

## DESCRIPTION FOR THE GENERAL PUBLIC

In formal definitions, towns and villages have usually been distinguished based on a dichotomy, that is by placing urban (and thus non-agricultural) and rural models of life in opposition to each other. Though this idea has already lost some of its value in more recent times, in the everyday sense, and in the minds of those managing metropolises, it is still common currency. In Polish cities and their functional areas, urban and peri-urban agriculture is considered to be an archaic relic of rural areas. Similarly, in Poland, the scientific research concerning urban agriculture has been neglected for decades, both by representatives of the agricultural sciences and urban planners. The former concentrated mainly on traditional rural agriculture, while the latter saw agriculture rather as providing reserves of land. In the Polish source literature, the subject of the urban natural environment is now being raised more and more often and is being treated with the same significance as open areas of land in the field of urban sustainable development, while in urban agriculture, this matter is only mentioned quite timidly. In highly developed countries, the subject of urban agriculture is going through a period of revival and it is highlighted that agricultural activity plays a significant role in the sustainable development of metropolitan areas. It makes it possible to preserve essential natural and cultural values, improves the food security of metropolises and allows numerous social goals to be accomplished. In Poland, around 60% of the surface area in the metropolitan areas is land for agricultural use, and there are around two farms for every 100 inhabitants, which gives rise to the question whether the sustainable development of such areas is possible without preserving their agricultural use and preserving economically vital farms. According to the authors of the project, the answer is negative because the sustainable development of metropolitan areas means ensuring the vitality of the large urban system as a whole, including economically vital farms and the maintenance of agricultural production.

The main aim of the project will be to assess the role of urban and peri-urban agriculture (UPA) in contributing to the sustainable development of metropolitan areas. In particular, there will be an assessment of the scale, causes and effects of changes in agriculture and the use of agricultural land in Polish metropolitan areas. The decisive factors in determining the course of processes of structural change in urban (and peri-urban) agriculture will be identified, and new functions and relevant models of UPA will be presented.

The scope of spatial analyses has been limited to five selected metropolitan areas, representing metropolises with regard to their size and location in various parts of the country (Warsaw, Krakow, Wroclaw, Tricity, Lublin). The research project concerns social, economic, environmental and planning-related aspects of the development of urban agriculture in metropolitan areas. Representatives from the fields of economics and agriculture, as well as spatial planners, will therefore be involved in its realization.

The first stage of the project will be devoted to an introduction to and more in-depth look at the issues connected with the development of urban agriculture. It is planned (on the basis of examples taken from Western Europe) that there will be a discussion of urban food strategies and an assessment of both the appropriateness of the reconstitution and development of agriculture in metropolises. The theoretical considerations taken into account will include natural and socio-economic factors, as well as factors relating to the institutional environment in Poland. The next stage of the research will provide a comprehensive description of urban agriculture in metropolitan areas. The analyses will be conducted from a dynamic and spatial perspective, taking into consideration a wide array of locations, as well as different natural and socio-economic features. Microeconomic research to be conducted into urban commercial farms (FADN data) will be a significant element of the project. The aim of these studies is to present and assess the processes of adaptation of farms to urban conditions, as well as to determine the possibilities for and conditions of their development. The research will be supplemented by analyses carried out using the case study and model method. This case study will result in the development of theoretical farm models which will help to achieve the goals of the concept of the sustainable development of metropolitan areas. It is planned to obtain original resources and seek the opinion of local experts who will assess scale, causes and results of changes in urban agriculture. Moreover, residents of the metropolitan areas, who will determine "contribution" of agriculture to the sustainable development of metropolises and the sense of its reconstitution and development in Poland, will be included in this research. There will be analyses of planning documents, multi-temporal digital orthophoto maps, satellite images and LIDAR data, in order to capture the influence of processes of urbanization on changes in the extent of built-up areas and investigate the compliance of an actual structure of land use with spatial development plans. Ecological and spatial models will also be determined for the selected municipalities and urban residential neighbourhoods.

As justification for the relevance of research into the importance of and changes to agriculture and agricultural areas in metropolitan areas, it should be emphasized that agriculture is subject to intense pressure of urbanization and rapid processes of de-agrarization, which have been observed in Poland and constitute a considerable threat to the sustainable and stable development of cities and metropolitan areas. These processes have not yet been comprehensively described or catalogued. This project is thus intended to fill the research gap in this area.