

Developing spatial indicators for the territorial monitoring of South Korea

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The Korea Research Institute for Human Settlements (KRIHS) is a leading think-tank for national territorial policy development focusing on research in balanced national development, housing stability, infrastructure development, and geospatial information. The Geospatial Research Division of KRIHS, in collaboration with the National Geographic Information Institute and the Ministry of Land, Infrastructure, and Transport, has developed and produced a variety of spatial indicators required for the monitoring of temporal changes in the national territory of South Korea, as well as for the support and evaluation of spatial planning and related policies.

The spatial indicators for national territorial monitoring concern four themes, such as balanced national development, territorial competitiveness, environment-friendly management of territorial resources, and livability in national territory. Each theme includes six to ten indicators that can collectively provide information of the comprehensive development status of the Korean territory in the individual thematic area. Some indicators are measured in the administrative units, and others are designed to show detailed geographic variability by employing the spatial scale of 500m*500m grids (i.e., road-distance measures of spatial accessibility to living infrastructures).

This paper will present the rationale and overall composition of the spatial indicators for Korean territorial monitoring and outline the procedure of data collection and indicator measurement across multiple spatial scales. Some illustrative outputs will be provided to show how the indicators can contribute to strengthening evidence-based policy making in the contexts of national and regional spatial planning. The paper will then conclude with discussions of methodological limitations and future work.