

# Community Based System Dynamics and social and ecological systems in India: Looking back at 12 Years of collaboration

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## ABSTRACT

In this paper we describe a 12-year effort between multiple institutions to weave together threads of community, system dynamics modeling, community impact, and concepts of ecological and social wellbeing. The paper starts with the early inspiration of this work in 2007 through the integration of participatory rural appraisal (PRA), and participatory approaches to system dynamics modeling and group model building with early exploration of these premises through community-based modeling in Boyapalle, Andhra Pradesh, India in 2008-2010. The paper describes how this early work informed the evolution of community based system dynamics from 2010-2016, and extensions of these ideas through research, education, and community practice in social and ecological system contexts. We close with a discussion of methodological and philosophical challenges as we look to the future of community based system dynamics as a community of practice around the globe, focusing on the challenges of scale-up of systems thinking and system dynamics capabilities for SES; multi-sector learning and understanding community at multiple levels; conceptualizing and measuring impact; and building new partnerships beyond social-ecological systems.