A Soft System Methodology Approach to Stakeholder Engagement in Water Sensitive Urban Design

Authors: Lina Lukusa, Ulrike Rivett

Abstract : Poor water management can increase the extreme pressure already faced by water scarcity. Unless water management is addressed holistically, water quality and quantity will continue to degrade. A holistic approach to water management named Water Sensitive Urban Design (WSUD) has thus been created to facilitate the effective management of water. Traditionally, water management has employed a linear design approach, while WSUD requires a systematic, cyclical approach. In simple terms, WSUD assumes that everything is connected. Hence, it is critical for different stakeholders involved in WSUD to engage and reach a consensus on a solution. However, many stakeholders in WSUD have conflicting interests. Using the soft system methodology (SSM), developed by Peter Checkland, as a problem-solving method, decision-makers can understand this problematic situation from different world views. The SSM addresses ill and complex challenging situations involving human activities in a complex structured scenario. This paper demonstrates how SSM can be applied to understand the complexity of stakeholder engagement in WSUD. The paper concludes that SSM is an adequate solution to understand a complex problem better and then propose efficient solutions.

Keywords: co-design, ICT platform, soft systems methodology, water sensitive urban design

Conference Title: ICSTSA 2022: International Conference on Systems Thinking and Systems Approach

Conference Location: Tokyo, Japan Conference Dates: September 08-09, 2022