PaCWaM+ PACIFIC COMMUNITY WATER MANAGEMENT PLUS

RESEARCH BRIEF

APPROACHES TO ENABLE EFFECTIVE COMMUNITY WATER MANAGEMENT IN RURAL PACIFIC COMMUNITIES: SOLOMON ISLANDS AND FIJI

DECEMBER 2022

This brief describes the research undertaken between 2018-2022 to understand how Civil Society Organisations (CSOs) and governments can better enable community water management to improve SDG6 outcomes in rural Pacific Island communities. Based upon the key findings in Fiji and Solomon Islands, there are ways external actors can effectively strengthen CWM. This research shares recommendations for policy-makers and a compendium of seven practical tools for people and organisations delivering community water, sanitation and hygiene (WASH) programs.

International WaterCentre · Griffith University Queensland, Australia · USP The University of the South Pacific · SINU Solomon Islands National University · LIVE&LEARN · PLAN International · Habitat for Humanity · Water For Women · Australian Aid

PACIFIC COMMUNITY WATER MANAGEMENT PLUS (PACWAM+) RESEARCH PROGRAM

THE NEED FOR THE RESEARCH AND ITS OBJECTIVES

80% of Melanesians live in remote, rural areas, and only 40% have access to basic water services (JMP, 2017). Government and private sector services are very limited due to geography and capacity; consequently, community water management (CWM) is likely to remain the dominant model for rural water service delivery, which is reflected in many Pacific government policies.

However, evidence from the Pacific and elsewhere, indicates that CWM models of service delivery typically have low sustainability (World Bank, 2017; Clarke et.al., 2014; Bond et.al., 2014). This low sustainability leads to poor WASH outcomes, such as inadequate accessibility, quality, and reliability of water and compromised hygiene practices. This then compromises the health and wellbeing of all people, but especially women and girls. In addition, the SDG6 targets reiterate that water service outcomes, sanitation and hygiene practices and ecosystem health, are intimately affected by CWM, and vice versa.

Evidence from the Pacific indicates several challenges to community management of natural resources: community governance, involvement of women and other marginalised people in decision-making, financial and technical capacity, support from external organisations, and disputes over resources and leadership (World Bank, 2017). Pacific evidence also indicates that within-country community context is variable, and efforts to support communities must work with diverse community contexts (Love, 2016).

Regarding CWM, global evidence indicates sustainability is higher with structural support for operations and maintenance, finance, governance and training (e.g. Clarke et.al., 2014; Bond et.al., 2014). But evidence is lacking about *how* enabling actors should provide support for CWM. Whilst lessons can be gleaned from other regions, the unique Pacific context (rurally-dominated populations dispersed amongst small, distant communities, diverse and complex socio-cultural settings, hydrogeological constraints and constrained capacity of enabling environment) requires rigorous evidence about approaches that are both feasible and effective. This research sought to address this significant gap in evidence.

About Water for Women

Water for Women is the Australian Government's flagship water, sanitation, and hygiene (WASH) program and is being delivered as part of Australia's aid program. Water for Women invests in socially equitable, inclusive and climate-resilient WASH in Asia-Pacific.

Water for Women has a goal of promoting gender equality and social inclusion in WASH research.

Research objective

The Pacific Community Water Management Plus (PaCWaM+) research objective was to investigate 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).

Women's focus group discussion, Hulavu, Solomon Islands. Source: SINU

Phase 1: What could be learned from evaluating CWM across diverse community contexts, especially about which community governance, engagement, and support features are most aligned with inclusive, integrated and resilient SDG6, including WASH, outcomes?

Phase 2: What approaches and tools, that are sensitive and responsive to local context and improve inclusion, could CSOs/Governments use to strengthen these community engagement, support and governance features?

RESEARCH PARTNERSHIPS

This research brought together a multidisciplinary team of local and international researchers, CSOs and government actors who combined expertise from WASH, environmental science, anthropology, gender, health, and community engagement, particularly in the Pacific context. The first phase of the research was led by a partnership of International WaterCentre, Griffith University, Solomon Islands National University and The University of the South Pacific. To develop tools and resources to strengthen CWM, the second phase saw collaboration between the researchers in phase 1 and the Ministry of Health & Medical Services - Government of Fiji, Water Authority of Fiji, Guadalcanal Province (Solomon Islands), Plan International, Live & Learn Environmental Education and Habitat for Humanity.

RESEARCH APPROACH

This research sought to apply a strengths-based approach, identifying the specific factors that influence the success of water management. A key measure of how successful a community was at managing its water system was the status of WASH services available to community members.

The research design involved two phases, the first to generate learning by filling knowledge gaps, the second to build a 'toolbox' of approaches, piloted and refined through practice and action research in collaboration with the CSOs. This was a research-to-impact approach where actors at all levels (community/CSO/government), and at all stages of the research, contributed to learning and desired outcomes.

The methodologies addressed a key Water for Women goal of promoting gender equality and social inclusion in WASH research, WASH governance and WASH services. The research team included the active participation of women: involving a female Fijian gender academic, female in-country research assistants and engaging female (and male) village-based researchers. This enabled: gender-conscious research methods; characterisation of social inclusion/exclusion issues associated with CWM governance and WASH outcomes including gender-based and youth-based issues, and exclusion due to other social status; and the development of socially-inclusive CWM tools.

PHASE 1 – UNDERSTANDING EXISTING COMMUNITY WATER MANAGEMENT

The Phase 1 research investigated existing CWM and sought to understand what constituted "good" water management[1]. The research methodology comprised a mixed-methods approach, drawing on a range of qualitative and quantitative techniques. Qualitative data collection consisted of key informant interviews (KIIs), group interviews (GIs) and household surveys (HHS). Data was collected from 8 communities across the Solomon Islands and 8 communities across Fiji. Site selection was designed to encompass different bio-cultural contexts (e.g. socio-cultural, economic and geographic) and various CWM arrangements, including differing types and amounts of external support. Quantitative data was collated and assessed including water quality testing, household surveys, community profile reports and field notes and political economy analysis.

PHASE 2 – PILOTING COMMUNITY WATER MANAGEMENT PLUS APPROACHES

The Phase 2 design comprised of action research combined with before-during-and-after assessments of change. The action research focused on developing and piloting approaches and tools that CSOs, governments or any relevant stakeholders could use to strengthen the community engagement, support and governance for CWM. It involved working closely with the partner CSOs to respond to Phase 1 findings and develop, test and refine CWM tools and approaches.

[1] For further details including the framework to assess "good" water management see PacWaM Research Brief – Phase 1 Key Findings

RESEARCH FINDINGS

This research deepened the understanding of CWM in Fiji and Solomon Islands. Through the process, a conceptual model was developed that allowed for an assessment of existing WASH, contextual factors and CWM and investigated the additional activities, that is the "plus" activities, that could strengthen CWM within the local context (Figure 1).

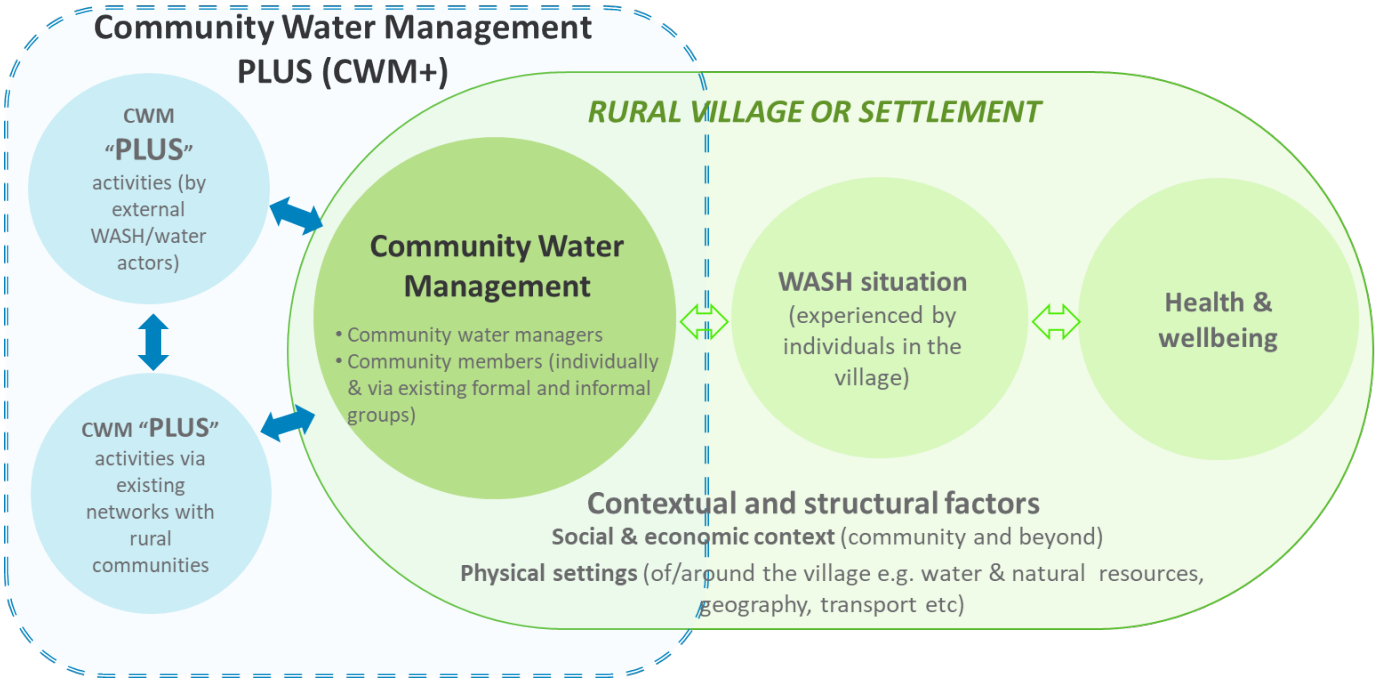


Figure 1: Conceptual model: Pacific Community Water Management Plus

The research in communities indicated that although there were strengths in particular aspects of CWM, all study communities were struggling with some aspects of CWM. The community water actions that were consistently poor across most or all case study communities were:

- assessing and managing risks to water quality;
- planning and managing supply and demand; and,
- engaging with the broader community and other village or settlement committees or groups.

For detailed phase 1 findings see:
Solomon Islands Synthesis Report Phase 1 Research

Solomon Islands key findings highlights

- Shared water systems were rarely delivering water services that were safe, reliable and available throughout the year.
- Women were more likely to have greater agency at the zone level than village-wide level.
- Some water committees engaged in proactive maintenance such as regular dam cleaning and keeping tap stands free of rubbish and weeds.
- Government and CSO engagement in the sector needs to focus on factors that can be influenced in the short-medium term but also to try and work with the structural factors that cannot be changed. To do this, these factors need to be assessed through a diagnostic (rapid community assessment) *prior* to implementation of a WASH or CWM project.

For detailed phase 1 findings see:
Fiji Synthesis Report Phase 1 Research

Fiji key findings highlights

- In most communities there was a positive association between perceived drinking water safety and water treatment practices.
- The decree that there must be a Water Committee appears especially suited to Fiji, where government regulations do influence people's actions at the community level. The decree to also have women and youth on Water Committees is also a useful stepping stone, though does not always lead to effective voice and influence.
- Water committees were often struggling to operate and maintain their water supply, often due to limited technical capacity - even for simple issues.
- *Solesolevaki* activities (fundraising and community work) were found to commonly and critically improve community well-being, both within and beyond the realm of CWM and WASH.

A key objective of this phase of the research was to learn lessons from communities where CWM was considered to be 'good' These findings, together with literature about CWM globally, led to the identification of key capabilities or functions that support effective CWM (Figure 3).

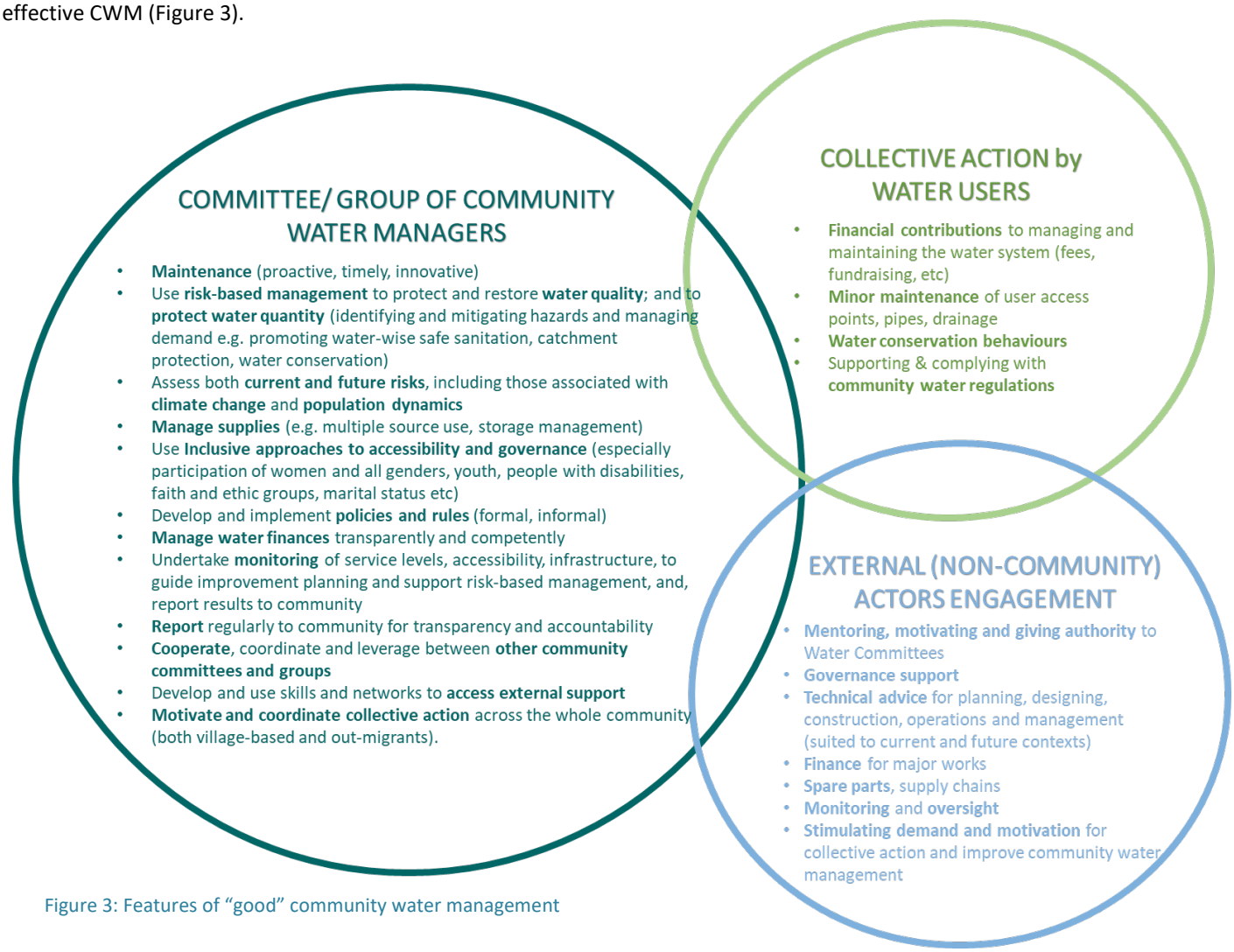


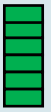
Figure 3: Features of "good" community water management

Village house, Wailotua 2, Fiji. Source: C. Beal

COMPENDIUM OF TOOLS TO SUPPORT COMMUNITY WATER MANAGEMENT PLUS

Based on the Phase 1 findings of what constitutes 'good' water management and what could be strengthened in CWM, five priority areas were identified that enabling actors could support. Tools and resources were developed to support external actors' engagement with communities in these priority areas. These were designed to complement existing approaches, particularly government policies and guidelines. They are summarised in a compendium of tools, which offers guidance about when and how to use these tools and resources (Table 1).

Table 1 Summary of CWM+ tools and resources for enabling actors to complement existing approaches and strengthen community water management.

TOOL	PURPOSE SUMMARY	TOOL RESOURCE	FOCUS OF TOOL (more green = stronger focus)				
			Understanding context & situations	Strengthening water committees & governance	Community action & social inclusion	Improving technical capacities	Connecting external support with rural communities
1. Community Diagnostic Guidance	To encourage and guide community assessments to understand context for rural water management	Guidance Note					
2. Water is Everyone's Business	A community engagement tool to promote discussion and thinking about water management and conservation	Facilitator's implementation guide (Solomon Islands), videos (1, 2 & 3) and discussion text, poster. Water conservation in Fiji					
3. Strong Water Committees - Strong WASH Communities	To raise awareness on the importance of having strong committee membership and how to keep the committee strong (and therefore the WASH community strong)	Facilitator's implementation guide (Solomon Islands, Fiji), video and workshop activities (including discussion text)					
4. Water Committee Backstopping	Providing external technical and non-technical support and advice about operating and maintaining a community water system	WASH technician checklist see Facilitator's implementation guide (Solomon Islands and Fiji)					
Water Safety Planning: **5. Solomon Islands Community-based Water Security Improvement Planning (CWSIP)** **6. Fiji Drinking water security and safety plan (DWSSP+)**	To build the capacity of Water Committees to identify hazards and assess risks to water quality and to identify and implement actions to reduce water quality risks	CWSIP Facilitator's Implementation Guides: Vol1; Vol2; Vol3 Videos and workshop activities, posters, Facilitators guide(s) Implementation Guide: Supplementary activities in the DWSSP Fiji					
7. Leveraging town-community social networks	To guide a way of working that recognises that the 'whole community' is geographically spread, and broader community engagement can help CWM	Guidance (within the Compendium of Tools)					

KEY MESSAGES AND RECOMMENDATIONS

This research found that there are ways to strengthen CWM beyond that which governments and CSOs currently do. These will further strengthen the inclusiveness and sustainability of water management and WASH services. External actors have a critical and ongoing role to play in supporting community water committees to thrive, particularly through both technical and non-technical support.

From a policy perspective, this research found that communities need ongoing external support for good water management. In both the Fiji and Solomon Islands context, and probably most rural communities in Pacific Islands settings, the following recommendations are made

1. 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 technical support, especially relating to proactive management of risks, and some operational requirements of water systems (capacities to respond to minor technical problems is mostly sufficient)
   - Water Committees also need mentoring and motivating, through ongoing support to "backstop" governance & management, and through monitoring and reporting to encourage both accountability and recognition of progress.
2. **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 and communities, 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 limits 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 creates a community-of-practice between nearby communities with similar water management situations, and may also be more cost effective.
   - Support for community water management needs to encompass not only educational approaches – whilst some education and awareness of Water Committees is needed, there is also a need to influence attitudes and behaviours of both Water Committees and community members. Complementing educational approaches with social marketing approaches offers a more holistic approach to influence action in improving both water supply and demand management.
3. While many smaller villages and settlements have strong social cohesion across the whole community, many villages and settlements also do not – the strongest levels of social cohesion often exist at smaller spatial scale 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 tribe, zones or groups/clusters of households, and social groups.
4. 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 the country 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 CWM.
5. 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, including women and youth groups. 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.
6. 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**.
7. **Applied research, conducted in partnership with enabling actors, generates much needed evidence** to guide the development of specific improvements to the way that governments, civil society and other enabling actors support community water management.

OTHER RESOURCES

The PaCWaM+ research project has produced a range of implementation guides and resources to support Pacific Community Water Management Plus, these include:

- Pacific Community Water Management Plus Compendium of Tools, and associated video
- Pacific Community Water Management Plus – Community Water Diagnostic
- Strong Water Committees – Strong WASH Communities in Fiji – Implementation Guide
- 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@griffith.edu.au (with or without English subtitles).
  - Water is Everyone's Business – Community workshop in Solomon Islands – Implementation Guide, and associated resources
  - Video: Water is everyone's business
  - Video: Youth and Water
  - Video: Women and Water
  - Water is Everyone's Business poster – Fiji (Fijian and English versions)
- Water is Everyone's Business – Promoting water conservation in Fijian Communities - Guide and associated video resource:
  - Video: Water Conservation is Everyone's Business (for stakeholders)
  - Video: Water Conservation is Everyone's Business (for use in implementation programs)
- 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 (Vol 1, Vol 2, Vol 3)

In addition to the CWM+ tools and resources), the following research outputs were generated during the project:

- Pacific Community Water Management Plus – Final Research Brief
- Localising Water Security – Research Brief
- Policy Brief – Improving water management in rural communities – Key findings for Policy in Fiji
- Policy Brief – Improving water management in rural communities - Key findings for Policy in Solomon Islands
- Research Brief – The Potential Role of Social Networks in improving Rural Community Water Management: Insights from Solomon Islands
- Backstopping Rural Community Water Management – Lessons From Solomon Islands and Fiji – A Research and Practice Brief
- 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
- 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"
- Challenges and opportunities with social inclusion and community-based water management in Solomon Islands
- Challenges and opportunities with social inclusion and community-based water management in Solomon Islands
- Video: Community-based Water Security Improvement Planning in Solomon Islands

These resources, together with other research outputs, including forthcoming publications are available at:
https://watercentre.org/pacwam/

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