

**The summary of doctoral thesis: *The social awareness of the utilization of geothermal waters in Voivodeship Lodz and State Styria***

The following doctoral thesis refers the widely understood relations between the human being and the nature. Its subject is focused round the problem of awareness of the values and the using of the geothermal waters in the context of sustainability of investigated localities and regions. The area of investigation consists of three chosen localities in Łódź district: Uniejów, Poddębice and Skierniewice and three localities in Styria land: Bad Radkersburg, Bad Waltersdorf and Bad Blumau.

The concept of the thesis relates on basis of content and methodologically – being the part of socio-economical geography – geography of perception, fulfilled in humanistic current.

**The main objectives of the thesis** make up:

1. The investigation and presentation of the condition of social awareness of the using of geothermal waters in selected localities of Łódź district and Styria land;
2. The comparison and appraisal of the condition of social awareness of the using of geothermal waters in investigated localities, with the special consideration of decision- making people;
3. The determination of vectors creating the condition of social awareness of the using of geothermal waters;
4. The investigation of the influence of the social awareness of the using of geothermal waters to the directions and the pace of socio- economic changes of investigated geothermal localities in the context of sustainability;
5. The identification and presentation of good practice attended on creating the social awareness of the using of geothermal waters and the proposition of educational and promotional activities in the term of development of geothermic

In the thesis there were the following **research assumptions** presented:

1. The condition of social awareness of the using of geothermal waters and the observance of the advantages coming from geothermic is different in Łódź district and Styria land. It depends on the length of the time of using of geothermal waters and the level of the economic development of the region.
2. The key factor influencing on the effective economical using of geothermal waters is the proper awareness of the decision- making group. On the creation of awareness of the using of geothermal waters in the decisive group and the achievement of the investment have the influence the positive examples of other localities: native and foreign, educational and promotional activities, the exchange of experiences, cooperation between individual localities according to the rule of healthy competition, cooperation with the research institutions and financial abilities of the exact territorial individual.

In realization of established objectives and solution of set research problems there were the following **research methods** used: questionnaire interview, the analyses of source materials (mainly informational – promotional, direct and participant observation, the SWOT analysis. Questionnaire interviews were conducted among three social groups – decision- making people in all the localities, and also in Uniejów among the representatives of local society and visitors.

In presented thesis there was an assumption accepted, that the main elements of the awareness of using geothermal waters among investigated social groups like: knowledge, opinions (beliefs) and activities of investigated people.

In the result of applied research procedure it was alleged that decisive people from researched geothermal localities, as well as from Łódź district and Styria land, present high level of social awareness of using of geothermal waters. The evidence of that is the state of their knowledge about the attributes, possibilities of using and healing qualities of this source. In reference to the opinion of using of thermal water, decision- making people in localities as well as in Łódź district and in Styria land, have seen from the beginning and still see in geothermic the proper direction and

advantages for sustainability of the locality and the region. All the people were characterized by positive attitude to the transitions of nature, society and economy which occur in their localities because of the using of geothermal waters. That kind of attitude is the reflection of a good state of the awareness of using of geothermal waters among investigated group of decision- making people. Comparing the aspect of activity of decision- making people, it has to be stated the diversity of the range of activity of decision- making people in Łódź district and Styria land. Decision- making people geothermal localities in Łódź district have a lot less achievements in the matter of all- round using of geothermal potential, geothermal commitment, commitment in communication with society, cooperation between communities and in the area of promotion and social education.

The results of empirical studies of social awareness of the using of geothermal waters in Uniejów among a group of inhabitants and visitors signalize a moderately good level of their knowledge about values and using of geothermal sources. It was alleged many lacks in their knowledge about: physicochemical attributes of geothermal waters in Uniejów. Investigated people a little better, but not adequately high, oriented in health attributes and using in treatment of geothermal waters and about current and future ways of using of this source. The representatives of the local society and groups of visitors showed a high level of awareness of the role, which the using of geothermal waters plays in the socio- economic development of Uniejów. They appreciate the diversity of advantages which geothermal activity and the status of health resort bring, but they are also aware of weak sides and dangers coming from the tourism like: the raise of prices, worse comfort and lack of safety. The condition of awareness of using geothermal waters among the group of inhabitants and visitors rated according to the criteria of undertaken activities- individual using of geothermal waters is diversified and higher then among visitors.

The condition of social awareness of the using of geothermal waters and observance of the advantages coming from geothermic, in terms of group of local inhabitants and visitors depends on the length of time of using geothermal waters in individual localities.

The awareness and observance of the advantages coming from geothermic, in terms of group of local inhabitants and visitors depends on the level of economic development and the level of finance well- being of the society. As the results of the research show among local society of Uniejów community, practically the highest meaning is dedicated to economic advantages but in Austrian society the priority are the advantages connected with the condition of the natural environment, the quality of life of the inhabitants and the necessity of preserving the correct state of nature with thought of next generations.

The examples of thermal localities in Łódź district and Styria land presented in the thesis indicate to that thank to rational and all- round using of geothermal waters and thank to the correct educational and promotional activities connected with geothermic success can be achieved in the socio- economic development, contributing towards the improvement of natural environment according to the rules of sustainability.