



***PROGIS Software***  
***Software that Shows!***

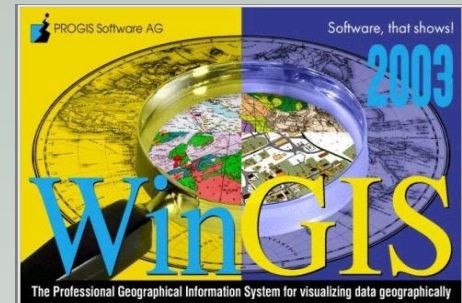
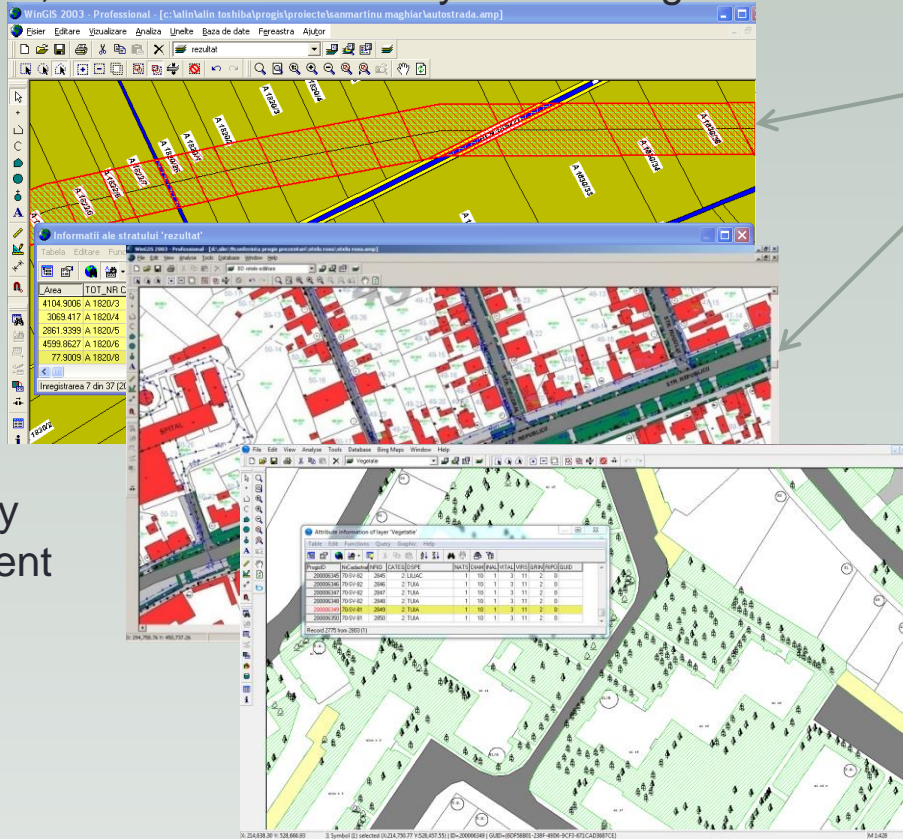


## **COMMUNITY MANAGEMENT, AGRICULTURE AND CADASTRE WITH WINGIS**

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S.C. Pfandl & Mayer S.R.L.  
Surveying, GIS, cadastre, aerial photography – Temeswar, Romania  
Alin Pfandl, CEO

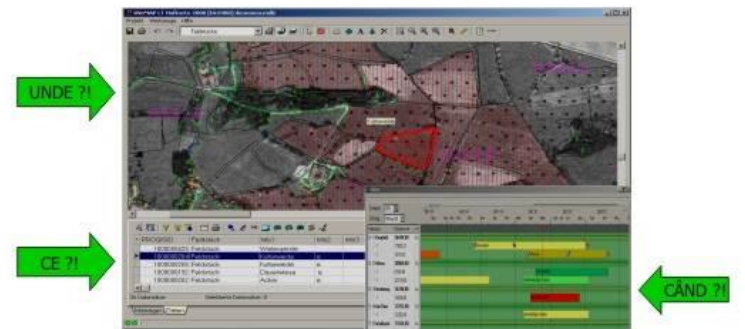
# Cadastre, arable land inventory and management



Community management

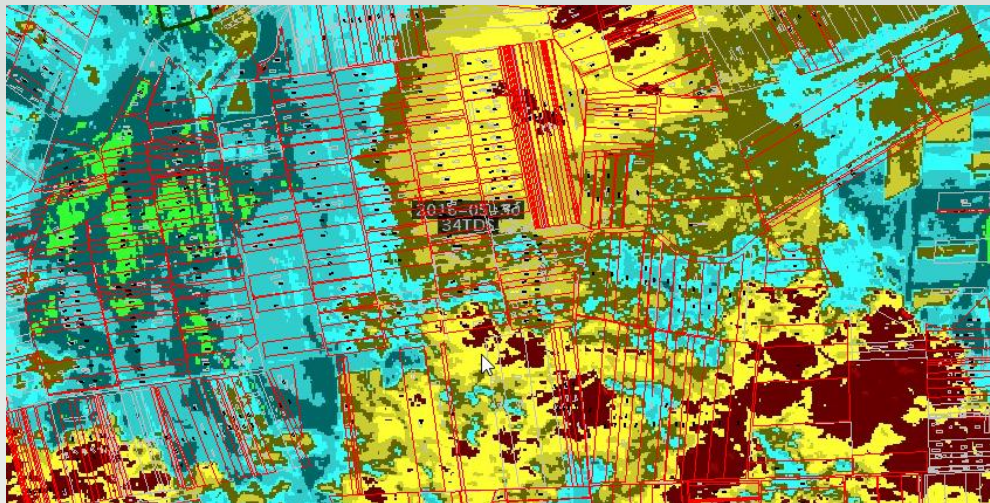
Green area management

AgrOffice – Farm management and Consultancy, to be implemented



# Modern community management includes cadaster, land management and green area management

- One of the most valuable resources of a community is the land
- The inventory, measurement and registration is a must
- Modern tools available (GPS, aerial imagery, electronic databases)
  - GPS
  - Aerial imagery
  - Electronic database
  - Sensors and meteorological robotic stations
  - WinGIS as integrator of information and tool for management
  - New tools available, Sentinel integrated, good news for farmers and communities!



# Arable land inventory and management

Beneficiaries: communities, agricultural companies

WinGIS 2003 - Professional - [c:\alinalin\alinalin\toshiba\progi\proiecte\sanmartinu maghiar\sinmag\_color.amp]

Eisier Editare Vizualizare Analiza Unele Baza de date Fereastra Ajuor

TOT

Link between the land and the owner

Informatii ale stratului 'TOT'

Tabela Editare Functii Interogare Grafica Ajuor

SUPRAF	NR CAD	ANEXA/POZ	AUTOR	MOSTENITOR	ADR MOSTENIT	TITLU	DATA ELIB	SOLA
3,00	A 1764/33	2A/24	KOCSMARDOS MARIA		TIMISOARA, STR. PACII 21	28483/76	21.03.1997	A 1764
1,82	A 1764/32	2A/38	KOVACS ISTVAN		SANMARTINU MAGHIAR 40	28483/88	24.03.1997	A 1764
1,60	A 1764/36	2A/8	KOVACS ANDRAS		SANMARTINU MAGHIAR 180	28483/75	21.03.1997	A 1764
1,10	A 1764/34	3/66	KOVACS FERENCZ	KOVACS FRANCISC, KC	SANMARTINU MAGHIAR 151	28483/99	29.04.1997	A 1764
1,30	A 1764/35	3/56	KOVACS MIHALY	KARDOS ELENA	TIMISOARA, STR. RECOLTEI 11	28483/95	25.03.1997	A 1764
2,20	A 1764/37	3/49	KOVACS STEFAN	KOVACS MARIA	DUMBRAVITA, STR. N. BALCESI	28483/92	25.03.1997	A 1764
1,73	A 1764/29	2A/67	IOZSA IOAN		TIMISOARA	28483/62	03.03.1997	A 1764

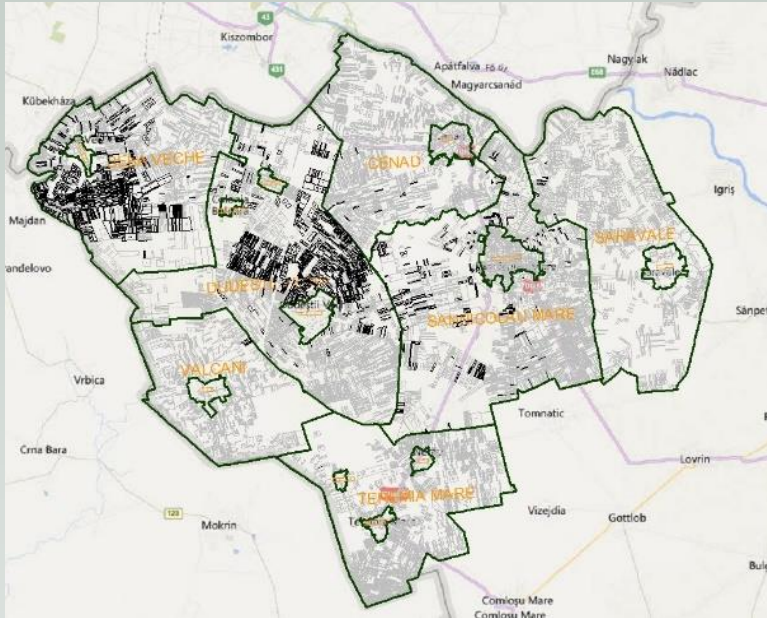
Inregistrarea 370 din 1056 (2)

Within second we can identify a land owner and the position of the parcel (in coordinates)

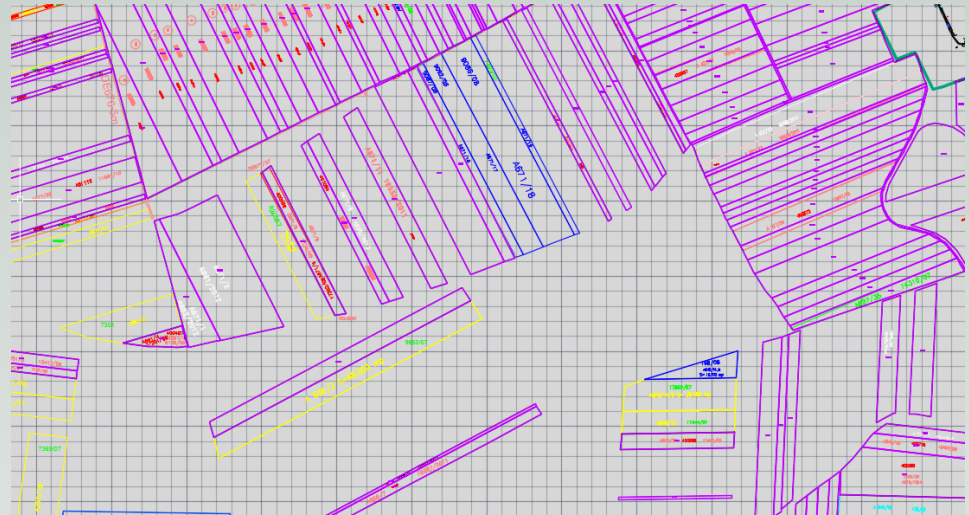
X: 182,231.78 Y: 466,873.43 2 suprafete selectate (Total suprafata:24,000.75 m.) M 1:4,747

# Arable land inventory and management

**Beneficiaries:** Rural communities and private companies

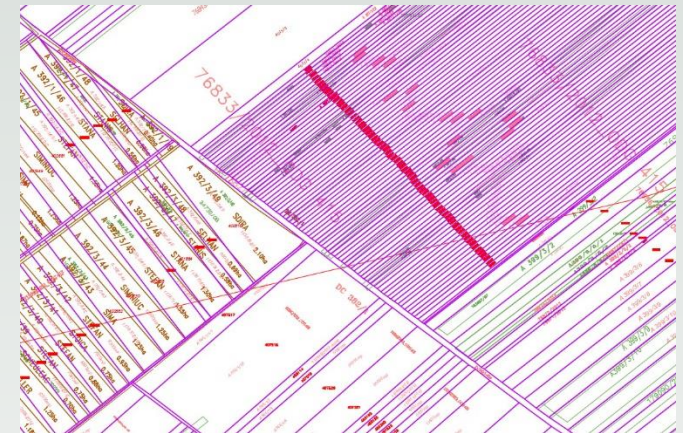


Now about 80.000 hectares in a 7 communities.  
Various colors showing different owners



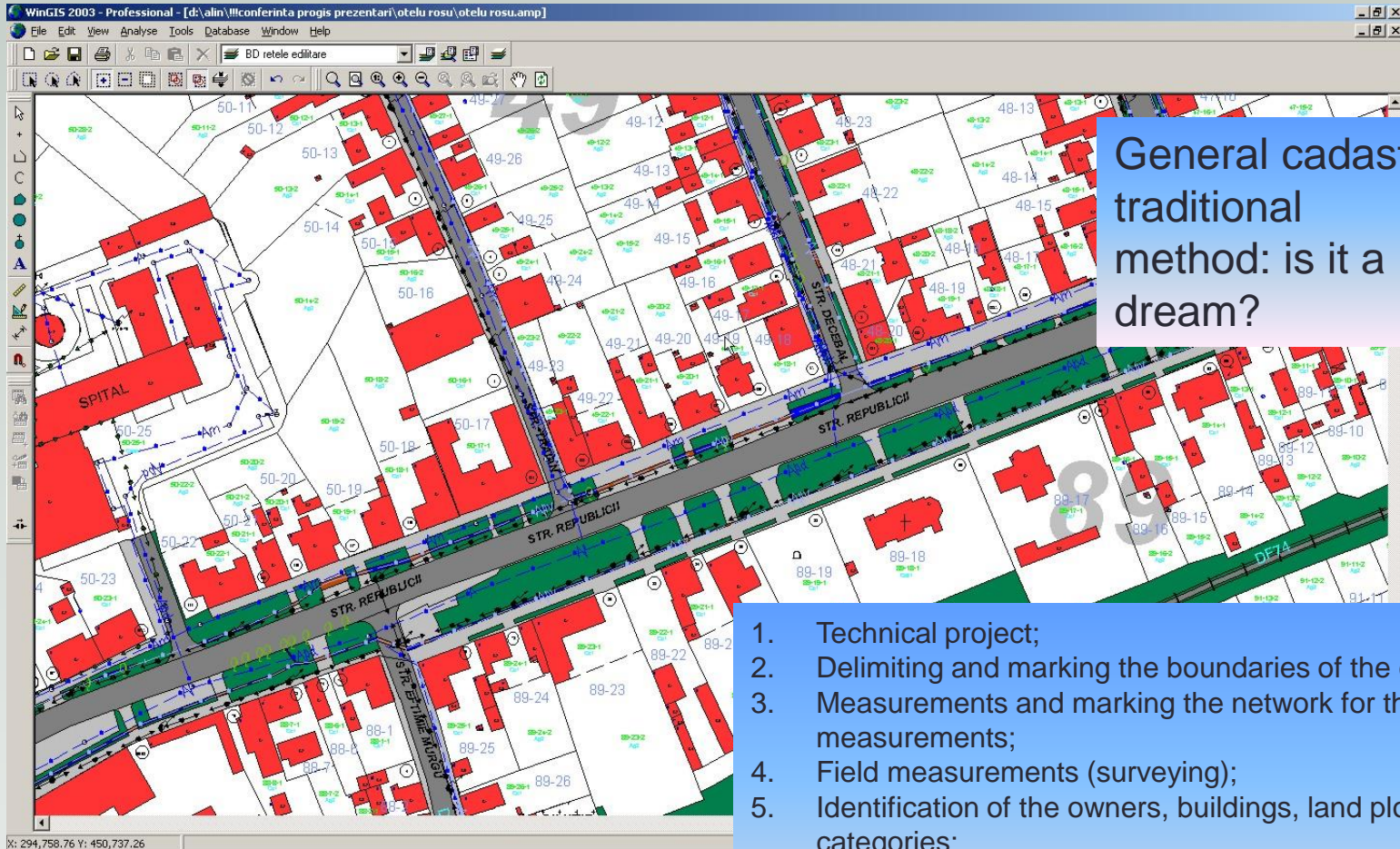
Cadastre is part of the solution, it will take decades to finalize the electronic registration if we don't change the method

Sample of finalized work. Please notice de small fields.



# Community management (real estate cadaster)

**Beneficiaries:** Urban and rural communities



General cadaster traditional method: is it a dream?

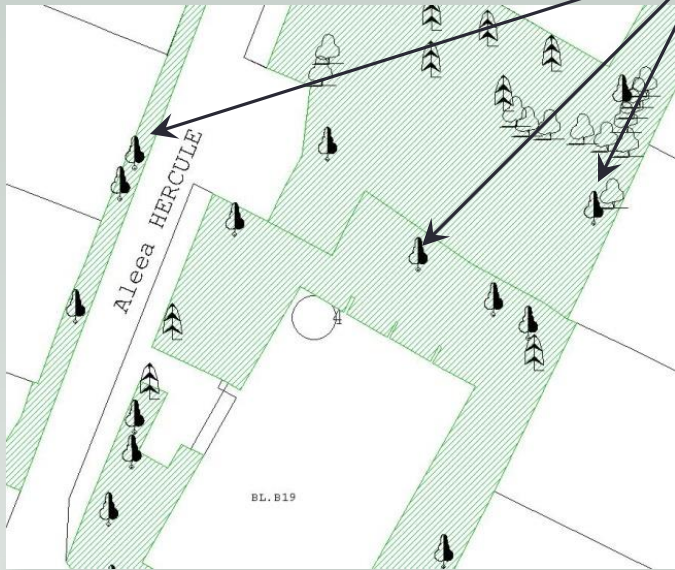
1. Technical project;
2. Delimiting and marking the boundaries of the community;
3. Measurements and marking the network for the measurements;
4. Field measurements (surveying);
5. Identification of the owners, buildings, land plots and usage categories;
6. Cadastral numbering and updating the plans;
7. Loading the database and ;
8. Writing the cadastral registers;
9. Editing the cadastral plans (detailed);
10. Editing the general cadastral plan.

**Benefits:** Community management, taxation, utility management, public transportation, urban development, etc.

# Green area management

**Beneficiaries:** Urban and rural communities – Legal obligation under Law no. 24/2007

## Graphic objects



## Internal database

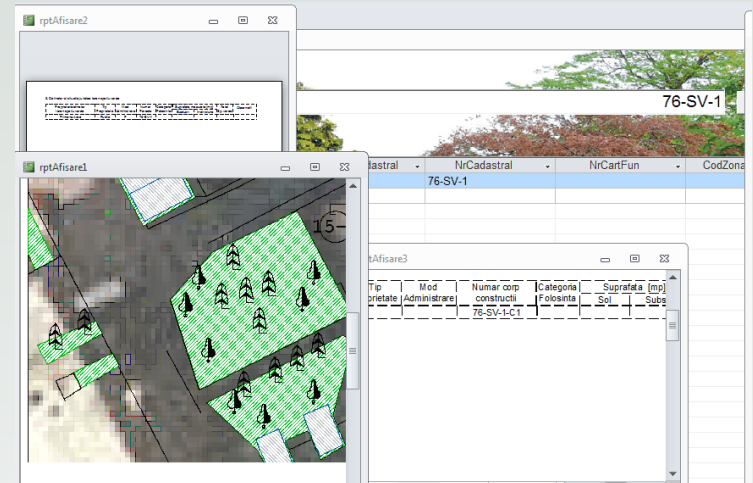
Attribute information of layer 'Vegetatie'

NRID	TIP PROP	CATEG	DSPE	NATS	INAL	DIAM	VITAL	VIRS	GRIN	Adresa
8129	2	1	TEI	2	2	30	3	12	2	STR. CURTICI
8130	2	1	TEI	2	3	50	3	20	2	STR. CURTICI
8131	2	1	TEI	2	2	50	3	20	2	Calea 6 VANATORI
8132	2	1	TEI	2	3	40	3	20	2	Calea 6 VANATORI
8133	2	1	TEI	2	3	40	3	20	2	Calea 6 VANATORI
8134	2	1	TEI	2	3	40	3	20	2	Calea 6 VANATORI
8135	2	1	TEI	2	3	40	3	20	2	Calea 6 VANATORI
8136	2	1	TEI	2	1	10	3	11	2	Calea 6 VANATORI
8137	2	1	CORCODUS	2	1	10	3	11	2	Calea 6 VANATORI
8138	2	1	CORCODUS	2	1	10	3	11	2	Calea 6 VANATORI
8139	2	1	CORCODUS	2	2	20	3	12	2	STR. CURTICI
8140	2	1	CORCODUS	2	2	20	3	12	2	STR. CURTICI
8141	2	1	CORCODUS	2	2	20	3	12	2	STR. CURTICI
8142	2	1	CORCODUS	2	2	20	3	12	2	STR. CURTICI

## Some of the benefits

- a) Protection and conservation of green areas;
- b) Maintaining the function of protection of the green areas for water, soil, climatic changes, public health, quality of life;
- c) Regenerating, expanding and improving the quality of green areas;
- d) Taking appropriate measures to maintain proper functions for green areas;
- e) Identification of the zones with deficiencies and expanding the green area coverage in urban areas;
- f) The inclusion into the public green areas of the land areas with ecological, social and cultural potential;

## Various reports



# AgrOffice – Farm management and Consultancy

**Beneficiaries:** Private agricultural companies, Agri-University, Payment Agency, communities, consultants, various service providers, machineries companies, etc.

After using WinGIS in the Romanian market for 15 years, we are now starting an agricultural business in the South-Eastern part of Romania, with foreign partners, having a goal to use more than 20.000 hectares of arable land. We are currently preparing the information for the initial 11.500 hectares of land, for which we have in plan to use state of the art technology, precision agriculture and modern farm management tools such as AgrOffice, developed by Progis. We have a good relation with the Agricultural Universities from Timisoara which is interested to cooperate with us.

Due to the Climate change related issues (we had the one of the driest year in decades) we intend to implement also an irrigation program on all land parcels.

We have approached also the Science Academy for Agriculture in Bucharest and the Ministry of Agriculture which is interested to support us.

