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# Facilitating Collective and Inclusive Decision Making on Integrated Water Resources Management in Burkina Faso

## HIGHLIGHTS

- ✓ *Companion modeling* spurred members of the local water committee in the Bougouriba River basin to meet, draft a management plan, and assume its role in integrated water resources management implementation.
- ✓ Potential to scale up use of companion modeling, which could help operationalize over 30 local water committees and further implementation of integrated water resources management policies in Burkina Faso.

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Outcome Stories

In Burkina Faso, more than two-thirds of the population relies on rain-fed agriculture for food and income. However, scarce and insufficient water or irregular rainfall frequently puts farmers at risk of losing their crops. Climate change is making already variable rainfall less reliable. Yet all kinds of water users—farmers, fishers, livestock herders, domestic users, city dwellers, emerging industries–and ecosystems depend on access to water of the right quality, in the right quantity, and at the right time.

Since the 1990s, Burkina Faso has promoted integrated water resources management policies, partly in response to a global development trend and partly to achieve more equitable water sharing. However, local authorities struggle to manage water resources in an integrated manner, and a significant gap between national policies and on-the-ground water governance remains. One of the main challenges is the lack of a shared understanding of the *integrated water resources management concept* among both policymakers and water users.

During the CGIAR Challenge Program on Water and Food's second phase of research in the Volta River basin (2010-2013), one research project worked directly with a local water committee in one of the seven sub-basins of the Bougouriba watershed in the southwestern part of the country. By facilitating exchanges between the

Photo: Liza Debevec

Meeting of executive committee members of the local water committee in Bougouriba

committee and all its stakeholders, the research team helped the committee to assume its role in integrated water resources management implementation. The International Water Management Institute (IWMI), the French Center on International Agricultural Research for Development (CIRAD), and the Permanent Secretariat for the IWRM Action Plan constituted the research team.

## Integrated Water Resources Management in Burkina Faso

Integrated water resources management has been defined as "a process that promotes the coordinated development and management of water, land and related resources, in order to maximize the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems."[1] It is a concept that highlights the interdependency of all water users within any watershed.

In Burkina Faso, local water committees (*Comités Locaux de l'Eau* or *CLEs*) are the institutional structures for integrated water resources management at the local level. While more than 30 local water committees have been established, they are facing implementation challenges: they lack funds, experience, and institutional support. In addition, local stakeholders, such as farmers, fishermen, livestock herders, domestic users, and city dwellers, have limited influence on the local water committees' decisions or water resources planning in general.

Because water is used by many different actors, for many different purposes, and in many different sectors, it is crucial to include all relevant stakeholders—water users, planners, development partners, and policy-makers—in water governance.

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## Introducing Companion Modeling

The research team introduced the local water committee in Bougouriba to *companion modeling*: an engagement and negotiation methodology that can facilitate dialogue on water management, mitigate water-related conflicts, and help stakeholders form a shared understanding of the constraints and opportunities provided by

[1] Global Water Partnership (2000)

the integrated water resources management concept.

The research team and its partners organized a series of multi-stakeholder meetings at the local, sub-basin, regional, and national level to discuss the local water committee's mandate and tasks. The meetings brought together all kinds of stakeholders: farmers, pastoralists, fishermen, miners, women, youth, civil society, policy makers from the provincial, regional, and national level, and members of the committee itself.[2]

Thanks to its participatory nature, companion modeling allowed the meeting participants to express their concerns and views on water management, to better understand the point of views of others, and to recognize their inter-dependency. For example, fishermen and independent gold miners—two groups that are in ongoing conflict over the use of water—were able to engage in dialogue and exchange views during the meetings.

As a result of the meetings, a consensus on the role of the local water committee emerged: The local water committee should promote good management of water resources, prevent and manage conflicts, protect the environment and water quality, and ensure availability of water. Meeting participants suggested that the committee might be able to do this through training and awareness raising activities, by setting up networks, and through establishing water infrastructure.

CPWF has previously used companion modeling (including to solve water conflicts in Bhutan and to improve river basin management in Lao PDR) and has found it to be instrumental in helping communities understand and resolve conflicts and collectively explore solutions for the sustainable use and management of their shared resources. In Burkina Faso, the research team also benefitted from the previous experiences of team members from CIRAD, which has introduced the companion modeling approach in more than forty sites across Europe, Africa, Asia, and Latin America in order to improve natural resources management.[3]

## A New Plan for the Local Water Committee in Bougouriba

In the Bougouriba watershed, there are seven local water committees: five exist in name only, one is semi-active, and one has taken its first few steps toward assuming its intended role in integrated water resources management.

Through the companion modeling process, committee members came to realize the important role that the local water committee in Bougouriba could play, namely to ensure that the needs of all water users in the sub-basin are being met. Following the multi-stakeholder meetings, members of the committee's executive body met on their own initiative, specifically to determine how to draft a road map and produce a management plan. Later, the committee requested the research team to help them draft a management plan and timeline for when the committee can be made operational. The water committee's initiatives were unprecedented and signify a big leap in the right direction for a previously dysfunctional committee.

**About CPWF Outcome Stories**

The CPWF Outcome Stories document changes in knowledge, attitudes and practices that have emerged through CPWF-funded research. Outcomes occur when research outputs foster engagement processes that result in changes in practice or changes in behavior. These stories capture outcomes at a specific point in time; outcomes may have evolved since the completion of these projects.

Companion modeling can create trust among stakeholders, facilitate dialogue, and help water users understand their interdependency.

[2] Daré et al (2013)
[3] Etienne (2011)

The companion modeling process also allowed the public agency tasked with implementing integrated water resources management in Burkina Faso (the Permanent Secretary for the IWRM Action Plan) and the Burkinabe Water Ministry to experience the benefits of participatory water planning, where local stakeholders have greater opportunity to express their opinions. This realization helped central authorities to realize the limitations of the current framework for local water committees.

The process of operationalizing the water committee in Bougouriba has thus begun, but the road ahead is still littered with challenges. Most significantly, local water committees in Burkina Faso lack institutional independence. Their planning, budgeting, and activities are dependent on the support from more central agencies, particularly the Mouhoun Water Agency, under which the local water committees operate, and the Permanent Secretary for the IWRM Action Plan.

## Companion Modeling as Methodology for Implementing Integrated Water Resources Management

Through their work with the local water committee in Bougouriba, IWMI and its partners demonstrated that companion modeling has the potential to operationalize local water committees and further the implementation of integrated water resources management policies in Burkina Faso.

Companion modeling can create trust among stakeholders, facilitate dialogue, and help water users understand their interdependency. Creating awareness helps water users and policymakers alike realize the need to truly manage water resources in an integrated manner in order to achieve equitable water sharing and meet the needs of all water users.

Presently, the Permanent Secretary for the IWRM Action Plan has preliminary plans to use companion modeling to improve the work of other water management agencies across the country.

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**About CPWF**

The CGIAR Challenge Program on Water and Food was launched in 2002, with the aim to increase the resilience of social and ecological systems through better water management for food production (crops, fisheries and livestock). We do this through an innovative research and development approach that brings together a broad range of scientists, development specialists, policy makers and communities, in six river basins, to address the challenges of food security, poverty and water scarcity.

The CPWF is part of the CGIAR Research Program on Water, Land and Ecosystems. WLE combines the resources of 11 CGIAR centers and numerous international, regional and national partners to provide an integrated approach to natural resource management research. The program goal is to reduce poverty and improve food security through the development of agriculture within nature. This program is led by the International Water Management Institute (IWMI).

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