POLICY BRIEF

Improving water management in rural communities - Key findings for Policy in Fiji

JUNE 2022

International WaterCentre
Griffith UNIVERSITY Queensland, Australia
USP THE UNIVERSITY OF THE SOUTH PACIFIC
SINU SOLOMON ISLANDS NATIONAL UNIVERSITY
Water For Women
Australian Aid

KEY MESSAGES FOR POLICY-MAKERS

1. **Communities need ongoing support for good water management**, which is necessary to support safe, resilient and inclusive WASH outcomes.

2. Water (or WASH) Committees are central to the sustainability of community-managed water systems and WASH outcomes, and **support should focus on supporting Water Committees**.
   - Water Committees do benefit from some technical support – more in relation to proactive management of risks, as well as some operational requirements of water systems (capacities to respond to minor technical problems is mostly sufficient)
   - Water Committees also need mentoring & motivating, through ongoing support to "backstop" governance & management, and through monitoring and reporting to encourage both accountability and recognition of progress.

3. More careful **consideration needs to be given to the nature of support offered to communities**, for sustainable water management outcomes.
   - Project-based support is appropriate for providing some place-based support, such as with the design and installation of infrastructure. However, the backstopping of Water Committees requires ongoing and regular support, beyond a project life cycle.
   - Support needs to be provided in ways that encourages the initiative and self-efficacy of Water Committees, such as by mentoring and developing capacities to solve technical, management or governance problems. A reliance on external organisations to fix problems creates a culture of dependency and delimits a Water Committee's self-belief and motivation to take action, and, reduces their authority and agency within their community.
   - For support intending to build specific capabilities, skills or knowledge, clustering of communities for training and engagement may be more cost effective as well as create a community-of-practice between nearby communities with similar water management situations.
   - Support for community water management needs to encompass more than educational objectives – whilst some capacity development of Water Committees is needed, there is also a need to influence behaviours (of Water Committees and community members). Complementing educational approaches with social marketing approaches offers a more holistic approach to influence action.

PACWAM+ RESEARCH PROGRAM

The Pacific Community Water Management Plus (PaCWaM+) research objective was to investigate how governments and Civil Society Organisations (CSO) can better enable rural community water management to improve SDG6 outcomes: specifically WASH outcomes that are resilient to natural hazards and disasters, that are sustainable (exist for the long-term), and that are inclusive (meet the needs of everyone).

This study provides regionally appropriate evidence about what kinds of support are needed to complement and improve community capacities for water management across different village, island and country contexts in the Fiji and Solomon Islands**.**

The research involved two phases. PHASE 1 research sought to identify what the 'plus' factors might look like in two Pacific Island countries – what type of support is needed by communities, and how that support might be achieved. PHASE 2 activities focussed on further exploring and – where possible – piloting, some potential 'plus' approaches.

Based on this 4-year research program, several key lessons have emerged for practitioners and policymakers in Fiji. This Policy brief outlines some of the most important.

More information about the research program can be found here:

www.watercentre.org/research/pcwm

4. While many smaller villages and settlements have strong social cohesion across the whole community, many villages and settlements do not – the strongest levels of social cohesion often exist at smaller levels within villages/settlements. **External organisations and Water Committees should seek to "*work with the grain*" by engaging with existing levels of social cohesion**, including social structures and networks, such as *mataqali,* zones or clusters of households, and social groups).

5. The social networks of communities extend beyond the boundaries of the village or settlements, with most having community members residing in towns or cities elsewhere in Fiji or overseas. **External organisations could leverage existing informal social networks that connect rural villages/settlements with towns**, as innovative ways to provide support to rural communities. Town-based community members and connections are potentially rich agents for knowledge transfer and acquiring resources for supporting improved

6. Although Water Committees are central to sustained community water management, all community members have important roles to play. **Water is Everyone's Business** and collective action is required by everyone. The way that individuals and households use and impact water, affects the sustainability of the water supplies – **Water Committees need to influence the actions and behaviours of community members**. And, **community members need to participate in collective action** such as conducting minor maintenance activities, assisting with larger maintenance and repair activities, and by paying water fees.

7. Structural and contextual factors, such as physical and social factors, influence local water management and WASH situations. These can be specific to each community, and so the problems encountered by a Water Committee, the types of support they need, and the suitability of different ways to provide that support, are not the same for every community. An **awareness of local factors and histories is important to enable supporting organisations to offer appropriate support to Water Committees**.

COMMUNITY WATER MANAGEMENT PLUS (CWM+) IS NECESSARY

Government and private sector water services to rural populations in PICs are limited and likely to remain so. Consequently, community water management (CWM) will remain the dominant model for rural water service delivery into the future, as reflected in many Pacific government WASH policies.

However, evidence from the Pacific and elsewhere indicated that basic models of CWM, in which communities bear full responsibility to manage water systems after their installation, typically have low sustainability (Clarke et.al., 2014; Bond et.al., 2014; Hutchings et al., 2015; World Bank, 2017). This leads to poor WASH outcomes, such as inadequate accessibility, quality, and reliability of water and compromised hygiene practices.

The balance of responsibility for operations and maintenance for water supply systems has to shift "*…away from rural communities that have for too long been overburdened with the expectation that they should be independently successful 'public service managers'*" (Hutchings et al., 2017).

The community water management plus (CWM+) model is considered a viable improvement to the basic CWM model (Baumann, 2006; Hutchings et al., 2015, 2017). The CWM+ model includes long-term support from external organisations or people following the initial hand-over of water infrastructure to a community.

Pacific governments already appreciate that further support is required to support CWM, and, do provide support to communities. However, the rate of progress of access to safe water services by rural communities is slow indicating that existing support is insufficient.

The PaCWaM+ program indicated that most community Water Committees studies as part of the research were struggling, without support, to remain active and effective water managers.

Enabling actors such as CSOs and provincial and national governments must provide some kind of further advisory and practical support if the community water management model is to lead to safe, reliable and adequate WASH services.

This support could be direct with support from government, CSOs provided to Water Committees. Or it could be indirect, such as through leveraging town-community social networks (Figure 1). Irrespective of the mode of support, it is clear that communities do, and will, continue to face challenges – both technical and governance in nature. Any such ongoing support needs to be pragmatic and place-based, whereby a balance is struck between fostering dependency (undesirable) encouraging self-help (desirable).

Community water reservoir tank, Daviqele, Fiji (Photo: D. Botero)

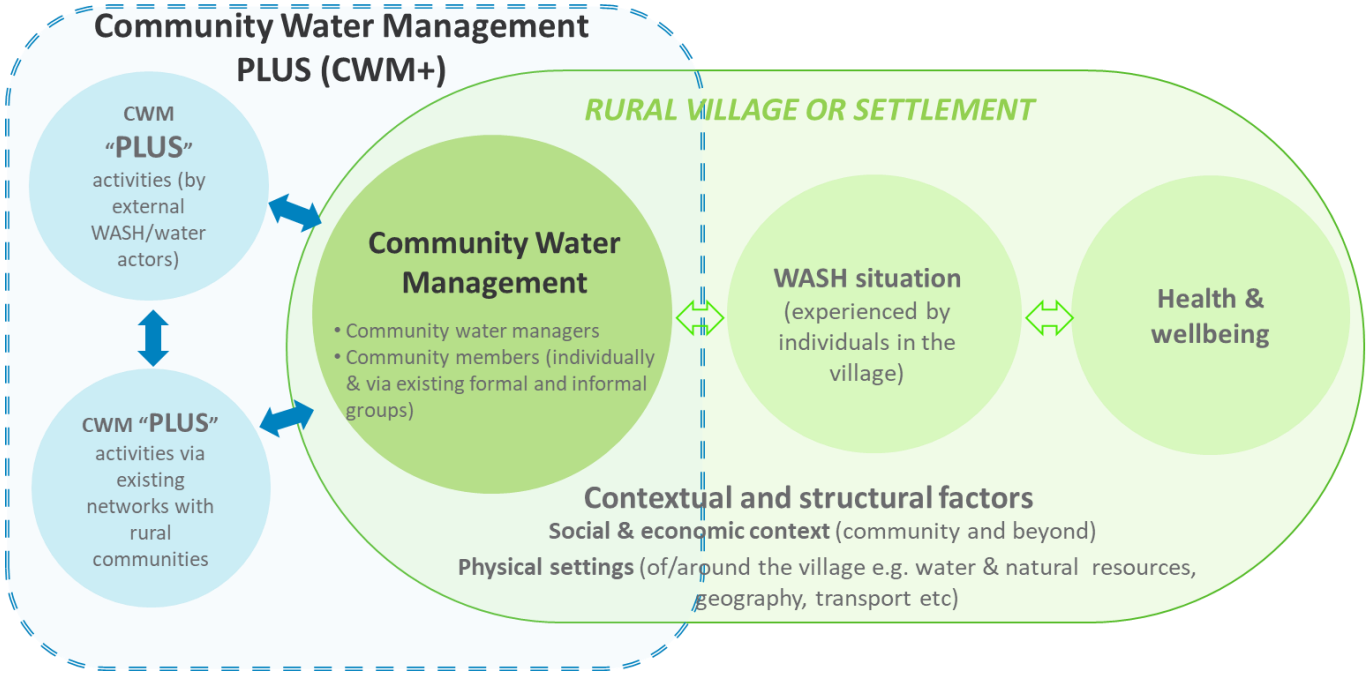


Figure 1: Community Water Management Plus model. Community Water Management is necessary for the achievement of WASH services, and the health and wellbeing benefits they provide. But Community Water Management requires ongoing support from organisations and individuals – either through direct engagement with Water committees in communities, or indirectly via existing social networks connected with communities. The type of support required, and the way that support is provided, needs to suit the local contextual and structural factors, and therefore might need to be different between different communities.

A range of structural factors that affect CWM and WASH were identified in Fiji. As these factors can't be (easily) changed, it is important that WASH and CWM interventions are adjusted to suit these structural or foundational particulars. These structural factors influence how "good" community water management is, and can be, achieved in each community. Understanding such factors, and how they inform CWM and WASH-outcomes, is important. Some key structural factors, as identified and explored in the research, include demographic factors (*e.g., Population and size of the community; number of mataqali),* governance, potential water management group members *(e.g., age, inclusiveness*), WASH history, cultural norms, extant social issues (e.g., "*community disharmony*") and physical settings.

Government and CSO engagement in the sector needs to focus on improving factors that can be influenced in a short-medium timeframe, whilst navigating around foundational factors that require longer-term changes. To do this, the specific foundational / structural factors of a given locale need to first be assessed.

In addition to structural factors, contextual particulars are also important to understand in relation to the WASH situation and CWM outcomes. There are different strengths and weaknesses in different communities, as each *koro* [village] or settlement has its own unique context (socio-economic, physical setting, history) and thus will do things differently. They will therefore require different kinds of external support.

WHAT DOES 'GOOD' COMMUNITY WATER MANAGEMENT LOOK LIKE?

Based on existing literature, our key research questions and the results from our Phase 1 research, we identified key features of what constitutes 'good' water management, based on the strengths observed and problems encountered in our case study sites (i.e., evidence of inadequate WASH, or factors identified by community members). These features of 'good' water management are grouped under three core areas.

i) **Actions by a water management group (*e.g., Water Committee*).** The existence of an organised group of community members to drive community water management actions is critical. There are many functions this group would perform for ideal water management outcomes, and thus the capacity of this group is also critical; a diverse membership is important, not only from the perspective of increasing representation and inclusion within communities, but also to increase the diversity of skills and knowledge needed in managing water systems, as well as creating some redundancy and spreading responsibilities amongst more people to ensure continuity of water services.

ii) **Actions by all water users (across different socio-spatial levels)**

In addition to actions by a water management group, all water users have a role to play in achieving resilient, inclusive and sustainable community water systems. Collective action is required on several levels – individual, HH's/family, group/area, community-wide

iii) **External actors' role (in each community relating to WM).** In addition to maintaining a supportive enabling / governance environment, external actor's such as government, civil society, and the private sector, have a role to play in assisting with managing community water systems directly.

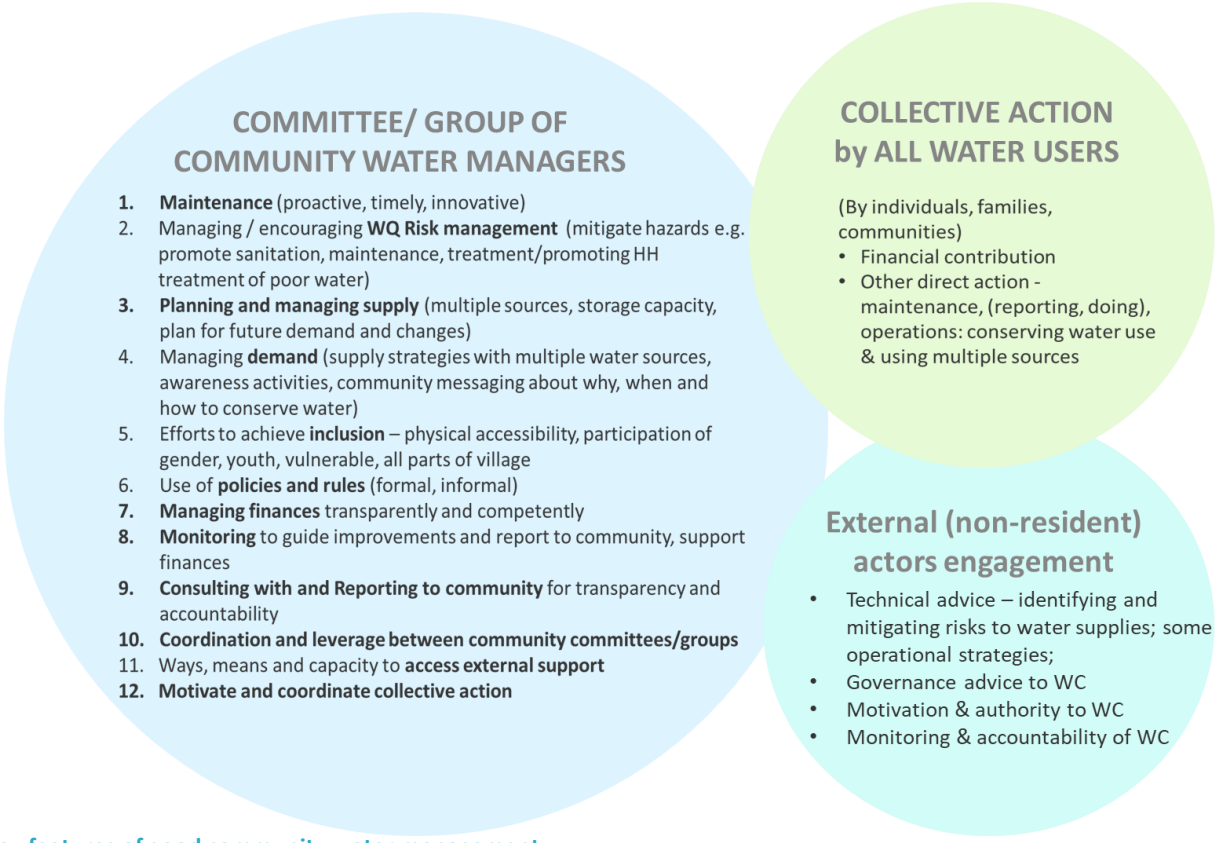


Figure 2: Key features of good community water management

APPROACHES TO SUPPORT WATER COMMITTEES AND COMMUNITIES

The Phase 1 Pacific Community Water Management Plus (PaCWaM+) research investigated how Civil Society Organisations (CSO) and governments can better enable rural community water management to improve SDG6 outcomes: specifically WASH outcomes that are resilient to natural hazards and disasters, that are sustainable (exist for the long-term), and that are inclusive (meet the needs of everyone). The Phase 2 work focused on developing and piloting approaches and tools that CSOs, Governments or any relevant stakeholders can use to strengthen the community engagement, support and governance for CWM.

These CWM plus tools and approaches were built on the following guiding principles:

- **Work with the grain**:
  - existing levels of social cohesion for action planning and representation
  - town-cousin networks
  - pedagogies/learning styles
- **Acknowledge village diversity** (modular approaches) and different social-governance contexts
- **Mix of educational and motivational** (social marketing) approaches
- **Complement existing actions by CSOs & Government**.

PLANNING & MANAGING RISKS TO WATER SUPPLIES: STRENGTHENING DWSSP (DRINKING WATER SAFETY AND SECURITY PLANNING)

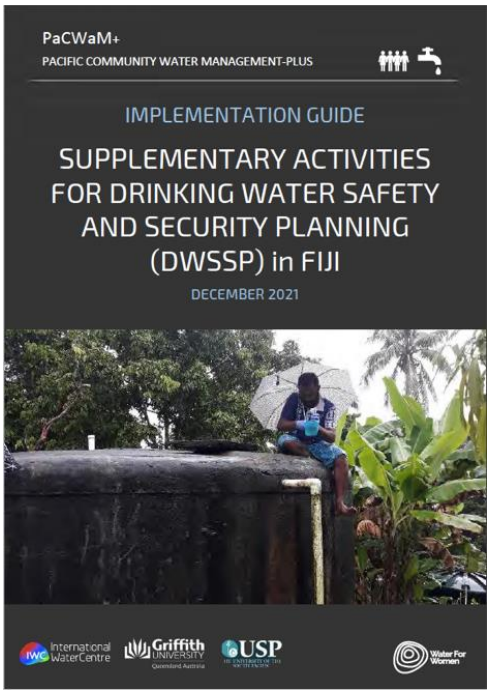
In partnership with the Fiji Government Ministry of Health and Medical Services (MHMS), a Supplementary Guide for Drinking Water Safety & Security Plan (DWSSP) was developed. The purpose of the supplementary guide is to strengthen existing DWSSP by adding or modifying activities.

The guide draws on the expertise of experienced DWSSP facilitators from MHMS, and from research conducted by the PaCWaM+ team with rural villages in Fiji as well as with other government and WASH practitioners. The supplementary activities draw on participatory, dialogic and Pasifika community development approaches and aims to better contextualise Water Safety and Security Planning to the Fijian context, and to the needs of Fijian Water Committees and communities.

The supplementary guide is intended to highlight some of the strengths, and address some of the challenges, common to DWSSP processes. Some of the key additions/modifications include:

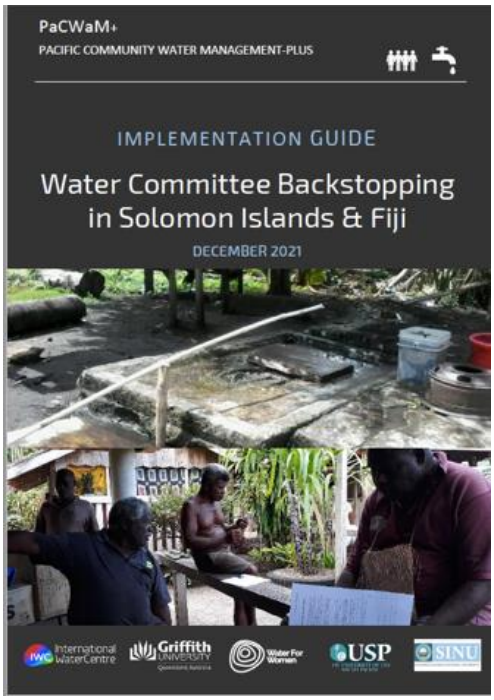
- Additional training on water cycles and pathways of impacts to water supplies (to support sanitary and risk assessments)
- Consideration of zones or other social levels in both assessing existing access, and in identifying future actions
- Encouraging not only infrastructure actions as part of the planning process, but also behavioural actions at individual and household levels
- Encouraging the Water Committee to assess their membership and ways of engaging and communicating with the Community for collective action.

Consistent with the existing DWSSP Facilitators Guide, this supplementary guide should be used when engaging with rural communities and their Water Committees (or WASH Committees) to develop a Water Safety and Security Action Plan. The Supplementary Guide is therefore intended to be used in conjunction with the DWSSP Facilitators Guide and materials produced and maintained by MHMS. This guide contains recommendations to modify or replace existing activities, and add new activities, to the DWSSP process.



STRENGTHENING WATER COMMITTEES: STRONG WASH COMMITTEES, STRONG WATER COMMUNITIES

Research indicated that sustaining the membership and the activeness of Water Committees remains a significant challenge; Governments, CSOs and utilities, can provide some encouragement and support to committees to enable them to become stronger (Refer to Additional reading for references of these research reports). This research formed the basis of the Strong Water Committees – Strong WASH Communities Implementation Guide.



The purpose of this approach is to motivate and encourage Water Committees to reflect on how they can make their committee stronger and work better with the whole community and advocate for greater collective action.

The *Strong Water Committees – Strong WASH Communities* approach is designed to complement the existing guidance provided by Governments and CSOs to committees, which focus on roles and responsibilities and strengthening the technical capacity of the committee. These topics are not addressed in the Strong Water Committees – Strong WASH Communities guide and need to be addressed separately**.**

The key activities include

- *Talanoa* session that includes stories about other Water Committees in Fiji, in particular contrasting a strong Water Committee with another that faces challenges, and encouraging dialogue about the relevance of these stories to the community and Water Committee
- Workshop activities to encourage discussion of how the Water Committee engages with its community members in planning and management
- *Water is Everyone's Business* (see below)

MOTIVATING COLLECTIVE ACTION: WATER IS EVERYONE'S BUSINESS

This resource is designed to promote discussion and collective action about water actions that very community member can take to assist in managing the community's water system. The aim is to raise water issues and management as a greater community priority and motivate interest amongst community members in meeting their collective responsibilities to manage community water, and to provide some awareness about actions they can take.

This community engagement tool, "Water is everyone's business" should be incorporated into a broader set of community engagement activities – it is designed to complement approaches such as the Strong WASH Committees – Strong WASH Communities approach above.

STRENGTHENING WATER COMMITTEES: BACKSTOPPING WATER COMMITTEES

Research indicated that communities would benefit from access to technical and non-technical advice to better manage their water systems. Furthermore, discussion with Water Authority Fiji (WAF) technicians found that communities generally had sufficient know-how to address minor repairs and maintenance, but were struggling with:

- management issues
- understanding the roles and responsibilities of the Water Committee
- ensuring adequate funds are available for repairs
- facilitating some collective water management actions.

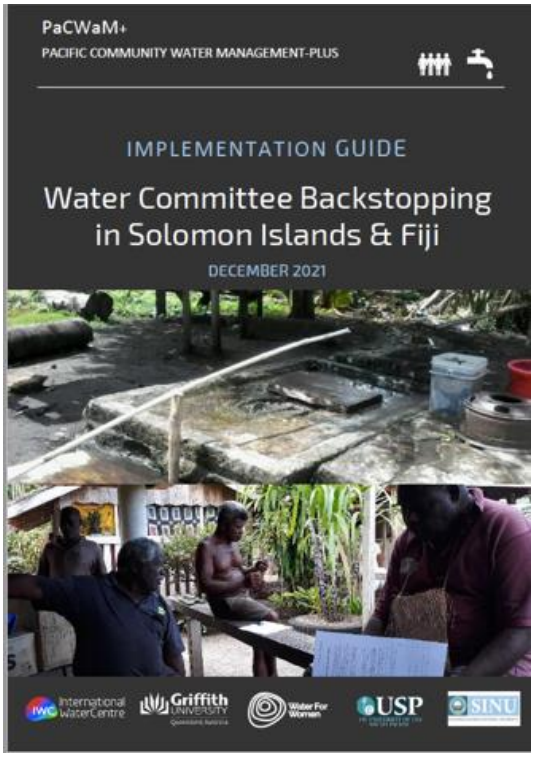
The purpose of the backstopping approach is to provide Water Committees with the opportunity to receive technical and non-technical support and advice about operating and maintaining their water system helps to improve the water system service. The backstopping should be carried out by a Water, WASH or related Technician or Officer or from a relevant government agency or utility.

The Technician's role is to be a "backstop" (similar to baseball 'backstop' whose role it is to catch the ball when the batter misses it – here the batter is the Water Committee). This involves providing technical and non-technical advice that is suited to the community situation – that is, it is specific to the water system, environment, and social and cultural context of the community.

The key activities of the Technician is to regularly visit Water Committees (e.g. every few months) to enhance skills and knowledge about water management, build confidence, clarify roles and responsibilities, and help motivate the Water Committee. This may involve showing/teaching people how to do repairs, maintenance or operate the water system. It may also involve sharing the technicians' experience about what good water management looks like in other parts. It does not entail fixing things for the community.

The Water Committee Backstopping approach should:

- Maximise capacity building and learning through regular 2-3 monthly community visits, preferably by the same set of Technicians (who develop familiarity with a community setting), and involve engagement with a regular group of Water Committee members to progressively build new capacities, using hands-on and storytelling teaching approaches
- Include operational, technical management and some maintenance issues aspects (e.g., identifying and mitigating risks to water quality and quantity, proactive maintenance)
- Include discussions with Water Committees about ways of working more actively with their community, encouraging collective action and raising funds for the water systems
- Recognise communities have different water systems with different social and environmental settings, and therefore have unique problems and capacity needs
- Maximise logistical efficiency and reduce the cost of visiting remote communities by clustering community Backstopping visits: for example, spending half a day in 10 villages in one week.



ADDITIONAL RESOURCES

The PaCWaM+ research project has produced a range of documents describing the **research findings** to support Pacific Community Water Management Plus, which are available from the PaCWaM+ webpage: www.watercentre.org/research/pcwm. These include:

- Fiji Synthesis Report Phase 1 Research
- Solomon Islands Synthesis Report Phase 1 Research
- PaCWaM+ Research Brief-Phase 1 Key Findings
- Water Conservation and Water Saving Sanitation in Fiji
- Climate Responsive and Inclusive Water Security Planning in Rural Solomon Islands – Pilot Outcomes
- Learning Brief on "The benefits of strong Gender and Social Inclusion in the management of village water systems in Melanesia"
- Policy Brief on "Governance to support Integrated Water Management in the Solomon Islands"
- Backstopping Rural Community Water Management – Lessons from Solomon Islands and Fiji – A Research and Practice Brief
- Challenges and opportunities with social inclusion and community-based water management in Solomon Islands (*proof, publication due in June 2022)*
- Community-Based Water Security Improvement Planning (Solomon Islands) – *case study*
- Video: Strengthening Rural Community-Based Water Management in Pacific islands- WEDC Presentation
- WASH & Learn presentation: Pacific Community Water Management Plus – *Key Findings November 2020*

A range of **implementation guides and resources** to support Pacific Community Water Management Plus can be accessed from the PaCWaM+ webpage: www.watercentre.org/research/pcwm. These include:

- Strong Water Committees – Strong WASH Communities in Fiji – Implementation Guide
- Water is Everyone's Business poster – Fiji (Fijian and English versions)
- Strong Water Committees – Strong WASH Communities in Solomon Islands – Implementation Guide. Including associated resources:
    - Video Strong Water Committees – Strong WASH Communities (standalone copies can obtained from iwc@griffithedu.au (with or without English subtitles), or viewed on the webpage: www.watercentre.org/research/pcwm)
- Water is Everyone's Business – Community workshop in Solomon Islands – Implementation Guide. Including associated resources
    - Video: Water is everyone's business
    - Video: Youth and Water
    - Video: Women and Water
    - Poster: Water is Everyone's Business
- Water Committee Backstopping in Solomon Islands and Fiji – Implementation Guide
- Supplementary activities for Drinking Water and Security Planning (DWSSP) in Fiji - Implementation guide
- Community-based Water Security Improvement Planning – Solomon Islands – implementation guide (3 volumes)

ACKNOWLEDGEMENTS

The authors would like to thank the communities where the research was undertaken and also The Fijian Government and numerous other organisations who made this research possible. In particular, we thank the staff from the following organisations and departments who constructively participated in project meetings and stakeholder workshops and interviews: Ministry of Health and Medical Services - Environmental Health Department, iTaukei Affairs Board, Department of Water and Sewerage, Mineral Resources Department, Water Authority of Fiji, and Habitat for Humanity Fiji.

This project was supported by the Australian Government Water for Women Fund and implemented by the International WaterCentre at Griffith University, Australia from 2018 to 2022.

Water for Women is the Australian Government's flagship WASH program and is being delivered as part of Australia's aid program.

Disclaimer: This publication was funded by the Australian Government through the Department of Foreign Affairs and Trade. The views expressed in this publication are the contributing authors' alone and are not necessarily the views of the Australian Government.

REFERENCES

Bond, M., Tyndale-Biscoe, P., Clark, K., Francis, N., Nott, T., Galing, K. and Blackett, I. 2015. The sustainability of rural water, sanitation and hygiene in Papua New Guinea. Water: Journal of the Australian Water Association, 42(6): 42-45.

Clarke, M., Feeny, S. and Donnelly, J. 2014. Water, Sanitation and Hygiene Interventions in the Pacific: Defining, Assessing and Improving 'Sustainability'. The European Journal of Development Research, 26(5), pp.692-706.

Hutchings, P., Chan, M., Cuadrado, L., Ezbakhe, F., Mesa, B., Tamekawa, C. and Franceys, R., 2015. A systematic review of success factors in the community management of rural water supplies over the past 30 years. Water Policy, 17(5), pp.963-983

Hutchings, P., Franceys R., Mekala, S., Smits. S., and James A. J. 2017. Revisiting the history, concepts and typologies of community management for rural drinking water supply in India, International Journal of Water Resources Development, 33:1, 152-169.

World Bank, 2017. Sustainability Assessment of Rural Water Service Delivery Models: Findings of a Multi-Country Review. [online] Washington DC: World Bank. Available at: <http://hdl.handle.net/10986/27988> [Accessed 2 March 2022].

CITATION

Souter, R., Love, M., Pene, S., Shrestha, S., and Beal C., 2022. "Improving water management in rural communities - Key findings for Policy in Fiji" International WaterCentre, Griffith University. Nathan: Australia.

Cover image: R. Souter, International WaterCentre (community water supply tank, Rewa catchment village).

RESEARCH PARTNERS

International WaterCentre

Griffith University, Queensland, Australia

USP, The University of the South Pacific

SINU, Solomon Islands National University

LIVE&LEARN Environmental Education

PLAN INTERNATIONAL

Habitat for Humanity

SUPPORTED BY

Water For Women

Australian Aid

water authority of fiji, Clean Water & Sanitation for a Better Life

Guadalcanal Province

Ministry of Health & Medical Services, Government of Fiji