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Information Environment Improvement Plan for Activation of Land Knowledge Ecosystem

Senior Research Fellow **Daejong Kim**, Assistant Research Fellow **Ryunghyeok Im**

Summary

1. Information technology has changed the processes and methods of producing, sharing and consuming data, information, and knowledge, but it is limited in its application to solving land problems
2. In order to diagnose land problems quickly and accurately and to develop policies, it is necessary to have a knowledge ecosystem that can efficiently and effectively create land knowledge
3. In this brief, the concept of 'land knowledge ecosystem' is established by applying the ecological theory established in ecology to data, information, and knowledge fields, and the land knowledge ecosystem is researched and analyzed with the case of Korea Research Institute for Human Settlements
4. As a result of the research, it was found that the use of various data and analysis tools in the process of producing land knowledge were insufficient, and not only tacit knowledge but also explicit knowledge were not systematically accumulated and utilized
5. It is confirmed that the interaction between researchers is centered around organizations such as the centers and the headquarters, and shows a pattern of strengthening interactions among specific people, and the consumers of land knowledge are expanding to various ministries and institutions

Future Tasks

- ① **(Establishment of an Open Land Knowledge Platform)** It is necessary to establish an online Open Land Knowledge Platform which provides data and analysis tools that can be used for diagnosing land problems immediately and where various participants can cooperate all together
 - Reduction of time and space constraints that are limiting interaction between data producers/consumers such as Statistics Korea and National Geographic Information Institute, research institutes that produce land knowledge, and consumers who are agencies of discovering and executing land policies
- ② **(Establishment of data-information-knowledge accumulation system based on time, space, and human)** In order to integrate and combine various types of data, it is necessary to store and manage* data which are produced based on standard identifiers integrating three elements of time, space, and human
 - * Premise of privacy and social consensus
 - Institutionalize all data to include standardized time (Time-stamp), space (Geo-tags), and humans (Object)
- ③ **(Preparation of a Collaboration System for Convergence)** In order to create convergence synergy, incentives and measures need to be prepared so that experts in different fields can meet and collaborate
 - Encourage collaboration with experts in new fields who do not have collaboration experience, not experts in the same or similar fields