



Post-Communist Economic Transition Reflected in Agriculture. Case-Study: Cluj County - Romania

Vasile Surd

“Babeş-Bolyai” University, Cluj-Napoca
Romania



The county of Cluj has a surface of 667,400 ha, representing 2.77 % of the total surface of Romania (23,839,100 ha) and respectively 2.83 % of the agricultural land (14,797,200 ha) (Fig. 1).

The surface of the county can be divided into the following three categories of land from the utilization point of view:

- agricultural land – 424,355 ha (64.4 %);
- woodland – 160,478 ha (23 %);
- other types of land – 85,797 ha (13 %).

At a national level, the division is made as follows:

- agricultural land – 14,797,200 ha (62,07 %);
- woodland – 6,244,700 ha (26.1 %);
- other types of land – 2,817,200 ha (11.83 %).

The agricultural area of the Cluj county is shown in the data comprised in table 1.

Table 1. Agricultural area of the county, by land utilization (1995)

Category	Area (ha)	% from total area	% from agricultural area
Arable	177,204	26.6	41.8
Pastures	159,137	23.8	37.8
Meadows	78,271	11.8	18.5
Orchards	7,013	1.04	1.7
Vineyards	1,155	0.17	0.2

The agricultural land displays very unequal shares at the level of the second rank administrative units. (There are two kinds of administrative territorial units in Romania: counties – of first rank, and communes – of second rank). Thus, in the case of Valea Ierii commune, the agricultural land holds a share of only 15.1 % while, (on the other side) the share of Luna commune is of 91.6 %. The relief leaves a strong mark on the structure of the land used (Fig. 2). Thus, Valea Ierii commune is situated in a mountainous area, while Luna commune lies in the low floodplain and terrace area of the river Arieş. The

reduced percentage of the agricultural land is counterbalanced by a vast sector of woodland in the case of the mountainous area (60 % forest for Valea Ierii commune). In other situations, the pastures and natural meadows record significant shares, leading to a relative leveling of the percentage held by the agricultural land between different administrative units. Anyway, we can still conclude that in the mountainous areas the percentage of agricultural land is below that situated in the lower hilly and valley areas (Fig. 3).

SURD

The role played by the main landforms in the division of land uses is more eloquently spotlighted through the percentage held by the arable lands from the total of agricultural land. Thus the percentage in the mountainous area exceeds 35 % of the agricultural land. For Someș Valley and Cluj Hills the arable land has shares varying between 35 % and 50 % from the total of agricultural land, considered at the level of administrative units. On the other hand, the eastern part of the county, belonging to the Transylvanian Plain is registered on the whole with more than 50 % of arable land from the total of agricultural land (Fig. 4).

The transitional phase, characterized by radical structural shifting, both in the political, social and economic life had a strong impact on the national agricultural domain.

One of the most critical aspects faced by the county agriculture, as well as by the country agriculture is that arable land is not cultivated at the highest degree. In many cases, after reallocation, a return to traditional agricultural practices happened, consisting in the "rehabilitation" of physical work (of man and animals) and the partial farming of the

arable land, all in the context of a workforce shortage in rural areas, followed by the insufficient technical equipment and managerial competence, all on the background of a strong crumbling of land properties (there exist about 5.2 million landholders in Romania, having over 25 millions plots of agricultural land).

In Cluj county from the total of 177,204 ha of arable land, within the 1995 agricultural year only 96,650 ha were tilled, representing 54.5 % from the total of this type of land (Fig. 5).

However, the different ways of expressing territorial reality highlights a situation of similitude with diverse motivations: a high degree of tillage for the arable land in the eastern part of the county, where fertile soils and family associations are prevalent and where other types of associations for agricultural exploitation are frequently encountered. The same phenomenon occurs in some administrative units situated in a mountainous area (Râșca, Măguri-Răcățiu) but with limited arable land, poor soils and a rather significant human pressure which compel to an almost total tillage of the arable land. This situation is presented by the following statistical dates, representing the main food crops in Cluj County.

Table 2. Production volume of the main food crops and their share in the national production (1995)

Crt. No.	Product	Total production (tones)	Share in national production (%)	Average production (kg)		Quantity/inhabitant (kg)	
				County	Country	County	Country
1.	Wheat, Rye	114,572	1.48	3,346	3,082	157.5	339.9
2.	Corn, grains	151,447	1.52	3,626	3,184	208.1	437.5
3.	Potatoes	110,462	3.65	10,857	12,317	151.8	133.1
4.	Sunflower	2,325	0.23	807	923	-	-
5.	Sugar beet	107,410	4.04	24,473	19,928	-	-
6.	Vegetables	61,910	2.15	-	-	85	126.5
7.	Grapes	3,184	0.24	3,315	5,245	4.4	5.8
8.	Fruit	25,954	2.82	-	-	35.6	40.4

The fact that a significant percentage of the arable land remains uncultivated is not compensated by considerable increases per hectare.

Table 3. The agricultural production/ha (kg) for the main crops

Crt. no.	Product	Production/ha (kg), country		Production/ha (kg), county (1995)
		1987	1995	
1.	Wheat, Rye	3,990	3,082	3,376
2.	Corn	6,351	3,176	3,625
3.	Potatoes	22,088	12,317	11,745
4.	Sunflower	2,269	1,304	788
5.	Sugar beet	26,861	19,928	24,990

The most obvious regress was recorded within the livestock-farming sector through the appreciable decrease of all kinds of livestock, except

the horses. This situation can be correlated with the one existing at the national level.

Table 4. Evolution of livestock

Crt. no.	Type of livestock	Number (country)		Number (county)	
		1990	1995	1990	1995
1.	Cattle	6,291,000	3,481,000	211,100	121,300
2.	Pigs	11,671,000	7,758,000	362,500	281,100
3.	Sheep	15,435,000	10,897,000	507,600	352,000
4.	Horses	663,000	784,000	no data	19,600
5.	Poultry	113,968,000	80,524,100	3,288,400	1,834,100

In order to relate the livestock to agricultural land, the transformation of each type of livestock into the so-called L.C.U. (large-sized cattle units - conventional units) (horses - 0,90 L.C.U., cattle - 0,84 L.C.U., pig - 0,20 L.C.U., sheep - 0,14 L.C.U., poultry - 0,04 L.C.U.) is necessary (Fig. 6).

The existence of a higher livestock density on agricultural land in the administrative units of the

Someş Valley is to be noticed, where poultry and pigs are predominant.

Within the area, there existed poultry farms with an intensive activity (Gilău, Floreşti), which are no longer effective, as well as a swine-fattening farm (Bonţida) whose future is unpredictable. In the mountainous area the cattle outrun the other categories.

Table 5. Livestock number and the share of the main animal product

Crt no.	Animals			Production					
	Type of livestock	Number	National percentage	Product	Measure unit	Production	National Percentage	Production/inhabitant	
								County	Country
1.	Cattle	117,413	3.3	Meat	tones	51,100	2.8	70.2	81.4
2.	Pigs	245,166	3.0	Milk	hl	2,084,700	3.7	286.5	250.3
3.	Sheep	370,065	3.6	Wool	kg	765,600	0.3	1.05	1.07
4.	Poultry	1,374,768	1.7	Eggs	pieces	148,100,000	2.7	203.5	245.5

Related to the whole county, the vegetable production has a higher value (55 %) than the animal production (45 %), this phenomenon being increased as a result of large livestock farms devided. They were established during the communist regime (according to our estimation, the actual vegetable production represents 66 % of the total agricultural production).

The reduction of land tillage, the combination of physical and mechanical work, as well as the excessive plotting of agricultural land reveal the specific features of an extensive agriculture that is profoundly out of balance, both structurally and managerially.

The generalized upholding of the labours performed in order to maintain weeding crops or to harvest corn, potatoes and hay (works done by people originating from rural areas, who actually live in the urban environment and found themselves landowners overnight) highlights a recent agricultural

phenomenon named "weekend agriculture" that characterizes the actual state of agriculture in the transition phase typical for Romania nowadays.

References

- xxx (1996), Anuarul Statistic al României, Direcția Națională pentru Statistică, București.
- Gilg, A. W.**, (1985), An Introduction to Rural Geography, Edward Arnold, London.
- Puia, I.**, (1979), Agrosistemul, bioproductivitatea și alimentația, Editura Academiei Române, București.
- Surd, V.**, (1993), Introducere în geografia rurală, Editura Interferențe, Cluj-Napoca.
- Surd, V.**, (1994), Critical Status of Rural Romania, Die Zukunft der landlichen Infrastruktur Ostmitteleuropas. Bundesanstalt für Agrarwirtschaft Schriftenreihe, Nr. 75, Wien.



Figure 1. Cluj county.



Figure 2. The main landforms of Cluj county.

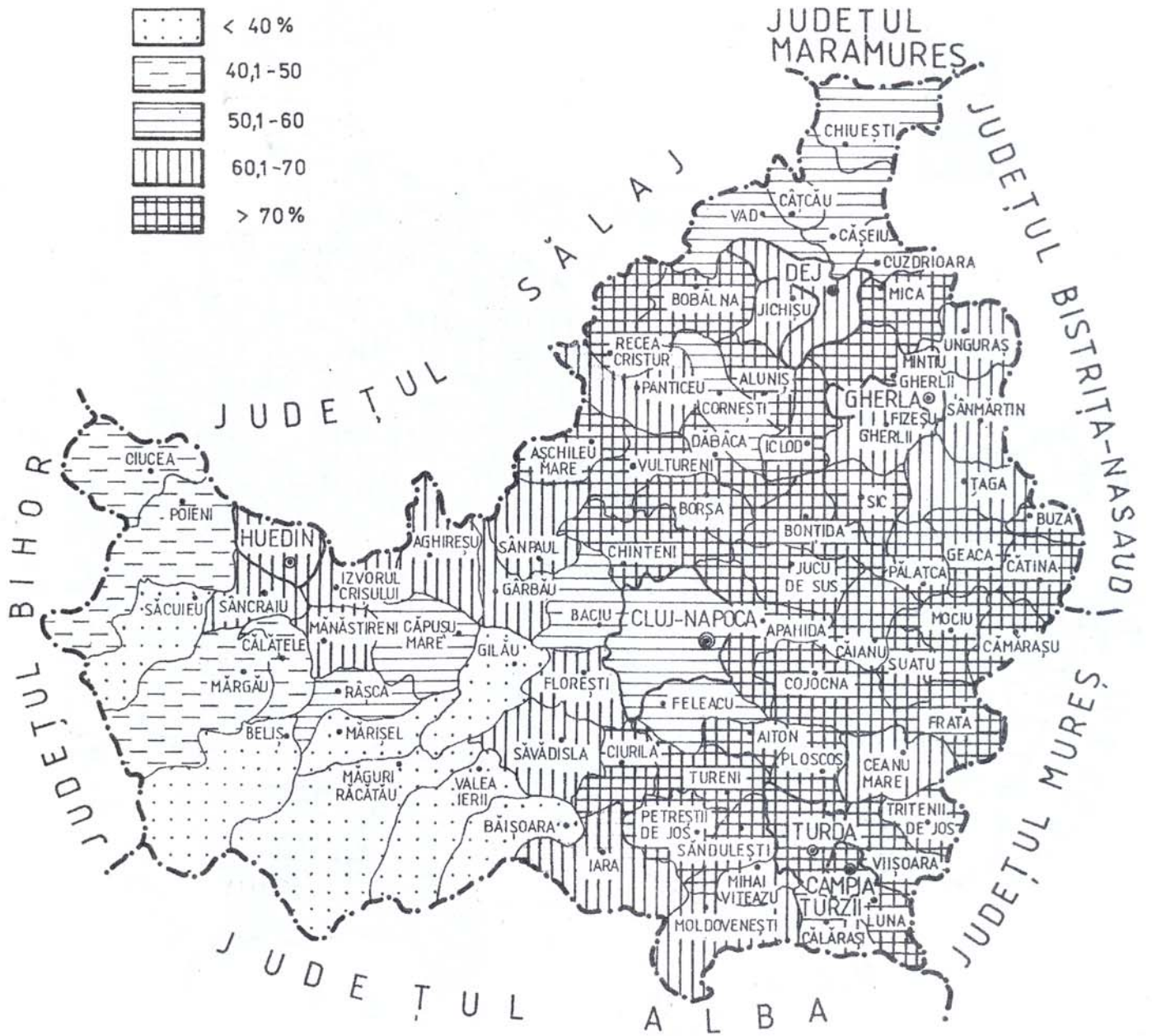


Figure 3. Agricultural land percentage for administrative units (1995).

SURD

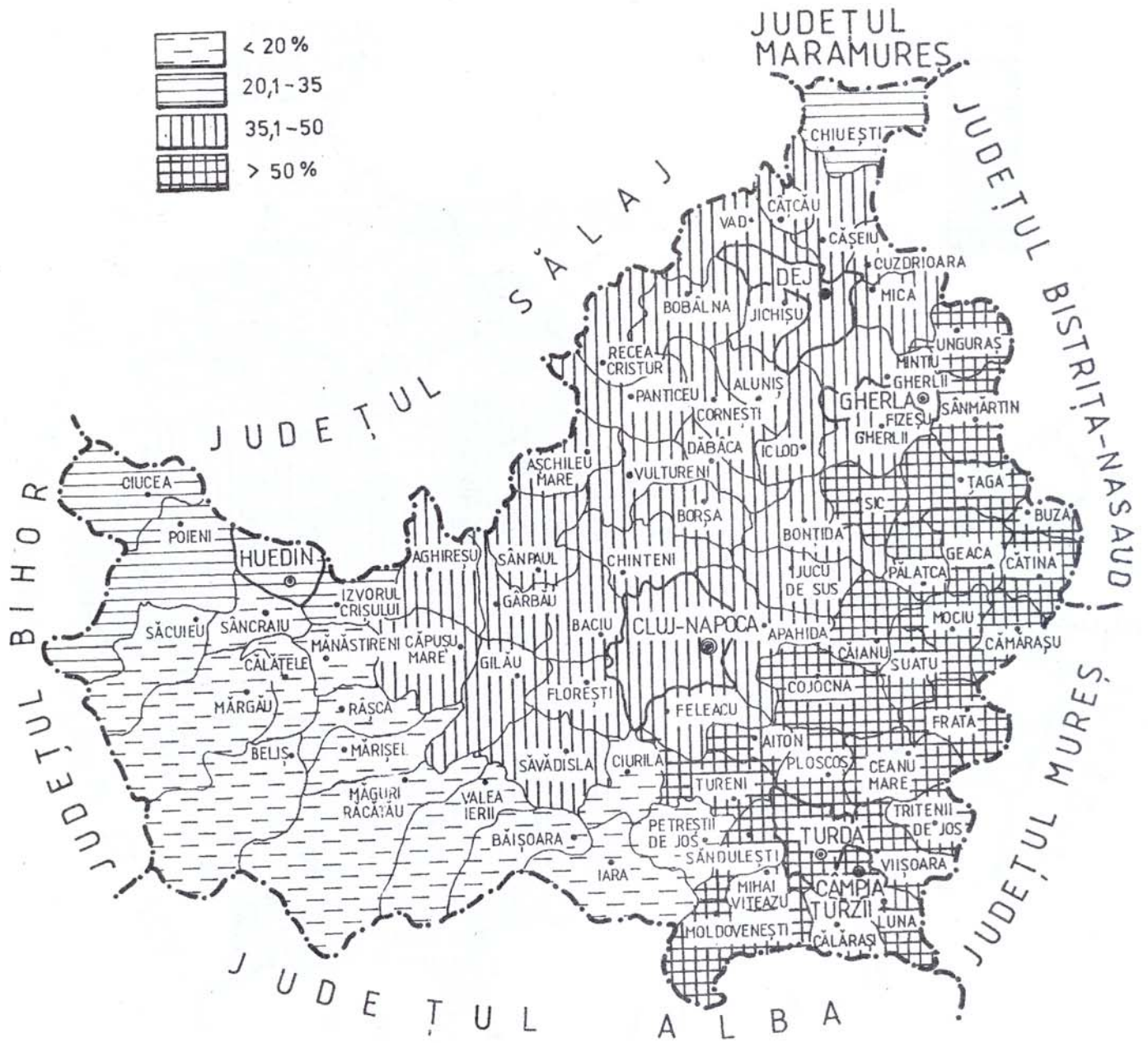


Figure 4. The percentage of arable lands from the total of agricultural land (1995).

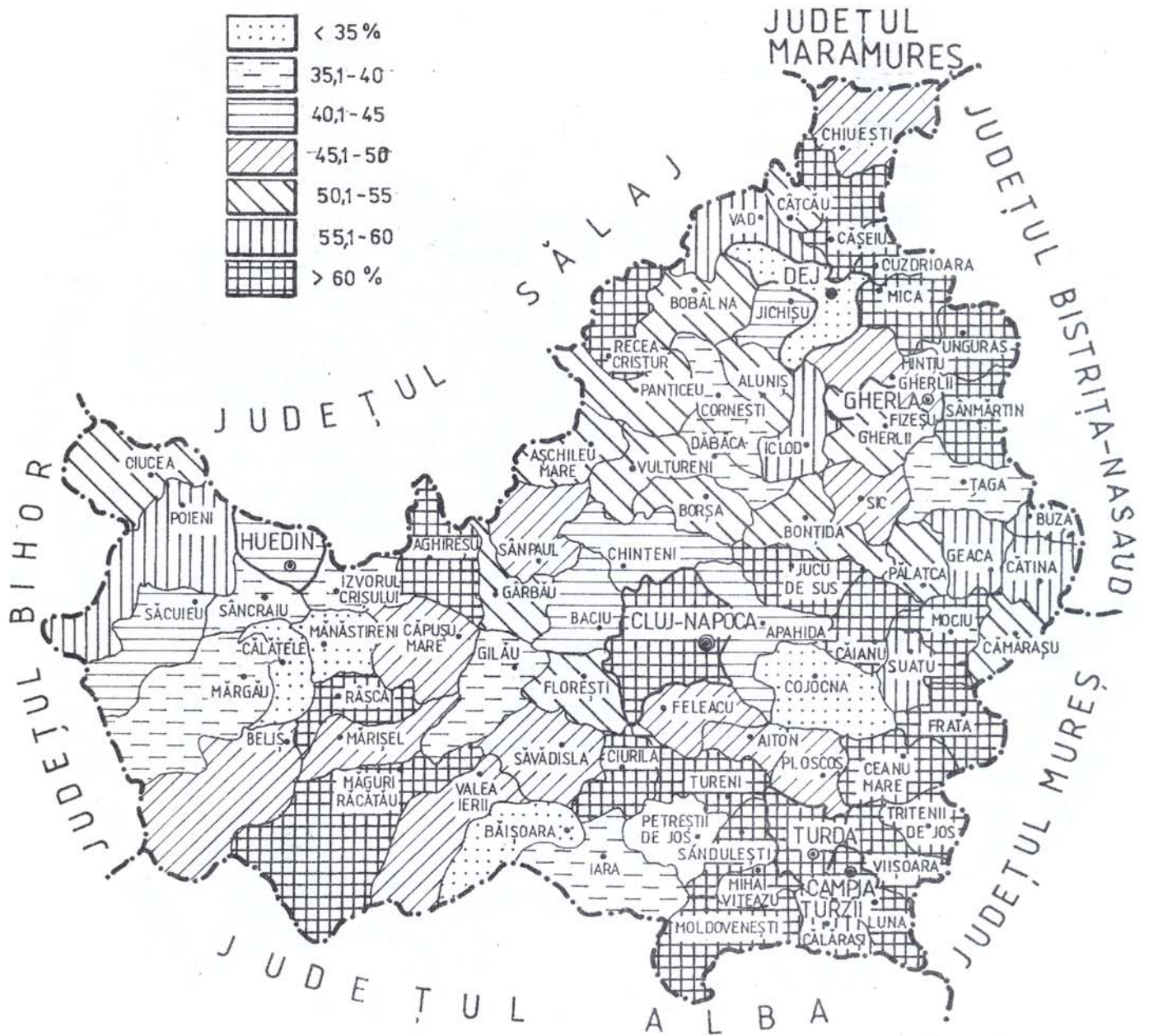


Figure 5. The percentage of tilled areas from the total of arable lands (1995).

SURD

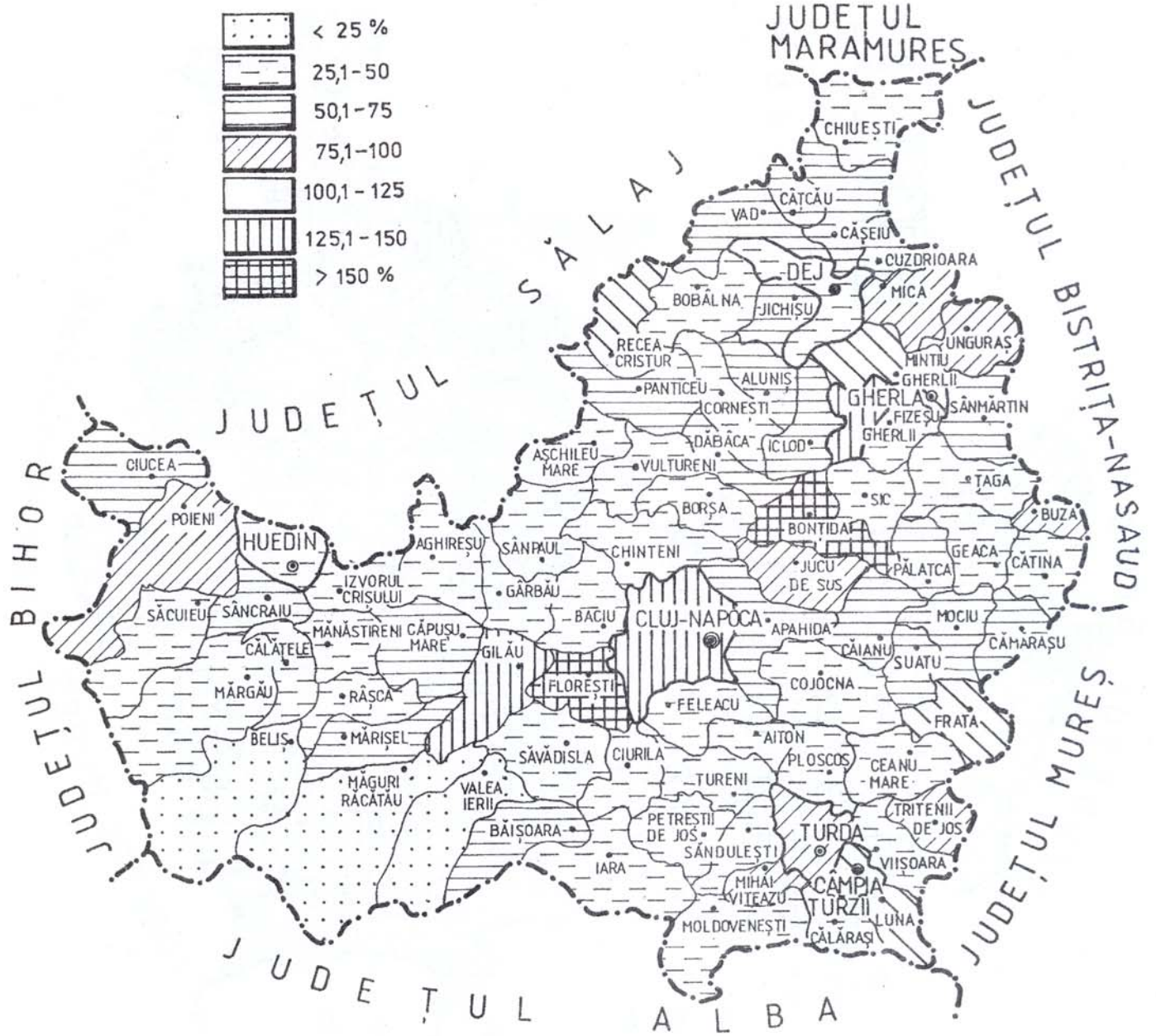


Figure 6. L.C.U. (Large-Sized Cattle Units)/100 ha of agricultural land.