

Topic: Relation between spatial factors and urban shrinkage of medium-sized cities - comparative study of German and Polish cities.

The phenomenon of urban shrinkage has become a serious challenge for many countries worldwide, including Poland. The projected decline in the urban population of Poland by 18.5% by 2050 underscores the urgent need for action in this matter (according to the Central Statistical Office of Poland). Although urban shrinkage is not a new phenomenon, its impact on cities and infrastructure is becoming an increasingly significant challenge. Negative demographic changes can lead to financial instability, an increase in vacant properties, the disappearance of services and shops, deteriorating infrastructure, and ultimately a decline in the quality of life in the affected city. Resilience theories suggest that cities have the capacity for adaptation and transformation, but effective urban planning strategies are necessary to mitigate the negative effects of shrinkage.

The debate on urban shrinkage began in the second half of the 20th century when many cities in Europe and North America experienced long-term demographic and economic changes. This phenomenon was mainly observed in developed countries, particularly in Europe and North America, where three out of four major cities in Eastern Europe saw a decrease in their population. However, in recent times, Asian cities as well as cities in developing countries have also experienced this phenomenon.

Understanding urban shrinkage, its causal relationships, and strategies for mitigating its effects remain challenging due to its multidisciplinary and complex nature. Research on urban shrinkage has primarily focused on large cities, while smaller cities, which are often the most affected, have received less attention. Medium-sized cities in Poland are predicted to experience a significant decline in population, and how they manage shrinkage will have an impact on the overall stability of the settlement network. It is important to examine whether effective local-level urban planning strategies can enhance resilience to population decline.

Planning practices related to urban shrinkage have been explored by researchers, emphasising the need to transition from growth-oriented strategies to innovative policies related to degrowth and reuse. German experiences in managing medium-sized shrinking cities have shown promising results through comprehensive strategies such as the Stadtumbau Ost and IBA Sachsen-Anhalt programs. These programs are based on the concept of compact cities with dense and compact development, equipped with a network of public spaces and well-connected within the region.

The proposed study aims to analyse German cities in the context of the spatial aspects mentioned above and compare them with trends of shrinkage and growth from the past 15 years. Subsequently, these results will be compared with a similar study focusing on Polish cities to identify similarities and trends. The final findings will contribute to a better understanding of the relationship between urban form and resilience to demographic challenges, and in the future, enable more effective planning for shrinking smaller cities in Poland.