Base Knowledge of Dam Resilience Policy Tool Development at DELTARES

Research objective: Dam sustainable development and climate resilience cannot be achieved only by setting regulation and guidelines, but also by raising awareness of the impacts that are generated in order to achieving goals of water and energy secureness. There is need for a simple, attractive and interactive tool that can help all stakeholders to grasp the favourable and adverse impacts as well as assist policymakers in decision making process for sustainable planning and management of dams and reservoirs. The main objective of the tool are:

- A validated knowledge-based playing tool with meaning and content from real-world concerns.
- A powerful tool for sharing, integrating and translating knowledge from and with experts, unraveling the important messages, connecting fields of knowledge.
- A simple tool to demonstrate the complex effect of interventions and corrective (structural, non-structural and recurrent) measures and policies.
- An effective tool to assist in decision-making processes picturing their impacts.
- A comprehensive tool applicable for all phases from planning and development to operation, and not only for planned but also for existing dam and reservoir projects.
- An interactive tool to apply and disseminate the Hydropower Sustainability Assessment Protocol (set up by International Hydropower association)

Methodology: The study will be basically to collect the base knowledge of dam development and operation through literature review and expert interview. This may leads to setup a framework for the tool and define the indicators which will be used for the tool. The port of the future serious gaming tool will be used as a guidelines. The expected final deliverable is the knowledge background of the tool and the stages including the steps to be taken to develop the software tool. This study shall be carried out at DELTARES.

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