

SUITABILITY OPPORTUNITIES IN LANDS OF ROMANIA ESTABLISHED BY SOIL EVALUATION AND AGROECONOMIC CRITERIA

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Abstract

Agricultural land favorability from Romania, although known a long time ago, was practically neglected at the same time with the land property changes. The actual legislation does not include direct references to the opportunity of the market value of a land establish according to the categories and grades of land classification.

Our target was to remind to specialists and not only, the criteria according to which land classification has to be done, the obligation to any agronomical space evaluation, in order to negotiate or another opportunity, to have as principle the land classification.

INTRODUCTION

Soil evaluation, as a soil science component, represents the reference in terms of natural qualities, both technological aspects of an agricultural area. Agricultural territory, wherever they are location parameters and transposed cartographically defined at different scales. It thus finds new destination in various agronomic utility.

Mutations in the categories of land resources spent in the last decades, and indirectly led to disruption of several components of eco-homogeneous "territories". Distribution of major land units suffered many changes, reflected in the land registers.

Soil map legends, previously developed, were converted after the 2003 SRTS and cadastral maps, the same scale, were subordinated to the land resources landmark new law (Law 18), while classes of soil evaluation were grouped by two (five instead of ten, twenty points range).

RESULTS AND DISCUSSION

Suitability for a specialist refers to natural ability or potency of a ground application of agricultural technologies in order to obtain stable and high quality productions.

For investors, the agronomic suitability means to achieve the profit opportunity.

Knowledge is the first condition of land resources in developing a profitable investment. If the necessity for an agricultural specialist is no stranger to training and his concerns, for people with ambitions for agriculture, but no knowledge in the field, soil resource must be the first opportunity. Based on the resource will be able to appreciate the land's production capacity, need and nature of investment, and expected to finally profit per hectare.

Opportunities, at present, on the production capacity of agricultural land in Romania, established by researchers in the field, have been grouped as follows:

1. At the national level, cartographic maps reconsideration of soil evaluation suitability to small scales (1/1,000,000), legends and the necessary annexes;
2. In the counties, maps of soil information is the (printed sheets 1/200,000), and also the work of zoning agricultural production (Sc. 1/50,000) counties;
3. Zoning on agro-ecosystems (23 total), includes reference to soil characterization, ameliorative systems and classes of soil evaluation for the most representative of the culture and uses.
4. In the commune, the default profile companies with agricultural production, private associations and manufacturers, the opportunity is correct inventory level of favorability (1/10,000 scale detail and sometimes being higher), to follow is knowing potential fertile plots in for a fair consideration of the agricultural tax, consider it an opportunity for the most urgent at the moment;
5. Change categories of use and removal from circulation of the upper class areas of evaluation, is an opportunity of considering the changes occurred in the land of the last 20 years;
6. Expropriation of the land with "national interest" to be made in agreement with the pedological and compensation specialists depending soil evaluation class. The most recent conflict in such situations, is the overpass section Pipera Vacarescu Barbu, the capital, where m^2 was quoted at 41euro (soil: red preluvo-soil - ELrs), compared with the adjacent area, in town, Floreasca is rated at 600 EURO/ m^2 (same soil - ELrs). Similar situations in the case of the A₄ motorway, Timisoara - Deva sector, where price m^2 of land out of agricultural production is 41 euro (Eutricambosoil), recitals in both cases took no account of soil evaluation.

For information about national (1/500,000), those approx. 1200 units, defined by 34 ecometric parameters, production capacity assessment was done for a total of five crops (wheat, maize, sugar beet, potato) and five uses (arable, pasturage, hay/field, vineyard, orchard).

The score ranges between 10 points per class, and the material code, the mapping are illustrated in table (suitability maps).

Cartographic scale on which 23 is 1/1,000,000 agrosystem, considered optimal for information and decisions at national and regional. Parameter "process specific" group refers to land as required by the prevention and control of processes such as excess moisture, salinity, erosion, secondary acidification and so on.

Table 3

Risk to the phenomenon of excess moisture and ameliorative measures in agroecosystems

Specific measure	Land use and area in hectares			Total farming
	Arable	Pasture+Meadow	Vineyards + Orchardas	
Absence	5510	2119	416	8375
Refining soil	2183	785	132	3100
Superficial drainage	929	673	111	1743
Depth drainage	974	351	15	1340

Table 4

Risk of soil salinization in Romania agroecosystem

Degree of damage and intensity	Land use and area in hectares			Total farming
	Arable	Pasture+Meadow	Vineyards+Orchardas	
Unaffected	7361	3969	696	12026
Secondary salinization	2284	374	60	2718
Strong salinity	8	21	0	29

The opportunity of knowledge about the production potential of a territory remains the detail 1/10,000 and in particular the statements of investments 1:2000 (maps-growing design, greenhouses and so on).

Romania has coverage area of one third of the agricultural area, with studies mapping and soil evaluation marks. Soils are detailed to the variant level, conditional soil evaluation includes a total of 14 crops, 6 species of fruit and unknown uses. Cadastral plot sheet that accompanies a studio also includes legal references such as the land acquisition acts, the situation heirs, and so on form of exploitation.

In our country, with the opening of land market liberalization after 1997 and land traffic was up and evaluation, with pricing per hectare. Basically, now, any study or assessment on soil evaluation involves the land marks. The methods used are the agro-economical, such as agricultural production, capitalized land rent, to parametric methods.

Evaluation by soil evaluation of land resource marks, aims to return or income per hectare. Expression values, the price it gets ground, fixed assets are included in the balance of agriculture. The indicator of "stability" of agricultural land and not only

is the natural potential fertility of the soil in question. Coefficients are added to this indirect indicator of evaluation, under or super-unitary. Their product with natural grade ups or downs the classification into classes (five in number, legislation after 1991). We also conducted a research on a farm in the Danube mead (Prundu-Greaca) which is the educational background protisoils and hydrosols. Soil evaluation was done in two crops: wheat and barley.

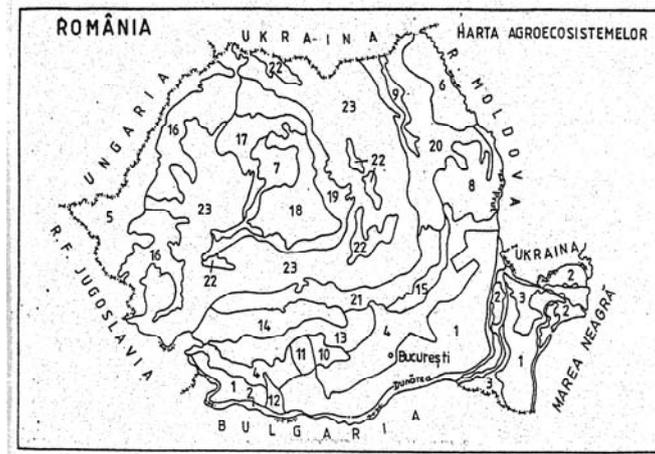
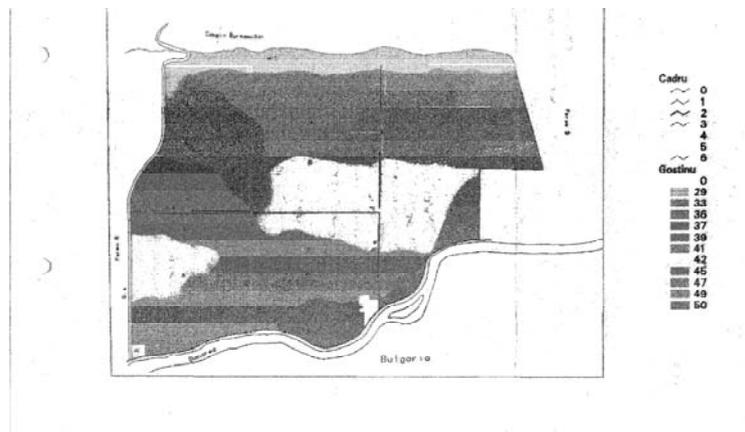


Fig. 1. Natural soil evaluation for wheat and barley at Prundu-Greaca



**Fig. 2. The point - represent Kg per point of soil evaluation
The color - the amount of soil evaluation point**

CONCLUSIONS

1. The paper represents our own point of view on some current opportunities regarding the resources of the Romanian land resources. Details of the

investigations take place at various scales, hence the territorial spread of land suitability, agro-default value.

2. Although there is valuable information on the agricultural potential of the entire national space, these are too little access and consultation of the almost neglected cartographic materials.
3. Opportunities on the land quality, its preservation and conservation will have to follow one direction ground and soil evaluation.

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