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Addressing Key Risk of Water Resources and Describing the Adaptation Pathways to Uncertain Future Climate Change

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ABSTRACT

In recent years, climate change is a pressing fact and a lot of people in Taiwan have suffered the consequence of it in their daily life. Water resources is the one directly under the threat of climate change. To against climate change causing deleterious impacts on regional water resources and increase drought risk, it is very important to find where the most vulnerable area is and adapt the whole water resources system from it. The 5th IPCC assessment report (AR5) defines key risks as potentially severe adverse consequences for humans and social-ecological systems resulting from the interaction of climate-related hazards with vulnerabilities of societies and systems exposed. Risks are considered “key” due to high hazard or high vulnerability of societies and systems exposed, or both. To have robust and resilient water resources system, this study will use a systematic method to identify the key issue of water resources to climate change, evaluate the current and future risk, identify the key risk of water resources, and purpose and assessment the adaptation options to describe the adaptation pathways for a sustainable water resources.