Evaluating landscape is one of the processes that lead to the recognition of the directions and dynamics of transformations caused both by human activity and forces of nature. Landscape evaluation is to a large extent associated with a sight-aesthetic attractiveness which influences the general impression that depends mostly on clarity, sharpness, distinctiveness, splendor and individuality of particular components, and their mutual connections and combinations. Defining and analyzing the results of human activity, which depicts a sight-aesthetic value of a given space, are essential aspects. Landscape view features are one of the most important elements during tourist exploration. To a large extent, they determine its attractiveness and choice of the area by tourists. The development of scuba diving as a form of tourist exploration is showing ever-increasing dynamics. Diving to watch e.g. coral reefs is becoming more common. Diving in the lakes has also become very popular and its use takes massive forms. The author, who was inspired by own study concerning landscape, has hypothesized, firstly, that it is possible to determine a sight-aesthetic value of lakes underwater landscapes using the direct observation (scuba diving) and modified point valuation methods used in assessing landscapes. Secondly, it is possible to create a point valuation method for lake landscape assessment that ensures objectivity represented by a high level of experts’ consistency. The main objective of the research is to gain new and more complex knowledge on the assessment of sight-aesthetic value of underwater landscapes in inland water basins. It is the filling of the research gap in socio-economic geography and expanding knowledge in the aspects of tourists exploration of water facilities.

Landscape sight-aesthetic assessment is one of the most complex researches in terms of methodology because of its multidimensionality which has the spatial, psychological and sociological dimensions conditioned by the character of people staying in the landscape and observing it. Therefore, the comprehensive approach to the topic has been planned. At first, a questionnaire for assessing the values that influence a sight-aesthetic quality of lakes underwater landscape will be prepared. It will be surveyed on scuba divers from scuba diving centers and clubs in Poland. The collected data will be used to create a point valuation method for assessing lakes underwater landscape In order to assure the correctness of the conducted research, the cohesion (the correctness of filling the survey) of each questionnaire and the level of consistency of all respondents will be determined with the use of statistical methods worked out by Kendall and broadly used in socio-economic geography. The next step will be applying a newly-created method for assessing underwater landscapes with the use of direct observations in the lake with the participation of licensed scuba divers. The points of assessing the sight-aesthetic value will be determined by applying a regular primary field grid (the squares, size from 100 m x 100 m to 500 m x 500 m depending on the size of the lake) on the research objects. The assessment will be made in the center of gravity of each field. A limited amount of data for the spatial distribution analysis of the researched phenomenon will be used. The measurements results collected during field research will be used in creating a database in a form of a point value scale. Every assessment point will be characterized by a value received on the basis of the point valuation. To create maps of a sight-aesthetic value assessment, geostatistical and deterministic methods available in ArcGIS software will be used. Testing various methods of interpolation will help in determining the most precise method of mapping the phenomenon with the use of validation tools available in the software (cross-validation, jackknifing).

The reason for developing the topic is connected with the lack of this type of research on inland water basins. It will be the first research concerning the topic in Poland. In the world, the research, in a limited extent, has been conducted on oceans and seas. Such research has not been conducted on inland waters mainly due to the difficulties connected with the organization (the difficulties in conducting reliable questionnaire survey among scuba divers, a number of licensed scuba divers to conduct the research in lakes with the use of point valuation method, long time and high costs). The research will be conducted on lakes located in the Wigry National Park, which additionally raises the cognitive values of the project. It is a protected area, but also subject to tourist exploration. There are lakes of various levels of exposure to human pressure. Some lakes are open for tourists (in a limited range) and others are located in the strictly protected areas and with limited access. Moreover, the lakes in the Wigry National Park are marked with various surfaces and depths. So the research materials will be diversified and it will contribute to a full recognition of the processes that occur underwater and influence a sight-aesthetic value. Such situation provides a really precise verification of preference described by respondents (scuba divers) in questionnaire surveys. Consequently, the gained results will contribute to gaining, broadening and supplementing contemporary knowledge about a landscape sight-aesthetic value and filling the gaps in relation to the knowledge about lake underwater landscapes.

The interdisciplinary nature of the research should be emphasized as the research will be based on social sciences, socio-economic geography, landscape architecture and cartography. In addition, they relate to aspects of tourism exploration.