

Regional Differences in Turkey in the Framework of Subnational Human Development Indeks

Neşe Aral, Nurten Dericci Temel

Bursa Uludag University, Turkey

Abstract

This study examines the human development disparities among Türkiye's 12 regions between 1990 and 2022, utilizing the Subnational Human Development Index (SHDI) database and employing Moran's I and Getis Gi* statistics. The SHDI is a prominent indicator that aligns with the UN's Sustainable Development Goal 10, "reducing inequality within and among countries," and provides essential data for monitoring progress within the broader 2030 Agenda. The analysis reveals that the SHDI exhibits spatial autocorrelation across the country. The existence of a spatial structure was confirmed, with Moran's I values recorded in the range of 0.258 to 0.557 over the years. These Moran's I statistics showed a fluctuating trend throughout the period, reaching their highest value in 2004. Furthermore, the Getis Gi* statistic was calculated to identify clusters (hot and cold spots) of the SHDI. This analysis successfully identified regions of hot and cold spots, revealing persistent clusters across the years. These spatial clusters reflect a persistent West–East divide shaped by historical economic, social, and structural factors, which remains the dominant axis of regional disparity in Turkey. The results of the analysis highlight both the inter-regional development differences and the spatial interactions between neighboring regions.

Keywords: Sustainable development, Spatial data analysis, Turkey.