Community-based drinking water organizations have the responsibility in supplying water for domestic use to 29% of the Costa Rican population. Nowadays, more than 1,500 of these organizations face important challenges for achieving this critical mission, such as fulfilling national drinking-water quality standards, and improving their organization and administration to secure water supply and distribution under climate change. We conducted action-research in two communities with similar geographical and demographic conditions: Cuajiniquil and Colas de Gallo located in the drought prone Guanacaste region in Costa Rica. Both communities are contrasted regarding to their assets and organization. We addressed the following research question: Can a participatory process help communities assess the situation of their aqueduct and its management, project themselves in the future, and build more resilient strategies to face domestic water restrictions? Through 16 participatory sessions, we adapted the Wat-a-Game (WAG) toolkit to the problem of domestic water provision in these communities, creating the WAG-Tico role-playing game. This was complemented by two other activities: visits by regional actors sharing their experience, and exchange visits between both communities for cross-learning about community-based water management. The process resulted in a locally-led collaboration between both communities and the emergence of community commitments for improving drought resilience. WAG-Tico sensibilized participants to appreciate the value of community organization and the impacts of climate change on water supply, and develop aqueduct management rules. Exchange visits and regional actors interventions promoted opportunities for accessing to external resources (i.e. social, human and financial). Colas de Gallo created its first water committee for building a community aqueduct and their first drilled well. Cuajiniquil has committed in protecting its water springs, organized training of women for repairing leaks in household water pipes, and a community contest for reducing water consumption. In this paper we analyze the synergic roles of distinct learning spaces to promote the emergence of community-based agreements that improved rural drinking water management.

Authors

Pável Bautista Solís*
*Universidad Nacional de Costa Rica (UNA)
Tropical Agricultural Research and Higher Education Center

Pierre Bommel
CIRAD Montpellier

Xinia Campos
Ministerio de Ambiente y Energía (MINAE, Costa Rica)

Andrea Suarez
HIDROCEC-UNA Centro de Recursos Hídricos para Centroamérica y el Caribe
Gregoire Leclerc
CIRAD Montpellier

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