

## **DEGREE OF MEETING THE NEEDS OF HOUSEHOLDS FROM VALUABLE NATURAL AREAS OF THE LUBLIN VOIVODESHIP\*\***

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**Abstract.** Valuable natural areas are areas in which economic and farming activity is associated with the need to meet a range of requirements. This has an indirect effect on the level of income, and thus, also on the level of the satisfaction of needs. Satisfaction of the needs of members of households is the most important task. The main objective of the study was to assess the level of satisfaction of the needs of selected groups in the opinion of the heads of 150 households occupying valuable natural areas against 50 areas with low environmental preciousness. It has been questioned whether meeting the needs of households living in valuable natural areas and control communes of the Lublin voivodeship with low-level preciousness are at the same level. In addition, an attempt has been made to examine whether and to what extent the level of net income earned in households within valuable natural areas and the type of household by source of income affects the degree of the satisfaction of needs.

The results indicated that heads of households from the control communes assessed the level of satisfaction of the needs of the selected groups as higher.

**Keywords:** household, consumption, valuable natural areas.

**JEL code:** D19, Q56

### **Introduction**

Man is the object of study of many sciences: philosophy, biology, psychology, sociology, and others. The interest of economy is mainly due to the fact that in order to meet their needs men acquire goods and services produced by businesses operating in the system of the national economy.

Meeting the needs of the consumer in households takes place to varying degrees, J. Szczepanski defines it as follows "consumer needs are the needs that lead to the consumption of material resources, goods and services having an economic value" (Szczepanski J., 1981). Both Polish and world literature abound with a variety of definitions of the household. The household definition of J. Piotrkowski should be recalled, according to which "households are closely associated with the family. They consist of all the material

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means and actions that are necessary for the existence and functioning of the family, and so the housing, its equipment, means of subsistence and organized household activities of the members. These measures and actions are designed to the best possible, under the circumstances, meeting the needs of the family and its members" (Piotrowski J., 1976). Households are all or part of the house occupied by one or more persons (Mutchler J.E., Krivo L., 1989).

Households, as business entities, must comply with the theory of rational consumer behaviour, according to which consumers (households) have a number of features and are subject to certain assumptions. As a result of efforts to meet the needs, households strive to achieve the highest and standard of living.

One of the definitions of natural valuable areas is the quoted definition by B. M. Dobrzanska that was formulated at the Fourth World Congress on National Parks and Protected Areas reading that natural valuable areas are "areas of land or sea with high biodiversity and the associated natural and cultural resources, used in a manner to ensure the protection of the existing diversity" (Dobrzanska B. M., 2007). From the economic point of view, valuable natural areas are areas on which business operations may in some way limit the conventional and traditional forms of management (Zbaraszewski W., Pienkowski D., Steingrube W., 2014). The Lublin region is characterized by a high share of valuable natural areas in the total area of the province. It is one of the provinces with the largest area of outstanding natural beauty (241 thousand ha). The economic situation of the region is not positive. Evidence of this is for example the fact that it is one of the regions with the highest levels of unemployment in rural areas in Poland (the registered unemployment rate in the country in 2013 was 14.4%).

Valuable natural areas of the Lublin voivodeship are areas where one can observe macroeconomic difficulties. This has an impact on living standards, as described by A. Zielinska, who indicates that the operation of valuable natural areas poses a risk to human capital, among others, through low quality of the life of inhabitants and low investment level (Zielinska A., 2008). The level of satisfaction of the needs of individuals and households is a reflection of their quality of life.

The main objective of the study is to assess the level of satisfaction of the needs of selected groups, in the opinion of the heads of 150 households occupying valuable natural areas, as compared to 50 from areas with low natural value. A question has been posed whether meeting the needs of households located within areas of natural value of the Lublin voivodeship and control municipalities with a low level of natural value are at the same level. In addition, an attempt has been made to examine to what extent the level of net income earned in households within valuable natural areas and the type of household by source of income affects the degree of satisfaction of needs. One can in fact assume that in the case of rural areas where there is a much greater use of self-service and self-supply, the role of these factors is reduced.

## **Methodology**

The study was carried out in the Lublin voivodeship in the area of 40 communes. Basing on the Local Data Bank of the Central Statistical Office, at the commune level, analysis was carried out of the indicator in the context of the preciousness of ecological rural and urban - rural communes of the Lublin region (Guzal-Dec D., 2013). As a result, 30 communes were selected belonging to the group of the most ecologically valuable and 10 control communes without such qualities.

The samples for the research have been made based on the following assumptions: 5 households in each commune (total of 200) of at least 5 ha (of which 3 implement agri-environmental programmes, with the exception of organic farming Pack 2), and also in the context of 200 - 50 tourist farms (about 10% operating in the region of LODR, data as of 1.01.2011), 60 certified organic farms (about 10% of the region), 60 representing average conventional agriculture farms (5-10 ha) - typical agricultural production excluding special branches of agricultural production and the production of vegetable, where the main source of employment is to work on their own farm) and 30 large farms - greater than 50 ha / producing mainly for the market. This choice was aimed at identifying different types of households with special emphasis on the type of activity predisposed in natural areas and, in such a way, households implementing agri-environmental programmes; organic and agrotourism farms but also farms producing for the market only / intense / potentially causing collisions with the natural environment. Selection of households maintaining these assumptions was a deliberate choice.

Within the natural valuable municipalities surveys were carried out using a questionnaire. The study is based on data submitted to statistical analysis in the SPSS 20 program.

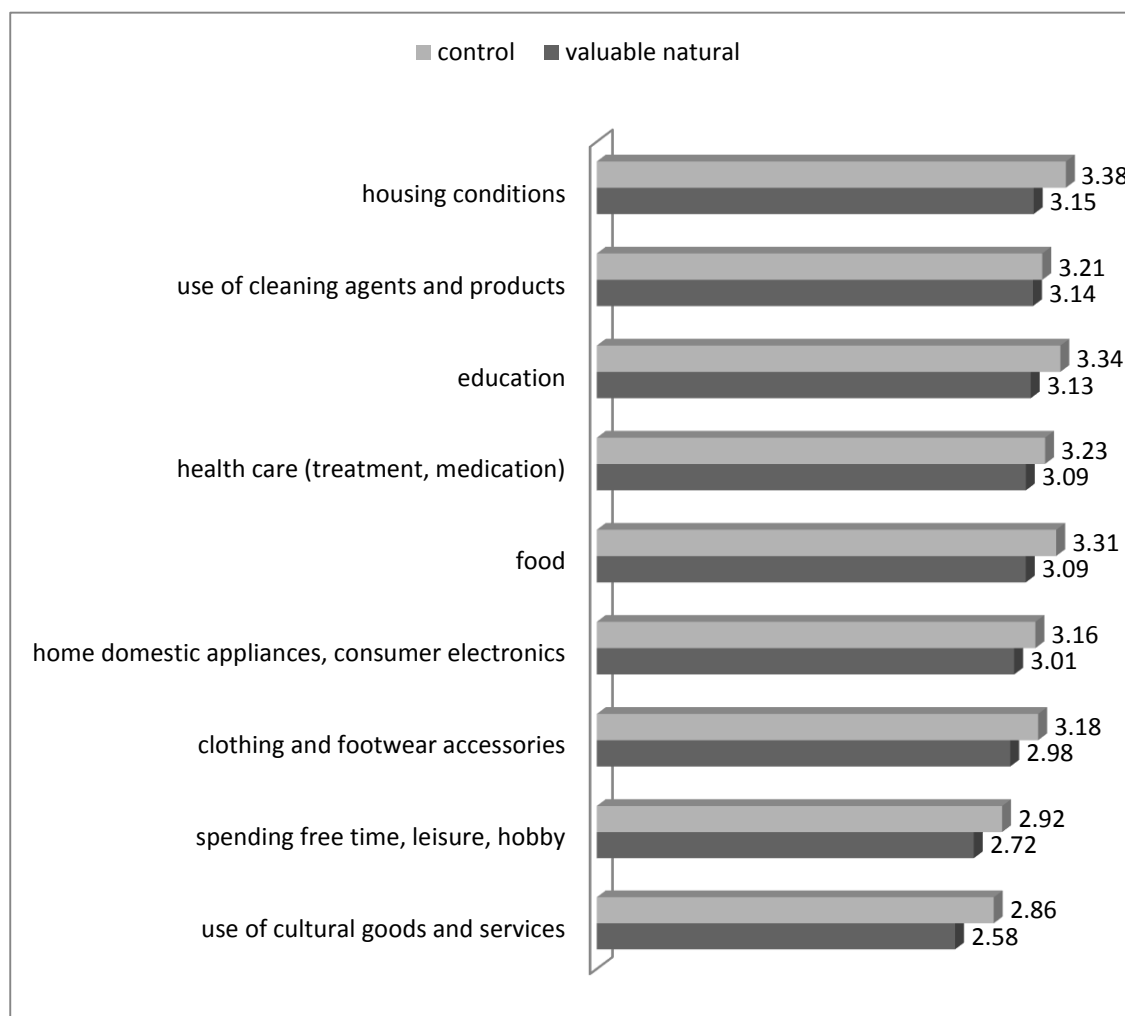
## **Research results**

The vast majority of the surveyed households are entities performing agricultural production (91.3%). The average size of a farm was 27.51 ha (standard deviation 58.37).

The degree of satisfaction of consumer needs of household members depends largely on the level of income, savings held, or liabilities. In the case of the study group, 70% of household heads rated the financial situation of the household as an average. Only 1% of the respondents indicated that the situation is rather bad, and none of the people involved in the study assessed it very badly, while 27% of the respondents assessed their financial situation as rather good.

Among the groups of the needs which are the subject of analysis in this study there were both the basic needs as well as those of the higher order. They included: food, clothing and footwear accessories, apartment appliances, electronics, computers etc., housing conditions, meeting the needs of leisure, hobby, tourism and recreation, meeting the needs in the use of cultural goods and services (cinema, theatre, books, newspapers etc.), health care

(treatment, medication), meeting the needs in education, and in the use of cleaning and hygiene.



\*- meeting the needs assessed on a scale of 1 to 5, where 1 is not meeting the needs to a sufficient degree, and 5 meeting the needs of a very high standard.

**Source: *autor's calculations based on empirical research***

**Fig. 1. The average level of the satisfaction of the needs of selected groups in the opinion of the respondents in the communes of natural value and control communes\***

Meeting the needs in the use of cultural goods and services (cinema, theatre, books, newspapers etc.) and leisure activities (hobbies leisure, tourism and recreation) were rated the lowest. The average for these variables was at the level - respectively - 2.58 (standard deviation 0.98) and 2.72 (standard deviation 1.0). Also in the case of meeting needs in the areas of clothing and footwear average rating in the opinion of respondents was below 3 points – Figure. 1.

Despite the fact that in the other surveyed groups the average rating in the opinion of the respondents was above three points, it should be noted that the degree of satisfaction of needs was low. The percentage of respondents rating the degree of meeting the needs at a

very high level ranged from 0.6% of the respondents (cultural goods and services) to 4.9% of the respondents (health) in each group. A much greater group of respondents were of the opinion that their household needs were not being met to a sufficient degree. Nearly 5% of the respondents expressed the opinion that the needs related to food and clothing and footwear accessories do not meet their expectations.

Analyzing the level of satisfaction of the needs of households from the area of the control communes, it can be seen that, in the case of all groups, needs were met to a greater degree. Heads of households in this group assessed the level of meeting the needs both in terms of housing (mean 3.38, standard deviation 0.97) and the needs in the use of cultural goods and services (mean 2.86, standard deviation 0.80).

It should be pointed out that both in the case of households within valuable natural areas and the control group, respondents assessed the degree of satisfaction of needs where the right infrastructure was necessary to achieve them as the lowest. Both the use of cultural goods and services as well as a varied range of leisure activities, recreation or tourism require infrastructure elements in the immediate vicinity, such as a cinema, a theatre, a swimming pool and others. Low level of satisfaction with meeting these needs points to deficiencies in this area, resulting, *inter alia*, from the activities of local governments.

In search of factors that may have a significant impact on the level of consumption the level of income and type of household according to the main source of income should be mentioned. The ANOVA analysis of variance allows the conclusion that there is a significant statistical relationship between the level of needs within health protection and the type of household by the main source of income ( $p = 0.040$ ;  $F = 2.853$ ).

In other cases, the degree of satisfaction of the needs of household members is not dependent on the type of household. In the case of meeting the needs of health care: access to medical services, the possibility of purchasing drugs, there were significant differences between self-employed and other households (pensioners and people living on unearned sources). It can be assumed that this is related to the fact that in the case of households of retirees and pensioners, needs related to health care are much higher. The need to use health services is more common. The level of income is also much lower than in the households of self-employed people. This may translate to the possibility of the use of private service.

Table 1

**Relationship between the level of net income per person at a household and the degree of satisfaction of consumer needs**

<b>Specification</b>	<b>value of Kendall's tau-c</b>	<b>level of significance</b>
household appliances, electronics, computers etc.	0.342	0.000
meeting the needs in the use of cultural goods and services (cinema, theatre, books, newspapers etc.)	0.315	0.000
health care (treatment, medication)	0.310	0.000
meeting the needs of free time, leisure, hobby, tourism and recreation	0.310	0.000
meeting the needs of education	0.306	0.000
food	0.302	0.000
clothing and footwear accessories	0.287	0.000
housing conditions	0.277	0.000
meeting the needs in the use of cleaning agents and hygiene products	0.277	0.000

**Source:** *author's calculations based on empirical research*

Another, equally important factor is the level of income in the household. In all of the analyzed cases there were statistically significant relationships between the level of net income per a person in a household and the degree of satisfaction of consumer needs (Table 2). The only difference is the strength of association between the variables.

Using the J. Guilford scale, one can say that between the level of net income per person in a household and the level of satisfaction of needs associated with clothing and footwear, housing, and the use of cleaning and hygiene products the strength of association is weak ( $0 < \text{value of Kendall's tau-c} < 0.3$ ). However, in the case of other groups of consumer needs and the level of net income per person in households, the strength of association is average. It can be assumed that there are other non-economic factors affecting the degree of satisfaction of consumer needs.

Indeed, households in the pursuit of the highest level of satisfaction of needs can take adaptation action associated with the search for substitute products at a lower price, saving and the use of self-supply and self-service. These kinds of forms of the pursuit of maximum consumption were implemented in the surveyed households. However, the degree of the use of these methods varied. It can be assumed that in the households implementing consumption by the provision of goods and services on their own, the degree of satisfaction of the needs is higher. The conducted analysis of the data indicated that, in the case of households carrying out the needs connected with fresh food in the context of self-supply, there was a statistically significant relationship between the degree of supply of fresh food as part of self-supply and the degree of meeting the food needs of the household ( $p = 0.021$ ; Kendall's tau-c = -0.134).

The resulting analysis material shows that, in the case of households that do not use self-supply in the supply of fresh food, there has been a higher percentage of households that meet the nutritional needs to a higher degree. One can speculate what factors may affect the schedule - the time and effort in providing food products may be inadequate to the satisfaction of consumption, and the financial outlays incurred for the self-production may be too high

compared to the cost associated with the purchase of goods on market. These considerations are a kind of the beginning of the subsequent analysis and an indication of the need to implement further research.

## Conclusions

1. Analysis of the level of meeting the needs in the opinion of the heads of households showed that, within the research areas, heads of the households from the control communes with low levels of natural values assessed their level of satisfaction as higher.
2. The greatest differences in the assessment of the level of satisfaction of needs were in relation to the needs in the use of cultural goods and services. Average assessment of the satisfaction of the needs of households from valuable natural areas was higher than in the control communes. Problems related to meeting cultural needs are related to the availability of facilities providing opportunities for their implementation. This is the result of inadequate socio - cultural infrastructure, number of projects of this kind within the research area.
3. Given that natural valuable areas are areas for which tourism and recreation activities are desirable, due to the use of environmental values, it seems justified to draw attention to the need to expand the infrastructure of tourism and recreation. It would affect not only the level of meeting the needs of the residents but also raise the level of competitiveness of the area for tourists.
4. Level of income is the factor that has the greatest impact on the degree of satisfaction of consumer needs. In the case of all groups of respondents, there was a statistical dependence between the level of satisfaction of and the level of monthly income per a person in households. However, the strength of association between the needs of different groups and income levels was poor or average. Which suggests that there are other factors affecting the level of satisfaction of needs.
5. In the light of the research, it was proven that the type of household by source of income is a factor affecting the level of satisfaction of needs of only one case (health care).

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