                             | Channels (HC)                  | 2            | 0,0250          | 0,02          |
| 9                             | Service roads (DE)             | 77           | 9,2241          | 8,31          |
| 10                            | Yards and constructions (CC)   | 8            | 1,9251          | 1,73          |
| <b>TOTAL ON VINEYARD UNIT</b> |                                | <b>192</b>   | <b>111,0584</b> | <b>100,00</b> |

### ➤ First stage of updating the cadastral data (1989 – 2004)

On the basis of topographic measurements from 2004, made for the vineyard unit, could be observed how, by fragmentation, the number of parcels increased with 41.67%, by the application of Law No. 18/1991 (table 2).

Table 2

**Cadastral Situation of the Parcels from the Vineyard Unit, by the Category of Use of the Land, for the period 1989-2004**

| No.                           | Use category of the land       | Plots number | Plots area      |               |
|-------------------------------|--------------------------------|--------------|-----------------|---------------|
|                               |                                |              | ha              | %             |
| 1                             | Arable (A)                     | 21           | 10,0698         | 9,07          |
| 2                             | Pasture (P)                    | 5            | 0,6828          | 0,61          |
| 3                             | Hay (F)                        | 7            | 2,9216          | 2,63          |
| 4                             | Noble vine (VN)                | 97           | 83,9482         | 75,59         |
| 5                             | Orchard (L)                    | 1            | 0,3641          | 0,33          |
| 6                             | Forest (PD)                    | 4            | 0,8941          | 0,81          |
| 7                             | Lakes and natural puddles (HB) | 1            | 0,2511          | 0,23          |
| 8                             | Channels (HC)                  | 2            | 0,0250          | 0,02          |
| 9                             | Service roads (DE)             | 126          | 9,9766          | 8,98          |
| 10                            | Yards and constructions (CC)   | 8            | 1,9251          | 1,73          |
| <b>TOTAL ON VINEYARD UNIT</b> |                                | <b>272</b>   | <b>111,0584</b> | <b>100,00</b> |

The area of the service roads increased with 0.7525 hectares (7.54%), because by decreasing the surface of those 10 vine parcels had been established 10 new roads, necessary for permitting the access for people on the parcels for which it was recognized the right of ownership, according to the Law No.18/1991.

➤ **Second stage of updating the cadastral data (2004 – 2008)**

Due to the 2008's update of the cadastral data of the parcels (table 3), on the basis of the dismemberments recorded on Cadastre and Land Registration Office, were made the following observations:

- between 1989 and 2007, while the vineyard unit was part of the outside of the City of Iasi, by fragmentation, the number of parcels increased with 45%;
- since the beginning of putting into practice of the Law No. 18/1991 until 2004, by fragmentation, the number of parcels increased with 43.33%;
- between 2004 and 2007, by fragmentation, the number of parcels increased with only 1.66%, because of the different steps of expansion process of the inside of the City of Iasi, the landowners increased prices and the potential buyers waited for the completion of that process;
- since the first year when the vineyard unit was included in the buildable area of the City of Iasi, by fragmentation, the number of parcels increased with 59.27%.

Table 3

**Cadastral Situation of the Parcels from the Vineyard Unit, by the Category of Use of the Land, for the period 2004 – 2008**

| No.                           | Use category of the land       | Plots number | Plots area      |               |
|-------------------------------|--------------------------------|--------------|-----------------|---------------|
|                               |                                |              | ha              | %             |
| 1                             | Arable (A)                     | 21           | 10,0698         | 9,07          |
| 2                             | Pasture (P)                    | 5            | 0,6828          | 0,60          |
| 3                             | Hay (F)                        | 7            | 2,9216          | 2,63          |
| 4                             | Noble vine (VN)                | 209          | 83,6351         | 75,31         |
| 5                             | Orchard (L)                    | 1            | 0,3641          | 0,33          |
| 6                             | Forest (PD)                    | 4            | 0,8941          | 0,81          |
| 7                             | Lakes and natural puddles (HB) | 1            | 0,2511          | 0,23          |
| 8                             | Channels (HC)                  | 2            | 0,0250          | 0,02          |
| 9                             | Service roads (DE)             | 131          | 10,2897         | 9,27          |
| 10                            | Yards and constructions (CC)   | 8            | 1,9251          | 1,73          |
| <b>TOTAL ON VINEYARD UNIT</b> |                                | <b>389</b>   | <b>111,0584</b> | <b>100,00</b> |

Then, for the first time, the fragmentation of the parcels was due to the desire of landowners to form, by dismemberment, lots for future houses (Huțanu Cr., Moca V., 2010).

➤ **Third stage of updating the cadastral data (2008 – 2010)**

According to the records of the **General Technical Cadastre**, in table 4, appear three new categories of use: shrubs and briers, green spaces and unproductive land.

Table 4

**Cadastral Situation of the Parcels from the Vineyard Unit, by the  
Category of Use of the Land, for the period 2008 – 2010**

| No.                           | Use category of the land       | Plots<br>number | Plots area      |               |
|-------------------------------|--------------------------------|-----------------|-----------------|---------------|
|                               |                                |                 | ha              | %             |
| 1                             | Arable (A)                     | 43              | 4,5629          | 4,11          |
| 2                             | Pasture (P)                    | 5               | 0,7037          | 0,63          |
| 3                             | Hay (F)                        | 14              | 2,1013          | 1,89          |
| 4                             | Noble vine (VN)                | 323             | 87,0417         | 78,44         |
| 5                             | Orchard (L)                    | 4               | 0,7001          | 0,63          |
| 6                             | Forest (PD)                    | 3               | 0,3175          | 0,29          |
| 7                             | Shrubs and briers (PDT)        | 1               | 0,0062          | 0,01          |
| 8                             | Lakes and natural puddles (HB) | 1               | 0,2555          | 0,23          |
| 9                             | Channels (HC)                  | 2               | 0,0274          | 0,03          |
| 10                            | Roads-streets (DS)             | 219             | 10,8191         | 9,75          |
| 11                            | Yards and constructions (CC)   | 33              | 3,4716          | 3,13          |
| 12                            | Green spaces (CP)              | 8               | 0,2561          | 0,23          |
| 13                            | Unproductive lands(N)          | 4               | 0,6990          | 0,63          |
| <b>TOTAL ON VINEYARD UNIT</b> |                                | <b>660</b>      | <b>110,9621</b> | <b>100,00</b> |

This modifications, materialized in the last two years by the removal from the agricultural circuit of a number of 26 parcels and the tabulation of 27 new constructions, may lead to the conclusion that the process of urbanization of the area has begun.

The 1% changes which occurred for the entire surface of the vineyard unit (0.0963 hectares) is due to the fact that the limit of the zone that makes the object of this study it is not materialized in the field.

## CONCLUSIONS

1. By fragmentation, the number of parcels increased with 45%, while the vineyard unit was included in the outside of the City of Iasi (1989 – 2007), and in the next four years, with 129%, when the vineyard unit was integrated in the inside of the City of Iasi, due to the process of urbanization of the zone.

2. In the next years there can be the possibility that, while the process of fragmentation of the parcels stagnates, to amplify the process of changing the categories of use, especially for the plots designated to the future houses.

## REFERENCES

1. **Huțanu Cr., Nistor Gh., 2010** – *The current state of rehabilitation end modernization of geodetic and topographical networks*. Ed. „Ion Ionescu de la Brad” Iasi. Scientific Works, Agronomics Series, The 53 volume, No. 1, p. 100 – 105.
2. **Huțanu Cr., Moca V., 2010** – *Use of cadastral plan in digital form and the databases information system for the national vineyard landsurvey*. Ed. „Ion Ionescu de la Brad” Iasi. Scientific Works, Agronomics Series, The 53 volume, No. 2, p. 96 – 101.