URBAN AND RURAL LAND USE



rban and rural land can generally be divided into three types of spaces: urban areas, rural areas, national conservation areas and marine resource areas. The measures difference taken to address climate change according to spatial categories. Each type of space has specific adaptation strategies for climate change based on distinctive characteristics. However, administrative districts often encompass multiple types of spaces, therefore, a comprehensive planning approach is required. Integrating relevant issues of climate change into spatial planning within the National Spatial Plan that provides a platform for coordinating adaptation strategies across different types of spaces within administrative areas. The report recommended that future land use research focus on developing spatially methodologies for multi-risks assessment and combine land use change technology with vulnerability indicators. This will assist integration among future spatial activity developments, land use, and adaptation strategies. Other side, facilitating the development of integrated adaptation strategies in advance. In further, by assessing potential adaptive capacity under future scenarios which can serve as a method for evaluating the effectiveness of adaptation implementation, including exploring the effectiveness of transformational adaptation strategies (Figure).

Critical Infrastructure

Road paving upheaval, slope disasters, road flooding, unstable water supply in the power sector, unsuitable site selection for renewable energy development, and need to consider affected on socio-economic factors and assess the interaction with social vulnerable groups



Coastal Conservation Zones To address various coastal impacts, it is necessary to strengthen the integration of socio-economic vulnerability in overall planning for land use and spatial development

Resources and Conservation Space

Marine and Coastal Resourc Areas

Currently, ecological resources in protected areas, reserved areas, and conservation zones are declining, and habitat are being damaged, with ongoing consideration for the long-term impacts of climate change

Figure Climate Change Impacts on Urban and Rural Spaces

Climate Change in Taiwan National Scientific Report 2024

Water Resources and Inundations In response to future flooding, water shortages, and impacts

on watershed systems, it is necessary to strengthen the exploration of how changes in dynamic cause-effects between urban land spatial distribution and flooding







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Vulnerable Social Groups Addressing issues such as permanent migration and temporary refuge should continue to prioritize the awareness of social vulnerability in the future

Slopeland

Strengthening assessment and consideration of the impacts and risks induced by landslide hazards under climate change

Environmental Snesitive Areas

Each environmental sensitive area should follow master laws and plans , and considering short-term protection and conservation tools to promote transformative adaptation strategies



Rural Farmaland and Biodiversity In response to flooding potential, temperature extremes, and drought, it is necessary to establish a risk map for agriculture and assess the potential impacts of climate change on the agricultural sector.