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# Integrated Decision Framework on UN SDGs and Climate Adaptation : SDG 6 in Taiwan

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Climate change can cause increasing extreme weather events such as flood and drought, which impact safety and stability of water supplies, compromising human lives and conditions for survival. To reduce such risk of climate change on water, it is important to ensure effective water resource management. Besides, the Paris Agreement emphasizes adaptation to climate change should take the impact on sustainable development goals (SDGs), especially poverty and other kind of inequality, into consideration. However, it still lacks a tool for integrating climate change and SDGs, evaluating trade-offs and synergies among different adaptation options, for decision-making.

Without understanding the synergies and trade-offs, it is impossible to carry out climate adaptation that takes SDGs into account. Thus, this study describes AdaptSDGs framework, which aims to accommodate SDGs in the climate adaptation decision-making, for water resources management on water use efficiency (SDG target 6.4) in Taipei City. As an integrated decision framework, the AdaptSDGs comprises a main structure of steps 1∼4 of the TaiCCAT climate adaptation 6-step and includes various tools: 1) a climate risk template for assessing the climate risk on water using efficiency, 2) a water supply system dynamic model for evaluating water use efficiency by linking the physical factors related to SDG target 6.4, and 3) a SDGs linkage model for addressing the linkages between SDG target 6.4 and its related SDG targets. The AdaptSDGs would practice climate adaptation and SDGs into the government's actions by systematic scientific analysis for cross-departmental and cross-level decision-making. I will carry out a case study of evaluating water use efficiency (SDG Target 6.4) in Taipei City and propose suggestions for the indicator planning and target processes for Taiwan's sustainable development target draft. The results of this study will promote sustainable water resources use and management and may help reduce potential risk and vulnerability of water supplies under climate change-related impacts and the process for SDGs.