

Participatory assessment of water developments in an atoll town

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Abstract

Water development projects often fail, which represents a poor outcome given the limited progress against the Millennium Development Goals in providing people with adequate water and sanitation services. This may not be surprising given that water management has been identified as being in the complex system domain. According to the Cynefin framework, many traditional approaches are not suitable; but it suggests an approach based on the methods of probe, sense and respond. In line with this general framework, a participatory assessment methodology has been used to explore experiences in the atoll town of Tarawa in the Republic of Kiribati. After framing the case study, information was collected providing multiple perspectives and these include narrative sources. When reviewing previous experiences, project implementations are seen as probes or disturbances to the system from which patterns of behaviour can be sensed. For this purpose, the critical factors leading to success or failure are described using network representations. These are then used to inductively sense system patterns, and the conclusions thereupon reinforce key recommendations in a recent United Nations report. Additionally, the findings in this paper feed into a larger study where Agent-based simulation and Bayesian networks are used in a participatory setting for integrated assessments.