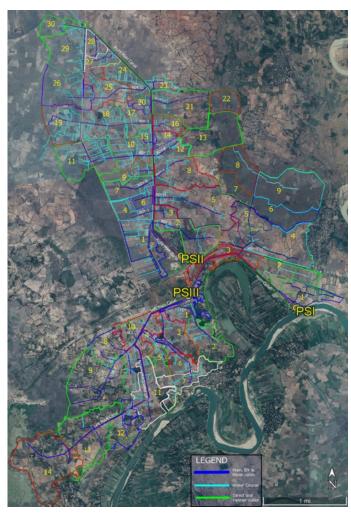


Empowering farmers through a better understanding of the power dynamics that shape the formation of water user associations

Diana Suhardiman and Sanjiv de Silva

Efficient, equitable and reliable irrigation for agriculture occupies an important place in Myanmar's national socioeconomic development plan and strategies. The Myanmar Agriculture Development Strategy and Investment Plan (2018-19 ~ 2022-23) recognizes agriculture as a pillar of growth, highlights its critical role in household food and nutrition security, and acknowledges smallholder farmers as the backbone of the country's agriculture. The Myanmar Sustainable Development Plan 2018-2030 recognizes water resources as the foundation for food production. Well-managed irrigation is especially important in Myanmar's Central Dry Zone (CDZ), home to about 10.12 million people (MIMU 2013), and the most water-stressed and food-insecure region. Since low and highly variable annual rainfall makes surface water scarcity a major constraint to rural livelihoods, it is critical for surface irrigation schemes to be operated effectively and equitably.

Driven by community-based development approaches and supported by international donors, water user associations (WUAs) have become a trademark of participatory development and to some extent, an institutional means to improve irrigation system



Google Earth map of the scheme.

management. As Hunt (1989: 79) said in jest: "If the farmers would only participate, the thinking goes, then the ditches would be constructed, the water would be allocated, and most important of all, the maintenance would be done." In reality, establishing WUAs and ensuring that they function well remain challenging, due to elite capture and institutional inertia.



Livelihoods and Food Security Trust Fund

























A project carried out by the International Water Management Institute (IWMI) and the Livelihoods and Food Security Trust Fund (LIFT) in Myanmar unpacks the power dynamics surrounding the formation and organizational development of WUAs, and shows that their functioning is very much determined by farmers and WUA leaders' ability to navigate the existing power structure and power relationships.

The project focuses on the formation of a multi-layered WUA to strengthen irrigation system management in the Pyawt Ywar Pump Irrigation Project (PYPIP) in Myinmu Township, Sagaing District, Sagaing Region, Myanmar. To better understand what strategies farmers and other key actors use to ensure reliable water supplies, how they view the potential role of WUAs in improving overall system performance, and how WUA formation could contribute to conflict resolution and more equitable access to water, the project worked with farmers, canal representatives, village administrators and Irrigation and Water Utilization Management Department (IWUMD) staff. A series



Developing criteria for electing farmer leaders (photo: Sanjiv de Silva/IWMI).

of workshops was organized to assist these local stakeholders in identifying the key causes of scheme failure in the past, to discuss the proposed WUA structure that will respond to identified weaknesses, and to facilitate the overall process of electing farmer leaders and establishing each organizational layer of the WUA. Through this process, the main stakeholders were asked to share the main challenges they face in ensuring reliable water supplies; reach agreement

institutional structure, mechanisms, and procedures; and work together to improve overall irrigation system management, while ensuring more equal water distribution between the different command areas of the three pumping stations and villages located therein. Throughout the process, the project ensured inclusive decision-making and open communication through continuous consultation with and between the different stakeholders at different scales. These included one-on-one discussions with key local actors, such as the village administrators and scheme management staff, and village-level discussions with farm households from different socioeconomic backgrounds, including the poorest and most marginalized.

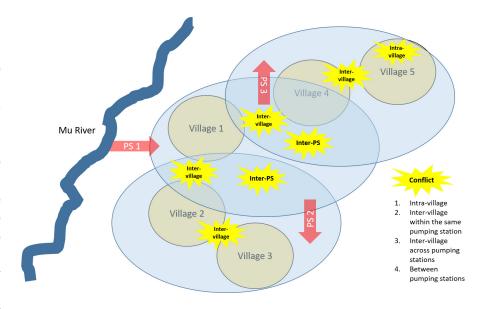
This inclusive process enabled the project to identify a number of fundamental weaknesses in the pre-project scheme management structure and come up with alternative institutional mechanisms to address these problems. One was the power asymmetry at different levels of the scheme, rooted in the location of villages in the structure of the



A farmer leader regulating an offtake point (photo: Madeline Dahm/IWMI).

scheme; inter-village politics between the five villages within the scheme; and the politics defined by these villages' close or distant relations with high-level officials from the previous military government. Moreover, while canal representatives (CRs) were supposed to provide reliable irrigation water supplies to farmers, in practice, a few CRs had used the role as an opportunity to accumulate personal wealth by favoring those who "paid" their services the most. This power asymmetry not only resulted in unequal water distribution between the different villages under the irrigated command area but also gave rise to conflict between pump stations, villages, and farmers.

As a first step to address the problem of power asymmetry in irrigation scheme management, the project introduced a new institutional setup that could enable farmer representation and coordination. This

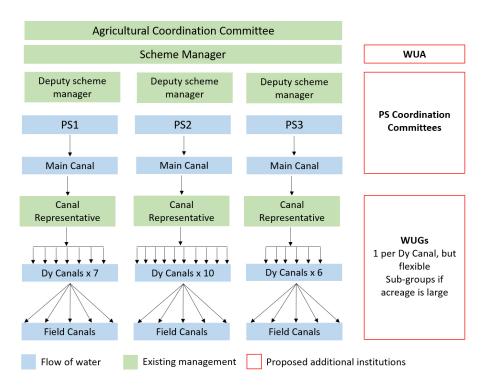


Power asymmetries and conflict at multiple scales.

new institutional setup consisted of (i) small-farmer subgroups (SGs), based on off-take points at the water course/ field canal level of the canal network; (ii) water user groups (WUGs) managing off-take points at the distributary canal level; (iii) a pumping station coordination committee (PSCC) for

each pumping station to coordinate inter-village water allocation; and (iv) the apex water user association at the scheme level, which coordinates allocation between water pumping stations. The election of representatives for each SG resulted in many more farmer representatives than before, who now operate within a discrete and more manageable geographical area. The functions of each institutional layer were specified and communicated, while the farmers themselves developed the roles and responsibilities for themselves, the SG representatives, and CRs (who now support groups of SGs and manage the WUG) as well as penalties for non-compliance. The scheme manager and staff were also invited to participate, especially at the PSCC and WUA levels.

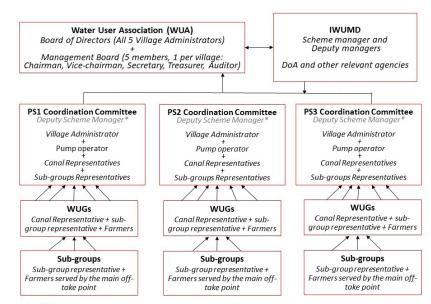
Existing scheme management and proposed institutional structures.



Note: Dy – Distributary; PS – Pumping Station.

project concluded formation of WUAs will lead to effective irrigation management when the WUAs can ensure reliable and equal water distribution to farmers' fields in support of their livelihoods. For this purpose, a WUA must be able to: (i) respond to the physical and structural complexity of the particular irrigation scheme; (ii) serve as an institutional means to address existing power asymmetries; (iii) empower farmers to act collectively across scales to address common concerns systematically and engage with other key stakeholders (e.g., the IWUMD and village administrators); and (iv) support farmers to take responsibility for irrigation management by making and enforcing rules, electing their leaders and holding each other accountable.

Overview of the new institutional design



*The Deputy Scheme Manager is not a member of the WUA but leads the PSCC

Note: DoA - Department of Agriculture; PS - Pumping Station.

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Project

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The International Water Management Institute (IWMI) is a non-profit, scientific research organization focusing on the sustainable use of water and land resources in developing countries. IWMI works in partnership with governments, civil society and the private sector to develop scalable agricultural water management solutions that have a real impact on poverty reduction, food security and ecosystem health. Headquartered in Colombo, Sri Lanka, with regional offices across Asia and Africa, IWMI is a CGIAR Research Center and leads the CGIAR Research Program on Water, Land and Ecosystems (WLE).



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