

国際共同研究 中間報告（課題番号：29W-04）

課題名： Integrated study on sedimentation problems for sustainable reservoir management in Vietnam

（ベトナムにおける貯水池の持続的管理に向けた土砂問題の総合的研究）

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所内担当者名：Prof. Tetsuya Sumi

研究期間：平成 29 年 4 月 1 日 ～ 平成 31 年 3 月 31 日

研究場所：Viet Nam

共同研究参加者数：8 名（所外 4 名、所内 4 名）

- ・大学院生の参加状況：1 名（修士 0 名、博士 1 名）（内数）
- ・大学院生の参加形態 [現地調査への参加，論文執筆]

平成 29 年度 実施状況

Research objectives are as follows.

- 1.To investigate, analyze, evaluate the current situation and cause of sedimentation in the reservoirs of Vietnam
- 2.To develop an indicator for reservoir classification based on sedimentation rate and reservoir longevity
3. To propose technical solutions for removing accumulated sediment in reservoirs (a case study in small/mid-reservoir in Central Viet Nam); To develop an annual updated accumulated sediment database used for future reservoir sedimentation management.

In order to clarify current situation in Vietnam, we have started overview the available data and literature/previous researches as follows.

- To carry out comprehensive field survey in the reservoirs which are representatives in the main regions of Vietnam
- To collect and analyze aerial and satellite images to investigate the change in morphology (accretion/erosion) of the reservoir sites and whole basin
- To analyze and evaluate the cause of sedimentation problem

Field visit and Kyoto - Thuyloi University Meeting from 31 March – 4 April, 2018

Date	Activities
31-Mar.(Sat.)	- Start from Pleiku city. Visit reservoirs in Highland region upstream of Se San River Morning: Yaly reservoir Afternoon: Pleikrong and Dak-uy reservoirs
1-Apr.(Sun.)	- Start from Kontum city. Over pass basin boarder from Se San River to Thu Bon River down to Hoi An city Morning: Hydrological Monitoring Station (Kontum city) Afternoon: Song Tranh 2 reservoir and upstream reservoir sedimentation
2-Apr.(Mon.)	- Start from Hoi An city. Visit downstream of Vu Gia-Thu Bon River Morning: River bank erosion sites River diversion structure between two rivers Afternoon: River mouth and coastal erosion sites
3-Apr.(Tue.)	- Drive from Hoi An to Da Nang and then fly from Da Nang to Hanoi-

Date	Activities
4-Apr.(Wed.)	Meeting at TLU Campus - Introduction by TLU groups - Introduction by KU groups - Discussions: focus on several issues • Discuss how to proceed the project • Discuss how to collect data for dams and reservoirs • Discuss about future collaboration for other projects - MOU signing

平成 30 年度 実施計画

Based on the field visit and wrap up discussion, we will continue our collaboration research as follows.

- Collecting available data: (Flow discharge, Sediment concentration, River cross-section)
- Literature review such as reservoir original design
- Preparation of basin scale modelling
- Monitoring of sediment concentration
- Workshop in March 2019 with invited stakeholders