LAND EVALUATION AND THE IMPACT OF HYDROTECHNICAL WORKS ON CRÎȘUL REPÊDE RIVER

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ABSTRACT
Land is essential in life and our existence. Its importance was considered by lawyers, geographers, sociologists and economists. Evaluation of unoccupied land or land and buildings on it belongs to the field of economic issues. Unoccupied or built upon it, the land is called real property. Value is created by the use of property or the capacity to satisfy human needs and desires. The property is a legal concept. The property consists in private property rights. We should make a distinction between real property which is a physical entity and its possession which is a legal concept. Legal property includes all rights, interests and benefits related to possession of the property. Real property is usually represented by some possession documents, only symbolic in nature. Therefore the real property is a nonphysical concept.

Keywords: evaluation, impact

INTRODUCTION
Evaluation of unoccupied land or pieces of land with buildings on it represents an economic issue. From the legal point of view it is not the physical characteristics of the land but about rights and obligations associated with various interests in these lands. Logically it means there are possible conflicts between private and public use of the land. The property is a legal concept consisting of private rights and obligations. Before 1989 real estate assessment issues were excluded, particularly those relating to evaluations of land, because the land was not considered an object that can be sold or bought, hence the uselessness of assessments and evaluators. The land represents a national wealth and therefore establishing its correct value is a categorical priority. In centralized economies price evaluation is identical to the price established by the state, there is no concept of free market. Real estate property is immobile and corporeal and it includes the land and buildings on it. Real property includes all interests, benefits and rights of ownership of a property. The right over a real estate property is patrimonial right. Ownership includes the right to sell, to rent and others. The property size determines the interest in that particular property.

MATERIAL AND METHOD
Land uses (fig. 1) depend on geographical, legal, economic and social factors which are also the basis for that land evaluation. Starting with 1989 in Central and Eastern Europe began a rather difficult period of passing from centralized economy to market economy and from dictatorship to democracy [1]. For market economy, establishing a more accurate value of land is a necessity absolutely objective because the land is involved in many economic processes.
One of the functions of the general cadastre is the economic one, outlining the economic value of real estate property necessary for determining taxes. Land value closest to the actual value is the value of land circulation, which is determined by market conditions. Land evaluation must be made in administrative regime, so as to ensure a unitary system for the whole country.

Value is an economic concept that refers to the relationship between goods and services available for purchase and those who buy them and sell them. Value is not a fact, only an estimate of how goods and services are estimated at a given moment, according to a particular definition of value [2]. Economic concept of value reflects the image on the market of the benefits belonging to the one who possesses goods or receives services at the respective date of evaluation.

RESULTS AND DISCUSSIONS

The concept of value on the market reflects the perceptions and collective actions on the market and is the basis for the assessment of most resources in market economies. Land is underlying the whole existence and, with rare exceptions, is a permanent fact beyond human existence. With the uniqueness and immobility of the land, each plot has a unique location. Due to its unique characteristics, when the land is assessed separately from the edifices on it, the economic principles require that those buildings are assessed as a contribution to the total value of the property. Therefore, the market value of the land, based on the concept of best use reflects land use and permanence to the buildings on it. And therefore many properties are assessed as a combination of land and edifices [3].

Hydrotechnical works from Crișul Repede basin (fig. 2), a certain area influences the development of the area, regulates the use of land, water output, preparation of territorial planning drafts. To attain these objectives there were set up two accumulation lakes (Lugaș and Tileagd) and for hydropower plants in Lugașu de Jos, Tileagd (fig. 3), Săcădat and Fughiu. In this arrangement a whole complex occupies an area of 1500 ha, of which 600 hectares of arable land, 500 hectares of natural pastures and meadows and 400 hectares other surfaces.

They are component part of the National Strategy for Flood Management and include three types of objectives:

a) Economic objectives aimed at protecting against floods, the existing economic infrastructure and ensuring economic opportunities of future generations.
These objectives include [4], [5]:

- Preventing or minimizing economic losses by reducing flood risk of populated areas, of economic objectives and goods,
- Preventing or minimizing economic losses by reducing flood risk of existing infrastructures,
- Preventing or minimizing economic losses by reducing flood risk of cultivated agricultural lands.

b) Social objectives aimed at protecting the population and the human communities against floods by ensuring to protect the population up to an acceptable level.
c) **Environment objectives** seek that through implementation of flood management strategy to achieve socio-economic goals while maintaining a balance between economic and social development and environmental objectives.

**CONCLUSIONS**

Hydrotechnical works from hydrographical basin Crișul Repede have led to major changes in the physical geographic background of the area under study.

**Negative effects:**
- 65 households and households annexes have been displaced,
- 984 hectares of land in Lugașul de Jos and 646 hectares in Tileagd were covered in water, thus were taken out of agricultural circuit,
- The price of agricultural land in the area has increased by reducing the available surfaces (unincorporated area),
- groundwater level in Tileagd has increased in wells, cellars, technical basements in blocks of flats, producing unwanted effects, which meant additional expenses.

**Positive effects:**
- hydroelectric power plants produce electricity for the national energetic system,
- farmlands, villages, roads are protected from flooding by maintaining constant levels along Crișului Repede,
- county and local access roads were made over the dams crests of wave ensuring villages connection to E60 national road,
- by soil erosion control and drainage works agricultural land areas were reclaimed,
- hydrotechnical works allow water supply to localities and the development of industrial-economic activities in the area,
- pisciculture development in fish farms from Remetești, Mâgești, Husășu de Criș,
- practicing recreational fishing on reservoirs,
- tourism and agro tourism development in Leș, Drăgan, Munteni, Bulz dams area.

The implementation of reservoirs in Lugașul de Jos, Tileagd (fig. 2), Săcădat had the side effect of taking out over 1900 hectares of farmland. The villages affected are Lugaș de Jos, Țețchea, Tileagd, Ineu Săcădat and Oșorhei. Between 2004-2008, due to the economic growth the land demand lead to a price increase, since the offer was limited. After the economic crisis, staring with 2009, the market value of farmland was in a continuous regression. Depending on the location, neighbourhood, utilities and access roads, one hectare of agricultural land is sold today with prices ranging between 1000-1200 Euros / ha (fig. 3).

**REFERENCES**

5. *** Amenajarea hidroenergetică a râului Crișul Repede – studii ISPM – studiu de fezabilitate* (Crisul Repede River hydro power – ISPM studies – study of feasibility).
7. *** Anuarul Statistic al României* (Statistical Yearbook of Romania).