

# The Vulnerability Assessment for Local Adaptation to Climate Change in Korea

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Climate change brought about an increase in temperature, an increase in precipitation and a rise in sea level. IPCC advised the importance of adaptation measures to minimize negative effects by climate change. The Republic of Korea established the national adaptation measures to respond climate change. Then the government demanded that local governments establish detailed adaptation plans. However, local governments have limitations, such as a lack of budget and a lack of human resources.

Therefore, the governments should supply local governments with human resources, budget and tools. This study was started to provide results and tools of vulnerability assessment for local governments. The study has 7 sectors; health, forests, water management, ecosystems, agriculture, marine, disaster. Researchers selected surrogate variables and established weights. CCGIS(Climate Change adaptation toolkit based on GIS) was used to assess the vulnerability. The unit of analysis is 232 local governments. Results of vulnerability assessment showed relative vulnerability. And then a mapping task was performed. Through this study, local governments can get information of relative vulnerability and priority of adaptation plans.

This study had a limited period of time, so that there are limitations. However, it has great significance. Because it is the first attempt to assess the entire Republic of Korea and the assessment included various sector and items. Also, we had several workshops with local government officials and experts and frequent internal meetings with researchers. Through the process of the study, we achieved know-how to progress studies for local governments.