

The sanitation value chain: its concept and new research collaboration project

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Abstract. Sanitation is essential for promoting health, preventing environment pollution, conserving ecosystem, and recovering and recycling resources. Therefore, it can be said that sanitation is closely related to such current global issues as poverty, urban slum, conservation of ecosystem, and resources management. Namely, the question, “How can we handle the waste from 10 billion people in future?” is a global environmental problem to be solved. In developing world, population is growing rapidly especially in urban slums and they have still high under 5 mortality and poverty issues. It also reported that 2.4 billion people are still using unimproved sanitation facilities, including 946 million people who are still practicing open defecation in 2015 (UN, 2015). On the other hand, depopulation and aging are progressing especially in rural area of developed world. Based on the above mentioned background, new research project on sanitation value chain has started. This is a collaboration project with LIPI, RIHN (Research Institute of Humanity and Nature, Kyoto) and HU (Hokkaido University). The concept of the sanitation value chain and the brief summary of the project are discussed in the keynote presentation. The concept of sanitation value chain proposed in the project : The project is proposing new concept, Sanitation Value Chain, which has the following basic policies: 1) Put values of people/ and community in the centre of discussion, and prepare sanitation system to drive this value chain; 2) Design the sanitation system by focusing on incentive for individual users and community; 3) Recognize a sanitation system as an integrated system with social and technical systems; 4) Design the sanitation system by making a good matching between social characteristics and prerequisites of the technologies. The goals of the research are 1) To propose the Sanitation Value Chain as a common solution for both developing and developed countries, 2) To show the validity of the Sanitation Value Chain by pilot study on co-creation of the value chain at developing countries and Japan, 3) To contribute to making interdisciplinary academic foundation on sanitation.

