Prototyping Integrated River Basin Management Based on the Data Integration and Analysis System (DIAS)

Toshio Koike\textsuperscript{1*}

\textsuperscript{1}UTokyo/EDITORIA

Increased water cycle variability impacts primarily through water, biological processes and human dimensions with implications for land use and societal development. It is critically important to recognize the fundamental linkages among water; land use, including deforestation; carbon cycle and ecosystem services; and food-, energy- and health- securities. By sharing coordinated, comprehensive and sustained water cycle and related Earth observations and information for sound decision making, we are now in developing effective interdisciplinary collaborations for working together based on coordinated and integrated efforts and subsequently to both mitigation and adaptation benefits at a river basin scale. Building resilience to the climate change and variability is essential for establishment toward the final goal, the sustainable development of Earth's societies and ecosystems.

Keywords: water cycle, river basin, resilience, Earth observation, data integration