Analysis of rice paddy reduction through remote sensing and policy implications

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Abstract: This study analyzed the change of land covers by using remote sensing imagery to investigate how rice paddy area is changing, and what kind of land use types are changing to rice paddies and vice versa. For a long time, rice paddies have been ecologically, culturally and economically one of the major functional elements of the environment and society not only in Korea but also in all countries that use rice as the major meal. However, as urbanization and development have accelerated in recent years in Korea, agricultural areas such as rice paddies are rapidly disappearing, while developed settlement areas have been increasing. Therefore, there is a growing need to raise awareness of land cover changes using maps. This study was conducted to analyze land cover types in urban areas, agricultural areas including rice paddies and farm field, forest, grassland, wetland, barren areas, wetland and water for Jeolabukdo area. As a result, agricultural land accounted for 32% of the 1980s, but it was steadily declining to 31% in the 1990s and 29.5% in the 2000s. On the other hand, the urban area was only 1.5% in the 1980s, but rose sharply to 4.1% in the 1990s and 6.7% in the 2000s. In addition to agricultural land, forests, grasslands, and wetlands have also been steadily shrinking, making it clear that the region as a whole is becoming less natural, which means that people would have less benefit from nature than before. The results of this study would provide useful information for the decision making process of the land plan and environmental management.

The body of your abstract begins here. It should be an explicit summary of your presentation that states the problem, the methods used, and the major results and conclusions. It should be single-spaced in **12-point type**. Be sure to adhere to the word limitation (**<500 words**).

Keywords: Remote sensing, Rice paddy, Land cover, Land over change