

aqueous solution saturated with CO₂ is expected to reduce the density and, according to literature data, the velocity properties.

References:

1. Adam, L., K. van Wijk, T. Otheim, and M. Batzle (2013), Changes in elastic wave velocity and rock Microstructure due to basalt-CO₂-water reactions, *J. Geophys. Res. Solid Earth*, 118, 4039–4047, doi:10.1002/jgrb.50302.
2. Alexander P. Gysi, Andri Stefánsson, CO₂-water–basalt interaction. Low temperature experiments and implications for CO₂ sequestration into basalts, *Geochimica et Cosmochimica Acta*, Volume 81, 2012, Pages 129-152, ISSN 0016-7037, <https://doi.org/10.1016/j.gca.2011.12.012>.

THE ECONOMIC EFFICIENCY OF LAND USE OF THE RURAL SETTLEMENTS

MYKHAILO BAHIN, PhD student

YULIYA RADZYNSKA, Associate Professor, PhD in Engineering, Scientific Adviser

OLENA ILIENKO, Professor, Doctor of Science in Education, Language Adviser
O. M. Beketov National University of Urban Economy in Kharkiv

Rural settlements of Ukraine are small administrative units which differ from other settlements by their function. Rural settlement is a basic territory for management of agriculture. At first, the people, who live in rural settlements are the workers of agriculture. Secondly, the production assets and management of agricultural processes are concentrated in them. Thirdly, the industrial zones with cattle-breeding and recycling branches are frequently located in these settlements.

There have been many various types of settlements in Ukraine in the course of historical development. Rural settlements in the modern sense of the term appeared after the emergence of cities. Two main forms of the land use managing can be named: private and collective. But the main function of the rural settlement has always been providing the population with the foodstuff and clothes.

Recently, village is separated to a certain extent territorially and administratively from industrial agricultural lands. First of all, it is the place of residence for people and providing of social and other services for them.

In Europe rural settlements can successfully compete with cities in the level of social and economic development, therefore, the division of settlements into categories is frequently purely functional. The social and economic indices of rural settlements in our country are cons in settlements than in cities. It can be explained by a poorly developed infrastructure in villages, such as roads, engineering communications, consumer service facilities and other social objects.

Therefore, the basic modern directions for rural settlements development in the system are the development of the infrastructure and moving the processing industry into the rural settlements, closer to the production place.

The analysis of the modern state of using rural settlements lands of Kharkiv region shows that such areas are used inefficiently, especially those of rural settlements. The necessity to pay a particular attention to villages is caused, in the first place, by their quantity: out of 1762 rural settlements of Kharkiv region, 1683 are rural settlements (95.5 %); secondly, by the quantity of people, who live in them (about 40 % in Kharkiv region); thirdly, an unsatisfactory condition of both the agro- industrial complex of Ukraine as a whole and rural settlements complexes in particular [1].

The transition to the new forms of managing rural settlements has destroyed interrelation between the farm industry and village to a certain extent. The development of agriculture and agro-industrial complexes has not considerably affected the improvement of well-being of the population and satisfaction of their social needs. The village nowadays is characterized predominantly by such parameters as: a negative demographic situation, the idle system of cultural and community services for the population, the impossibility of getting a qualitative education and medical service, not speaking about the absence of basic services.

The law of Ukraine “About the priority of the social development of the rural settlements and the agro-industrial complexes in the national economy” from 17.10.1990 defines that “the priority of the social development of the rural settlements and agro-industrial complexes objectively follows from the exclusive importance and indispensability of agricultural production for the vital activities of the person and the society, from the requirement of the revival of the farmer as the host of the land, as the bearer of morality and national culture. The high level of social and economic development of the village is the main condition of food and raw materials supply of the country, its economic independence” [2].

The basic criterion for definition of the economic efficiency of lands' using is the money value of rural settlements at which the value of each square meter of territory is defined [3]. Accordingly, each square meter can and should be profitable.

Unconditionally, there are such territories, the income from which are not expressed obviously or cannot be received. For example, there are ravines, degraded lands, bogs, etc. However, such lands should not be useless.

Other category of lands, namely, public lands (parks, roads, communications, etc.), can be quite self-supporting. Cost of such lands should be transferred to other objects - to the adjoining farm land areas, the industrial zones, the lands of commercial purpose.

The third category of the lands, the lands of the objects of social purpose, can bring in return the budget. The above requirement does not apply to shops, restaurants and cinemas, whose social role is directly connected with commerce. But to such objects as schools, hospitals and libraries which can become profitable

by combining social and commercial activities. For example, a club can work on the basis a computer of class at school in the evening.

The income of the residential areas in villages can be also considerably increased on the basis of the market relations' development. Today, 58% of agricultural production in Kharkiv region is made on personal plots. The rational using of such lands and providing citizens with the opportunities to work for the market, can improve the social and economic position of the rural settlements. Industrial lands using, if skillfully organized, can be effective as well as using other “non-profitable” lands.

To conclude, it should be mentioned that the potential for increase of the economic efficiency of the rural territories is great enough. But the observance of the ecological norms is the important condition for effective land using. It is impossible to speak about an economic efficiency along with the ecological problems such as abandoned and unused lands, unorganized use of lands for waste, use of lands for other purposes.

References:

1. Socio-economic situation of rural settlements of Kharkiv region. Statistical collection / Main Department of Statistics in Kharkiv region, Kharkiv, 2021. — 198 p.

2. The law of Ukraine “About the priority of the social development of the rural settlements and the agro-industrial complexes in the national economy” from 17.10.1990 No. 400-XII.

3. The law of Ukraine "On Land Valuation" from 11.12.2003 No. 1378-IV. Bulletin of the Verkhovna Rada of Ukraine dated 09.04.2004, No. 15, Article 229.

THE PLACE OF ENVIRONMENTAL JOURNALISM IN ECOLOGIZATION OF CONSCIOUSNESS AND DEMOCRATIC DEVELOPMENT OF SOCIETY

TARAS BONCHAK, postgraduate student of Department of Ukrainian press
SOLOMIYA T. ONUFRIV, Associate Professor, PhD in Philology, Scientific
Adviser

OLENA B. IVASYUTA, Associate Professor, PhD in Philology, Language Adviser
Ivan Franko National University of Lviv

The functions of the environmental press are not limited to informing about existing environmental problems, but contribute to the formation of the ecological culture of the population: understanding of modern environmental problems of the state and the world, awareness of the idea of ecological development, rational use of natural resources, overcoming consumerism towards nature, personal responsibility for the state of the environment.

Ecologically competent behavior of a citizen is the ability to predict the consequences of one's own influence on nature. It is worth noting that the