



# The Specificity of Rural Space of Romania with Regarding Physical Effort of Population

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## Introduction

In Romania there are three main units of relief, in approximately equal parts, by country surface (238.317 km<sup>2</sup>): mountains 35 %; hilly areas 35 %; plain areas 30 %.

The mountains are developed between the altitudes of 600-700 meters and 2544 m (the highest peak in Southern Carpathians). The hilly regions have the altitude situated between 300-600 m altitude. The plain units are situated at the periphery of national territory. Their altitudes are developed between 10-20 m till 300 m. A special category of territory is formed by Danube Delta, with altitudes between 2 m – 5 m, frequently under the flood danger.

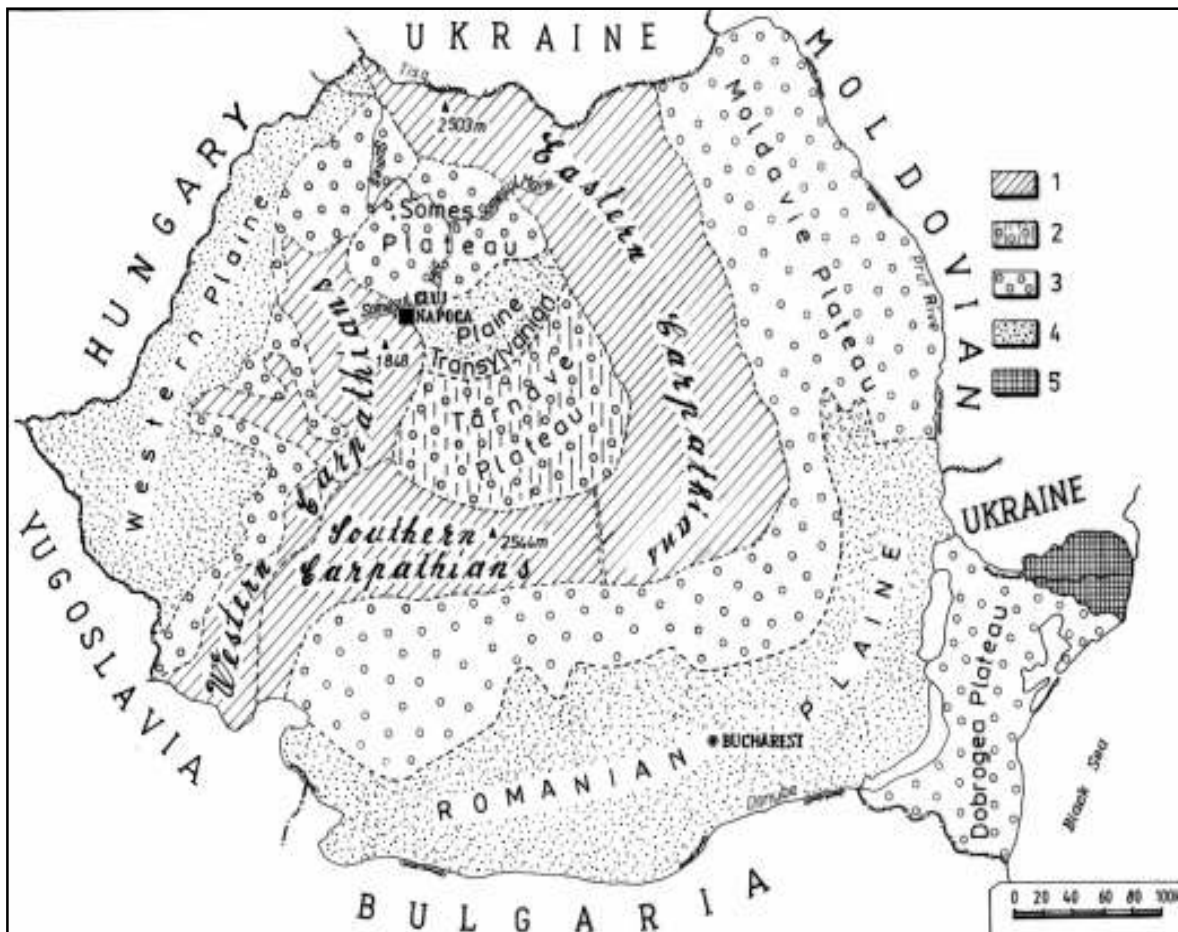
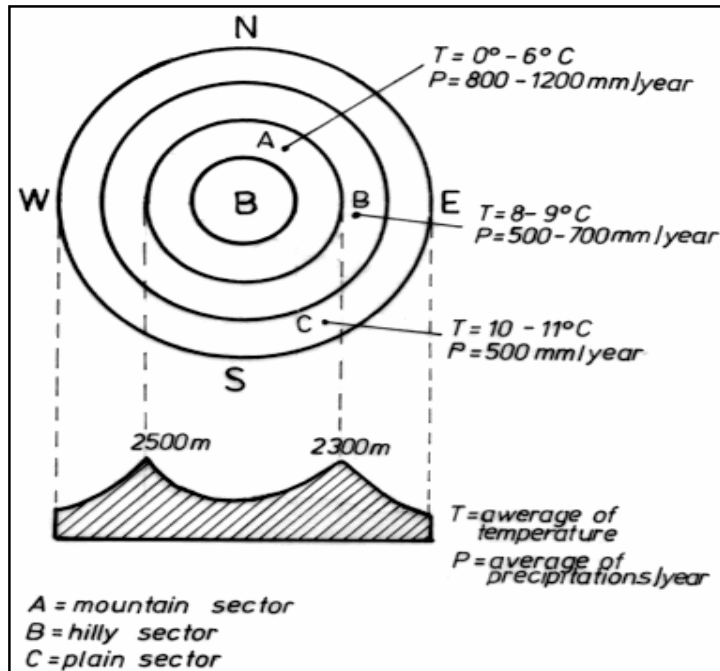


Figure 1. The main units of relief from Romania: 1. Mountains; 2-3. Hilly areas; 4. Plain areas; 5. Danube Delta.

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The main units of relief are disposed in symmetrically. These form a huge amphitheatre where the main role is the crown of Carpathians. By point of spatial development, Romania's relief is disposed in a concentric model of the relief.



**Figure 2. The concentric model of the relief of Romania.**

In the center of the country it is the Transylvanian Collinarity Depression, close by the chain of the Carpathian Mountains. The Carpathian Mountains developed on a north-south direction, till Prahova valley, which is the chain of Eastern Carpathians.

From Prahova valley to Timis-Cerna corridor are developed the Southern Carpathians. From south, from the Danube defilee till in north, on Somes valley are developed the Western Carpathians.

The Eastern Carpathians are very rich in springs of mineral water, in direct connection with volcanic phenomenon.

In addition, this branch of Romanian Carpathians has the highest degree of coniferous forests. Their maximum altitude is 2303 m, in Rodna Massif.

The Southern Carpathians are the highest (>2500 m) and the most massive from the Romanian Carpathians. Because of the high altitudes it's developed the ice relief (ice valleys, ice circles, etc.). In the same time the high altitude play the main role for the snow preservation and skiing activity.

Between Southern Carpathians and Eastern Carpathians is interposed Prahova valley, with its famous mountain resorts (Sinaia, Busteni, Predeal). In addition, in their neighbored is Poiana Brasov, with very good infrastructures for winter sports.

The Western Carpathians are smaller (they don't pass over the altitude of 1850 m). They are famous by large variety of the relief forms, in connection with a variety of lithological structure. By large extension and picturesque on remark limestone relief (curves, gorges, etc.). At the external periphery are situated the hilly units and than the plain units.

The medium figure of temperature is fluctuating between 0° C at 2000 m and 11 C at 50-100 m altitude, along of Danube river.

The warmest month is July, with 22° C average of temperature in Western Plains, 23° C in Romanian Plain and 24° C in Moldavian Plain (East part of Romania).

The number of tropical days (>30° C) is 50-56 in Romanian Plain.

The coldest month is January, with the medium figure of temperature in plain areas of - 2° C in Western Plains, - 3° C in Romanian Plains and - 4° C in Moldavian Plain.

On remark, by the amplitude between medium figure of temperature on warmest (July) and coldest month (January), the phenomenon of thermal continentalism. This (thermal continentalism) is more moderate in Western Plains, with frequently influences of humid oceanic air from Western Europe and became excessive in eastern parts of Romania, where continental influence is very strong.

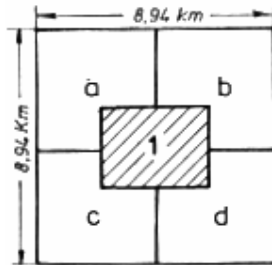
### Rural Framework

Almost 90 % of the Romanian territory is under control of rural communities (administration control). In Romania there are 13.099 villages, which are divided, by

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administrative point of view, in 2688 communes (administrative rural units). Average of village by each commune is 4,6. One village has a population of 770 inhabitants (average) and one commune 3750 inhabitants. Over 53 % of Romanian villages are small, with a number of populations less 500 inhabitants.

Average of surface for each village is 1600 ha (16 km<sup>2</sup>) and for one commune 8000 ha (80 km<sup>2</sup>).



**Figure 3. The geometrical model for one rural commune:** 1. The village commune centre; a, b, c, d, the villages with compose communal system.

The perimeter of one village can be covered, in time, by walking, in 3 hours and for one commune in 7-8 hours.

## The Villages, with Regarding Human Effort

The villages and communes are divided by surfaces of their territory, having their estates in the mountains regions.

Regarding the physical effort of the rural population, we can put on light three major aspects:

- the general level of development;
- the specific character of economical activity in rural areas;
- the natural framework of prescient

Romania is a country with middle level of economical development (about 3500 USD /year G.D.P.). This phenomenon has a strong impact of the degree of labor mechanization in agriculture.

After December 1989 it has returned to the private property of the land. The average surface of each exploitation is 2,2 ha, which is divided in 10-15 plots. The majority of agricultural works, especially these for maintenance the crop and the harvest, impose the use of man and animal physical power.

The specifically character of agricultural labor is very different by main units of relief. Thus, in mountain areas, rural economy dominated by breeding, impose remarkable physical effort for man. Hilly regions have, usually, a mix agricultural structure (crop, breeding, viticulture and fruit growing). By abandoning mechanization labor on viticulture, some parts of our vineyard is in fallow.

Revert to the subsistence agriculture (nurris and wheat) put in the light traditional practices in agricultural processes.

In the plain areas, flat land offer a very good opportunities for mechanization. In addition, the access to the agricultural land is more easily than is mountain and hilly regions.

Destruction of main systems of irrigation in Romanian Plain, after December 1989, turns this excellent agricultural land in to waste, with traditional customs in agricultural labor.

## Physical Framework of the Rural Hearth

This plays a very important role in the process of physical fortification of population. By the structure of precincts can establish three main categories of rural settlement:

- agglomerated;
- dispersed;
- scattered.

Each structural category imposes one certain time-spatial dynamic, by the areas to three main structures (shop, school, church, and health unit).

The agglomerated villages, with flat precincts by concentration of household impose easier access to endowment and inter-human contact. The walking time to school not exceed

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30 minutes. The football game remains the main aim for the children and for the youth.

In the Danube Delta and Moldavian Plain, the presence of numerous natural lakes develops the needs and the passions for swimming.

The dispersed villages usually are situated on the valleys, in going with the slopes. The relief altitude can touch from place to place 400-500 m, a fact which impose about one hour for access to control facilities. The main sport games are football and skiing.

The scattered settlements impose more long time to access to control facilities. There are villages in mountain areas where the children spend over two hours for school access. The difference of level (altitude) between low places, which concentrated the main central facilities, and high places, situated at peripherycal areas, frequently passing 600 meters. By walking get a good physical fortification of body. The skiing and sledging are main sports for all during cold season. Each of big cities of Romania have spatial correspondences in mountain areas for holidays and skiing (Bucharest – Valea Prahovei; Brașov – Poiana Brașov; Sibiu – Păltiniș; Timișoara – Muntele Mic; Reșița – Semenic; Cluj-Napoca – Băișoara; Oradea – Stâna de Vale; Baia Mare – Borșa, Izvoarele).

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