Scientific Papers. Series E. Land Reclamation, Earth Observation&Surveying, Environmental Engineering. Vol. I, 2012 Print ISSN 2285 - 6064, CD-ROM ISSN 2285 - 6072, ISSN-L 2285 - 6064

CHARACTERISTICS REGARDING NATURAL POTENTIAL OF BIHOR COUNTY FOR RURAL DEVELOPMENT

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Abstract

The subject of this paper is estimate of natural potential in Bihor caunty for establish the possibilitys for rural sustainable development and for determining restricting natural factors who to manifest over rural activities.

Key words: rural development, natural potential of territory, climat conditions, soil characteristics, hydrographic basin.

INTRODUCTION

Any strategy for socio-economic development must be based on the assessment of the natural resources that should be turned into good account in a sustainable manner. In order to achieve the highest effect with lowest consumption, the resources should be differentiated according to category and exploitation limits.

The natural potential of a territory is defined by the complex resources constituting the environment and can be analyzed based on the amount and specificity of each particular constituent [2].

MATERIAL AND METHOD

The socio-economic development of a territory depends upon the natural resources that it provides for use according to the requirements imposed by the developmental process shaped into general and sectoral policies and strategies at local, zonal or regional level.

The area under study is located in the North-West Development Area which includes six counties, as follows: Bihor, Bistriţa-Năsăud, Cluj, Maramureş, Satu-Mare, Sălaj, Fig. 1.



Fig.1. The North-West Development Area

This area consists of 421 local administrative units: 6 counties, 42 cities and towns (of which 15 cities) and 399 communes. There are 1,844 human settlements in total, fig. 2, [5].

Concerning its cross-borders, the area under study is partly included in the Bihor-Hajdú-Bihar Euroregion, established by the Bihor County Council and the Hajdú-Bihar Selfgovernment (Fig.3) [2].



Fig.2. Crişuri hydrographic basin



Fig.3 Bihor-Hajdú-Bihar Euroregion

The primary natural potential consists in the basic elements that determine the formation and evolution of the environment and the secondary natural potential, reflects the expression of the environmental factors that are influenced by contemporary human intervention.

RESULTS AND DISCUTIONS

Geographic location and relief layout result in the particular characteristics of the climate. The area under study is defined by the oceanic temperate climate from western and Mediterranean climate from southern and southwestern Europe. [4]. It is noted that there is an oceanic climate in the entire study area, differentiated according to the relief forms, i.e. plain, hills and low-mountains plateaus [1].

The Crişuri hydrographic basin presents great variability of surface deposit types (Fig.4). Thus, the following are present from the border with the Republic of Hungary: Holocene alluvia – gravels, sands, clays (1), wind sands in four sites (3), deluvio-coluvial and proluvial sandy-clayey glacial deposits, associated with terrace deposits (7), eluvio-deluvial deposits formed on neogenic volcanic rocks (14).



Fig. 4. Surface deposits in the Crișuri hydrographic basin [3]

Soil quality shows a predominance of agricultural lands, included in classes III and IV, which points to the necessity of permanent and intensive improvement interventions destined to ensure high productivity [1].

The lands that are highly subject to degradation are acid soils – total 270 882 ha; acidification affects these soil in varying degrees: slightly acidic, 129 298 ha; moderately acidic, 118 716 ha; strongly acidic, 22 868 ha. There are also almost 40 000 ha of salination-affected soils, out of which 1 300 ha moderately and strongly saline, fig.5.



Fig.5. Soils of Bihor County

Moreover, other 2 263 ha of land are affected by erosion while water excess results in the degradation of another 5 677 ha. [6].

The hydrographic basin of the Criş rivers drains an area of over 27 500 km², consisting of four main rivers that converge as the branches of a tree: Crişul Alb (the White Criş) - (Foto 1); Crişul Negru (the Black Criş) – (Foto 2), Crişul Repede (the Fast Criş) – (Foto 3) the Barcău. They all collect the waters from the western slopes of the Apuseni Mountains.

The Crişuri hydrographic basin presents the following potential:

- theoretical water resources – 3 116 400 thou mc $\,$

- technically usable water resources -744 734 thou mc.

- fishery -1051 thou mc.



Photo 1. Crişul Alb (the White Criş)



Photo 2. Crişul Negru (the Black Criş)



Photo 3. Crişul Repede (the Fast Criş)

CONCLUSIONS

The area of study is rural space with valuable natural potential for rural sustainable development.

Natural potential of Bihor Caunty provided rural sustainable development if to apply programs for lands improve and land protection.

This programs are necessary to control the effects of restricting natural factors who to manifest over rural activities.

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