

Abstract

SESSION 2:

Accelerating Actions for Sustainable Development and Climate Change

WORKSHOP 2.2:

Application of Knowledge Management in Scaling up Partnership Investments in a Blue Economy

Using Systems Thinking and 'Smart Technology' to Facilitate Social Learning with Communities

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The CCRES (Capturing Coral Reef & Related Ecosystem Services) project, funded by the Global Environment Facility, the World Bank and The University of Queensland, is focused on engaging with government and coastal communities in the design of local economies that improve the livelihoods of people and sustain the coastal ecosystems on which livelihoods and the well-being of the community depends. A key activity of CCRES is to understand how communities currently use and interact with coastal ecosystems and how these interactions, along with external factors, have led to current problems such as fish catch decline, mangrove loss, water pollution and food insecurity.

CCRES has drawn upon 'Systems Thinking' and 'Community-based system dynamics' to engage with community members and to elicit their knowledge about the socio-ecological systems within which they operate. To aid the process of knowledge elicitation and sharing, an iPad application (SESAMME) has been developed. SESAMME (Socio-Ecological Systems App for Mental Model Elicitation) is a tool for eliciting the mental models of local stakeholders framed around specific problems at specific geographical locations.

Using examples from work conducted in El Nido, the Philippines, and Selayar, Indonesia, I will present how a systems thinking approach and the use of smart technology (i.e. SESAMME) is successfully connecting with, and learning from, the communities that we are engaging with.



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About Russell Richards:

Dr Russell Richards is a post-doctoral researcher involved with research in the Capturing Coral Reef & Related Ecosystem Services (CCRES) project at the University of Queensland, Australia. Previously, he has worked on projects in Australia and overseas, focusing on coastal / fisheries management and climate change adaptation. His research interests encompass marine ecological modelling, systems modelling, participatory model building, climate change adaptation and marine restoration. He is keenly interested in how different modelling methodologies can be integrated to address research questions across a range of disciplines. Dr Richards has recently expanded his modelling repertoire to include computer apps as a means of improving community engagement. This includes developing the 'SESAMME' (Socio-Ecological Systems App for Mental Model Elicitation) app, which is currently being used within the CCRES project.