PaCWaM+ PACIFIC COMMUNITY WATER MANAGEMENT-PLUS

Decentralisation and rural water service delivery in Fiji

Final Report – December 2024

International WaterCentre

Griffith UNIVERSITY Queensland, Australia

USP THE UNIVERSITY OF THE SOUTH PACIFIC

Water For Women

Australian Aid

Acknowledgement

The authors would like to thank all the participants who engaged in this research – we appreciate their time and insights. We especially appreciate the active engagement of the Department of Water and Sewerage, the Water Authority of Fiji, the Ministry of iTaukei Affairs, the Ministry of Health and Medical Services, and the Ministry of Rural and Maritime Development.

Special thanks to Ms Isabella Ennever – a Griffith University student who interned with Dr Sarah Pene at the University of the South Pacific and provided valuable assistance.

The report was further improved through feedback from participants at the June government stakeholder workshop as well as input from some participants and other sector actors following the event. Extra thanks to Bhawna Chand and Mohammad Nistar Khan (DWS) as well as Kencho Namgyal (UNICEF).

This work was funded by the Australian Government, Department of Foreign Affairs and Trade, Water for Women Fund program, as part of the PaCWaM+ 2 research project (WRA-CR02).

Project information

Locations: Solomon Islands, Vanuatu, Fiji

Lead organisation: International WaterCentre, Griffith University

Key Research Partners: The University of the South Pacific (Laucala campus, Suva, Fiji), Solomon Islands National University, and The University of the South Pacific (Emalus Campus, Port Vila, Vanuatu).

Government partners: Ministry of Health and Medical Services (Fiji), the Department of Water and Sewerage (Fiji), Ministry of Health and Medical Services, Environmental Health Division/RWASH (Solomon Islands), and the Department of Water Resources (Vanuatu).

WfW Project No.: IWC GHD Aust CR02

Short title: PacWaM+ 2: Supporting decentralised rural water supply in Pacific Islands

Full project title: PaCWaM+ 2: Supporting decentralised rural water supply in Pacific Islands - formal and informal networks to support rural Water Committee engagement with water resources management for climate resilient WASH outcomes.

Photo credits: Peni Wanimala, Sachita Shrestha, Kerryn Devnney, Mark Love, Sarah Pene, Diana Botero, Shutterstock.

Recommended citation:

Love, M., Pene S., Shrestha, S., Batikawai, S., Raikadroka, R., Lesivakayawa, S., Wainimala, P., Tinai, S., and Souter, R.T., 2024. *Decentralisation and rural water service delivery in Fiji: Final Report*. International WaterCentre, Griffith University: Nathan, Australia; The University of the South Pacific: Suva, Fiji. December 2024.

Table of Contents

Executive Summary

This report examines the strengths, challenges and opportunities associated with rural water service delivery in Fiji, with a specific focus on decentralisation.

Globally, there has been a slow but steady shift away from the community water management (CWM) model towards various alternative models – sometimes referred to as community water management plus (CWM+) (e.g., Baumann, 2006; Hutchings et al. 2015) – marked by increasing decentralisation, professionalisation, and a diversification in service delivery models, including various forms of private sector involvement (see Lockwood and Smits, 2011). However, there is little to no information of what this might look like in the Pacific Island's region. This research explores these wider global shifts and debates in the rural water supply, sanitation and hygiene (WASH) space in the context of Fiji.

Due to demographic, geographic, environmental and socio-economic particulars unique to Pacific Island Countries (PIC), the professionalisation of rural water service delivery at scale is unlikely in the near term, meaning that the community water management model will remain the dominant water service delivery approach for the foreseeable future. However, as Hutchings et al. (2017), among others argue, the balance of responsibility must eventually shift away from the expectation that rural communities can independently be successful "public service mangers" (Hutchings et al., 2017). Communities need some kind of support.

While some PIC, such as Vanuatu, have adopted elements of CWM+ (by outsourcing training and strengthening community-level legal powers), there remains a widespread absence of systematic post-construction follow-up monitoring and support across the region. Lessons from Africa, Asia and Latin America demonstrate the value of institutionalised post-construction support and operationalising diverse service delivery approaches (e.g., government, private sector, CSOs). However, the unique character of the region questions the direct transferability of lessons from elsewhere to the Pacific Islands.

Decentralisation – including in the rural water sector – has been intensifying in PICs such as Solomon Islands, Fiji, and Vanuatu, with recent policies changes (all within the last decade) advancing (on paper at least) decentralisation aspirations. Evidence from around the world shows that decentralisation efforts vary widely, from "big bang" decentralisation (Hofman and Kaiser, 2004) through to gradual, well-resourced "wholesale planned decentralisation" to "phased", "partial" and "inadequately resourced" examples (Lockwood and Smits, 2011: 65-8). Under-funded decentralisation agendas and human resource gaps are frequent challenges experienced elsewhere and there remains debate about the net benefits that have derived from decentralisation in developing country contexts (see: Faguet and Poschi, 2015). Regardless, decentralisation unfolds over an extended period, taking decades not years. As Lockwood and Smits (2011) emphasise, the effective decentralisation of rural water service delivery necessitates not only empowering but also resourcing lower levels of government. Based on the analyses in this report, Fiji corresponds to a mix of "partial" and "inadequately resourced" examples of decentralisation in the context of rural water services.

This research employed a mixed-methods approach, including literature reviews, stakeholder interviews, and participatory workshops, with interviews conducted across national, provincial, and village levels. Adapting and extending on the various extant WASH "building blocks" frameworks (e.g., Huston and Moriarty, 2018) and other key relevant literature (Lockwood and Smits, 2011; World Bank, 2017), this research utilises six critical "elements" or "building blocks" deemed critical to progressing decentralisation in the rural water sector in the PIC context:

- Policies, legal and regulatory frameworks
- Budgeting, finance, and (material) resources
- Information and knowledge sharing
- Monitoring, evaluation, and learning
- Harmonisation and coordination
- Human resources and capacity development.

These elements were examined within the broader context of the enabling environment (including the political economy) for sustainable rural water service delivery in Fiji (we did not explore sanitation). A total of 40 indicators were ultimately identified, with each element containing between 5 - 9 indicators. Each indicator was assigned a rating based on the evidence at hand (qualitative data and grey literature). Whilst a subjective process, applying a quantitative rating was deemed productive for identifying strengths, weaknesses, priority areas, and providing a benchmark for longitudinal purposes.

Relative to some of its' near neighbours (Solomon Islands and Vanuatu), Fiji performs well – the rural WASH situation is better in absolute terms, the sector has comparatively more resources and capacity at both national and subnational levels, and there are key policies in place which encourage monitoring of water committees (WC) (*Rural Water and Sanitation Policy, 2021*). Overall, the current state of decentralisation in the rural water sector in Fiji was rated as "weak" to "moderate", with two "very weak", two "weak" and two "moderate" elements. Policy and financing were strongest, with monitoring, evaluation and learning, sector harmonisation, and coordination the weakest.

The **policy, legal and regulatory landscape** governing WASH in rural Fiji is complex, with five-line ministries having important roles to play in supporting rural community water management. The *Rural Water and Sanitation Policy* (2021) enhances subnational support and refines roles for subnational stakeholders (especially Roko Tui's) to monitor and support community WASH projects; however, research results found that awareness and understanding of the policy are inconsistent, with 61% of respondents unaware of its existence. There was also mixed understanding of what "monitor" means. Governance complexities, such as overlapping responsibilities between the Department of Water and Sewerage (DWS) and the Water Authority of Fiji (WAF), and the duality of governance structures in rural, community contexts (iTaukei and settlements), further complicate policy application. According to some respondents, there is a need for improved guidance on the status of subnational WASH-related bylaws and rules. Clear evidence indicates that the directive for all matters to go through the Roko Tui's Office (RTO) before reaching other agents, such as Provincial Administrators (PAs) and District Officers (DOs), is not being followed.

Relative to other countries in this wider study (Solomon Islands and Vanuatu), Fiji is better equipped in terms of **budgeting, finance and (material) resources**, but still faces challenges. The absence of recovery costs for operation and maintenance at the community level highlights the need for updated capacity development approaches and the adoption of a life cycle costing/service delivery approach. Addressing financial and budgetary challenges and disaggregating between hardware (infrastructure) and software (training/monitoring and follow-up) is desirable. Transitioning from government and 'project' dependency to a more sustainable community management "plus" model requires a shift to greater professionalisation at the national and subnational level, which necessitates greater human and financial resources and a subtle but critical conceptual shift. The hitherto lack of standardised water committee training has hindered efforts to normalise the significance of water fees, regular fundraising, and sound financial management. It is too soon to assess the impact of the new WC training, but it is a welcome initiative; however, a review of the content suggests that financial matters arguably remain under-engaged with.

The cross-sectoral nature of WASH makes **information and knowledge sharing** a complex and resource-heavy task – this is not a challenge unique to Fiji. There has been, and remains, significant challenges with information and knowledge sharing (recognised by respondents from all agencies and at both national and subnational levels), with duplication in data collection, contradictory data, and fragmented and inconsistent sharing of information amongst stakeholders.

Research underscores the importance of **monitoring, evaluation and learning** (MEL) systems for tracking progress and informing adaptive management. The *Rural Water and Sanitation Policy* (2021) outlines the responsibilities of various agencies in monitoring water quality and project implementation. Despite this, there remains ambiguity, a potential duplication of effort, and questions about resource efficiencies – especially with regards to water quality. The Policy mandates monitoring donor and NGO compliance with regulations and standards, and tasks the Roko Tui's Office with monitoring water and sanitation programs in rural iTaukei villages. This Policy directive is not universally understood or practiced, and interpretations differ—some see it as a coordination task, while others expect direct engagement with WCs and Turaga ni Koro's (TNK).

Harmonisation and coordination across the sector are challenging. Fiji's water and sanitation planning shows strong consultation, with input from diverse stakeholders shaping the *National Development Plan* (NDP), WAF *Strategic Plan*, and *Fiji Water Sector Strategy 2050*. However, rural water service delivery lacks some strategic alignment, with examples of non-government organisations (NGOs) working independently of key ministries. The draft *Rural Water and Sanitation Master Plan*

aims to address this by better outlining responsibilities. At the national level, there is some evidence of siloing and territoriality among key government ministries and stakeholders. Again, the Master Plan is intended to mitigate some of these issues. The proposed "Rural Water and Sanitation Program Coordination Committee" is designed to provide strategic oversight and direction for implementing the *Rural Water and Sanitation Policy* and support improved sector harmonisation. There were calls for more frequent meetings and forums at the subnational level to enhance collaboration and policy awareness, including recommendations for a WASH Steering Committee at the Provincial level.

The WASH sector in Fiji faces persistent challenges in relation to **human resources and capacity development,** compounded by significant staffing shortfalls and high turnover rates. DWS, WAF and Ministry of Health and Medical Services (MoHMS) all struggle to meet expanding responsibilities with limited resources. Provincial officers are often overwhelmed by their broad workload, resulting in concerns of burnout. Despite participation in various capacity-building initiatives, there remains no overarching plan or systematic human resource needs assessment for the sector, leaving gaps in training and support at both national and subnational levels. WCs are the centre of the governments adopted CWM model, yet water management training has been highly inconsistent. The recent development and pilot implementation of standardised WC training is a welcome and productive development. Nevertheless, WCs largely lack post-construction support, despite provisions in the Policy through TNKs and Assistant Roko Tuis (ART) "monitoring" the WCs. Without follow-up, WCs are likely to underperform, water systems will continue to fail (negatively impacting human health and wellbeing), and systems will require costly rehabilitation long before they should.

In sum, despite challenges, Fiji has a solid policy base and decentralised governance system with which to animate the CWM+ approach, with subnational actors now responsible for monitoring the water and sanitation situation in communities. This report aims to assist the government, development partners, and sector stakeholders prioritise resources and actions to enhance rural water service delivery and decentralisation efforts, ultimately improving WASH outcomes and strengthening the resilience and well-being of rural communities. The policy awareness deficits identified in this research have already began to be addressed by the DWS.

Introduction

Pacific Island countries (PIC) face significant challenges in providing access to improved drinking water and sanitation services. Only half of the population uses basic drinking water sources, and just one-third have basic sanitation, placing these nations among the lowest globally in terms of access (United Nations, 2021). With limited government and private sector water services in rural areas, **community water management** (CWM) has become the dominant model for rural water service delivery, as reflected in numerous government policies.

The CWM model is entirely dependent on **water committees** (WC) – a group of 'volunteers' who are tasked with managing and operating a water system (ideally) after some training. However, evidence from PIC and elsewhere demonstrates that most WCs are struggling to function sustainably and effectively (e.g., Bond et al. 2014; Clark et al., 2014; Hutchings et al. 2015; Love et al. 2020, 2021; Whittington et al. 2009; World Bank, 2017).

Poor CWM leads to poor water, sanitation, and hygiene (WASH) outcomes, such as inadequate accessibility, quality, and reliability of water and compromised hygiene practices.

Collectively, PIC have the lowest access to safely managed or basic drinking water and sanitation services in the world. As of 2020, only 47% of PIC rural populations had access to basic drinking water sources (WHO/UNICEF, 2021)

Since the beginning of the 2000s, there has been a growing emphasis on the need for post-construction support and the rise of what has been called "community water management plus" (CWM+) approaches (e.g., Baumann, 2006; Hutchings et al. 2015, 2017). This has resulted in the emergence of alternative models marked by increasing **decentralisation,** professionalisation, and a diversification in service delivery models, including various forms of private sector involvement. There is a global shift towards a "**service delivery approach**" (SDA) to rural water supply, which means considering the entire life-cycle cost of water service delivery, incorporating both the hardware (engineering or construction elements) and software (management) components necessary for sustainable water services (Lockwood and Smits, 2011: 19-20, *et passim*; Moriarty et al. 2013; World Bank, 2017).

This shift in tackling rural water services also entails a greater appreciation for the enabling environment and its political economy at all levels (international, national and subnational), and a nuanced appreciation for the role of local (non-state) institutions (Whaley and Cleaver 2017).

Decentralisation

Decentralisation can be defined as "the transfer of authority to plan, make decisions or manage public functions from the national level to any organisation or agency at the sub-national level" (Mills et al., 1990: 89). In international development, decentralisation harks back to the post World War II reconstruction-era, where empowering local governments was a means to rebuild war-torn nations. It was refigured in the 1980s under the International Monetary Fund and World Bank as part of structural adjustment policies aimed to reduce central government expenditure and improve public sector efficiency and, since the 1990s, has been seen to enhance local governance and service delivery (Awortwi, 2013; Bergh, 2004; Conyers, 2007; World Bank, 1999; Smoke 2003). Decentralisation is also an unmistakable feature of the water sector worldwide – considered a "critical building block" and a precursor to, or component of, the professionalisation of rural water service delivery (Lockwood and Smits, 2011; World Bank, 2017).

There remains debate amongst scholars and policy makers about the net development benefits that have derived from decentralisation in low- and middle-income countries (see Faguet and Poschi, 2015). Many **development partners** working in the Pacific, including the Australian government, have not paid adequate attention to decentralisation. A 2014 evaluation of Australian aid found that it had only "variable success" in sustaining service delivery outcomes in decentralised contexts, and that subnational capacities and context were not appropriately taken into consideration in development policy, strategy, sectoral design and evaluation (ODE, 2014). A key recommendation was:

> **Aid is more likely to achieve sustainable improvements in services delivery if it works to improve *service delivery systems* rather than directly support the delivery of health, education, infrastructure or other services (ODE, 2015: 4)**

Decentralisation and service delivery

Service delivery refers to the mechanisms, processes, and activities involved in providing services (such as healthcare, education, water and sanitation etc.) to individuals, communities, or businesses. Key questions for service delivery include: What authority is held at the subnational level to make decisions about service delivery? Where does responsibility for planning, providing, and delivering services and monitoring lie? (ODE, 2014:92).

There are both **supply** and **demand** aspects of service delivery (Figure 1).

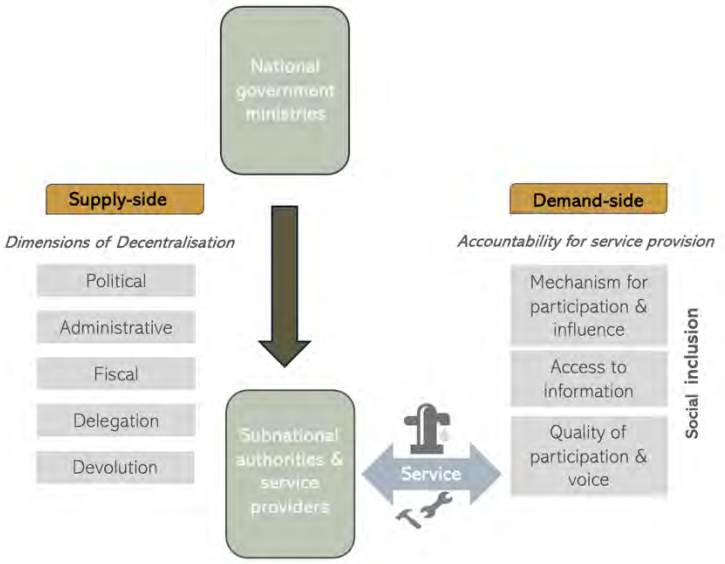


Figure 1: Service delivery and decentralisation[1]

The **supply side** focuses on the entities responsible for delivering the services and their capacity to provide quality services, and includes regulation and policies, resources, providers, and distribution and accessibility.

There are said to be four main **dimensions** or **types** of decentralisation.

Dimensions of Decentralisation

Political: The voice of citizens is integrated into policy decisions at a subnational level and civil society can hold the associated authorities and officials accountable

Administrative: Redistributing authority and responsibility for providing public services from the central or national level of government to a subnational and/or local level

Fiscal: The decentralisation of government expenditure and revenue-raising authority to subnational government structures in line with their allocated functional responsibilities

Market or divestment: The transfer of functions to the private sector or non-government organisations

Analysts also talk of three **modes** of decentralisation – deconcentration, delegation and devolution (below). In practice these modes co-exist, with political drivers and logistical realities rendering these categories less clear. This is especially evident in countries with low resources and capacity (ODE, 2014:91-2).

Modes of Decentralisation

Deconcentration: The weakest form of decentralisation, transferring administrative responsibilities to lower levels of central government (generally the first step in decentralisation)

Deconcentration entails the mere relocation of execution to the local level with decision-making power remaining at the centre

Delegation: Transfers managerial responsibility to semi-autonomous organisations, not wholly controlled by the central government but accountable to it

A more extensive form of decentralisation

Devolution: Transfers governance powers and responsibilities to subnational levels outside direct central government control, typically involving elected local governments

Devolution is the most far-reaching form of decentralisation and involves the transfer of governance powers and responsibilities to subnational levels that are largely outside the direct control of the central government, often through some electoral process which makes local governments directly accountable to local people.

The **demand side** of service delivery refers to the role and influence of users, customers, or beneficiaries in shaping the delivery of services. It emphasises the perspectives, preferences, and needs of individuals and communities who consume public or private services (such as healthcare, education, water etc.). Social inclusion is vital here - ensuring that all groups (women, men, children, and people with disabilities) can participate in decision making, hold providers accountable, and access services equitably.

Citizen demands for effective governance represent an important facet to effective service delivery in decentralised contexts. Their role is critical to support accountability for the quantity and quality of services and who gains access to those services (ODE, 2014). Three areas are of critical importance:

Accountability for service provision

Mechanisms for participation and influence: The structures and processes that ensure active participation of citizens in influencing the operations of government (elections and other means to participate in policy, planning, budgeting, and social auditing)

Access to information: Degree to which governments, especially at the subnational level, ensure accountability and transparency and the availability of information to citizens (e.g., public access to budgets and acquittals, user-friendly access to policy and processes, commitments and standards of service delivery)

Quality of participation and voice: Citizens' ability to engage in participation mechanisms, use information, and voice their opinions to influence government and services (ODE, 2014: 93).

Rural water service delivery & decentralisation

The transfer of authority from central to local governments has significant implications for how water services are delivered in rural contexts. There are a range of decentralisation scenarios evidenced around the world. Decentralisation unfolds over an extended period, requiring many years, even decades. Evidence demonstrates that effective decentralisation requires meaningfully empowering lower levels of government, endowing them with not only service mandates but the resources, capacities, and decision-making autonomy required to meet those mandates. Without adequate resourcing and long-term commitment, service delivery falters and WASH situations can deteriorate rather than improve.[2]

In their study of rural water service delivery in 13 countries, Lockwood and Smits (2011) identify four main decentralisation experiences associated with rural water service delivery:

Rural Water Service Delivery and Decentralisation

Phased Decentralisation: Initial deconcentration to the provincial level, followed by further decentralisation (e.g., Benin, Mozambique)

Partial Decentralisation: Varying degrees and dimensions of decentralisation applied in parallel (e.g., Ghana, India, USA, Ethiopia)

Inadequately Resourced Decentralisation: Implemented rapidly, often only on paper, without sufficient support or decentralisation of key capacities to local authorities (e.g., Burkina Faso)

Wholesale Planned Decentralisation: Well-planned and fully implemented (e.g., Colombia, South Africa, Uganda) (Lockwood & Smits, 2011: 65-8).

The low population densities, geographical dispersal and isolation of many rural communities in PIC – among other factors unique to small island developing states – complicates the neat transferability of lessons learned from elsewhere to the PIC context.[3] This is perhaps most evident in regard to the professionalisation of rural water service delivery through market divestment or other means: **most PIC remain reliant on the CWM model** and a full service delivery approach to rural water supply is yet to be fully embraced (due to resource constraints and other factors).

Nevertheless, decentralisation trends have been intensifying in Solomon Islands, Vanuatu, and Fiji, with each country enacting policy changes over the last decade or so that transfer greater responsibility to subnational actors to support (in varying ways and levels) rural water service delivery.

Context

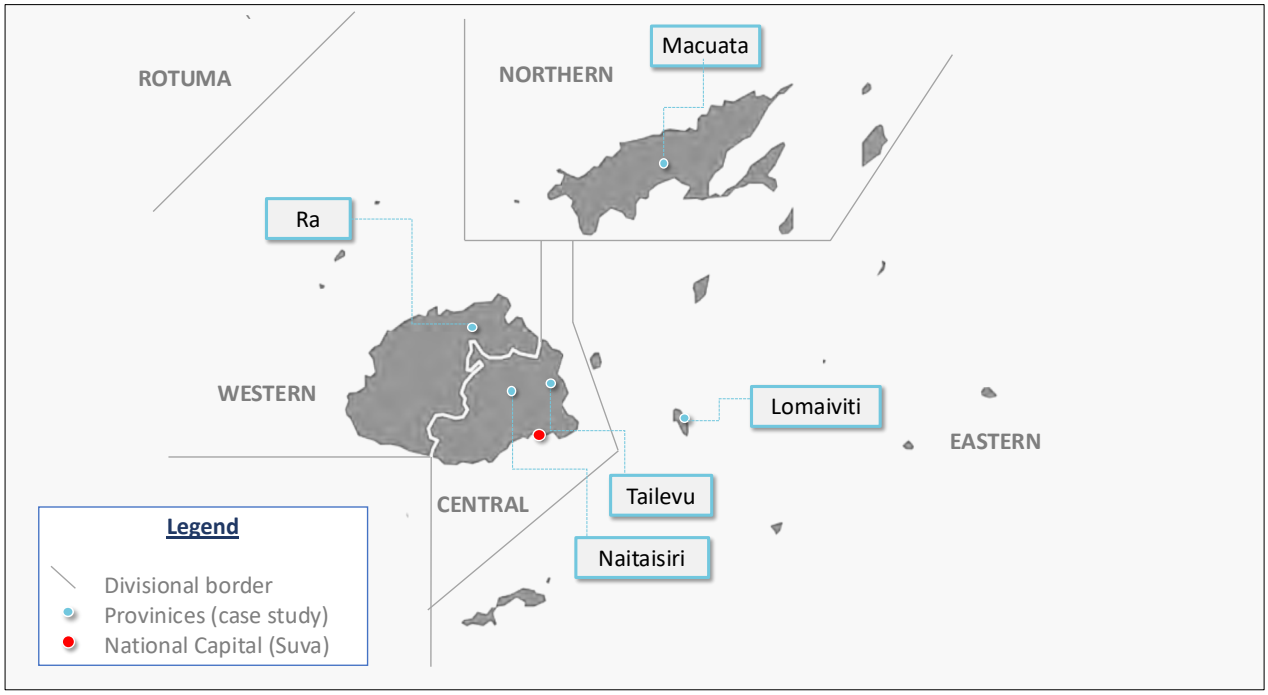


Figure 2: Map of Fiji – highlighting the five provinces where data was collected (source: Google maps and authors)

Fiji

The Republic of Fiji, located in the South Pacific Ocean, is an archipelago consisting of 332 islands, including approximately 110 inhabited islands (World Bank, 2021; Jagan, 1988). The largest island, Viti Levu, is home to the capital city, Suva, which covers an area of approximately 18,300 km² (GoF, 2023). Fiji is composed of 14 provinces and one dependency, Rotuma—a group of islands situated approximately 500 kilometres north of the main Fiji Islands, midway between Fiji and Tuvalu.

Despite significant net outmigration, Fiji's population has steadily increased to 893,468 people, with approximately 58% residing in urban centres (FBoS, 2021; World Bank, 2021). Surface water reservoirs are essential for around 70% of Fiji's population and industries, supported by widespread rainwater collection systems (World Bank, 2021). Fiji's oceanic tropical marine climate ensures consistent warmth with minimal temperature fluctuations and variable rainfall, particularly during warmer months (WHO & UN, 2021).

As a small island developing state, Fiji faces substantial vulnerability to climate change impacts, including rising sea levels, coastal erosion, water shortages, salination of water supplies, depleted fishery stocks, large-scale flooding, and increased occurrences of vector-borne diseases. These challenges are already affecting the nation, with internal displacement due to climate-related factors becoming a reality (WHO & UN, 2021).

The dispersed nature of rural and maritime communities across Fiji presents significant challenges for the government in delivering water and sanitation services. While larger islands have access to local streams and surface water, other islands must rely on limited groundwater and rainfall sources for freshwater. Currently, no desalination systems are in place to provide drinking water.

According to numerous sources, **water supply systems are breaking down and requiring repairs much earlier**

than they should – within 2-4 years of implementation. The government have identified the following problems and challenges as drivers of low system sustainability:

- **Design for single source only**
  - *not taking rainwater harvesting and other local supplies into consideration*
- **Lack of training in operation & maintenance**
  - *until late 2024 there has been no systematic training packages for communities following water system handover*
- **Lack of clear management responsibility**
  - *Clarification of local responsibility and understanding of water resources has not been developed adequately*
- **Lack of support for maintenance**
  - *No maintenance back-up has been provided by implementing agencies – follow-up support is required*
- **Inadequate estimates of water demand**
  - *Water usage increases dramatically when people have access to water taps, as does the production of wastewater (DWR, 2021: 7-10).*

The relationship between water supply and increased wastewater identified in the national *Rural Water and Sanitation Policy* (DWS, 2021) is a significant issue, with estimates that **37% of the country's wastewater is discharged directly into land and marine environments**, with no comprehensive national data available on the safe management of sanitation systems (WHO/UNICEF, 2021).

This increases the risk of contaminating drinking water sources, which can lead to waterborne diseases such as typhoid, leptospirosis, and gastroenteritis. Heavy rainfall and flooding, often linked to cyclones, further exacerbate these risks by mobilising pollutants and pathogens into waterways. Research has identified the "proximity of swamps" and "livestock near water sources," as contributing to high disease risk by enabling mosquito breeding and water contamination (Jupiter et al., 2024).

The relationship between environmental and human health in Fiji is circular: clean and well-managed water resources protect human health, while poor environmental practices, compounded by climate vulnerability, amplify disease risk. Fiji has reported:

- over 20 typhoid outbreaks since 2005
- significant dengue outbreaks (27,000 cases in 2013–2014)
- multiple leptospirosis outbreaks following cyclones and heavy rainfall events (in Jupiter et al., 2024). [4]

Decentralisation in Fiji

Political and Administrative Decentralisation

Historically, Fiji's political decentralisation has been influenced by its colonial legacy and the continual interplay between authoritarianism, conservatism, and liberalism (MacWilliam, 2019). British colonial rule in Fiji, established in 1874, redefined land ownership through the Native Lands Commission, which designated the mataqali, or descent group, as corporate landholders. The Deed of Cession, negotiated with Ratu Cakobau, who claimed the title of King of Fiji, was meant to encompass all of Fiji's islands. However, the western regions, which historically had a less hierarchical social structure, were initially excluded and resisted its terms (Parke, 2014). To forestall rebellion and assuage discontentment, the first Governor of Fiji, Sir Arthur Gordon, orchestrated the deployment of a regiment comprising eastern Fijians to suppress uprisings in the western regions. Two years after the Deed of Cession, Gordon established the Fijian Administration or Matanitu i Taukei to establish a system of "indirect rule" over indigenous Fijians. This began dividing the colony into 12 provinces (later extended to 14). Steadily, eastern Fiji's hierarchical chiefdoms and strong village structure subsequently became the recognised "tradition" across the country (Macnaught, 2016).

The Native Administration aimed to formalise British knowledge of local "customs" into legislation, ensuring they served to reinforce colonial authority. The administration effectively marginalised the iTaukei population from governmental and economic operations of the colony. This was because the governance structures tailored to regulate European capitalist settlers were seen as incompatible with iTaukei ways of life (Brookfield, 1988:15-17; see Derrick, 2001 [1946]; France, 1969; Kaplan, 1989, 2004; Pauwels, 2015). Gordon was committed to preserving iTaukei culture and designed a closed system of governance and control that aimed to enable the colonialists to pursue their interests without interference from the iTaukei community (France, 1968). This ultimately functioned as a mechanism to impede the development of indigenous Fijians (e.g., Hall, 2019; Sayed Khaiyum, 2002).

Under this system of "indirect rule", each province comprised various districts each known as "tikina". In each tikina were located a number of villages or koro, led by a chief, or tui, with hierarchical positions such as Roko Tui for the province, Buli for the district, as well as local mataqali (clan) chiefs. Additionally, there is the Turaga ni Koro (TNK), or village headman. These communal units each have their own council to address local issues, which

then convene at higher levels for further discussion and decision-making. In the colonial-era, it was generally chiefs sympathetic to the colonial presence who were appointed to hold many of these positions (Durutalo, 1997). This is essentially the same decentralised governance system which exists today.

At Independence in 1970, the country adopted a constitutional democratic system based on the Westminster model – a unicameral parliament with proportional representation, an executive comprising a President and cabinet, an independent judiciary, the public service, and disciplined forces (military, police, prisons).

A series of coups in 1987, 2000, and 2006 disrupted the democratic functioning of the government and dented the country's global reputation (see Knapman, 1990; Fraenkel, 2013). The latest coup in 2006 – led by Josaia Voreqe "Frank" Bainimarama – resulted in significant changes in indigenous institutions, including the dismantling of the Bose Levu Vakaturaga (BLV) or Great Council of Chiefs (GCC) and the cancellation of annual Methodist Church Conference (Appana and Abbott, 2015; Ramesh, 2010). The Bainimarama government also dissolved municipal councils, sugar cane farmers' unions, and the public sector union. The re-establishment of parliamentary democracy was supported by a new Constitution in 2013 and a national election in September 2014 (which Bainimarama's *Fiji First Party* won).

The Bainimarama-era ended in 2023 with the election of the Rabuka government in December 2022 (see O'Brien, 2023). The GCC was reinstated in 2023 after the Fijian parliament passed the iTaukei Affairs (Amendment) Act of 2023, which re-established the GCC as a statutory body with a mandate to oversee matters related to the iTaukei people, their traditions, and culture (Movono & Sas, 2024).[5]

Subnational governance and administration

Fiji has a complex governance and administration system and structure that vary, in rural contexts, between registered indigenous villages (koro) and what are legally referred to as 'settlements.[6] Nevertheless, they both sit under a broader state structure.

The Republic of Fiji is divided into four administrative divisions: Northern, Western, Eastern and Central (Figure 2, above). Each has a Division Commissioner appointed by the government and a Divisional Planning Officer. These Divisions are further subdivided into fourteen provinces – or *yasana* – which are each aligned to one of the three confederacies (Kubuna, Burebasaga and Toyata) that pre-date colonial intrusion and represent chiefly alliances (Lasaqa, 1984). The island of Rotuma, north of the main archipelago, is a self-governing dependency according to the Rotuma Act promulgated in 1927. The Fiji government includes Rotuma in the Eastern Division for statistical purposes (such as the census), but it operates autonomously and does not fall under any of these divisions, with its own council empowered to legislate on most local matters. While the divisions primarily group together provinces and have limited administrative functions themselves, they play a key role in promoting cooperation among the provinces to facilitate the provision of services.

Each of the fourteen provinces are administered by a Provincial Administrator (PA) and a Provincial Council, whose joint role is to oversee the administration and development of their respective provinces.

The decentralised governance structure in Fiji is provided for by several key legislations and regulations. The *iTaukei Affairs Act* (previously the Fijian Affairs Act) establishes and regulates the iTaukei Affairs Board [7] and the 14 provincial councils. The Act outlines the roles and responsibilities of the councils, ensuring they align with national development goals while preserving indigenous customs and traditions. The other principal decentralisation legislation is the *Local Government Act 1972 (Cap. 125)*, which was amended in 2006 to enable councils to enter partnerships, joint ventures or other commercial arrangements with other statutory authorities, companies, or other legal entities. [8] The *Local Government Act* was amended again in 2009, impacting the composition of councils and allowing for the appointment of special administrators, and again in 2018 to amalgamate rural local authority areas with municipal councils (CLGF, 2019)[9].

The 2013 Constitution did not include provisions for either the GCCs or the autonomous powers of the provincial councils, **effectively centralising many governance functions under the national government.**

Each province is divided into districts – around 195 at present, with some provinces containing as few as four districts and others as many as twenty-two. These districts vary in size, with village numbers ranging from between nineteen and 146. Districts tend to centre on towns, but some follow provincial or tikina boundaries. District Officers (DOs) and Assistant District Officers manage administration at the district level within a province, ensuring that government services and development initiatives are implemented effectively, including statutory duties such as records registration, liquor licensing, and acting as Third-Class Magistrates. DOs

report to the PA and serve as a link between the provincial administration and local communities, working closely with District Advisory Councillors (DAC), as well as the Roko Tui Office (RTO) and, by extension, the TNK.

The complex amalgam of 'customary' and contemporary administrative roles in Fiji is further complicated by the legal differentiation between villages and settlements.

Village and Settlement in rural Fiji

There are two types of residential categories in rural Fiji – village and settlement. A village is registered iTaukei villages or "**koro**" (of which there were 1,217 in 2022). A settlement is everything else. Some settlements are iTaukei villages that will eventually become a registered koro (e.g., 45 new villages were registered in 2022).[10] Others are iTaukei settlements where people have moved to be closer to transport, school, and/or other services, or where people have decided to settle on their own mataqali land. Many rural settlements, however, are demographically dominated by Indo-Fijian's.[11]

Around eighty-seven percent of land in Fiji is communally owned by iTaukei clans (cannot be sold) and is managed by the iTaukei Land Trust Board. Historically, most Indo-Fijians lived in cane farming settlements, and today some (although not as many as previously) still lease land for farming through the iTaukei Land Trust Board (typically for 30 years, extendable to 99 years) (TLTB, n.d.). Over the last few decades many Indo-Fijians have moved to coastal towns like Nadi and Lautoka on Viti Levu and Vanua Levu, seeking jobs in factories, mills, construction, businesses, and government. An increasing number now reside in Suva and its peri-urban outskirts, where both Indo-Fijians and indigenous Fijians migrate for better employment opportunities (Leonard, 2019; Trnka, 2005).[12]

Villages and settlements have their own local, district, provincial, and national focal points. Village (iTaukei) communication with the government on matters such as development ideally go from the TNK (village 'headman') through the Ministry of iTaukei Affairs (MTA)(the RTO), and then to the Provincial Council Office, Divisional Commissioners Office and/or PAs Office (which sits under the Ministry of Rural and Maritime Development and focuses on providing opportunities and services to people resident in both rural settlements and villages). However, PAs can "never go straight to the village" but must go via the Roko Tui's Office (e.g., ART-M5). The Roko's are "mediators" or "facilitators" between communities and the state. Settlements, by comparison, communicate with the state through a DAC (a settlement leader/spokesperson) and typically do not deal with the RTO. In gloss, **PAs deal with all communities,** but the **RTO only works with iTaukei communities.**

iTaukei (koro) contexts

The MTA acts as a bridge between the government, iTaukei institutions, and other government administrative bodies across the country. The ministry manages iTaukei land records, fishing grounds, headship titles, and traditional knowledge, and resolves disputes over these matters (MTA, 2017). The Ministry also oversees the fourteen provincial councils, acting as the "guardian" of the traditional Fijian administration system that stretches down through the provinces to the district and koro (Figure 3).

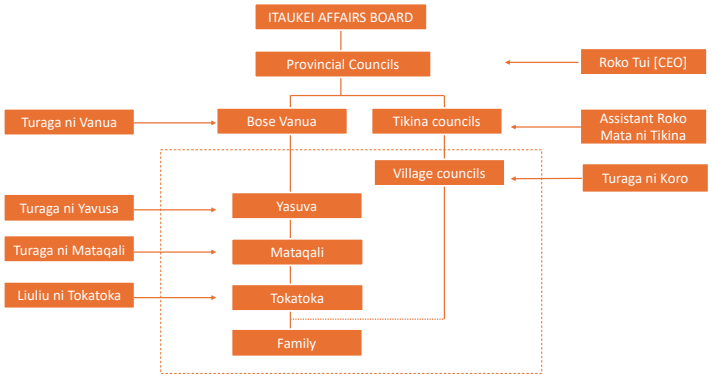


Figure 3: iTaukei administrative structure

The MTA currently has eight "platforms" and "strategic proprieties". Climate change and disaster risk reduction, as well as improved "water quality", are situated under strategic priority 7 – "Promote the conservation and preservation of natural resources and building resilient iTaukei communities" (MTA, 2022).

The ministry operates at the provincial level through the **Roko Tui**, who is the head of the Provincial Council. A Provincial **RTO** consists of a Senior Roko Tui (SRT), several Assistant Roko Tuis' (ARTs) – who are responsible for a set number of koro within a tikina – and other support staff (e.g., clerical staff, driver, and a conservation officer).

At the tikina level, key leadership roles include the Buli (an administrative and chiefly title formalised by the British), Turaga ni Vanua[13] (an inherited chief who oversees multiple villages and maintains cultural and land stewardship), and Turaga ni Yavusa (head of a yavusa, representing the tikina in councils and government). Every three months there is a Bose ni Tikina [Tikina Council meeting], overseen by the "Tui" or "Turaga iTaukei",[14] to discuss local development topics. Regulations enforced at

this level are outlined in the iTaukei Affairs (Provincial Council) Regulation 1996, Part I [regs 3-23].

In each tikina, the Mata ni Tikina (district representative) links the council with their tikina, ensuring all villages receive council updates. Koro (villages) are typically formed by a single yavusa, which is composed of multiple mataqali (clans).

At the village level, governance revolves around the TNK (referred to informally as turani) who is selected by villagers and approved by the tikina council.[15] The TNK operate as a "village headman" and receives a stipend from the government.

The Bose va Koro (Village Council) sits above several sub-committees, generally 8-10, and must meet at least quarterly. The Village Council is required to enforce decisions made by the Tikina Council. Common sub-committees include Water, Health, Development, School and Church (Love et al., 2021:45). Fundraising is the prime means of supporting development at the village level, with both resident and emigrant members often contributing to fundraising and rural development (Love et al., 2024).

Under the MTA Strategic Development Plan (2018-2022), a community profiling process informs Integrated Village Development Plans (IVDP) which are stored in the iTaukei Affairs Database (FJ-MTA-M1), guiding village development priorities.

Settlements

As noted above, settlements can be populated by iTaukei, Indo-Fijian's, or both (as well as minorities such as Melanesian descendants). For example, Cobue (Bua province, Northern Division, Vanua Levu) is an iTaukei settlement settled in 1977 by people from the nearby koro of Navunievu (also referred to as Waitabu village), located 3.8 kms away. The current settlement leader first moved his family to Cobue because it was both their familial land and because it was located nearer to the school. Previously, the settlement was freehold land occupied by Indo-Fijians whose forefathers had leased and farmed the land. There are two nearby Indo-Fijian settlements – Vatubogi and Cobue settlement. Cobue is still governed using the standard iTaukei system and the proximity and ties to the nearby 'home' koro is a key thread of strength and cohesion, evidenced through inter-community fundraising and committee participation. Despite some tensions over water, there is relative harmony and cooperation with the nearby Indo-Fijian settlements (see Love et al. 2020:44-5).

A more typical settlement example is Narara – an Indo-Fijian settlement (Ra Province, Viti Levu) consisting of 77 households where the main source of income is sugar cane and vegetable farms (Love et al., 2020:45).

Rather than the TNK, it is DACs who are the "eyes and ears, leg and hands, of the government" in settlements. DACs operate under the Ministry of Rural & Maritime Development and Disaster Management (MRMDDM) and are tasked with representing multi-ethnic and minority communities, facilitating discussions and decisions on development issues, coordinating development projects with governmental and non-governmental organisations (NGOs), and assisting during natural disasters by managing evacuation centres, food rations, and relief supplies outside of iTaukei village boundaries.[16]

Within a settlement there is a settlement committee, and it is the elders in the community who make decisions. Whenever there is an issue to be discussed, someone is elected to undertake the responsibility to resolve it. Settlements tend to have fewer committees than koros, with between four and six (MRD-M1). Narara, for instance, had five.[17]

The DACs report to PAs, under the MRMDDM. Note that PAs is a wide term that refers to not only the PA role itself, but also the Assistant Provincial Administrator, DOs, and more. PAs regularly attend district Bose ni Tikina meetings – they are not only engaged with settlements.

There are some important differences to underscore between the Roko Tui's Office and PA's. First, the Roko Tui's Office typically does not have funds for rural development activities – these primarily rest with the MRMDDM.[18] In this research, respondents frequently noted that WCs would go straight to the PAs rather than via the Roko Tui's Office (as per policy), as they know that it is the PAs that have the money. One respondent put as follows: "The Roko Tui's Office looks after the village [iTaukei wellbeing, governance, culture]. For our part [Provincial Administration] we look after the development aspect" (PA-M3).

Regardless, in terms of water, the policy is that for koro contexts the RTO should be the "first point of contact", and they then should discuss with PAs and the Water Authority of Fiji (CO-F1). Second, only the Roko has the authority to enforce most Acts and legislations within a koro, e.g. a health inspector from the Ministry of Health and Medical Services **(**MoHMS) cannot enforce the Public Health Act in a registered iTaukei village, only offer assistance and advice (HI-F1). Hence, the RTO is an important conduit for ensuring pubic and environmental health issues are adequately addressed.

Decentralisation and the health sector in Fiji

Fiji's health sector has undergone progressive decentralisation over recent decades. The initial phase, termed the "first wave" of decentralisation (1999-2004), aimed to devolve health services to subnational governments, transferring specific functions from the central ministry. However, implementation constraints shifted the approach to delegation—granting administrative authority over select functions to three administrative regions only (Mohammed et al., 2016: 234). Frequent government changes required continuous renegotiation, and MoHMS staff perceived the project as externally driven by Australian interests. Consequently, a fully devolved structure was never achieved, and decentralisation was largely "rolled back" by February 2008 (Mohammed et al., 2016: 238).

The "second wave" of decentralisation (from 2009) was limited to Suva and focused on deconcentrating outpatient services from divisional hospitals to local health centres, thus reallocating workload without fully decentralising authority (Mohammed et al., 2016). Although this phase incrementally targeted service delivery, five key functional areas remained centralised, restricting the potential benefits of decentralisation.

The most recent MoHMS *Strategic Plan* 2020-2025 emphasises the decentralisation of service delivery with specific outcome measures (MHMS, 2020: 1). The Plan seeks to shift outpatient services to sub-divisional hospitals and health centres closer to urban populations and enhance integration through community outreach with multidisciplinary teams and community health workers (CHWs) (MHMS, 2020: 12). A public-private partnership in 2018 with Health Care Fiji was established to improve services in the Western Division (MFA, 2018).

Water service access, delivery, and enabling environment

Water access situation

According to the latest WHO/UNICEF Joint Monitoring Programme report (2024), rural access to safely manage water in 2021 and 2022 was around 27%, with little change over the last five years (Figure 4).

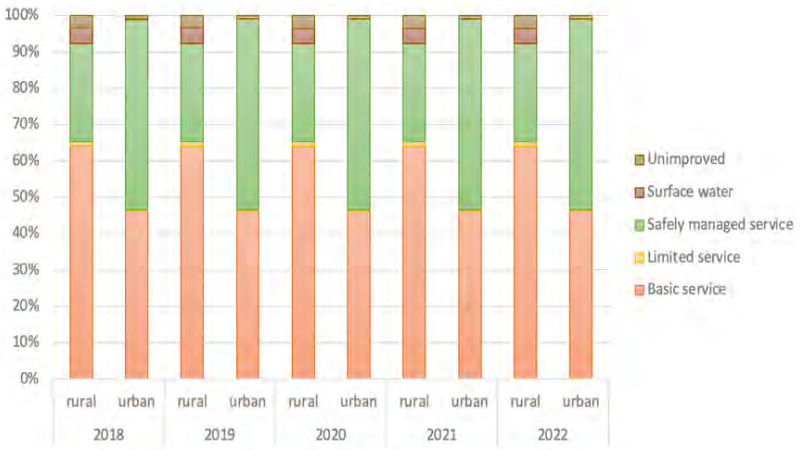


Figure 4: Water access - rural & urban Fiji (source: JMP, 2024)

The MRMDDM *Strategic Development Plan* 2021-2031, drawing on census data (FBoS, 2017), reports rural access to clean and safe water as 62% in 2020/21 (MRMDDM, 2021:10). The 2021 Fiji Multiple Indicator Cluster Survey (MICS) found (FBoS, 2021):

54% household members with a water source available when needed

45% household members whose source water was tested and had *E. coli* contaminates in their drinking water

31% household members with improved drinking water source on premise, available when needed and free of *E. coli*

A key strategy to increase access to safe water coverage in Fiji has been through the introduction of novel technologies, such as plain chlorination or, more recently, Ecological Purification System (EPS). Developed in partnership with the Japan International Cooperation Agency (JICA), the DWS and the Department of Public Works have constructed and installed 124 EPSs across the country, benefitting over 15,000 people (DWS-M1).

The Ecological Purification System uses no chemicals, power or moving parts – it employs natural based mediums consisting of stones, gravel and sand stored in two or three different rota tanks, with algae growing on a sand surface to provide oxygen, trap particles and remove nutrients. The Department of Water and Sewerage (DWS) monitors water quality of all EPS facilities and advisers WAF on recommendations for maximum efficiency of the system (DWS, n.d.). **The roll-out of EPSs greatly increases safe water access, improving rural targets** (DWS-M1).

WASH and climate change

Like other PIC, Fiji has been especially impacted by both sudden and slow-onset disasters that are related to climate change (SPREP, 2024; MoE 2018). The social and economic costs of disasters are extremely high – between 2000-2021 Fiji experienced a total of 13 cyclones and flood events, which cumulatively accounted for 79 deaths and damages amounting to FJD$3.13 billion (MRMDDM, 2020: 16).

Fiji has long been active in raising awareness around the world about climate change and its impact on small island developing states, actively participating in international forums[19] and mainstreaming climate change adaptation and resilience into strategic development plans and policies. Fiji was the first country in the world to develop Planned Relocation Guidelines and Standard Operating Procedures for communities impacted by climate change (MoE, 2018; OPM, 2023). In September 2021, the Fijian Parliament passed Fiji's *Climate Change Act*, which creates a further legal mandate for state-supported relocation activities.

The recent *Rural Water and Sanitation Policy* (2021) includes a new section on climate change (DWS, 2021: §10,1, vi). The national Drinking Water Safety and Security Planning (DWSSP) process undertaken by MoHMS does not currently include climate change as risk, but this is currently being addressed (along with other adjustments) as part of a pilot DWSSP review and revision activity currently being undertaken by MoHMS and the International WaterCentre.

Rural water service delivery - Governance

Rural water services in Fiji are managed centrally and provincially, with resources and authority deconcentrated and devolved across WAF depots, health inspectors, and local administrators. Oversight involves multiple actors, including PAs and WCs. Private sector involvement in water implementation is considered but not yet widely integrated into national planning.

Key Departments and Ministries:

Department of Water and Sewerage (DWS): Under the Ministry of Infrastructure and Meteorological Services (MIMS), is responsible for policy, regulation, data management, compliance, and conservation awareness. Centralised in Suva, DWS works closely with WAF, providing technical support (design, implementation and maintenance of water and sewerage systems), regulatory compliance (ensuring WAF services meet required standards), and cooperation on joint projects.[20]

Water Authority of Fiji (WAF): Manages urban and rural water services, community engagement, and water quality testing through decentralised offices and treatment facilities. [21] WAF is a Commercial Statutory Authority promulgated through the Water Authority of Fiji Act 2007. Between 2010-2019, WAF implemented 622 rural projects (MRDDM, 2020:18).

Mineral Resource Department (MRD): Responsible for ensuring the sustainable utilisation and protection of groundwater resources across the country, including regulatory functions, groundwater exploration and assessment, coordination with other ministries, research and data management, capacity building and awareness, and technical expertise (MLNR, 2015).

Ministry of Agriculture and Waterways (MoA): Focuses on agricultural water use, flood control, and coastal protection.[22]

Ministry of Health and Medical Services (MoHMS): Sets water quality standards, promotes sanitation, and conducts DWSSP. The Ministry holds the authority to halt activities that disrupt or contaminate water or waterways and enforce legislation regarding rural household sanitation practices and wider environmental health standards. The MoHMS has a presence in each province, with responsibilities for community health centres and sub-divisional and divisional hospitals.

The Environmental Health Department (EHD): Sits under the MoHMS and is overseen by the National Advisor for Environmental Health, who reports directly to the Deputy Secretary for Public Health. The EHDs primary goals and objectives are outlined in the National Environmental Health Action Plan (NEHAP), a document developed within the framework of the "Healthy Islands" concept which was embraced by the Ministers of Health for the Pacific Region through the Yanuca Island Declaration in 1995 (MoHMS, 2002). The EHD are tasked with enforcing

legislations promulgated for the protection of public health from environmental health risk factors, including pollution, insanitary conditions, poor drinking water quality, illegal developments, improper waste management practices, breeding of disease vectors, poor food quality, and more (MoHMS, 2016).

Ministry of Rural & Maritime Development and Disaster Management (MRMDDM): Coordinates rural development projects to foster resilience and sustainable livelihoods. Through its 10-year *Strategic Development Plan* (2021-2031) (MRMDDM, 2021) and Integrated Rural Development Framework, MRMDDM is positioned to decentralise service delivery to ensure government services reach remote rural communities effectively (GoF, 2022). Collaborating with partners like UNDP, MRMDDM supports risk-informed projects and recently re-established a Rural Housing Program to improve rural infrastructure (Vucukula, 2024). The MRMDDM prioritises all rural water and sanitation requests through the District and Provincial Development Boards, which consist of the MTA, MoHMS, District Advisory Councils, and other stakeholder Ministries, which are then forwarded to the Water Authority of Fiji for action. All requests for the construction of rural water and sanitation schemes should be registered with the Ministry and included in the Ministry's planning processes – which draws on the WAF *Promulgation Act* 2007 (Section 30 Conditions of Service, paragraph 5.c 11) – and includes all communities (settlements and koro) at district and provincial levels.

Ministry of iTaukei Affairs (MTA): Develops, implements, and monitors policies and programs for the good governance and wellbeing of the iTaukei population of Fiji. The MTA are engaged in rural water services in that the 2021 Policy stipulates that all rural water and sanitation projects and needs are to be recorded and endorsed by the Roko Tui's Office who "shall monitor" water and sanitation programs and water conservation awareness in koros (DWS, 2021).

Ministry of Education: Ensures safe WASH facilities in schools.[23]

Ministry of Finance, Strategic Planning, National Development, and Statistics (MoF): Responsible for the *National Development Plan* (NDP). Several SDG6 targets have been explicitly integrated into the NDP, including 100% access to clean, adequate, and safe water by 2031, and a reduction in the amount of unaccounted water to 32% by 2021 (MoE, 2017).

WASH Cluster and Civil Society Support: The National WASH Cluster, led by MoHMS and United Nations Children's Fund (UNICEF), coordinates disaster response and preparedness. CSOs play key roles in capacity-building and emergency response.[24]

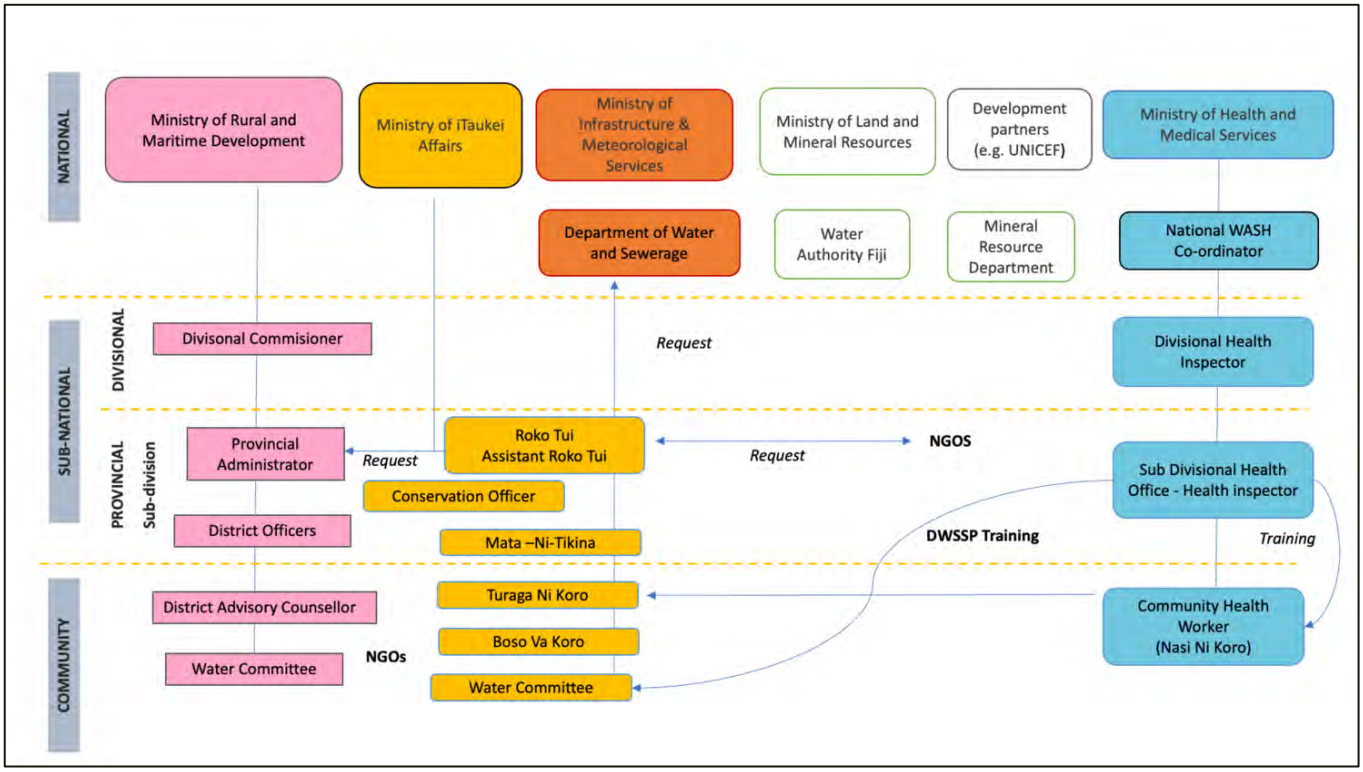


Figure 5: Stakeholders w/ some responsibility for rural water service delivery

Enabling Environment

The **enabling environment** can be defined as the set of interrelated sector functions that impact the capacity of governments and public and private partners to engage in WASH service delivery functions (e.g., Tsetse et al., 2016: 3).

According to data collected by International WaterCentre (IWC) in 2019 as part of our earlier research (PaCWaM+1), which included a political economy and enabling environment analysis (see Love et al., 2020: 60-69), both civil society organisations (CSO) and government interviewees highlighted that:

- The government have a strong view of their capacity to cater for their citizens' needs
- The government recognise that more can be achieved by improving collaboration with non-government partners
- The government were starting to shift away from building infrastructure themselves and to sub-contract more, "recognising the capacity outside [of government] and wanting to be more transparent"
- UNICEF has had a substantial influence in strengthening and supporting the governments capacity with regards to WASH
- Following the introduction of the 2013 Constitution, water was stipulated as a "human right" and the previous 10% community contribution was abolished. WAF introduced a policy of fully subsidising water carting to communities when they have no water; this was seen by numerous respondents (government and non-government) as impeding "communities' self-organising capabilities" and delimiting "resilience" (Love et al., 2021: 63).

Another important element of Fiji's enabling environment is the regular, formalised character of fundraising and the degree of support provided by external family members now resident in urban centres or overseas (see Love et al., 2022).

More recent consultations and interviews undertaken for this research have highlighted **coordination issues between some CSOs and key government agencies**, as well as between key government line ministries (see "coordination and harmonisation" and "information and knowledge sharing" elements herein).

Water service delivery in rural Fiji – how does it work?

In rural Fiji, water service delivery is ultimately managed by a WCs. The basis for community water management is derived from various DWS policies and guidelines - key being the *Rural Water and Sanitation Policy* (2012, 2021), the *Practical Guidelines for Rural Water Supply Management Plan* (WSMP) (MWTPU, 2012), and a WAF (2016) brochure entitled *Rural & Maritime Water Supply Scheme: What communities need to know when applying for the Water Supply Scheme*. There are also several policies of note awaiting approval (see policy element, below).

Apart from government initiatives, various NGOs play active roles in capacity support and water infrastructure implementation. However, there is limited publicly available data on the extent of CSO implementation or donor activities nationwide. Nonetheless, significant aid is allocated to the sector.

At the **community-level**, water supply management is somewhat determined by context (e.g., water supply system type) and whether it is considered a registered koro or a settlement. Although the same policies and guidelines apply regardless of context, who communities engage with regarding: i) requesting a water supply system or rehabilitation; and ii) ongoing oversight of maintenance and operation, is determined by location; koro residents deal with the Roko Tui's Office (MTA). Settlement dwellers deal with PAs and the MRMDDM. Both these national bodies have devolved functions and are mandated to assist with the establishment of WCs as well as monitoring "water and sanitation programs" and "water conservation awareness" (DWS, 2021).

The overarching regulatory framework and guidance for rural water service delivery is the *Rural Water and Sanitation Policy* (2012, 2021).

The Rural Water and Sanitation Policy (2012, 2021)

The *Rural Water and Sanitation Policy* (DWS, 2021) – hereafter also "the Policy" – stipulates that a WC must "manage, operate and maintain" a system following installation (DWS, 2021: 16). Emphasis on the role of the WC has increased over time: the 2012 policy mentions "WCs" only twice (DWS, 2012), whereas the most recent policy (DWS, 2021) mentions "WCs" ten times.

According to the Policy, endorsement is required from the village council, Tikina council, and the Roko Tui's Office for water and sanitation projects in iTaukei koros, as outlined in §13.1. Prior to submission, implementing agencies must fulfill four requirements:

- written request from the community for the project
- consent from landowners and evidence of community agreement to provide land for development
- proof of a WC establishment, inclusive of female and youth members
- written consent from community members allowing agencies to conduct investigations, surveys, project implementation, and training/awareness activities (DWS, 2021).

The Policy determines that the MTA (in iTaukei villages) and District Advisory Councils (in non-iTaukei contexts) are to take a **more active role in WASH matters at the rural village and settlement level.** Their roles have been emphasised and responsibilities increased relative to the 2012 policy. The new policy specifically states that in iTaukei (koro) contexts:

> **§14.3 Ministry of iTaukei Affairs**
>
> (i) All Tikina (District) rural water and sanitation projects and needs are to be recorded and endorsed by the Roko Tui's Office of the relevant province before it is forwarded to the Ministry of Rural and Maritime Development and Implementing Agencies with the four requirements under paragraph 13.1
>
> (ii) The Roko Tui's Office shall monitor Water and Sanitation programmes including Water Conservation awareness in the village
>
> (iii) Assist Implementing Agencies with land consent issues and the establishment of the Water Committee (MoiT, 2021).

The revised policy makes the Roko Tui's Office the first step in applying for a water project, responsible for monitoring, including "water conservation awareness", and establishing WCs.

In non-registered village contexts, it is the MRMDDM who are responsible for settlements. The updated *Rural Water and Sanitation Policy* (2021) states:

> **Ministry of Rural & Maritime Development**
>
> (i) Community request submitted to the District Officer's Office should be endorsed by the Village, Tikina and Roko Tui's Office with the four requirements under Section 13.1
>
> (ii) Projects from non-iTaukei communities to be endorsed by the community meeting and the District Advisory Council with the four requirements under Section 13.1.
>
> (iii) The District Officer to assist in the establishment of Water Committee in the communities
>
> (iv) The Ministry of Rural and Maritime Development and Disaster Management to submit the WSMPs for all their water and sanitation projects to Department of Water and Sewerage for vetting and approval (DWS, 2021).

Water Committees

The role of the WC in Fiji, as dictated by the state (and informed by NGOs and donors), is drawn from two main areas: the *Rural Water and Sanitation Policy* (2012, 2021) and the *Water Supply Management Plan* (under DWS). Additionally, WCs are commonly understood as one of the iTaukei Affairs compulsory committees and they should submit their report at the Bose va Koro (WAF-M1).

The *Rural Water and Sanitation Policy* (2021) outlines the role of the WC as follows:

> **§14.9 Water Committee**
>
> Water Committee will have to ensure the following:
>
> (i) manage, maintain and operate water supply and sanitation schemes after handing over
>
> (ii) ensure water sources and reservoirs are accessible at all times
>
> (iii) record number of standpipes, households connected to water, type of bathroom and toilets and ensure that all leakages are recorded and repaired
>
> (iv) collect levy for purchase of parts and tools for the sustainable management of the water system in the village and settlement
>
> (v) work with the TNK recording damages to water and sanitation system due to disaster for reporting purposes to Water Authority of Fiji, the Roko Tui and DO's Office
>
> (vi) ensure the cleaning of water sources, dams and reservoir on a monthly or quarterly basis and flushing of water mains after heavy rainfall
>
> (vii) ensure proper drainage systems for wastewater are in place and promote safe and hygienic environment in the villages and settlements (DWS, 2021).

The updated Policy has added "youth members" to the already mandated "one or two female members" required to be members of the WC (DWS, 2021, §13.1.v).

WCs are considered one of the most essential committees in both village and settlement contexts; however, until late this year there has been no standardised, comprehensive training for WCs (see "Human resources and capacity development" element). DWS (with support of WAF, MoHMS and UNICEF) have developed a Water Caretakers training package and began piloting it in Tailevu province in October 2024.

Key challenges with the community-based water management model in Fiji

Achieving universal access to safe and secure water and sanitation in rural contexts in Fiji faces challenges. Effective collaboration within the water sector, particularly under the 2050 Strategy, is crucial for accelerating positive change and addressing the five primary challenges confronting Fiji's water services sector: economic viability of water utilities; impacts of climate change; ageing infrastructure; environmental concerns; and skills and capability gaps (WAF, 2023).

Around the world, community-managed water supply systems in rural areas face distinct challenges compared to larger urban systems, including a higher risk of breakdown, limited financial resources, and reliance on undertrained operators (World Health Organisation, 2012; World Bank, 2017). As discussed in the introduction, the current CWM model is not supporting sustainable rural water service delivery, with poor operational and maintenance behaviours leading to unnecessary breakdowns, water loss, and costly repairs/rehabilitation. So too in Fiji, **many WCs struggle to effectively operate and maintain their water supply** due to a range of factors, including inactive WCs, insufficient finances (a lack of water fee/fundraising for spare parts), and (sometimes) limited technical capacity (Love et al., 2021a).

A lack of "ownership" taken by Water Committees was highlighted in the *National WASH Summit,* as was the need for "relevant authorities" to better enforce Water Committees (Harries, 2018: 11).

Numerous additional factors pose challenges for CWM in Fiji. First, high rates of mobility are draining human capital and communities' capacity to sustain rural water systems through maintenance and operation tasks. Second, representation on WCs in Fiji is relatively limited. Evidence from elsewhere in the Pacific Islands region (e.g. Vanuatu) suggests that WCs with diverse representation (especially more women) are more active and sustainable than those that are less inclusive (Mommen et al., 2017). Whether this translates to the Fiji context is an open question, but the participation of women and youth in WCs in Fiji remains comparatively low (Love et al., 2020; Nelson, 2022). Lastly, while WCs are clearly considered one of the essential committees in both village and settlement contexts, until this year there has been no standardised, comprehensive training package used by implementors following hand-over of a system to communities – as is found, for instance, in neighbouring Solomon Islands and Vanuatu. There is a mandatory WSMP undertaken at water system implementation, but this is not an adequate training process that meets the Policy's objective of ensuring community "ownership and participation" (DWS, 2021). [25]

Using the "**essential elements of effective rural water service delivery decentralisation**", and its attendant indicators, is a productive means through which to systematically explore the current strengths, challenges, and opportunities extant in the water sector in Fiji.

Research Design & Methodology

This report summarises the results of formative research on rural water service delivery conducted in Fiji from early 2023 to mid-late 2024. Data was collected at three levels – village, provincial and national:

I. **Village level:** TNK, WC members (Chairman and members), Community leaders/members
II. **Provincial level:** RTO, MoHMS EH Officers, Conservation Officers (CO), PAs / DOs
III. **National level:** iTaukei Affairs, DWS, Water Authority of Fiji, Provincial Advisors.

Five provinces—Tailevu, Naitasiri, Lomaiviti, Macuata, and Ra—were selected as case-study sites based on provincial staff interest, geographic variability, and logistical and financial considerations (see Figure 2).

Data collection

Data collection involved a desktop review, key informant interviews, and two workshops. A desktop review began in January 2023. Grey literature was sourced through internet searches, field visits, and follow-up correspondence. Most interviews were conducted between September and October 2023 by the University of the South Pacific (USP) team, with a few additional national-level interviews conducted in March 2024 to address gaps identified during the initial analysis.

A stakeholder validation workshop was conducted in June 2024. This provided and opportunity to gather further data, validate findings, fill gaps, and elicit some recommendations.

Ethics approval was obtained from Griffith University, the SAGEONS Academic Unit Research Committee (USP), and

the Fiji Human Health Research and Ethics Review Committee, Ministry of Health and Medical Services.

A total of 44 interviews were conducted with 46 participants: 37 at the provincial and koro levels (Tailevu, Naitasiri, Lomaiviti, Macuata, and Ra) and 4 at the national level (Suva). Respondents included both 'professional' staff (n=23) from provincial and national government roles and community-level workers and leaders (n=23). See Appendix, Tables 1-4 for respondent details.

Interviews spanned five provinces, reflecting Fiji's regional diversity. Participants included ART, Health Inspectors, Conservation Officers, PAs, and community leaders such as TNK and WCs members.

Most interviews were conducted in Fijian, with careful translation to maintain linguistic and cultural nuances. The Australian research team analysed the qualitative data using NVivo® (see Jackson and Bazeley, 2019; Saldaña 2013). Two cycles of coding were applied: i) a broad-brush coding based on emergent themes and (some) predeterminate descriptive codes; and ii) a further round of coding following the **Pacific Knowledge and Learning Exchange** (PKLE) workshops in Suva, Fiji, in November 2023, which was attended by academics and water sector professionals from Solomon Islands, Vanuatu, and Fiji (see Appendix, Table A5).

Through free listing and then recourse to the broad "building blocks" categories and definitions, participants at the PKLE workshop identified what they considered to be the key **elements of effective decentralisation** for rural water service delivery. This became the framework for our analysis of decentralisation in Solomon Islands, Fiji and Vanuatu**.**

Framework: Elements of effective decentralisation for rural water service delivery

The **enabling environment** is critical to furthering rural water service delivery and enhancing WASH outcomes more generally. There are a growing number of guidance documents on what the required "building blocks" of an effective WASH sector are. These include UNICEF's (2016) *Strengthening the Enabling Environment for Water, Sanitation and Hygiene* (which builds on the five Sanitation and Water for All (SWA) sector strengthening building blocks) (Tsetse et al., 2016), and the IRC International Water and Sanitation Centre's *Understanding the WASH system and its building blocks* (Huston and Moriarty, 2018). In specific rural water service delivery terms, Lockwood and Smits (2011) *Supporting Rural Water Supply: Moving Towards a Service Delivery Approach* (based on the results of the Sustainable Services at Scale (Triple-S) research program) and the World Bank's (2017) *Sustainability Assessment of Rural Water Service Delivery Models* both identify "building blocks" deemed essential to improving rural water service delivery.

Combined with the participatory data analyses and verification processes undertaken during the PKLE event, we co-identified six key "elements" or "building blocks" deemed critical to progressing decentralisation in the rural water sector in the PIC context:

- Policies, legal and regulatory frameworks
- Budgeting, finance, and (material) resources
- Information and knowledge sharing
- Monitoring, evaluation, and learning
- Harmonisation and coordination
- Human resources and capacity development.

Framework Indicators

Numerous indicators were developed/adopted for each key element (see Figure 6, below). These were developed through reference to the 'building blocks' literature and the first cycle coding of primary qualitative data. A total of 40 indicators were ultimately identified, with each element containing 5 - 9 indicators. Each indicator was assigned a rating based on the evidence at hand (qualitative data and grey literature).

Following analyses of the data, and validated at the stakeholder workshop, each indicator was assigned a rating using a Likert five-point scale, with 1 equating to "very weak" and 5 "strong".

Whilst ultimately a subjective approach, the ratings are based on a detailed analysis of the data (qualitative and desktop). Applying a quantitative rating can be productive for numerous reasons, from easily identifying strengths and weaknesses, providing a means for comparative (cross-country) analysis to identify regional challenges and strengths, and as a benchmark for longitudinal purposes and tracking change over time.

We considered applying the traffic light scoring system – green, amber, red – used, for example, by World Bank (2017), but ultimately choose to use a Likert five-point scale as it provided a more **granular assessment**.

The numerical value given the ratings were aggregated for each element, then divided by the number of indicators, resulting in an **overall score for each element.**

The elements are high-level and neither exhaustive nor exclusive; rather, they are inter-related and overlap (to varying degrees), e.g., "information and knowledge sharing" is critical to "harmonisation and coordination" and "monitoring, evaluation and learning"; "human resources and capacity development" and "budget, finance and (material) resources" are critical to everything. This reflects the complex, cross-sectoral character of WASH.

Elements of effective decentralisation for rural water service delivery

Policies, legal & regulatory framework

- Single, overarching national plan and subnational plans (overarching and sectorial) that support WASH and decentralisation.
- WASH policy plans and targets- *Put into practice.*
- Role definitions for all involved national ministries & departments support decentralisation goals.
- Mechanisms for consumer feedback and complaints.
- Traditional and community leaders represented and engaged in the planning process.
- Local and intermediate institutional levels (sub-national, e.g., provincial and community levels) can and do adapt and apply local bylaws or ordinances.
- *WCs and their bylaws are legally recognised and supported by the State.*
- Internal control mechanisms (e.g., policy reviews and audits).
- Design standards and types are appropriate, effective, adequately resourced and implemented.
- Staff are aware of policies, plans regulations etc.,

Budgeting, finance & resources

- Budget & funding for rural water service delivery is adequate and disaggregated between hardware and software.
- Funding is dispersed effectively and devolved to Provincial levels. (*Effective national - Provincial financial disbursement and payment processes; Provincial - community financial support systems; Review/audit process).*
- Adequate financial information. *Budget and expenditure are publicly available. Financial flows are known and predictable. Financial needs for sector operations are known; Amount of funding available is known.)*
- Sound legal and institutional frameworks in place for financial transactions. (e.g., acquittal procedures).
- Financing institutions in place support decentralisation.
- Staff have access to necessary equipment and resources to undertake their duties. (*e.g., computers, vehicles, fuel. Access to materials/parts.)*
- Community contributions (in-kind and/or monetary) are clear, understood and systematically applied.

Human resources & Capacity development

- Adequate staff to meet policy & planning objectives (and all positions filled).
- Government-led sector capacity development.(*capacity needs assessment).*
- Staff have access to professional development training opportunities.
- Service delivery partners are adequately trained (in line with national policy and strategies).
- Structured follow-up (or backstopping) to support community water-mangers following handover.
- Non-government implementation partners provide or fund community training (in line with government standards).
- Community capacity development. (*iterative, scaffolded learning (e.g., backstopping).*
- Contextually appropriate & effective training manuals & pedagogy.*e.g., vernacular language, visual aids (slides/flipcharts, videos)* .

Information & knowledge sharing

- Clear national coordination process/mechanism for information sharing.
- National WASH database exists, is accessible, up-to-date, and utilised by multiple actors across the sector.
- Information reporting process/mechanisms exist that are clear, practical, and utilised.
- Asset management procedures are undertaken.
- Data transparency and public access to information.

Harmonisation & coordination

- Evidence of all sectors contributing to a single national plan.
- Policy and strategy alignment and harmonisation to support decentralisation goals.
- Harmonisation and coordination strategies and policy are practiced by all actors working in the sector (e.g. SDPs).
- Financial alignment and harmonisation (to support decentralisation goals).
- WASH information is collected and stored in a central depository that is accessible and used by WASH sector actors.
- Regular stakeholder meetings, operational taskforce/working group, sector specific MOUs.

Monitoring, evaluation & learning

- Monitoring & evaluation of water service delivery and management is undertaken.
- WASH reports and sector reviews (*National & sub-national).*
- Appropriate indicators exist to monitor and report on service delivery sustainability and effectiveness.(*Software and hardware).*
- Monitoring at the community level *(Software and hardware).*
- Follow-up support and monitoring (post construction).

Figure 6 : Elements of effective decentralisation for rural water service delivery

Policies, Legal and Regulatory Frameworks

A critical element for effective WASH decentralisation is ensuring that the appropriate policy, legal, and regulatory architecture is in place; without a 'proper' suite of national and subnational (provincial and community level) policies and plans, decentralisation falters and stalls.

Overarching national plan and subnational planning supports rural WASH and decentralisation

In Fiji, the framework for rural water service delivery is anchored in a comprehensive legislative and policy structure that spans both national and subnational levels. This is supported by the NDP, which is linked to the Sustainable Development Goals (SDG) and includes ensuring that all Fijians have access to safe drinking water and improved sanitation services (MoE 2017).

A suite of sector specific Strategic Plans are closely aligned to the NDP (see below).

The *Water Supply Act* is the foundational legislation, established in 1955, consolidated in 1985 and superseded by the *Water Authority of Fiji Promulgation Act in 2007*. The 2007 Act also includes components for protecting and managing water resources, assisting with urban and rural land use planning with respect to water use and control, and includes provisions for drought and emergency water supply.

Decentralisation is foreground in the NDP, stating the "government is exploring options to decentralise some of its offices currently based in Suva to the Western and Northern divisions" and noting that this "would involve private partnerships for investment in new buildings and facilities and other support" (MoE, 2017: 9). The sectors this might impact is not specified. The health sector has undergone some decentralisation (both primary and auxiliary health services), and this remains a focus in current plans (e.g., GoF, 2017:39; MoHMS, 2020: 12, 23).

WAF is decentralised in deconcentration terms – to lower levels of central government (often on a geographical basis) – with 17 depots across the country, over 50 water treatment sites and 11 customer service centres.[26] WAF is prioritising decentralised wastewater treatment, favouring nature-based solutions over "energy intensive and centralised solutions" (GoF, 2024: 31). The minister for Public Works recently highlighted that …

> *"… adjustments have been made to decentralise and enhance the capacity of various ministries", stating that the previous government had centralised finances "within one person and one ministry (in Boila. 2024).*

The *Rural Water and Sanitation Policy* (DWS, 2021) incorporates a decentralised approach with provincial and district level actors (e.g., Roko Tuis/DACs/DOs/PAs) responsible for various tasks associated with supporting community water management. This role supports national and subnational water plans.

The RTO has a clear mandated role to be the focal point for projects in iTaukei contexts, whether it be WAF, MRMDDM, or NGOs. This is useful for planning, coordination, and monitoring; however, challenges persist in translating policy into practice.

In summary, national and subnational planning supports the decentralisation of rural water service delivery through its current policies. However, there is room for improvement given that awareness of key policy direction is not universally understood (see "policy awareness" indicator below).

WASH policy, plans, and targets – put into practice

The legal and policy framework in Fiji ensures the right of every citizen to clean water and adequate sanitation, as outlined in the 2013 Constitution (clauses 35 and 36) (GoF, 2013), the NDP (MoE 2017), the Fiji Water Sector Strategy 2050 (GoF, 2024) and various Ministry specific Strategic Plans (e.g., MoHMS, 2020).

The NDP outlines a vision for "Transforming Fiji" which includes ensuring that all Fijians have access to safe drinking water and improved sanitation services by 2031 (GoF, 2017). The NDP is not just a document of intent; it is a carefully crafted plan that is broken down into a 5-year plan (2017-2021) and a 20-year vision (2017-2036).

This structured approach allows for periodic assessments and adjustments, ensuring that the plan remains relevant and achievable. The NDP is closely aligned with the SDG 6, which emphasise the importance of clean water and sanitation for all. Sector goals are established through an analysis of the sector context, considering challenges and opportunities, which justifies the prioritisation of policies and strategies and validates the chosen development programs for the next 5 years (Gof, 2017:18).

The Rabuka government (elected in late 2022) began consultations on a new NDP in February 2024, which is expected to be completed this year and will replace the current 20-year NDP (MoF, 2024).

The WAF's 5-year Strategic Plan (2020-2025) responds to the immediate challenges posed by the COVID-19 pandemic and the impacts of climate change. The plan focuses on consolidation and improving water and wastewater asset delivery through innovation and technology. It also aims to enhance the organisational culture and human capacity within WAF, recognising that the effectiveness of infrastructure projects is closely tied to the capacity of the people managing them. Despite these efforts, the Minister for Public Works has highlighted that decentralisation efforts have been hampered by previous centralisation of finances, noting that "adjustments have been made to decentralise and enhance the capacity of various ministries," a move seen as crucial for empowering local decision-making (Boila, 2024).

The *Strategic Plan* does not articulate a discrete vision (or targets) for rural areas. However, it states that its "expected outcome by 2050" is "reliable 24/7 supply of safe water" in both urban and rural settings (GoF, 2024: 19).

Up until 2019, **Provincial Development Plans** were established which contributed to Divisional Development Plans; there are no longer Provincial Development Plans but there is a system for prioritising development which informs the national budget each year and there **is a line item for rural water in the budget** (MRD-M1).

The key **national** and s**ectoral plans** and **strategies** are:

- NDP 2017-2036 (currently being revised by government)
- *Fiji Water Sector Strategy 2050*
- *Ministry of Rural and Maritime Developments' 10-year Strategic Development Plan (MRDDM, 2020)*
- *Water Authority of Fiji 5-Year Strategic Plan (August 2020-July 2025) (WAF, 2020)*
- *Ministry of Waterways and Environment Strategic Plan 2020-2024 (MoWE, 2020).*

There are two more adjunct 'planning' approaches of note to rural water service delivery:

- *Practical Guidelines for Rural Water Supply Management Plan* (WSMP) (MWTPU, 2012)
  - Currently being reviewed and revised by DWS[27]
- DWSSP (MoHMS, n.d.) Training Package
  - Currently undergoing revision.

The 2018 ***National WASH Summit*** identified several gaps, including a lack of operation and maintenance guides for boreholes and rainwater harvesting systems, and the absence of a national *Joint Implementation Plan* (Harries, 2018).

Policy Implementation and Challenges

The DWS is the key regulator in Fiji's water sector, tasked with developing and enforcing policies related to water and sewerage services. The cornerstone of DWS's policy framework is the *Rural Water and Sanitation Policy* (DWS, 2021), which serves as the primary guide for rural water service delivery.

This policy represents a significant evolution from its predecessor (DWS, 2012). The 2021 policy includes more detailed guidance for provincial institutions and actors, such as RTOs and DACs, enabling them to take a more active role in overseeing WASH matters at the community level. This decentralised approach is intended to empower local actors, ensuring that decisions are made closer to the communities they affect. Furthermore, the 2021 policy introduces slightly revised provisions for monitoring the

impacts of climate change and promoting water conservation, reflecting a growing recognition of the environmental challenges facing Fiji.

However, despite the policy's comprehensive nature, **its implementation has been inconsistent and** there is room for improvement, particularly in terms of awareness and understanding at the subnational level (see "awareness" indicator below).

Draft policies and regulations

In addition to the existing policies, several key documents are currently in draft form. These include:

- *National Water Resource Management and Sanitation Policy* (draft): This policy, expected to be finalised by mid-late 2024, will provide a comprehensive framework for managing water resources and sanitation across the country. It aims to address existing gaps in the current policy framework, with a particular focus on improving coordination and integration across different sectors.
- *Integrated Water Resource Management Plan* (draft): This plan is anticipated to provide a holistic approach to managing water resources, integrating environmental, social, and economic considerations.
- *Water and Sewerage Services Bill* (draft, 2022): This bill, when enacted, will strengthen the regulatory powers of the DWS, enabling it to more effectively oversee water and sewerage services.
- *National Groundwater Resources Development and Management Policy* (draft): This policy will address the specific challenges associated with managing Fiji's groundwater resources, a critical component of the country's overall water supply.
- *Rural Water Supply and Sanitation Master Plan* (draft): This plan is deemed essential for improving sectoral coordination and efficiency. It will provide a detailed roadmap for achieving the targets set out in the NDP and other strategic documents.

These draft policies and regulations represent a significant step forward in addressing the challenges facing Fiji's water sector. Once finalised and implemented, they will provide a more cohesive and effective framework for managing water resources and delivering sanitation services, particularly in rural areas.

Role definitions - include progressing decentralisation

The cross-cutting nature of WASH demands the involvement of many line ministries and departments. As is common elsewhere, at national and subnational levels there is considerable evidence of overlap, fragmentation, departmental "siloing", confusion/contention with regards to roles and responsibilities, and challenges translating policy into practice. This weakens accountability and efficient resource allocation – as highlighted at the national WASH Summit (Harries, 2018).

The MRMDDM *Strategic Plan* identifies "unclear governance and coordination mechanisms, poor communication and prioritisation" resulting in duplication of effort and resources and leading to gaps in service delivery to rural communities and suggests that **developing Standard Operating Procedures can support improved coordination** (MRMDDM, 2020: 32).

There is no formal national or sectoral role delineation policy that we could find. The role description for Roko Tui is available on the internet through the MTA website and provides an insight into the demanding workload and extensive areas of responsibility associated with both the position and the office. **There is no mention of the Rural and Water Sanitation Policy in the job description** and the RTO's role to "monitor water and sanitation programs" and "water conservation awareness in the villages", or guidance on how they are to assist "implementing agencies" (government and non-government) and support the establishment of the "WC" (DWS, 2021 §14.3. ii).

It was clear from respondents that role definitions – at least in practice – are not as clear and widely comprehended as they could be. For example:

- There was confusion and different understandings of what exactly "shall monitor" means amongst respondents. Is it to monitor TNKs and ensure that they are monitoring the WC, or directly check-in with WCs? What does monitoring "water conservation" look like?
- A MoHMS Environmental Health Officer stated that their activities are more frequently facilitated by WAF than the Roko Tui's Office (DHI-M1)
- One Roko stated that they were uncomfortable "telling people straight" what they are supposed to be doing (note that most ARTs interviewed had no issues) concerned about overriding the authority of the TNK. They felt that if a WC has not listened to instructions, then WAF should be the ones to follow-up not the ARTs (e.g., ART-M1)

- When a community needs something done they tend to ask the PAs or go direct to WAF rather than following the Policy of contacting the RTO first (as per DWS, 2021 §14.3.i). There is a general perception that there is little use going through the RTO because they don't have funds for direct development.

These examples suggest a lack of decisive departmental responsibility with regards to who is responsible for overseeing CWM outcomes in Fiji.

Mechanisms for Consumer Feedback and Complaints

Fiji has established mechanisms to ensure that consumers have a voice in how water services are delivered. WAF operates a toll-free contact line and email service, available 24/7, that allows consumers to raise issues and complaints, as well as request water carting services.[28] This service is a key component of WAF's commitment to customer satisfaction.

The WAF Annual Reports include data on Call Centre and email service levels and response times (e.g., WAF, 2020), **underscoring the importance of consumer satisfaction and water service delivery to the government**. According to the 2021 WAF Annual Report, the national call centre receives between 20,000 and 34,000 phone calls per month, along with 1,212 to 1,664 emails (WAF, 2021: 38).

This data underscores the importance of consumer satisfaction and highlights the demand for reliable and responsive water services. However, there is no **disaggregation between rural and urban customers** in the publicly available data.

The lack of rural/urban disaggregated consumer data is a potential gap that inhibits monitoring and learning opportunities about the specific needs of different communities.

At the subnational level there is also a structured feedback mechanism that allows communities to provide input and raise complaints. This system is facilitated through the network of TNK/WC → Roko Tui and Provincial Officers/Depts and DACs/WC → DOs. This decentralised approach is designed to ensure that local issues are addressed by those closest to the communities affected.

However, despite this solid structure challenges remain, with inadequate monitoring and follow-up hindering effective feedback and gaps in policy awareness amongst key staff (below).

Traditional and community leaders represented

Traditional and community leaders hold significant roles in Fiji, in both rural and urban contexts and in iTaukei and Indo-Fijian contexts. The CWM model mandated in Fiji and other PIC relies heavily on the direct and indirect engagement of community leaders.

The formalisation of indigenous Fijian and colonial-era "indirect rule" administrative and governance practices have ensured that, especially in iTaukei contexts, community and customary leaders are represented in decision making. As previously illustrated (Figure 5, above), the MTA has a decentralised structure that stretches from the GCCs all the way down to the koro, where the TNK engages with mataqali and other community leaders.

At Bose va Koro, decisions are made regarding development, land use, and wider social and economic matters. Quarterly or so the Tikina chief will visit to discuss district-wide concerns. ARTs also visit, but generally through invitation. Additionally, village chiefs, headmen and select representatives convene quarterly to address district matters.

The MTA has issued statements to clarify the status of 'traditional' institutions and titles in Fiji. In 2015, the Permanent Secretary for iTaukei Affairs reiterated that all "traditional bodies that exist within a vanua are an extension of government's iTaukei development program," except the Bose va Vanua, which is governed by traditional leaders with limited government interference (Nasiko, 2015). From next year, the Turaga ni Yavusa will also receive a stipend (FJD $100 per month) (ART-M1), formalising their role as quasi-public servants.

This codified governance structure provides an opportunity for inclusive representation and decision-making about development issues. Through the Bose va Koro and broader tikina and yavusa level consultations, the Integrated Village Development Plan and community profiling process provide constructive entry points for consultation, awareness campaigns, and capacity building (MoIA, 2016). However, it is important to note that there is no formal role for faith-based organisations in rural water-related policy, highlighting a gap in the inclusion of

religious communities in the water governance process (cf. Solomon Islands *RWASH Plan*, MHMS, 2015).

From a rights-based perspective, women, youth, people living with a disability and other vulnerable or marginalised populations are often restricted by cultural norms from participating fully in decision-making processes. Some rights holder organisations have criticised the draft Fiji Village Bylaws for restricting the voices of these groups (FWRM, 2012).

Local and Intermediate Institutional Levels Adapt and Apply Local Bylaws and Ordinances

The ability of community-based management entities to legally enact and enforce bylaws and ordinances is essential for effective rural water governance (e.g., Lockwood and Smits, 2011). Strong mechanisms exist in iTaukei contexts for enacting such bylaws, but enforcement remains an issue and there is evidence.

Previously, provincial councils had the authority to make "bylaws for the health, welfare, and good governance [including rates or fees]" (Part 3.7.2) and could "impose penalties in breach thereof..." (Cap. 120 Rev. 2006 Fijian Affairs Act Part 3.7.3). However, some of these powers have been reduced by subsequent amendments. Regardless, at the district and village level there are mechanisms for enacting bylaws.

The Tikina Council, for example, may "make regulations, orders, and bylaws concerning the good government, welfare, and prosperity of the Tikina and to implement regulations, orders, and bylaws that are enforceable within the Tikina" (iTaukei Affairs (Provincial Council) Regulation 1996, Part I regs 3-23). The iTaukei Affairs Act, reportedly states that "nothing is to be planted along the water source …[but]… the levy for that offense is very low" (CO-M1).

Earlier research identified numerous examples of community/WC proscriptions against planting or grazing animals near/above water sources (e.g. Galoa, Daviqele) (Love et al., 2021: 73). These appeared to be respected. Nevertheless, in this research several respondents highlighted challenges.

> *"Despite the water committee telling people to stop planting or having animals near the dam they were just not listening […] they [Water Committee] just don't have the authority. It's not like an official law (ART-M1).*

Another respondent stated that there was a lack of clarity on infringement specifics:

> *"One thing that I am not clear on is the amount of money that people can be charged if they do not maintain their dam and water source?" (CO-M1).*

In settlement contexts, PAs are responsible for the enforcement of various acts and legislations (e.g. *Public Health Act*, *Town Planning Act*). Health Inspectors can enforce the *Public Health Act* in settlements and urban contexts but in registered iTaukei villages most acts and legislation have no power except the *iTaukei Affairs Act*.[29]

> **Technically, only the MTA have full power in registered Fijian villages and no other Ministries have the authority to enforce health policies, acts, and laws except for public gathering spaces (like churches, village halls, schools) and/or if a public health emergency has been declared (HI-F1).**

One respondent felt that rather than the Rokos it was the CHW and, if necessary, the Police, who were better positioned to deal with issues of community members not listening to the WC and/or the TNK (WAF-M1).

In sum**, there is a need for improved guidance on the status of subnational WASH-related bylaws and rules.**

Internal Control Mechanism

Policy reviews and audits are essential for ensuring that policies remain effective, up-to-date, and aligned with government goals and objectives. The *Rural Water and Sanitation Policy* (2021) is scheduled for review every five years following its approval date—or sooner if required—as outlined in the policy (DWS, 2021). However, the last policy review took longer to complete due to financial constraints.

UNICEF, the Asian Development Bank and the United Nations Development Programme (UNDP) have all

supported some WASH-related reviews, (UNDP, 2023a, 2023b). These reviews have provided valuable insights into the relevance of current policies and identified areas for adjustment.

The DWS has been reviewing the draft *Water Supply and Sanitation Master Plan* and has sought comments from external academic institutions and in-country partners and sister ministries as part of the process.

Policy audits seek to evaluate the implementation and effectiveness of policies, ensuring compliance and identifying areas for improvement. We could not find any evidence of policy audits in the WASH space. Following scoping discussions at the beginning of this research – which identified potential disconnects between policy and practice with regards to the *Rural Water and Sanitation Policy* (2021) – this research became, in part, a policy audit.

Design Standards are Appropriate, Effective, Adequately Resourced, and Implemented

The DWS is responsible for overseeing the formulation of rural water supply and sanitation management plans. This is done through the WSMP, which outlines national drinking water quality standards and wastewater and sanitation system design. These guidelines are in line with the *Public Health Act* (1935 and subsequent amendments), *Standards for Septic Tank* (Central Board of Health), *National Liquid Waste Standards - Environment Management Act, 2005*, the *KoroSan Guidelines for Fiji*,[30] and *Water Authority of Fiji standards*.[31]

In addition to these guidelines, the DWS also has a design, operation and maintenance manual and poster/handout for the EPS. However, there are reports of "cheap copies" of EPS circulating, and it is unclear why, by whom, and how these inferior EPS are being implemented. **This suggests gaps in standardisation and compliance regarding EPS, which need to be addressed to ensure the effectiveness of these systems.**

The Water Authority of Fiji plays a critical role in verifying that drinking water quality meets World Health Organisation (WHO) guidelines. The WAF is currently undergoing a major institutional revamp, which includes a review of current water tariffs (ITA, 2024). The MoHMS manages the *National Drinking Water Quality Committee,* responsible for overseeing and maintaining collaboration on the implementation of drinking water quality standards.

The *National WASH Cluster Emergency Response Standards* list WASH service delivery standards for use in humanitarian response and recovery efforts.

Other key standards include: WAF Standards; Ferro-cement Water Tank Manual; Standard Dam Design; Hydraulic Design; WASH Cluster Standards; Sanitation Compendium (including government-approved emergency latrine designs); and WASH Safety Planning Guidance.

We have not been able to review all the above standards. **Updating internal manuals and procedures to better incorporate climate resilience considerations was a recommendation from the last WASH Summit**, where it was also acknowledged that there remained gaps in standards and a lack of adherence to current standards (highlighting "accessibility" as an example) (Harries, 2018: 14, 21).

Staff awareness of policies, plans, regulations

Awareness of the *Rural Water and Sanitation Policy* (2021) is inconsistent. The Policy specifically instructs ARTs and DACs to monitor water and sanitation schemes and ensure that "water conservation awareness" is being undertaken. However, knowledge of this critical policy is mixed, with many key stakeholders either unaware of the policy or lacking a thorough understanding of its requirements. Of the 44 respondents interviewed, 42 provided a clear response when asked about the policy. A majority of respondents (n=27, 61%) were not aware of the policy (Table 1).

Table 1: Policy awareness - Rural Water & Sanitation Policy 2021

Province	Aware	Not aware	N/A	Total
Lomaiviti	6	2	0	**8**
Macuata	1	9	0	**10**
Naitasiri	0	3	1	4
Ra	2	5	0	**7**
Tailevu	3	6	0	**9**
National (Suva)	3	2	1	**6**
Total	**15**	**27**	**2**	**44**

Respondents from Lomaiviti displayed higher policy awareness compared to other provinces. In contrast, respondents from Macuata and Naitasiri had low awareness levels, while those in Tailevu and Ra showed mixed awareness, with more "no" than "yes" responses.

An ART staff underscored the mixed levels of policy awareness:

> *"I have never heard of this policy until now. I also did not know that we have a responsibility in that policy. That policy was passed in parliament, but the Roko Tui's have no idea of what it is and how they are to be of assistance (ART-M5)."*

Government officials showed higher awareness than community members, especially in Lomaiviti, where all government respondents were aware of the policy. In contrast, community awareness was split, with many communities in Macuata, Naitasiri, Ra, and Tailevu unaware of the policy. This echoed earlier findings from PaCWaM+1, where our pilot WC backstopping activities revealed that many villages lacked understanding of the policy, requiring initial visits to focus on policy awareness (IWC, 2022).

The lack of widespread policy awareness, particularly among ARTs and TNKs, is a significant concern. Many respondents who knew about the policy admitted they did not fully understand it. Most WC members and TNK were unaware of the policy.

On awareness and/or compliance with other policies, a senior DWS staff member gave examples of water implementation activities being delayed due to implementors not completing the requisite WSSMP and ensuring that land consent has been gained prior to commencing work, as outlined in the Policy (DWS-M2).

This suggests that not all government agencies and partners are fully aware of, or implementing in-line with, core national policies.

Budgeting, Finance, and Resources

Adequate budgeting, finance, and material resources (e.g., access to transport, materials, and human resources) are essential components to furthering decentralisation within the rural water services sector. In the IRC's nine 'WASH building blocks", finance deals with everything from the "cost of service delivery, the sources of funding, the roles of different actors in providing finance, effective mechanisms for long-term financial procurement and channels for getting money to where it is needed" (Huston and Moriarty, 2018:21).

This element is strongly linked with human resources and capacity development.

Budget and funding for rural water service delivery

Adequate Funding

Effective decentralisation requires strong financial planning and long-term budget certainty. Since 2016, across the PIC, WASH budgets appear to have remained steady in some countries (e.g., Samoa), increased in real terms in others (e.g., Vanuatu, Kiribati), and declined in a few countries (e.g., the Solomon Islands, Tuvalu, **Fiji**) (UNICEF, 2023: 18-20).

According to various UN-Water Global Analysis and Assessment of Sanitation and Drinking Water (UNGLAAS) reports, the total expenditure by the Fiji government on WASH has fluctuated over the last decade, with a peak in 2018 (where expenditure in WASH was USD$129.75M (FJD$294.12M) (UNGLAAS, 2018/19, 2021/2022). Moreover, comparing proposed versus actual WASH expenditure, since 2015 the expenditure in Fiji appears to have been 25% lower than was originally budgeted (Figure 7).

Regardless, of thirteen PIC[32] Fiji has the fourth highest per capita average annual budget allocation for WASH in the Pacific, at USD$127.90 per capita (2016-2020) (UNICEF, 2023: 21).

Figure 7: Fiji - Budgeted and actual WASH expenditure 2012-2021

(Source: UNICEF, 2023: 18-20)

In Fiji, the MoF is responsible for managing the country's economic policy, planning, and development. In addition to preparing the national budget, allocating resources to various departments and agencies and ensuring fiscal discipline, the ministry is also responsible for the formulation and implementation of the NDP and coordinating with other ministries, stakeholders and development partners to ensure alignment with the country's long-term development goals – improved water services are critical to this ambition.

The government provide a recurrent budget to WAF – the main implementors in the rural water sector. WAF does not control its own revenue. Instead, it receives operational grants from the MoF every six months. Because it cannot be certain how much money it will receive, this "constrains its ability to enter (often more economical) longer term contracts " (FRC, 2024). It is assumed (but not confirmed) that the cost for water carting to communities is drawn from operational funds.

In the 2022-2023 financial year (FY) WAF was to receive FJD$204.3M, which includes 89.2M for operating expenditures and $115.1M for capital investment in infrastructure – primarily to improve Fiji's long-term standing water supply and wastewater management needs (MoE, 2022: §1.37). However, WAF's annual capital expenditure budget between 2018/19 and 2022/23 financial years has been reduced by more than half, to $115 million. WAF will need $800 million over the next five years for water and wastewater infrastructure renewal. The wastewater sector alone will need $180 million in that time "to work towards compliance obligations" (FRC, 20224: 111).

The Fiji government supports rural water service delivery via both direct and indirect means. Directly, the government provide recurrent funds to WAF and DWS. Additionally, through both recurrent MoHMS budget allocations and development partner support, DWSSP – which typically includes some small infrastructure improvements – is also undertaken in rural communities. There are ad hoc direct funding sources through discrete programs, e.g., the government allocated FJD$16.5M to a rainwater tank subsidy scheme between 2016-2020 (UNICEF Pacific, 2023). Indirect budget support includes the funds that support PAs, and the stipends paid to community leaders who have a role to play in supporting rural development, including water management.[33] The annual operating budget for the Division Commissioner's office is around FJD$29.1M (divided by the 4 divisions). They receive direct funding from the MoF, but program specific funding is centralised from Suva (PO-F1).

The biggest financial challenge facing Fiji's water system and services is ageing infrastructure and the WAFs economically unviable financial status: WAF's annual revenue is approximately FJD$33 million, with arrears of water rates exceeding FJD$33 million. The WAF does not operate as an independent commercial enterprise, struggles to meet half of its annual operating costs, and has the cheapest residential water rates in the Pacific (WAF, 2023: 9). Furthermore, **nearly 50% of treated water is lost across the network, resulting in non-revenue water loss costing around FJD$23M annually** (WAF, 2023: 11). WAF and the government acknowledge that there is an urgent need to reassess WAF's financial model to ensure its long-term financial sustainability and the provision of water and sanitation services into the future. This is currently under investigation by the government. The Financial Review Committee recommended that the government must "move urgently and give priority to putting WAF onto a financially sustainable footing" (FRC, 2024: 120).

Whilst comparatively high, government funding to rural water service delivery in Fiji is still not enough to meet targets

Development assistance

Across the PIC, donor funding for water and sanitation showed a consistent rise in real terms from 2016, with a total of US$40.5 million (equivalent to US$16.9 per capita), to 2019, reaching US$50.8 million (or US$20.3 per capita). However, this upward trend was interrupted by a significant decline of over 25% in funding levels from 2019 to 2020 (UNICEF, 2023, p. 24)

Fiji spends a greater percentage of development aid on water and sanitation than the regional average (3%) (Dayant et al., 2023). Historically, **Fiji had one of the lowest Official Development Assistance (ODA) to gross national income (GNI) ratios in the Pacific Islands region**, with aid accounting for only 2.5% of national income between 2008 and 2020 (Dayant et al., 2023). However, in the wake of the COVID-19 pandemic, Fiji's share of aid to national income spiked significantly to 15% and in a global context **Fiji is now amongst the most aid-dependent countries in the world,** ranking 15th out of 134 countries for its ODA/GNI ratio (Dayant et al., 2023).

Projects with a "principal" and "significant" focus on climate change adaptation and mitigation represented 19% of the total incoming development flows, slightly

above the regional average of 18% (Dayant et al., 2023). The "water and sanitation sector" represented around 2% of total aid money spent between 2011-2017, and this has recently grown to 3% (Dayant et al., 2023).

The government receive concessional loans from the Asian Development Bank and World Bank to support the sector, but this is primarily focused on urban water.

Budget Disaggregation

Best practice includes not only funding certainty but also whole-of-life costing for service delivery and disaggregating budgets between **hardware** (e.g., water system construction) and **software** (e.g., community engagement training, monitoring/follow-up).

Currently, there is **no budget disaggregation** between hardware and software in DWS or WAF budgets. This is a significant gap given the high rates of water system failure and dependency on water carting. Many countries now allocate a portion of their budgets to software to enhance system longevity and WASH coverage.[34]

The MoHMS has a monitoring and evaluation budget line in their operational budget for assessing DWSSP (FJ-MHM-M).

There is **no separate national budget for emergency WASH** response; rather, existing program funds are redirected as needed, which potentially impacts regular work plans and delays new or rehabilitated water projects in rural areas (FJ-MHM-M). UNICEF, as well as other development partners, typically provide additional funds for emergency response, including water system repairs and needs assessments. At the subnational level, the Division Commissioners have a separate budget line for emergencies that include supporting water system repairs.

As per the *Rural Water and Sanitation Policy* (2021), provincial-level actors – e.g. ARTs/DACs – are critical to the successful application of CWM through "monitoring" WC performance. However, until this financial year the main means for funding the Roko Tui's Office had been through provincial levies, which were often insufficient to meet the costs to support community visits as often as required (see below).

The RTO has a fuel allowance, but health inspectors have no separate budget line for fuel costs and must be requested from the main budget (DHI-M1).

Funding management and dispersal to Provincial levels

Divisions and Provinces receive funds from multiple sources, including recurrent central government grants, provincial rates and taxes, and own-source revenue. Divisional Commissioner's receive funds direct from the MoF, who then disperse it to the province offices (PA-M11).

There are clear and effective budget execution and disbursement processes, monitored by the cash management unit. We found no evidence of delays, issues, or complications with fund disbursements to subnational levels.

Until recently (late 2023), the provincial councils financially supported the Roko Tui's Office and their activities through provincial levies/rates (soli ni yasana), which have their antecedents in the colonial-era "head-tax". The new government has decided that it is the "**governments duty to fund the operations of provincial council offices**" and now "your soli ni yasana will be decided by you, how you use the money" (Ro Filipe Tuisawau in Vucukula, 2023). The provincial levy was previously used to cover the salary of all the RTO staff – as well as the operational costs for provincial offices (which includes transport to communities) – the salary for TNK's, district-level representatives, and tikina meetings (ART-M6). This extended to maintenance for provincial buildings (CO-M2). The funds from provincial levies were often not enough:

> *"…for Lomaiviti, the provincial rates [were not enough] to help us in our operations and weakened our plans to visit communities. We have duties to attend to, but if we did not meet the budget from the provincial rates, this affects travelling expenses, fuel costs, arranging for boats to travel across to Moturiki - those things where often not possible due to a limited budget (ART-M3).*

> *"In Tailevu we didn't even reach about 50% of what we need; this is also a challenge when the government doesn't provide any assistance. Sometimes it's hard to carry out the work because there is limited funding and support. So, we just try our best to complete the tasks (CO-M1).*

Especially during the COVID-19 pandemic, respondents from different provinces reported that the provincial levy

collection decreased substantially, greatly impacting the RTOs operational capability (ART-M2).

Respondents were overwhelmingly positive about the policy shift away from provincial levies, with the government's direct allocation providing stability. This shift in budgeting dynamics, from provincial levies to direct government funding, reflects broader changes in governance and fiscal policy.

Provincial - community financial support systems

There is little direct provincial to community financial support systems in place with regards to rural water. However, PAs do assist communities in requesting funds to support new water system implementation or the rehabilitation of old systems, and the MTA have recently launched a revised Village Improvement Scheme, which includes drainage but not water supply or sanitation.[35]

Review/audit processes

As per Section 8 of the Finance Act 1981, the Minister of Finance is required to submit government accounts to the Auditor General within six months of the end of the financial year. The *Public Finance Management Act* 2016 included provisions for financial reporting, management and auditing. government agencies have internal auditors placed by the MoF responsible for conducting audits and reviews of financial activities within their respective agencies. The presence of internal auditors enhances the internal control systems and supports the overall accountability framework.

The Auditor General's office plays a crucial role in maintaining financial integrity and accountability. It conducts independent audits of government accounts and activities, ensuring compliance with financial regulations and identifying areas for improvement. The Auditor General is responsible for auditing the financial statements of all public sector entities and reporting the findings to the Parliament, thus providing an essential check on the executive's use of public funds.

Financial information

Budget estimates are available online, detailed by line ministries and include broad budget lines (GoF, 2022). Additionally, the government have recently produced a "Citizens' Guide to the Budget" which simplifies national budget information to enhance transparency, accountability, and public understanding (e.g. MFSPNDS, 2023). This reflects the government's commitment to accountability and improving public access to financial information.

From what we can ascertain, there has been no feasibility study conducted on how different financing mechanisms – taxes, tariffs, and transfers– might be used to support rural water service delivery (see UNICEF, 2016:19-20). It is unclear if the current review of levies includes rural contexts or not.

To our knowledge, there has been no feasibility study on financing mechanisms (e.g., taxes, tariffs, transfers) for rural water service delivery.

Legal and institutional frameworks for financial transactions

Fiji has an established legal and institutional framework for financial management, which include the *Financial Management Act* (2004) and the *Public Finance Management Act* (2016). These ensure that financial transactions at both the central and provincial levels are conducted transparently and efficiently, in accordance with established laws and regulations. The roles and responsibilities of different government entities in financial management are clearly defined. The *Public Finance Management Act* (2016) includes provisions for financial reporting, auditing, and the establishment of financial control systems. This system seeks to foster good governance and build public trust in the management of public resources. The MoF has advised it is reviewing subsidiary legislations to further improve governance and transparency (The Fiji Times, 2023a).

At the provincial level, the *iTaukei Affairs Act*, *iTaukei Affairs (Provincial Councils) Regulations 1996, the Local Government (Amendment) Act 2023* and Provincial Councill Regulations provide guidelines for financial management, including revenue collection, budgeting, and expenditure controls, and ensuring alignment with national financial policies and oversight mechanisms.

Financing institutions and decentralisation

The main financing institutions are the government's recurrent budget expenditure, supplementary budgets, direct donor budget support, and non-direct donor support. Visibility into how these sources support, or not, decentralisation was limited. However, the policy change from provincial levies to central government funding does

appear to provide greater fiscal surety and should enhance the RTOs ability to engage with communities.

Staff and Community Water Managers' have access to equipment and resources

Staff equipment

Access to equipment did not surface as a key concern, although there was one report of inoperable laptops and having to share amongst staff (CO-M1). The government have recently opened several new sub-district offices and there are plans to improve provincial offices, including equipment and staff housing. The main challenge cited with relation to material resources was adequate access to transportation to visit communities.

Especially during the COVID-19 pandemic, when budgets fell short due to a decrease in levies, provincial officers struggled to conduct community outreach initiatives.

All five of the RTOs visited had at least one vehicle, but none had boats. One vehicle was not considered enough by staff in all cases. Even in Macuata, which has two vehicles, it was deemed insufficient:

> *"There' is four of us and there's just two vehicles. If the other two Assistant Roko Tui's are using the vehicle today, the other two officers won't be able to go out. So, when we submit our work plans, we make sure that it does not clash with the other work plans submitted. Our work revolves around visiting villages and this is affected because of limited resources like vehicles. Mostly, we have to be out from Mondays to Thursdays, but because of this, we are more like office staff now (ART-M5).*

There are monthly fuel allocations, but if the budget is exhausted staff must wait for the next budget cycle before conducting visits (ART-M4). Staff use detailed workplans to optimise travel opportunities and carefully manage fuel allocations (e.g. PA-M1; CO-F1). Access to communities is challenged by financial constraints, especially noted in maritime regions like Lau and Lomaiviti, where the main mode of transport is boats and fuel is very expensive. This curtails the frequency and scope of visits, which can impact the effectiveness of outreach and operational activities, including emergency responses to health issues like dengue fever outbreaks (HI-F1).

Cooperation with other departments at the provincial level was a common theme (e.g., MoA, Ministry of Health, Police) – "to share and care is good" as one respondent stated (PA-M3). Interviewees reported that they use the PAs or MoHMS boat when they need to go to the outer islands, paying for the fuel, but boats were not always available (e.g., CO-M2; ART-M2). ARTs take the opportunity to accompany NGOs who may be working in the area and visiting communities. Despite these adaptive responses, dependency on other government departments is not reliable and was described by one respondent as "embarrassing" (ART-M3).

Procurement

Effective supply chain management requires standardisation (to reduce market fragmentation) and accessible and economically viable spare parts (Lockwood and Smits, 2011:127; Harvey and Reed, 2004). The 2018 *WASH Sumit* reported that there was a "**nationwide shortage of materials**" (Harries, 2018: 11). WAF has numerous depots spread across the country, but it is not known if procurement is a major issue, if there remains a shortage and, if so, what materials are most impacted.

At the **community level**, earlier research found that access to "spare parts" was a challenge in some cases but overall was a low concern relative to 'software' factors, such as a lack of community cooperation and funds shortage for maintenance and repairs (Love et al., 2020: 78-79). With regards to EPSs, DWS did not report issues with finding the necessary parts to construct the system. In this research, although it was not systematically explored, at least some WCs had spare parts on hand (e.g., Nawaisomo). Fiji has more suppliers, and better transport infrastructure, than both Solomon Islands and Vanuatu.

At the national level, government procurement policies and practices are governed by a structured framework designed to ensure transparency, accountability and efficiency in the use of public funds. These policies are outlined in several key documents and regulations,[36] managed by the Fiji Procurement Office under the MoF.

Community contributions

Sustained financing is crucial for the functionality and longevity of rural water supply systems.[37] There are two kinds of community contributions: contributions towards water system construction (monetary, in-kind) and post-construction operation and maintenance cost retrieval.

Since the 2013 Constitution, the obligatory financial contribution demanded from communities for water system construction has been waived. Today, communities contribute through in-kind support only,

e.g., providing labour, food and accommodation for workers.

The CWM approach requires ongoing community contributions (in-kind and/or monetary) for the model to work. The *Rural Water and Sanitation Policy* (2021) states that part of the WCs roles is to "collect levy for purchase of parts and tools for the sustainable management of the water system in the village and settlement" (DWS, 2021: 14.9.iv). Fundraising may be a more common mechanism for raising funds than water fees/tariffs in Fiji. Only one of the WCs (from the eight examined for this research) had an active water fee/tariff in operation, which was not used for spare parts but to pay the people who turn the water on/off each day (FJD$2.00 per house, per month - Naiborebore village).

In some of our previous research, three (of eight) community case-studies had an active water fee – Bavu, Rukuruku and Cobue. Fundraising specifically for water were cited by households in six of the eight communities – Daviqele (13%), Galoa (6%), Nabubu (10%), Narara (19%) and Rukuruku (19%). In Nabubu, it was reported that the funds for maintaining the water system were generally raised through the village cooperative. One community reported having a fee in the past, but it was short lived (Love et al., 2021: 77-78).

Fundraising is a crucial part of rural village life throughout the PIC, and in Fijian contexts is closely connected to the sub-committee and governance structures discussed above. In iTaukei contexts there are two main types of fundraising or community contributions used: a one-off/ irregular household contribution where the amount is set and a more general contribution where the amount is not set. Fundraising activities frequently draw support from village emigrants now residing in towns or overseas (see Love et al., 2023).

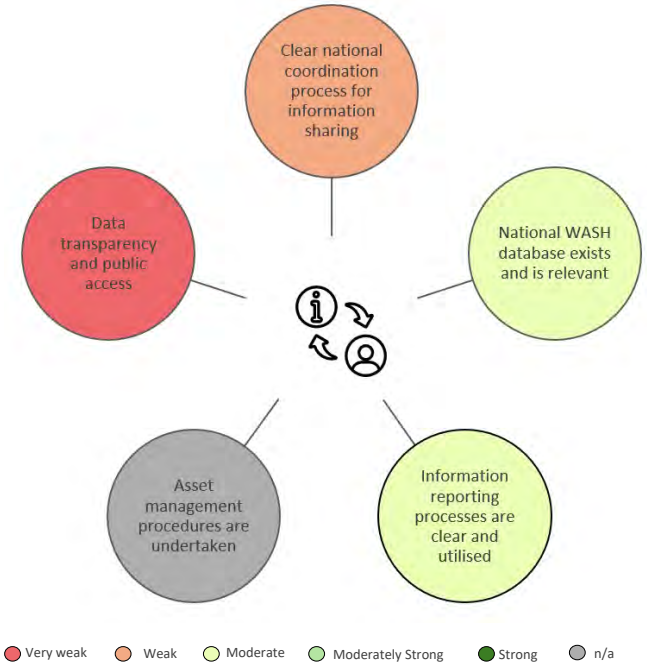
It is noteworthy that raising funds though means other than a set water fee did not appear to be a significant challenge or attract the same levels of contention as we have seen in Solomon Islands and Vanuatu. This likely reflects the relatively wealthier status of Fiji, the more institutionalised character of collective financial self-help [soli], and the more homogeneous nature of iTaukei villages.

In the interviews for this research, there was one report of a WC having a water fee in the recent past, but it was currently on hold due to "mismanagement" of funds (WC-F2). In Fiji, when WCs struggle and need funds quickly, they can generally access funds from the Village Development Committee (VHW-F).

At least in iTaukei contexts, the established culture of fundraising and the ability to draw on support from salaried workers resident outside the village, provides a safety-net for WCs when in dire need. Regardless, the historical lack of standardised and systematic training for WCs – now beginning to be addressed (see "human resources & capacity development" element, below) – combined with some evidence of financial mismanagement, underscores the importance of including solid financial literacy resources in the new water management training package.

Information and Knowledge Sharing

Information and knowledge sharing is a critical element for advancing the rural WASH decentralisation agenda. Without robust data management practices, from collection through to storage, access and dissemination, decentralisation policies, plans and practices cannot progress. A culture of learning and adaptive management is required and this hinges on good information and knowledge sharing. This element is closely linked to both the "harmonisation and coordination" and "monitoring, evaluation and learning" elements.



Information Reporting Process/Mechanisms

The cross-sectoral nature of WASH complicates information collection and coordination.

Sector coordination for data sharing initiatives emerged in Fiji during the era of the Millennium Development Goals (MDGs, 2000-2015). This led to the creation of the National WASH Coordinator position in the MoHMS to encourage collaboration among stakeholders in the WASH sector. However, there is no single, overarching and clear national coordinating process for information sharing, although the *Rural Water and Sanitation Policy* (2021) stipulates that DWS is the leading agency tasked with regulating and "vetting" water projects (DWS-M1). They are also responsible for updating relevant data from implementing agencies (e.g., WAF, NGOs) on the WSMPs (which each implementing agency is mandated to undertake) into the departments **Rural Water and Sanitation Database** (DWS, 2021: §14.1. ii).

The WASH Summit identified communication with WASH partners as a core challenge that was resulting in "**wastage of resources and repetition of work**" (Harries, 2018: 12). A key strategy of the 5-year NDP (2017-2021) was to strengthen water policy and planning by improving sector coordination: "improve management and sharing of data among various stakeholders, including Water Authority of Fiji, DWS and Ministry of Waterways" (MoE, 2017:19). Similarly, the MRMDDM's 10-year Strategic Development Plan places a strong emphasis on the need to ensure that data and resources are used more coherently and efficiently (UNDP, 2021).

Despite awareness of information sharing challenges and solid policies and plans, ongoing challenges with information sharing persists

Respondents across different government agencies reported gaps and communication breakdowns between, and within, agencies. One respondent noted that the Ministry of National Planning [now Ministry of Finance] should ultimately have all the data and reports, but they do not. Roko Tui's summarise TNKs reports – which are held by the MTA – and there is not any centralised storage and access management plan regarding this data. The Bainimarama government reportedly "watered down" the role of the Ministry of National Planning but is now making a comeback (MRD-M1). The same respondent continued:

> *"We've got the technology, so our guys on the ground, the DACs and TNK's, have templates but it's unfortunate that some of these good reports just rest there when some key decision makers like National Planning would love to have that information…. (MRD-M1).*

The MTA village profile data and the WASH information gathered from the regular TNK and RTOs was not regularly shared or easily accessible to other departments, and the six-monthly MoHMS Health Office data was similarly reported as not easily accessible by other departments. A representative from the MTA stated that the community profiling data is cleaned and centralised, and it will eventually end up with the MoF (MTA-M1).

Numerous respondents noted challenges around information sharing:

> *"Just to be frank, I think there is always some communication breakdown between the different agencies. What we have seen is that some of the information that is with the RTO is different from the information with the Ministry of Health and Health Inspectors. For example, when you look at water and sanitation, for a particular community, the types and the numbers of sanitation facilities, the health inspectors have a different number compared to the Roko Tui's office […]. The Roko Tui's office was surprised, because in their data they had 100% of toilet facilities in that community, but it was only 2 households from our end. We can say that there is a communication breakdown, and not enough monitoring. The Roko's office is just receiving the paper-based data without verifying it (DHI-M1).*

> *"The village nurse [..] is doing better work that the Turaga ni Koro when it comes to providing data (DWS-M2).*

> *"There are gaps in data collection and analysis at all levels [of government] (FJ-MHM-M).*

> *"The ground information is mentioned in the Turaga ni Koro's report every month. The only problem is getting or sharing this information. I think there are hidden territorial issues too in some government departments (DWS-M1).*

In the past, there has been formal MoUs between some ministries regarding data sharing, but none that are currently active. The DWS, WAF and the MTA share some information with other government departments on request, but this can be time consuming and doesn't always materialise. Moreover, every department has different **data sharing confidentiality concerns**, especially with raw data, and this was cited as a factor delimiting more open information sharing, with "table-top discussions" adequate but the sharing of raw data more complex and fraught (June workshop discussion with stakeholders).

The DWS and WAF share data with non-government actors on request. Several respondents reported examples of NGOs "doing work in isolation" and not sharing information with the government (e.g. DWS-M1; DWS-M2). The Roko Tui's were deemed the well situated to keep the government informed of NGO activities (DWS-M2).

A key recommendation from the 2018 WASH Summit was to **establish a WASH communication network specifically for sharing information** (Harries, 2018: 4); this has not yet materialised.

At the subnational level, there appears to be clear processes for RTOs and DACs to share information – between themselves, the PAs and, for RTOs, to the MTA. Many provincial-level respondents reported good cross sectoral coordination in practice but called for more training.

In short, the current data sharing situation is arguably leading to unnecessary duplication and resulting in less-than-optimal visibility of critical data, such as water-borne disease outbreaks and risk profiling to identify where interventions are most needed. This negatively impacts efforts to improve access to safe and secure water in rural contexts.

While there is recognition that better coordination and information sharing is required, there is currently not an effective national coordination process/mechanism for information sharing, making this is one of the weakest indicators in Fiji overall

The national WASH database is a constructive step forward.

National WASH Database

Through collaborative efforts between the UNDP and the Fiji government through the Asia Development Bank / UNDP Project "Building disaster-resilient Infrastructure through enhanced knowledge", a national baseline dataset for Fiji's WASH sector was established in 2022, which is managed by the National Disaster Management Office (NDMO) (UNDP, 2023a).

Organised in excel spreadsheets with a central index, the baseline dataset includes:

- Rural water supply and sanitation facility data (from DWS)
- Specifications and costs of rural and outer island groundwater bore and reticulation systems (from MRD)
- Analysed 2017 Census data (FBoS) (from UNICEF)
- Summary information on water and wastewater treatment (from WAF)
- Latest WHO/JMP/UNICEF Fiji WASH sector summary data.

Furter data to be added and regularly updated to the national baseline data include urban water supply and wastewater infrastructure data (WAF), WASH and wastewater assets in heath facilitates (MoHMS), and WASH and wastewater assets in schools (MEHA) (UNDP, 2023a).

DWS conduct rural data collection and verification exercises, gathering information on village demographics, water supply systems, sanitation facilities, and the types and costs of water projects installed in each village. This data has been used to identify hotspot communities needing assistance with safe and consistent water supply, leading to the installation of infrastructure like EPS. In 2021, DWS collaborated with UNICEF to carry out the Fiji **National Rural Water Point Mapping Survey**, which included all registered villages, settlements, and rural schools in Fiji. The survey collected data on demographics, GPS coordinates, water supply sources, treatment methods, storage, and sanitation facilities. It also covered hygiene aspects, such as the availability of handwashing facilities and soap. The WASH in Schools survey, part of the national survey, specifically addresses water and sanitation systems in schools, including menstrual hygiene facilities.

Additionally, DWS maintains data on water and wastewater quality, tested both in its lab and in the field using compartment bag tests for *E. coli*. WSMPs are submitted to DWS for approval, providing data on the projects implemented.

WAF (and its sub-business units) have a Laboratory Information Management System for water quality testing, but it is not yet fully integrated with other systems or departments (WAF-M1).

A list of WASH sector data sources is listed in Table 2.

Table 2: WASH sector - existing baseline data source

Data Custodian	Data Held by Stakeholder
National Disaster Management Office (NDMO)	WASH Sector Asset Database
Department of Water and Sewerage*	Rural Water and Sanitation Database. Includes location details and general descriptors of Rural WASH infrastructure (water source descriptor, # of water tanks per location with construction material and capacity, # of water standpipes, # of toilets, # of showers). It flags the presence or absence of water treatment and the type. The data includes some schools.
Water Authority of Fiji	Summary descriptors of some (urban) WTP and WWTP assets[38]
Fiji Bureau of Statistics	Summary statistics for water supply access, hand washing facilities and toilet access aggregated at Province and new tikina level
UNICEF	Detailed statistical analysis of the 2017 FBoS Census data based on JMP water and sanitation access ladder classification statistics
Mineral Resource Department	MRD's data will includes specifics of the groundwater bores, pumps, reticulation systems installed by MRD and associated detailed costing
Ministry of Health and Medical Services	WASH data for health facilities and Drinking Water Quality Database
Ministry of Education, Heritage, and Arts	WASH data for schools

Information Reporting Process/Mechanisms

The reporting processes/mechanisms for collecting data are relatively clearly delineated. There is a mix of data types and purposes – baseline data sets garnered for (ideally) monitoring, and data collected for compliance [or "verification"] purposes (e.g., DWS's WSMP, water quality testing, Rural Water and Sanitation Database).

Subnational and community level

There are established processes for reporting and information sharing at the community and district/provincial level, including for WCs, in both koro and settlement contexts. However, there are also significant challenges in implementation, consistency, inspection, and inter-department communication

associated with this process. The main subnational level reporting process are:

- Monthly TNK reports
- Monthly DAC reports
- WC logbooks
- Community Health Worker reports
- 6-monthly MoHMS Health Inspector reports.

TNK are mandated to provide monthly reports to the RTO (they are not paid otherwise) and, likewise, DACs provide reports to PAs. These reports should encompass updates from the various community-level sub-committees, including the WC, and ensure coverage of water-related issues - both positive and negative. The Roko Tui serves as a focal point for the TNK, acting as a liaison between the village and government line agencies, including WAF and NGOs. This communication pathway is designed to facilitate the efficient resolution of complex issues, and the Roko Tui can escalate matters to Divisional Commissioners, when necessary, for problems requiring higher-level attention (e.g. funding, policy implications):

> *...on paper these sub-committees support the Turaga ni Koro in administration or coordinating development work in the community. The Turaga ni Koro is required [...] to provide a report to the Roko Tui. Again, everything is happening efficiently and professionally. The WC report should be included so the good, the bad, and the ugly of what is happening in water should be part of Turaga ni Koro [report]. Now, with the Roko Tui, what we are telling the whole world in the development space in rural areas is the Roko Tui works with PA as the focal point for Turaga ni Koro. They are the window to 60-plus line agencies, so these guys don't have to run far. So, if you meet someone from the village saying, "I'm going to the Office of the Prime Minister, I'm going to the Ministry of Social Welfare" [...] if they recognise this system, they don't have to come. [...], these guys are paid to look after the grass roots. [...]. So, on paper WC updates, including requests for interventions, should be part of Turaga ni Koro's report to the Roko Tui. The Roko Tui has these line agencies including Water Authority, DWS, including the NGOs as well. So, he can reach out to them. So, if the issue is complex and requires a higher level of attention because of maybe funding or policy issues they can raise it to Divisional Commissioners (MRD-M1).*

Note that this respondent used the phrase "on paper" eleven times – acknowledging that practice does not always reflect what is supposed to happen as per Policy, job description, etc.

Logbooks

WCs are required – in the Policy – to keep logbooks or minute books; some WCs clearly do (e.g., WC-M5) but many do not:

> *I am in my fourth year in this role, and I have never seen any logbook from any WC and I am not sure if they have that or who prepares the logbook. Mostly, what we do is just discuss the work and progress and that is all we can do (ART-M6)*

> *...only some [have logbooks] but they should all have a logbook (ART-M1)*

> *No, [the WC do not have a logbook] but I believe there is a need to have a book to record and document all the work that the WC does (TNK-M5)*

> *For my experience, there is just one logbook for the village headman, but for the WC, they do not have one that we know off (ART-M5)*

> *... when I asked the Turaga ni Koro where the logbook was, he said that they had lost their logbook (ART-M1)*

> *No, we don't have a logbook, but we have been planning to have one (WC-F4)*

Several ARTs were unaware that there was a policy requirement for WCs to have logbooks:

> *I didn't know that this was a requirement to have for the WC. Now this will be part of my work to ask and check who will be responsible for supplying*

Another ART underscored that as the WCs are volunteer's, perhaps it was **too much to expect that WCs faithfully fulfil their logbook duties.** If they are being active, e.g., when the TNK asks the community to go clean the dam, or fix an issue, it happens, then it was considered ok (ART-M2).

The lack of WC logbooks, and different perspectives on whether they were needed or not, **confounds accountability and systematic progress tracking, and does not support, motivate or hold WCs to account**, which is the point of the logbooks – they are designed to assist the TNKs and RTOs 'monitor' the water situation in villages and promote WASH as a priority.

This challenge with logbooks is further aggravated by the absence of a standardised training package and guidance materials for WCs (see "Human resources and capacity development" element).

Communication

The role of ARTs is critical to bridging the communication gap between communities and government agencies. Challenges such as limited access to council meetings due to transport difficulties / resource constraints, including telecommunication challenges (especially in maritime areas) hinders effective information sharing to an extent. Nevertheless, the system works and there is a reliable and systematic two-way communication system from national through to subnational levels.

Efforts are being made to redress some of the telecommunication issues (in partnership with Telekom Fiji) (Fiji Government, 2023). Additionally, some staff are leveraging novel technologies to bridge the gap of distance, establishing chat groups through Messenger and Viber:

> *"One way we are also trying to help is setting up chat groups through messenger and Viber with committees like natural resource committee. Now in Tailevu there is a project setting-up these chat groups for women and youths. This really helps with our delivery in terms of communications. They can take pictures and report on the activities right in Wainibuka and send that report to us. Or they can simply just send their queries or concerns. They no longer must come to the provincial office with their books to present their request [...]. This is also helpful for the Roko's as well [...]. In my view, using the technology and tools we have today can really help. Some villages are now making good use of that by sending information through these social media platforms (CO-M1)*

Digital technologies, especially through smart-mobile telephony, offers a range of possibilities with regards to CWM in Fiji, especially given the deep penetration of mobile phones and social media (Kemp, 2022). While we found no examples of this technology being used with WCs, **the use of novel technologies certainly provides the opportunity for ARTs and DACs to monitor and support communities and their sub-committees**.

Although no substitute for face-to-face interaction and on-the-ground observation, enhanced use of mobile communication can partially circumvent transport and resource issues and supplement existing community engagement practices.

Asset management

Asset management through asset registers and other information and reporting procedures are required for accountability, forward planning, capacity development and appropriate resource allocation.

WAF has effectively digitised its asset database to assist in assessing risk and planning interventions (Harries, 2018: 13). The NDMO have a WASH Sector Asset Database (UNDP, 2023b: 7), but we have not been able to sight the database to ascertain exactly what it contains. Each department have their own asset management procedures and guidelines, and there are several national policies that provide guidance on asset management procedures (e.g., Fiji Procurement Regulations, 2010; Fijian Constitution 2013).

We have little primary information about community and provincial level asset management procedures related to rural water service delivery; however, in tandem with the new WC training package (DWS, 2024), DWS have produced an asset record template entitled "Inventory of Issue and Return of Equipment and Tools" (DWS, 2024b.) that is focused on documenting the issuance, receipt, and return of tools and equipment, as well as handling discrepancies like loss or damage.

Following the recent shutdown of the Waila Water Treatment Plant in March 2023, the CEO of WAF called for a review of the state of its asset management systems within the Suva-Nausori corridor (Vula, 2023).

Data transparency and public access to information

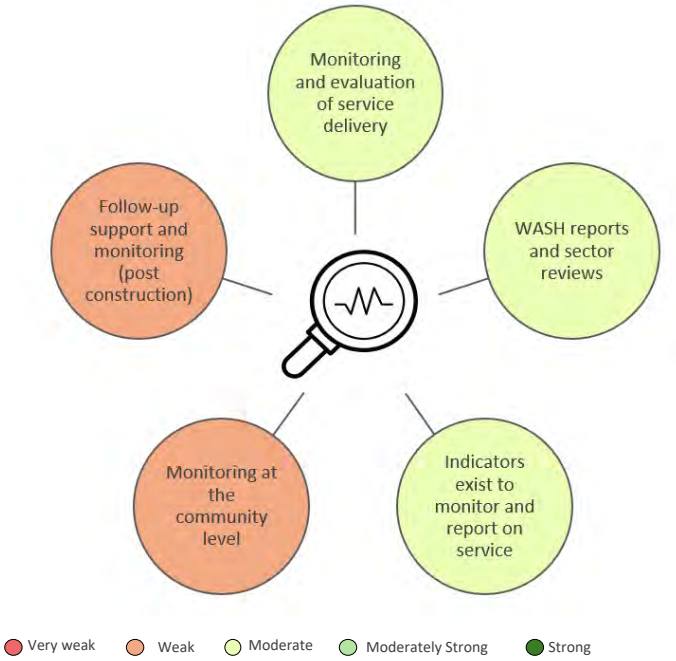
Despite relatively high levels of accountability and established mechanisms in place for lodging complaints, the visibility of WASH information in the public domain is limited.

Other than the census data there is, to our knowledge WASH information is not easily available to the public (e.g., no community, district, provincial or divisional WASH data). This is a gap - Solomon Islands has more publicly available WASH information than Fiji.

Monitoring, Evaluation, and Learning (MEL)

WASH improvement and effective rural water sector management requires ongoing learning and adaptation – this is doubly so when undergoing decentralisation – and is impossible without good data. However, monitoring in the sector is about much more than simply reporting on a set of indicators and is not the same as project-based monitoring and evaluation; there must be a systematic way of collecting and analysing data and using it to inform action and decision making at the national, provincial and community level (see Huston and Moriarty, 2018:23).

This element is closely linked to both "information and knowledge sharing" and "harmonisation and coordination" and includes the all-important CWM+ "follow-up / backstopping" component, deemed a critical transitionary step towards a service delivery approach in the rural PIC context.



Monitoring, evaluation and learning (MEL)

At both national and provincial levels, the government seeks to monitor and evaluate policies and approaches through alignment to the NDP, which serves as the framework from which ministries prioritise activities and strategic priorities. Monthly reports based on result-based business plans are submitted to the MoF, which informs future funding allocations. Performance is measured based on both quantitative and qualitative targets, including output and outcome indicators (MTA-M1).

Overall, the aim is to continuously improve and refine approaches to achieve desired outcomes. However, there are challenges with human resources, a lack of real-time feedback mechanisms, and gaps in data collection and analysis across all levels of government – national, divisional, and provincial. A "lack of monitoring" was listed as one of seven key "WASH issues" identified at the 2018 WASH Summit (Harries, 2018: 21).

There is a national Poverty Monitoring Unit (PMU) under the Ministry of Women, Children, and Social Protection who conduct impact assessments on government programs to understand their effectiveness and find areas for improvement (e.g., Madigibuli, 2023). Programs assessed include the Agriculture Development Programme, Coastal Fisheries Development Programme, a Disability Allowance Scheme, and more. A key function of the PMU is to raise awareness and bring services to rural communities. During the June workshop it was noted that the key WASH-related agencies represented did not currently share data with the PMU in any systematic way, and it was asked (but not answered) if the PMU should be consulted.

The MTA have a monitoring unit (which they are currently trying to strengthen) focused on understanding development issues at the household level – not the tikina or provincial level. WAF and the MRMDDM both have a single monitoring officer, but they are largely focused on internal programs. Neither MoHMS nor DWS have a monitoring unit or dedicated monitoring position (June workshop).

Monitoring is clearly outlined in the *Rural Water and Sanitation Policy* (2021):

- DWS will monitor the implementation and approval of WSMP (14.1.iii) and water quality standards of projects (14.1.iv)
- MoHMS will monitor the water quality standards together with water safety planning of the rural water schemes (14.1.i) and the water quality of rural schemes (14.4.ii)
- WAF are to also monitor the water quality standards of rural projects (14.5.ii)
- MLMR monitors water level and quality of boreholes (14.6.11, iii) and the implementation of ground water projects in rural communities (14.6.v) (DWS, 2021).

Note that multiple agencies are responsible for monitoring water quality – it is unclear if/or to what extent this creates duplication and resource leakage.

The Policy also seeks to ensure that the government will monitor NGOs to ensure that they abide by the practices and standards outlined in the Policy (11.3). Moreover, as emphasised numerous times throughout this report, the Policy makes the Roko Tui's Office responsible to "monitor" water and sanitation programmes (including water conservation) in rural iTaukei villages (14.3.ii).

There is a monitoring and evaluation framework for Fijis National Adaptation Plan Process which includes conducting a "comprehensive assessment of all Fiji's water and sanitation infrastructure and resources in order to meet current and future needs in light of climate change projections" (GoF, 2020: 17).

The 2018/2019 UN assessment (UNGLAAS 2018/2019) states that monitoring progress towards national targets was ad hoc and there was only 50-75% of human resources needed for effective monitoring; however, **the 2021/2022 report showed improvements** – although information was not provided for all indicators. The more recent UNGLAAS assessment on 'coordination and monitoring' suggested that tracking against established data was being undertaken for to drinking water across government expenditure, treated water, quality of service, equitable service coverage, cost efficiency and system functionality (UNGLAAS 2021/22). In terms of the using the data for sector review and planning, resource allocation, standards or regulations, and surveillance activities, the government fared less well, suggesting that while data is available it is only being used for a minority of decisions (UNGLAAS 2021/2022).

The government acknowledge that monitoring and evaluation strategies, plans and practices requires more attention (GoF, 2023). One respondent stated:

> *"There is a lack of real-time feedback mechanisms in place for monitoring and evaluating WASH policies and practices. Instead, tracking national progress on SDG Goal 6 is often based on estimates using the Census 2017 data as baseline. There are gaps in data collection and analysis at all levels to properly inform monitoring and evaluation mechanisms (FjJ-MHM-M1).*

The Turag ni Koro's quarterly report is used to guide the monitoring of the Integrated Village Development Plans – the TNK-RTO-MTA linkage constitutes a human monitoring chain from village-provincial-national levels (MTA-M1). Further analysis of monitoring and evaluation at the subnational level, especially the role of provincial level agents (e.g., ARTs, DACs), is engaged with further below ('Follow-up support & monitoring – WCs').

WASH reports and sector reviews

Monitoring, evaluation, and learning (MEL) is closely aligned with regulation [and accountability] in that it can supply actors with the relevant information required to determine whether policies, procedures and services are being delivered as planned (Lockwood and Smits 2011: 99-100). In Fiji, all the key WASH sector policies and plans make mention of the need for regular reports and reviews.

WASH situation reports

Various reports and publications provide comprehensive insights into the status and progress of the WASH sector. Some notable reports include:

- **UNICEF and WHO Joint Monitoring Programme (JMP) Reports:** These reports provide detailed statistics and analysis on water and sanitation coverage in Fiji. They track progress towards the SDGs and highlight areas needing improvement (WHO & UNICEF, 2021)
- **Fiji Bureau of Statistics Reports:** FBoS publishes reports on national health and demographic surveys, which include sections on access to clean water, sanitation, and hygiene practices (FBoS, 2017)
- **Ministry of Health and Medical Services Annual Reports:** These reports include updates on public health initiatives, including WASH programs, and detail achievements, challenges, and future plans (MoHMS, 2023)
- **Water Authority of Fiji (WAF) Annual Reports**: WAF's reports provide insights into infrastructure development, water supply and sanitation services, and performance metrics (e.g., WAF, 2021).

Sector reviews

There have been several formal sector reviews, including:

- **Fiji WASH Sector Performance Review 2019:** This review assessed the overall performance of the WASH sector, identifying key achievements and areas for improvement. It highlighted progress in increasing access to clean water but pointed out persistent challenges in sanitation and hygiene, particularly in rural and remote areas (SWA, 2019).
- **Review of opportunities for the Pacific WASH sector 2021:** Regional review of the Pacific WASH sector (ADB, 2022).

- **Pacific Regional Infrastructure Facility Sector Review 2021:** The review provided a comprehensive analysis of infrastructure development in the WASH sector across the Pacific, including Fiji, and emphasised the need for greater investment in resilient infrastructure to withstand climate change impacts (Overbeek, Cox & Pereira-Hill, 2021).
- **DWS have been reviewing the WSMP** and sought comments from external institutions as well as in-country partners and 'sister' ministries.

There have been various external reviews/analysis of the WASH sector more widely (e.g., water resources management, Wilson et al., 2022.), but none that we are aware of that specifically focus on rural water service delivery.

Appropriate indicators for monitoring and reporting

Appropriate indicators for monitoring and reporting service delivery are required for successful and sustainable WASH implementation. The government monitors and reports on WASH indicators in alignment with the SDGs. The country has integrated these indicators into its national WASH framework to ensure progress towards SDG 6, using Akvo Flow, a third party (commercial) digital data collection and management software (DWS-M2).

Key Indicators and Alignment with SDGs

- **Access to Safe Drinking Water**
  - Proportion of population using safely managed drinking water services (SDG Indicator 6.1.1)
- **Access to Sanitation**
  - Proportion of population using safely managed sanitation services (SDG Indicator 6.2.1a)
- **Hygiene Practices**
  - Proportion of population with handwashing facilities with soap and water at home (SDG Indicator 6.2.1b)

As noted above, the monitoring of national progress on SDG 6 targets relies mainly on estimates derived from Census data (2017), which while providing a baseline for tracking progress does not offer real-time insights into current conditions or recent developments in the WASH sector. The water ladder allows countries to broadly monitor their progress and compare the success of water-focused interventions between time and place. However, they are limited. There is an overemphasis on infrastructure (piped water), difficulty in low resource contexts to measure all three criteria (accessible on premise, available when needed, and free of contamination), and a lack of recognition of non-faecal sources of infection (e.g., water-based helminths or aquatic vector larvae) (see Bain et al., 2014; Howard et al., 2020; Shaheed et al., 2019).

Despite these challenges, the MoHMS, through the EHD at the sub-divisional level, plays a vital role in addressing some of these data shortcomings:

> *"The EHO maintains a WASH database in Excel format, which records information on water sources, treatment, sanitation facilities, and hygiene infrastructure within the areas they serve. Additionally, the Community Health Worker's reporting template includes a section on WASH, requiring them to report on the WASH status in their respective communities. This helps in gathering more granular data at the grassroots level (FJ-MHM-M1).*

Given that multiple departments (the MTA, MoHMS) are collecting granular household and village-level data, it would be fruitful to review the indicators being used, identify redundancies and seek greater synergy and efficiencies where possible. At the stakeholder validation workshop in June, **most departmental representatives suggested that there was duplication in data collection**, with one participant suggesting that there is respondent fatigue with people tired of answering surveys and questions that are similar to what they have already answered for another department.

Community-level monitoring - infrastructure and management

Policies and guidance clearly stipulate that WCs are responsible for the ongoing maintenance and operation of water system infrastructure, including water conservation. TNK's, in turn, are responsible for ensuring WCs are doing their duties (and sometimes are also a member of the WC). In short, WCs and TNKs, with oversight from the RTOs, are meant to ensure there is community-level monitoring (both 'hardware' and 'software').

There is a lack of a standardised, national WC training process/manual/guideline – as is found in most other PIC – other than WSMPs and DWSSP, which are not really

designed to build the foundational management capacity of the WC but rather focuses on imparting technical skills (see "Human resources and capacity development" element). Hence, the key roles and responsibilities of WCs are primarily spelled out in the *Rural Water and Sanitation Policy* (2021), which states that WCs must ensure the following: (i) manage, maintain, and operate water supply and sanitation schemes after handing over (ii) ensure water sources and reservoirs are accessible at all time (iii) record number of standpipes, households connected to water, type of bathroom and toilets and ensure that all leakages are recorded and repaired (iv) collect levy for purchase of parts and tools for the sustainable management of the water system in the village and settlement (v) work with the TNK recording damages to water and sanitation system due to disaster for reporting purposes to Water Authority of Fiji, the Roko Tui and DOs Office (vi) ensure the cleaning of water sources, dams and reservoir on a monthly or quarterly basis and flushing of water mains after heavy rainfall (vii) ensure proper drainage systems for wastewater are in place and promote safe and hygienic environment in the villages and settlements (DWS, 2021, §14.9).

A PA from Macuata reiterated that the role of the WC is to "do regular checking right from the catchment, the pipeline, to the reservoir and to different houses" and the TNK's monthly report should include an attachment report from the WC outlining when they cleaned the catchment etc., "only then can we know that they are doing their part" (PA-M3). It was stressed by a TNK from Lomaiviti Province that some tasks are "too big" for the WC alone, and the "whole community" must sometimes work together to get the work done", including monitoring "household water use" (TNK-M3).

This guidance clearly demands community level monitoring by the WC. However, as is widely known and reflected from this and our earlier research, many WCs are not fulfilling their role as stipulated in the Policy. Indeed, a community member from a village in Lomaiviti explained that due to excessive leaking taps, miscommunication, poor management, and little action by the WC it is now "the village" and "not the WC" that is looking after the water system (WC-M4).

There were numerous reasons proffered for why WCs are frequently not fulfilling their duties. These typically included:

- a lack of funds
- limited tools
- lack of technical knowledge
- poor management.

Seven provincial-level government agents were specifically asked if technical or management issues were more of a problem: four believed management (software) was the primary issue and not a lack of technical know-how, while three believed that it was a mix of both (Table 3).[39]

Table 3: Management or technical issues - main challenge?

ID	Management	Technical
PA-M1	✓	
ART-M1	✓	
ART-M2	✓	
PO-F1	✓	✓
VHW-F	✓	✓
HI-M1	✓	✓
CO-M1	✓	

These result echo earlier findings from Fiji (as well as Solomon Islands and Vanuatu)[40] where it was found that managerial weaknesses more than technical issues where ultimately deemed the main cause of early system breakdown.

It is for this reason that there has been a global call for "community-water management plus" approaches, which may involve the outsourcing of rural water service delivery to third parties, the training and payment of community or district level actors (e.g., plumbers), and/or structured 'backstopping' approaches that involve regular follow-up support for WCs. The latter approach acknowledges that software – not just hardware (infrastructure) – also needs to be monitored and supported. Theoretically, this is part of what the TNK, ARTs and DACs role is – to "monitor" the water (and sanitation) situation in communities and ensure that WCs are managing their system appropriately.

Follow-up monitoring and support for water committees

With its well-structured and devolved administrative system (national; divisional; provincial; district; community) and comparatively well-resourced and capable workforce, **Fiji is well placed to be able to provide follow-up support and monitoring to WCs** – certainly more so than Solomon Islands and Vanuatu [the other countries involved in this research]. The updated *Rural Water and Sanitation Policy* (2021) expanded the role of the Roko Tui's Office to include 'monitoring' of water and sanitation in villages, including water conservation (DWS, 2021: 14.3.ii).

How is the Policy currently being applied in practice?

Below is a suite of exemplar quotes that capture the perspective of differently situated actors – ARTs, TNKs, other government officers, and WC members – followed by a summary analysis.

ARTs perspectives

> *"It is important for us to monitor. But in my experience and knowledge, we do not monitor. We only consult and ask questions to the committees. Whatever they say, we believe that to be true. But for us, to go and monitor the activities in these villages, that is non-existent (ART-M3)*

> *"It's an activity of the provincial council office to look after water and sanitation for every village [...] you always [have to] follow up. But in some villages, they are told today and the following week everything falls apart. We must keep following up (ART-M1)*

> *"To my understanding, we have visited villages and communities regarding water communities. We have organised awareness sessions and have advised them that they need to have a woman and a youth in the WC team. They also have been advised about organising fundraising [soli's] in the village to help them financially when the need arises [...] These are the two important points we have been addressing when attending to awareness sessions (ART-M4)*

> *"Sometimes we have cases where some village Water Committees will not disclose the issues that they are facing to us, so we are lucky at times the village nurse will point that out for us. Sometimes when we attend the village meetings then we come to understand that there is limited water available. So, we question the work plan of the WC members. It is the TNK whose task is to monitor all the committees in the village and see that they are active (ART-M6).*

Asked why they thought the RTO role has been expanded to include water and sanitation, a respondent said because "**we have a relationship with the community**" (ART-M5). All the Roko's interviewed understood why the Policy had been made more explicit, but one ART was somewhat critical:

> *"The Roko Tui can't just be going straight and asking the committee, the village Water Committee, about how things are going? [Our] role here is to safeguard the iTaukei. That must be number one, the iTaukei in their own setting, in their own way, which is called the iTaukei rural setting. We have to respect that … (ART-M2).*

Others felt the Roko Tui did have the authority to directly engage if the WC were not responding to the TNKs instructions (e.g., no planting above dam, failing to submit WC reports at the Bose va Koro). **In such cases, the ARTs role was to encourage action and shift priorities towards WASH.** Several ARTs highlighted that it was ultimately the TNKs responsibility to ensure WCs are active and fulfilling their responsibilities, including keeping logbooks. There was evidence of some uncertainty about what "monitor" really means in the Policy: Is it the ARTs role to ask the WC to look at the logbook when visiting a village? Or is it the ARTs role to ask the TNK at tikina meetings?

TNKs perspective

> *"… when I call them [Roko Tui], they tend to tell us to call PA, it's like they do not understand the issue we have here (TNK-M1). "Do they (ARTs) ever give advice to the members of the water committee? Yes, they do that. They advise the water committee members and ensure they do manage the water (TNK-M3). "Since I started as village as TNK [2022] not once have I seen someone from the Roko's office ask about or be concerned about our village water needs and challenges ... [but it would be good if they did] so that it increases our level of understanding in the village in terms of the issues and challenge we face. Mainly regarding the roles and responsibilities we have in the village (TNK-M4).*

It was underscored that the RTO does not just "turn up" at the village – they must be invited. However, it was explicitly noted that **"I think it's important and right for the Roko to attend to the village [and check up on the water situation]" (TNK-M5)**. Another TNK suggested that if they **"had followed-up or monitored water here"** it would be better because **"they would know when to come here with water and help us" (TNK-M1).**

The TNKs were overwhelmingly supportive of the RTOs more directly engaging with village water and sanitation issues.

Other government officers' perspectives (provincial and national)

> *The policy says that Roko Tui's Office is supposed to monitor [...], so our interpretation of that is does that mean the Roko Tui's Office supposed to come and check that the WC is doing their job? Yes, on a time-to-time basis [but] it is the TNKs responsibility too (MTA-M1).*

> *My understanding of the Roko Tui's role is basically to **provide a coordination role that empowers the Water Committee in the village**. They empower the community that looks after the management of the water resources. Their role is to support, coordinate and to ensure that the Water Committees are providing the services that they should be doing. For example, if water system is not working, they are to assist in coordinating who is supposed to report the issue to the government (PO-F1).*

> *The selection of the Turaga ni Koro and the Mata ni Tikina and the provincial council [is very important]. These people must be vigorous all the time [asking] where's your report [have you done this] inspection …(WAF-M1). "There are a lot of policies out there, I see that the Roko Tui's are mainly focusing on vanua empowerment. So, this alone carries a lot of work for them. But it's not forgotten this is something that still happens, there are still discussions in place on strengthening ties with village heads (TNK). Empowering their village committees. It is really moving very slow (CO-M2).*

For the DWS, the rationale for bolstering the role of the RTO, following consultations, was numerous, including:

- To monitor water and sanitation 'projects' (e.g., WAF and NGOs) and ensure there is no "double-dipping"
- They have status: "People listen more to the Roko's than people from outside" [e.g. WAF, NGO]"
- Verification: "If the RTO gets a request for assistance regarding water, they can go and see what is going on, take a look. See if their water system is good or if there is an upgrade needed [...] what we want is a support letter from them saying yes, we agree there are problems [and they need assistance]"
- Help with WC establishment
- Ensure there is no land issues (DWS-M2).

A WAF respondent (during our previous PaCWaM+1 research) stated:

> *We are trying to strengthen the responsibilities of Roko Tui's. Let's say a village is complaining of a shortage of water … the Roko Tui has to check out their [WC] work schedules –have they been visiting the dam sites, cleaning-up the catchments etc. – or, if the Roko Tui sees in their logbook that they have identified a leaking tap, check that they have done something about it (WAF M-4).*

Water Committee perspectives

There were mixed responses from WC members about the engagement of the ARTs in water issues at the community level:

> *The Roko's office just comes into the village on general things, welfare of the communities, natural resources. But to talk on water, no one has ever come to the village (WC-M10).*

> *There are times when we have taken our water issues to them [Roko Tui] and they have advised us to go see WAF. When we take it up with the WAF, WAF advise us to buy our own equipment. We go to the Roko Tui's office and Roko Tui's office sends us to WAF (WC-M4).*

> *It will be useful [if the ARTs followed-up with the WC]. Having the Roko Tui's office on board will drive the WC team. They will be able to know what needs to be done, what equipment is needed to address such issues and what sort of training is needed to be conducted for the villagers leading water management (WC-F2).*

One WC member emphasised that while the RTO has a role to play, it is ultimately the TNKs role to monitor the WC.

In summary

The **ARTs** interviewed were generally supportive of the Policy revision. Several ARTs – and one WC member – highlighted that it was ultimately the TNKs responsibility to ensure WCs are active and fulfilling their responsibilities, including keeping logbooks. Amongst the

ARTs there was also some uncertainty about what 'monitor' really means.

All of the **TNKs** interviewed (n=5) were overwhelmingly supportive of the RTOs engaging more directly with water and sanitation issues but note that only one Roko demonstrated some knowledge of the Policy. Exactly what this looks like in practice remains unclear, but TNKs had no issue with the ARTs visiting and talking with the WCs.

'Other' provincial and national-level government respondents displayed somewhat mixed perspectives – some suggested that they should be inspecting or asking to see the logbook if a community is requesting assistance, whilst others thought the role was more coordination focused and that the Policy meant that they primarily review reports and take more note of water and sanitation issues. A WAF respondent stressed that "the selection of the TNK and the Mata ni Tikina and the provincial council is very important. These people must be vigorous all the time, asking where's your report, conducting village inspections …" (WAF-M1).

All but one of the thirteen WC members interviewed thought that the greater involvement of the RTOs in monitoring and water and sanitation was a positive development and would "boost the WC team to better uphold their responsibilities" (WC-F2).

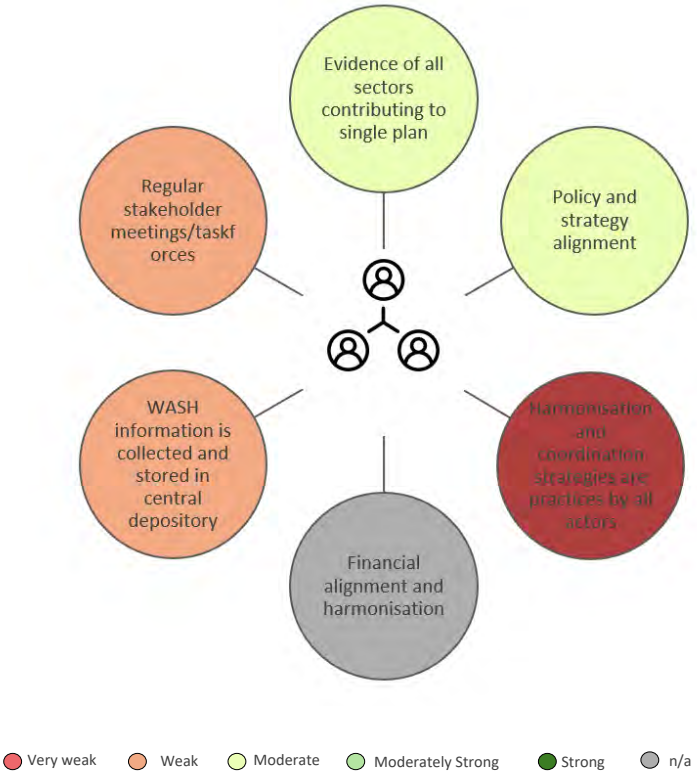
Note that there was clear evidence that the direction that everything should go through the RTOs and then to other agents (PAs, DOs) was not happening in practice (e.g., TNK-M2). Moreover, several respondents emphasised the difference between policy and practice, with two respondents using the phrase "on paper" to highlight the divide between policy and practice.

The case for structured follow-up/backstopping support to WCs is also discussed further under "Human resources and capacity development" element).

> *"It's not the Roko Tui's job to just come and see, because the Roko Tui is not here [meaning away from the village]. So, from what we know it is the TNK [who] should take it up to the Roko Tui […]. If the TNK didn't tell the Roko Tui, the Roko Tui is just sitting there [and doesn't know] (WC-F5).*

Harmonisation and Coordination

Effective water service decentralisation requires strong coordination mechanisms and structures. To achieve multi actor and multi-level coordination requires good policy and clearly defined roles, relationships, and responsibilities, supported by good communication and coordination platforms (hence, is closely linked to "information and knowledge sharing"). Coordination can be assisted through working groups, technical meetings and joint sector review processes that increase interaction amongst stakeholders and ensure that sector actors understand their roles and are working together effectively (Huston and Moriarty, 2018:19). This element also includes donor alignment and harmonisation (see OECD, 2006).



Evidence of sector contributions to a national plan

The NDP for Fiji, which includes a 5-year (2017-2021) and a 20-year (2017-2036) component, was developed through a nationwide consultation process involving the private sector, civil society, community groups, and various government ministries. This approach aimed to address cross-cutting issues like gender equality, health, disability, and governance, promoting sustainable and inclusive development for all Fijians (Green Policy Platform, 2017). These consultations were then translated into shorter, sector-specific development plans (GoF, 2017).

The NDP incorporates interim 3-year and 5-year plans and involves sector consultations. The MoF conducted close to 30 meetings with various government bodies, laying the groundwork for the NDP's preliminary draft, which will be refined through additional consultations to align with Fiji's SDG commitments (FDI, 2023).

In terms of rural water service delivery, the WAF Strategic Plan lacks specificity about the degree of consultations undertaken. The Fiji Water Sector Strategy 2050 was developed through stakeholder engagements involving the government of Fiji, WAF, development partners, communities, and other sector bodies between February 2023 and February 2024 (GoF, 2024: 7).

The draft *Rural Water and Sanitation Master Plan* aims to register and prioritise communities in need of water (and sanitation) services, ensuring better accountability for operations and maintenance. However, the extent of consultation is unclear.

Policy and strategy alignment and harmonisation (support decentralisation)

There is widespread recognition of a "lack of a strategic approach to delivering water and sanitation services to rural communities by government, WAF and NGOs," which has resulted in "**an uncoordinated approach to the installation, governance, and ongoing operations of these systems**" (GoF, 2024: 22). A DWS respondent noted that "once all stakeholders have a copy of the Master Plan, they can work in line with it [...]" and this will address harmonisation issues (DWS-M2).

In terms of decentralisation proper, there is general policy and strategy alignment with a strongly devolved, and relatively well resourced, decentralisation structure. The only challenge remains the 'mixed' views and low awareness of aspects of the current *Rural Water and Sanitation Policy* discussed above.

Harmonisation and coordination strategies and policy(s) are practiced

National

"Collaboration" remains a challenge at the national level, with evidence of siloing and "territoriality" among key ministries and stakeholders. The Master Plan is designed to address this issue.

Subnational

At the subnational level, the decentralised administrative framework theoretically supports rural water service delivery, but practical challenges persist. While collaboration frameworks are in place, effectiveness hinges on provincial-level coordinators' performance and knowledge sharing.

Provincial-level coordinators are crucial in identifying stakeholders and facilitating engagement on water management issues. Most provincial level respondents interviewed – ARTs, PAs, DOs – reported that there is good communication and collaboration between the RTOs and PAs (e.g. PA-M3; ART-M1). There were numerous examples given of sharing transport between departments to improve access to communities and circumvent the challenge of limited fuel allowances and/or access to transport to enable community visits. However, there were some obstacles to effective collaboration in evidence.

A key challenge is simply the very broad range of responsibilities and demanding workload that provincial officers are tasked with (see "Human resources and capacity development" element). Another challenge is clarity around roles and responsibilities. A Divisional Commissioner noted the importance of having clearly defined Terms of Reference and Job Descriptions to serve as a roadmap for collaboration and accountability (MRD-M1). There is a general civil service induction process, but the lack of awareness of the 2021 Rural and Sanitation Policy revisions is evidence that not all information is "**trickling down**", as one respondent put it (MTA-M1).

Asked who was responsible for overseeing WCs and responding to water issues, some respondents mentioned both MoIT (the ministry which DWS sits within) and the MTA (e.g., MRD-M1), whilst others said it was the PAs role:

> *"The PAs role is to enforce and empower the Water Committee to be responsible […] in my experience, there is very minimum effort shown [by ARTs} … all the coordination and oversight roles are provided by the PAs, the Roko Tui supports awareness programs and advice in the communities, but workwise the PAs are doing more of their roles than the Rokos (PO-F1).*

> *"If anything happens in any village, the first responders in those villages are the ART's. Even before any government agency comes in, we are there first because we are the link to the relevant government agencies. Also with the PA, for any development plans, they will need to inform us on that. This applies to any government departments; they will need to liaise with us first before anything can be carried out (ART-M6).*

> *"The role of the Roko Tui is to strengthen the role and responsibilities of the Water Committee at the village level. Like visit them, consult with them and visit the catchment (PA-M3).*

Mixed messages also merged regarding WSMP and other frameworks, **reflecting confusion over who ultimately oversees WCs and handles water and sanitation issues at the community-level.**

Practice is often not reflecting policy regarding community/WC engagement with provincial level officers, particularly when requesting assistance. **Requests typically bypass the RTO and go direct to PAs, who have access to funds for rural development activities whilst the RTO do not** (e.g., CO-F1).

Based on the respondents in this research, there are mixed views and a lack of certainty about exactly who is responsible for overseeing WCs and addressing water and sanitation issues in communities.

The (draft) Master Plan is also devised to help address some of these role alignment and coordination issues.

Service Delivery Partners (SDP) / Non-government Organisations (NGOs)

There were numerous examples proffered – more often informally than during interviews – of some NGOs not engaging with key line ministry's (such as DWS and WAF). In one detailed example, a community in Central Division had a water system built by an NGO. Not long after it was completed a contractor (for WAF) arrived with the parts to build a water system. They subsequently replaced the extant system with a newer system (otherwise the contractor would not get paid) that reportedly does not work as well. There were also criticisms of some academic institutions and churches doing research/ implementation and not appropriately engaging with relevant ministries.

NGOs play a critical role in extending WASH services, especially in remote and underserved areas. However, the lack of a coordinated framework for their involvement and a lack of enforcement of the Policy, results in fragmented efforts and inefficiencies

A report by SPC on the upper/middle Waimanu River catchment highlighted that:

> *"It is worth noting that the iTaukei Affairs system and the VIDP has not always worked as planned, and in many cases, external partners can go to the communities directly, thus not having the support or collaboration of the vanua (group of clans and villages) (SPC, 2021: 07).*

Financial alignment and harmonisation (support decentralisation)

A thorough analysis of the sector's financial alignment and harmonisation was not possible. However, challenges were noted at the subnational, community, and provincial levels.

The lack of standardised training at the community level, aside from WSMPs and DWSSP, **has limited the opportunity to reinforce the importance of water fees/regular fundraising and sound financial management for sustaining systems**. This represents a critical gap in financial alignment and harmonisation to support the community-based water system model.

WASH information accessible to all actors

Access to comprehensive and up-to-date data is essential for sector coordination and harmonisation. However, this remains a work in progress with critical data not readily available. Challenges persist with inter-departmental data accessibility.

Regular stakeholder meetings, taskforce working groups and others

There are various committees whose role is to oversee the WASH sector, namely:

- **National WASH Cluster**
  - Led by MoHMS, the National WASH Cluster was first established in December 2012 in response to post-Tropical Cyclone Evan. The Cluster primarily focuses on providing effective and efficient service to the government and people of Fiji before, during, and after natural disasters. This emergency response and recovery mechanism is part of the National Clusters, where NDMO sits at the core (GoF, 2016). It was reported that the WASH Cluster have missed two quarterly meetings in 2024 (June workshop).
- **National Drinking Water Quality Committee**
  - Endorsed by the Cabinet on its formation in 2022 (Naivalurua, 2022), the National Drinking Water Quality Committee is managed by MoHMS and responsible for overseeing and maintaining collaboration on drinking water quality standards (FJ-MHMS-M1). However, according to one respondent is it has been inactive of late (WAF-M1).
- **Rural Water and Sanitation Program Coordination Committee**
  - A recommendation and decision following the 2018 WASH Summit was to establish a Fiji National WASH Steering Committee, which would be chaired by the DWS; the WASH Cluster would remain active but focus solely on emergencies (see Harries, 2018: 4). The idea of setting up a WASH Steering Committee has been around since 2014 but apparently cannot be implemented until the National Water Resource Management and Sanitation Policy is approved.

There are also ad hoc forums, such as the 2018 WASH Summit and, recently, a National Water Committee Stakeholders Workshop. Active stakeholder engagement through regular meetings and working groups creates a collaborative environment where issues can be promptly addressed, and best practices shared. The current inactivity of some coordination bodies undermines these efforts.

Recently (*c*. late 2024), the DWS has developed a Terms of Reference for the establishment of a **Rural Water and Sanitation Program Coordination Committee** (RWSPC). The RWSPC is being established to provide strategic oversight and direction for implementing Fiji's *Rural Water and Sanitation Policy*. This initiative aims to enhance access to safe water and sanitation services in rural areas, aligning with national priorities and addressing the specific needs of rural populations. The committee will oversee policy implementation, coordinate stakeholders, and ensure community participation while promoting sustainable practices and capacity building.

The committee's scope includes policy guidance, project prioritisation, and monitoring and evaluation of water and sanitation services. It will comprise representatives from government ministries, local authorities, NGOs, donors, and technical experts, meeting quarterly to review progress, address challenges, and make recommendations. The RWSPC's work will be supported by a secretariat and a **Monitoring and Evaluation Sub-committee** to ensure effective communication and data-driven decision-making. This collaborative structure aims to strengthen water and sanitation outcomes for Fiji's rural communities and is a positive development (ToR in possession of the authors).

Interestingly, there were calls for more meetings/forums at the **subnational level:**

> *"I think there should be more frequent meetings so that we can be aware of which programs each department is running so we can assist each other. In terms of transport […]. But I think that's the gap because we need more collaboration, more meetings, to strengthen that loophole [refereeing to Policy awareness] (HI-F1).*

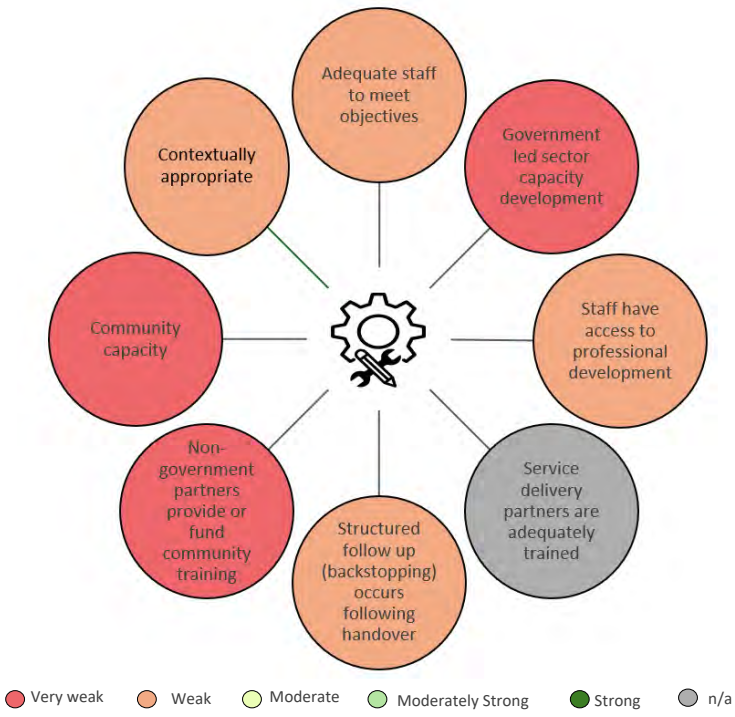
Active stakeholder engagement through regular meetings and working groups creates a collaborative environment where issues can be promptly addressed, and best practices shared. The current inactivity of some coordination bodies undermines these efforts.

A key recommendation from participants at the June workshop was for each Province to establish its own **WASH Steering Committee** (see "recommendations" below).

Human Resources and Capacity Development

A critical component of the enabling environment to support effective decentralisation is ensuring that there is adequate human and institutional capacity and competency. Public and private institutions at all levels must have the capacity to carry out their roles and responsibilities. As captured by Lockwood and Smits (2011), many local governments require capacity support as they decentralise; without it, decentralisation efforts tend to stall and falter. Institutions need both sufficient material and human resources to efficiently decentralise (see budgeting, finance, and resources for material resources).

This element also includes capacity development at the community-level – ensuring that WC training (and/or other sector specific training) is contextually appropriate, undertaken as stipulated in national strategic plans/policy, and effective.



Adequate staffing numbers

Loss of staff means a loss of essential knowledge and capacity. There was, and remains, concern about understaffing in the water sector in Fiji, as flagged in numerous independent sector reviews and reports (e.g. WHO, 2015). The Fiji *Water Sector Strategy 2050* reports that **WAF has lost 950 staff over the past four years due to staff turnover, including migration** (GoF, 2024: 14).

Despite their critical role, DWS faces significant staffing constraints, with many vacant positions and considerable time lags associated with advertising and filling positions (DWS-M2).

At the **subnational level**, respondents did not explicitly mention understaffing; however, the roles and responsibilities of provincial-level officers – PAs, DOs, COs and ARTs – are extensive. For example, one ART in the Macuata Province is tasked with looking after 28 villages, another ART 35 villages "these are huge numbers, and we cannot attend to all of them" (ART-M5). "Burnout" was raised as a concern (MTA-M1).

According to the most recent UNGLAAS assessment there has been no human resource need assessment conducted for WASH in Fiji (UNGLAAS 2021/2022).

The UNGLAAS assessment reports on the "Sufficiency of human resources" for drinking water (Table 4).

Table 4: Sufficiency of human resources - drinking water

Indicator	Weighting % of what is needed
Sufficiency of human resources overall	50-74%
Policy development and planning	75-94%
Monitoring and evaluation	50-74%
Regulation	50%
Design and construction	75-94%
Community mobilisation	75-94%
Operations and maintenance	75-94%

(Source: UNGLAAS, 2021/22)

Given the post-COVID decline reported by WAF and others, these percentages have likely dropped since the UNGLAAS assessment.

Government-led sector capacity development plan

Fiji has several initiatives and plans related to water sector capacity development, often integrated into broader national and regional strategies.

Mutual Accountability Mechanism: Fiji participates in the SWA partnership, which emphasises accountability, capacity building, and coordinated efforts to improve WASH services. This framework involves multiple stakeholders, including government agencies, to enhance the delivery and monitoring of water services (SWA, 2024).

Pacific Community (SPC) Initiatives: The SPC GeoScience Division provided technical support and capacity building for water resource management in Fiji [as well as other PIC]. This included training and advocacy to improve the management of water resources and enhance resilience to hazards (see SPC, 2015). This continues today.

National Disaster Management Office (NDMO): Fiji's NDMO has launched various initiatives to strengthen disaster coordination, including water resource management during emergencies. This includes the development of mobile emergency operations centres, which improve communication and response capabilities, indirectly supporting the water sector's resilience.

These initiatives demonstrate Fiji's commitment to developing capacity in the water sector, however, there is, to the best of our knowledge, **no WASH specific sector capacity development plan, nor has there been a targeted sector training needs assessment at the national or subnational levels for rural water service delivery (or sanitation).**

Staff have access to professional development opportunities

The latest available WAF 2017 Annual Report provides many examples training and workshops attended by staff.[41] Some DWS staff have also attended conferences and workshops. However, it was suggested more training opportunities, especially in the DWS, were needed.

At the **subnational level**, there are initiatives to support capacity building at provincial, district and village levels. These inform rural water services indirectly more than directly (see below). We have not identified any coordinated WASH specific capacity development framework.

The MTA support capacity development through training and other means with Roko Tui's, COs, TNKs and others – the most recent training has focused on the Integrated Village Development Plans (MTA-M1). Partners such as UNDP have also supported leadership and governance capacity strengthening activities with TNKs, through training of trainers and outreach activities (UNDP, n.d).[42] Nevertheless, there were calls for more training from numerous respondents. Literacy was cited as an issue with regards to WCs and TNKs (including financial literacy) (MTA-M1, WAF-M1). Inconsistent (and late) reporting from TNKs has been identified as an issue (Nanuqa, 2022).

Many respondents cited a need for more training/awareness, primarily regarding water supply, sanitation, and water conservation (ART-M1, CO-M3, HI-F1).

A **Health Inspector** stressed that training was needed for **ARTs and TNKs on water and sanitation because they alone have the legal mandate, not health inspectors:**

> *"I am not empowered [...] I can only offer advice [...] they need to undergo refresher training to remind them that they have that power. This is one of the problems - a lack of communication" (HI-M1).*

Service delivery partners are adequately trained

We did not have the opportunity to explore this indicator in any detail. WAF sub-contract some implementation work to private contractors, but the kind and frequency of training given to private sector operators was not determined. With regards to other external bodies, we are unaware of any government-to-NGO training.

NGOs/SDPs provide or fund mandated community training

Non-government implementation partners, such as NGOs, play a crucial role in providing or funding community training. They are required, by the Policy, to undertake a WSMP but there were numerous examples proffered of not undertaking the WSMP or submitting to DWS for entry onto the database.

Many NGOs, as part of their interventions, do provide various skills-based training with WCs at the community level, e.g., Partners in Community Development Fiji,

Habitat for Humanity, the Wildlife Conservation Society WISH project.

Community capacity development

Training

WCs are considered one of the most essential committees by the government. As per the *Rural Water and Sanitation Policy* (2021), local communities are accountable for the operation and upkeep of their water supply systems, with the WC having a clear responsibility to manage, maintain, and operate a system following handover to the community (DWS, 2021, §14.9-vi). There is a Defects Liability Period following water system installation – implementers are responsible for fixing any defects for six months (DWS, 2021, §13.2. xviii) – and then operation and maintenance are the WCs' responsibility. The Policy stipulates that the WC is to "**ensure sustainability of the water and sanitation system in close collaboration with Water Authority of Fiji and the Department of Water and Sewerage**" (DWS, 2021, §13.2). What this collaboration looks like is not stipulated.

Despite this critical objective, to date there has been no standardised training for WCs provided by the government. A PA noted:

> *"[We] do not provide them [WCs] with all the information they need […]. Sometimes they are not provided with any materials. These WC teams need something to start with so that they can go on getting people in and trying to get funds to get further materials needed in the village. Providing them with such materials would be a big step for them […] and this would also make things easy for us – probably the next time we go for a visit, there's a standard and organised WC team in that village (PA-M2).*

According to the Policy, the WSMP must be implemented when a water supply system is established, and this includes the establishment and training of the WC. However, respondents indicated that while training "sometimes" occurs it is not typically provided (e.g., DWS-M2, MRD-M1; PA-M2). There is, however, community-level training provided for EPSs.

Recently, the lack of standardised training has started to be addressed with DWS and WAF – supported by UNICEF – commencing 3-day WC training. In October 2024 training commenced as a pilot in 96 villages in the Tailevu province using a cluster approach. The goal is to eventually conduct the training in all villages across the country. The training package includes a toolbox for basic repairs and uses a mix of flipcharts and PowerPoint delivery modalities (June workshop). DWS was considered the "technical line agency" best positioned to be responsible for such training (e.g., MRD-M1).

DWSSP is a specific type of training – a risk-based approach to identify and address hazards – but it is no substitute for foundational WC training. DWSSP is largely undertaken retrospectively (but can, and increasingly is, being used at project implementation). The MoHMS undertake approximately 21 DWSSP trainings a year.

A health inspector highlighted the importance of DWSSP training in not just iTaukei communities but also settlements, schools and health facilities, and explained how the process supports system upgrades:

> *"Our target is to do [DWSSP] training for all the communities […]. We give them the plan and also assist them. For this year, since the budget started in August, we have given Sāuva village two ten-thousand-litre water tanks. Straight after the training we provided these to them. This is because there was no storage facility for them, but this was only identified at the training. It was just from the source to the taps. So, when there is heavy rain, there is no water. Instead of them trying to fundraise for these two water tanks, we have provided the assistance on the FJD$5000+ for two tanks. The only thing for them to do is prepare the base and connect it to the reservoir and connect the pipes. This is something we are trying to improve in the communities, is to help train them first (DHI-M1).*

The impact of water safety planning on improving rural water quality in the Pacific Islands has, based on various studies, been mixed (String et al., 2020; cf. Souter et al., 2024). Regardless, it is the globally recognised standard and WSP is a productive tool for not only assessing risk but also identifying infrastructural challenges and gaps.

Structured follow-up (or 'Backstopping')

The high rate of water system failure is not just the 'fault' of WCs: evidence from around the world demonstrates that WCs everywhere require some kind of ongoing support (e.g., Lockwood and Smits, 2011; Love et al., 2022; Souter, et al., 2022; World Bank, 2017).

DWS reported doing annual "follow-up" with communities and water managers where EPS have been

installed, but there is no regular, structured follow-up support for other types of water systems.

Follow-up support to WCs can take numerous forms: **direct support** from government, NGOs or private sector delivery partners ('backstopping', see Love et. al., 2021b) or **indirectly**, such as through town-community social networks (see Love et al., 2023). Regardless of the approach, it is evident that communities will continue to encounter governance and technical challenges and require some form of ongoing support. Such support should be practical and tailored to the specific context of each community, aiming to strike a balance between fostering dependency (undesirable) and promoting self-reliance (desirable) (Souter et al., 2022). **Without such support, Fiji's ambitious goal of reaching 100% safe water coverage by 2031 will not be met, and water systems will continue to deteriorate and require rehabilitation years before they have reached their designed lifespan.**

There was a suggestion, from various respondents, that DWS should be more visible. One suggestion was that they need an office in each division. There was also mention of **outsourcing:** paying individuals or service delivery partners to help maintain systems in addition to WCs. This is the approach used in some places in Africa, Asia and Latin America (see Lockwood and Smits, 2011; World Bank, 2017).

Many respondents talked (unprompted) about the need for 'follow-up'.

> *This is what you are required to do […] follow-up and see if those things are being done (DWS-M2).*

> *It is our responsibility to follow up on WC matters (ART-M4).*

> *In some communities they are very active. They are active on things they have done on their own. The only thing is the monitoring part, because if we just do the training and leave them there and forget to follow up again it just dies down. The more we monitor and the more frequent we go [the better it will be], that's why we ask for the minutes of the meetings, or their logbooks, to see what they have done (DHI-M1).*

Directly asking if follow-up would be useful, the replies from WC representatives were overwhelmingly affirmative.

> *[Follow-up would] be very useful. It'll teach a lot of things, especially the Water Committee members. The least they could do is assist us or guide us (WC-M4).*

> *It would be very useful. The villagers would know that the government is in support of water cleanliness, the Roko Tui's are the representatives of the government and having them visit us or follow up on such issues is important (WC-M5).*

With the Policy directive for monitoring WCs, combined with the solid decentralisation structures in place, **Fiji is well placed to conduct monitoring as a form of backstopping support** (see "Follow-up monitoring and/as support" under MEL element).

Contextually appropriate and effective community training

As noted, historically there has been no standardised, approved government guidance or training package specifically for rural WCs, other than the DWSSP implemented by MoHMS. According to the Policy, the WSMP must be implemented when a water supply system is established, and this includes the establishment and training of the WC. However, respondents indicated that while training "sometimes" occurs it is not typically provided (e.g., DWS-M2, MRD-M1; PA-M2). The EPS community-level training package was not reviewed for this report.

MoHMS are currently co-developing and piloting a revised DWSSP package (w/ assistance from IWC). One of the key recommendations from the consultations and formative research informing the current revisions was to translate resources into the iTaukei language, trial 'cluster' trainings, and use more handouts/flipcharts rather than relying on (very larger numbers of) PowerPoint.

In late 2024, DWS and WAF – with financial support from UNICEF – began piloting a new training package: NAI VOLA DUSIDUSI NI KOMITI NI WAI NI VEIKORO KEI NA TAUDAKU NI VEIKORO LELEVU [**Guidelines for Village and Rural Water Committee**s]. The WC training package provides guidance for managing water systems in Fiji's rural communities. Developed by the DWS, it aligns with the Fiji NDP (2017–2021) and focuses on improving access to clean water, sanitation services, and sustainable resource management. The manual supports the achievement of the United Nations SDG 6 by 2031.

The guide defines the responsibilities of WCs, including regular meetings, financial planning, maintenance of infrastructure, and community engagement. WCs are tasked with facilitating water connections, protecting water sources, and ensuring the fair sharing of costs. It also includes guidance on rainwater harvesting and integrating new water systems such as treatment plants and boreholes.

The manual details maintenance practices for cleaning pipelines, repairing tanks, and managing emergencies like droughts and fires. It emphasises the importance of inspections, record-keeping, and coordination with agencies such as WAF, particularly during times of resource depletion. The appendices provide templates and forms for tasks such as inspections, maintenance records, and community by-laws. These resources are designed to assist communities and stakeholders manage their systems effectively while promoting sustainable practices and collaboration.

The pilot WC training commenced on the 21 October in Silana village, with representatives from WCs in nearby villages attending the three-day training. A 'lite' M&E framework has been developed, but it is unclear if it has been implemented yet and/or what the results signal.

A detailed review of the Guide content demonstrate that it covers a wide range of issues; however, there may be room for more emphasis on the critical financial dimensions of CWM. The Guide states that WCs are required to "Develop and agree on a financial plan for the committee, including the amount and frequency of contributions from community members (weekly, fortnightly, or monthly)", ensure the "proper use of funds for operations" and, if possible, "establish a dedicated bank account" (DWS, 2024:8). Given the critical importance of community contributions to maintaining system function and longevity, more emphasis, including examples, may be warranted.

In terms of WC training, the use of videos to supplement the 'school/lecture' format, that uses real stories from effective WCs has been used as a companion to standard water management training, as well as targeted "follow-up" activity in communities (Love et al., 2022). This provides participants with local examples of what 'good' CWM looks like.

DWS have been using an "incubation" model whereby an EPS intervention is undertaken in four or five villages within a single district, so they can "learn from each other" (DWS-M2). This is a productive approach. The cluster training associated with both the WC training and new WSP approach may build practical connections between WC members from neighbouring villages that can be drawn on for mutual learning and support.

Localisation and adaption of training is always necessary and is an ongoing process that requires companion monitoring, evaluation and learning. It is hoped that the WC training is adequately monitored, and any learning incorporated into future revisions.

DISCUSSION

There remains debate about the net benefits that have derived from decentralisation in developing country contexts (Faguet and Poschi, 2015). Regardless, decentralisation unfolds over an extended period, taking decades not years. Effective decentralisation necessitates not only empowering but also resourcing lower levels of government. There are a range of rural water service delivery decentralisation scenarios evidenced around the world. Based on the analyses in this report, Fiji corresponds to a mix of 'partial' and 'inadequately resourced' examples.

Relative to its' near neighbours (Solomon Islands and Vanuatu) Fiji performs well; the rural WASH situation is better in absolute terms, the sector has more resources and capacity, and there are policies in place which encourage monitoring and provides the opportunity for follow-up to ensure the CWM model works effectively (Rural Water and Sanitation Policy, 2021).

However, despite Fiji's comparatively strong decentralised administrative structure there remains substantive challenges, especially with coordination and harmonisation, information and knowledge sharing, monitoring, evaluation and learning, and human resources (namely, staffing gaps that intensified post-COVID and appear likely to continue into the future). Additionally, a key concern identified by this research is the lack of awareness and understanding about *the Rural Water and Sanitation Policy* by subnational government officers (e.g., ARTs), mixed views about roles and responsibilities and what "shall monitor" specifically means. This demonstrates that comprehensive socialisation and awareness raising and training is required to clarify key points and ensure that the Policy is implemented as intended.

The absence of recovery costs for operation and maintenance at the community level highlights the need for updated capacity development and the adoption of a life cycle costing/service delivery approach. Addressing financial and budgetary challenges and disaggregating between hardware (infrastructure) and software (training/monitoring and follow-up) is desirable. Transitioning from government and 'project' dependency to a more sustainable community management 'plus' model requires a shift to greater professionalisation at the national and subnational level, which necessitates greater human and financial resources and a subtle but critical conceptual shift.

Access to comprehensive and up-to-date data is essential for sector coordination and harmonisation. However, this remains a work in progress with critical data not readily available, challenges with inter-departmental data accessibility, and a lack of communication and coordination with non-government actors. The proposed Rural Water and Sanitation Program Coordination Committee and Master Plan will assist with this.

The elements and sub-indicators used in this analysis are reflective of the Pacific Islands context (at least the three countries where this research was undertaken: Solomon Islands, Vanuatu and Fiji). Due to a range of factors including demography, geography, and socio-economic particulars the professionalisation of rural water service delivery at scale is unlikely in the very near term; however, it is arguably closer and more feasible in Fiji than the Solomon Islands and Vanuatu. Regardless, the CWM model will remain the dominant water service delivery approach for the foreseeable future (note that WAF are in the process of connecting some rural communities to the metred network around Suva). The selection of sub-indicators, and the data used to rate them, have remained largely focused on the CWM+ approach. It is hoped that this selection of indicators can help better identify and asses what the most appropriate "plus" factors look like in the context of Fiji.

In this final section of the report, we summarise the results and key findings from each element deemed essential to progressing rural water service delivery in the context of decentralisation. In terms of gloss rating, the highest scored element was "policy, legal and regulatory framework" (3.7 – "moderate") whilst the lowest scored element was "human resources and capacity development" (1.6 – "very weak"). The latter scored so low due, in large part, to the hitherto lack of standardised training for WCs (which began to be redressed with pilot WC training in October 2024), understaffing/resourcing, and the general absence of systematic and targeted post-construction monitoring and follow-up.

The point of quantifying an indicator is so it can be measured, tracked, and compared over time. This report aims to assist development partners, stakeholders, and the Government of Fiji identify strengths, weaknesses and opportunities and better prioritise resources and actions going forward.

Following the summary results section is a short list of recommendations. The recommendations were elicited during a stakeholder validation workshop in June 2024, with representatives from the five key agencies who have some level of responsibility for rural WASH. These are not exhaustive, but are recommendations that have been consensually identified by all the key agencies responsible for supporting rural WASH.

Summary Findings: Policies, Legal, and Regulatory Frameworks

Tailored policies, legal and regulatory frameworks that leverage the resources, governance norms and structures across national to subnational levels is required for effective rural water service delivery; such policies must exist beyond 'paper' alone and be manifest in practice. This element was identified as the strongest of the six elements in Fiji (3.7).

The WASH sector in Fiji is guided by various legislation, policies, and strategies that, to varying degrees, support decentralised rural water service delivery. The NDP outlines specific targets on rural development and explicitly states that the government is exploring options to further decentralise. A suite of sector specific Strategic Plans are all closely aligned to the NDP. WAF's current 5-year Strategic Plan includes a focus on service delivery and prioritising decentralised wastewater treatment and nature-based solutions. However, the Plan does not articulate a discrete vision (or targets) for rural water service delivery.

DWS is responsible for policy formation and implementation and is also the sector regulator; WAF is responsible for implementation support, monitoring and maintenance, and community engagement – there are some conflicting responsibilities between these two agencies. There are a number of draft policies that stakeholders believe will redress some of the key challenges identified in this research.

The *Rural Water and Sanitation Policy* 2021 is the overarching Policy that regulates rural water (and sanitation) sector and signals a positive trend that, on paper, provides much needed subnational support to improve CWM. Building on the earlier policy, the 2021 Policy foregrounds WCs much more than the 2012 policy and contains slightly adjusted roles for the RTOs and DACs, making them more specifically responsible to 'monitor' water and sanitation schemes as well as 'water conservation awareness'. Our research results demonstrates that awareness and application of the policy was inconsistent: of the forty-two respondents interviewed, 61% were not aware of the Policy. There was also mixed understanding of what 'monitor' means. All respondents thought the Policy adjustment was a positive move that could greatly improve WC performance if it was efficiently translated into practice.

The DWS is the sector regulator and, among other things, oversees the compulsory pre-construction WSMPs. However, standardisation and compliance challenges exist. There was evidence of water implementation activities being delayed due to implementors not completing the requisite WSMP, NGOs conducting work without informing key line agencies, and inferior copies of EPS being installed.

There are very strong mechanisms for consumer feedback in Fiji, including a policy of water carting by WAF to communities facing disruptions and/or hardships (during NDMO declared drought events).

The "duality" of governance structures in Fiji complicates policy application. For example, in iTaukei contexts, requests for (or complaints about) water supply should go through the RTOs before PAs and DOs. In practice, people tend to by-pass the RTO and go direct to other agencies (e.g., EHOs, PAs). In settlements, PAs enforce the *Public Health Act* and *Town Planning Act* but in iTaukei villages the MTA has full authority and Health Inspectors have limited power (unless there is a declared Emergency under the *Public Health Act*).

According to some respondents, there is a need for improved guidance on the status of subnational WASH-related bylaws and rules.

The Tikina Council can make district-wide bylaws and WCs can – through the Bose va Koro – propose rules. However, in practice WASH-related proscriptions are few and enforcement is inconsistent.

Key policy reviews are conducted but often face delays. There is no evidence of policy audits in the WASH sector (e.g. tailored evaluations of Policy implementation and effectiveness of a Policy).

- **National and subnational planning supports decentralisation, but practical application faces challenges due to unclear roles and responsibilities**
- **Awareness and understanding of key policies, especially the *Rural Water and Sanitation Policy 2021,* are inconsistent**
- **While strong mechanisms for consumer feedback and complaints exist, challenges in monitoring and follow-up persist, impacting effective response**
- **The *Draft Rural Water and Sanitation Master Plan* and the *Water and Sewerage Services Bill*, once approved, are believed to address various key challenges identified in this report.**

Summary Findings: Budgeting, Finance, and Resources

A strong financial foundation is integral to the efficient and sustainable delivery of rural water services. In Fiji, budgeting, finance, and material resources were identified as the second strongest of the six elements (3.14) – stronger than both neighbouring Vanuatu and Solomon Islands. Nevertheless, financing is a concern, with cost recovery mechanisms currently not sufficient to cover outgoings and a review on levies (for the metered water network) currently underway.

The MoF manages Fiji's economic policy, national budget, resource allocation, and national development plans, including for water services. The WAF, one of the main implementors in the rural water sector, receives significant government funding but current cost recovery mechanisms are not sufficient to cover outgoings (a review on levies for the metered water network is currently underway). Historically, Fiji had one of the lowest Official Development Assistance levels relative to gross national income in the region, but in the wake of the COVID-19 pandemic its share of aid to national income has spiked significantly.

The cost of meeting the policy of water carting is not publicly available but is viewed by some as financially unsustainable and delimiting community resilience and ownership.

Budget estimates are available online, detailed by line ministries, and include broad budget lines. Visibility into WAF's or DWS's specific operating budgets was not possible, but there is no full life cycle costing for rural water service delivery nor budget disaggregation between hardware (infrastructure) and software (community mobilisation/training and management) – this is a major gap. The MoHMS has a specific monitoring and evaluation budget line for DWSSP. There is no separate budget line for emergency WASH response, with existing program funds redirected as needed, which has the potential to impact work plans.

At the subnational level, the RTOs and PAs receive funds from multiple sources. Recent policy shifts have moved away from a reliance on provincial levies to direct government funding, which is seen as enhancing financial stability.

There are numerous laws, regulations, and oversight mechanisms to ensure sound financial management. Funds disbursement from central to subnational levels appear effective, with no evidence of delays or negative impacts on provincial activities. However, past reliance on provincial levies sometimes created uncertainties, particularly during the COVID-19 pandemic when shortfalls limited community outreach initiatives. Many interviewees reported that their ability to visit communities remains partially restricted by transportation challenges.

Government procurement policies and practices are governed by a structured framework designed to ensure transparency, accountability and efficiency in the use of public funds. We did not find evidence of substantive supply chain challenges but there are historical reports of material shortages.

Communities sometimes provide labour and material (sand, gravel) during construction, however, in relation to supporting regular O&M, ad hoc fundraising appears more common than the use of monthly household water fees. The established culture of fundraising and financial self-help provides a safety net for WCs but is often reactive rather than proactive. Financial literacy and management are a challenge in some contexts.

- **Fiji is financially better situated than its neighbours when it comes to rural water service delivery; nevertheless, there remain funding short-falls, gaps and challenges (national and subnational levels)**
- **There appears is no full life cycle costing applied to rural water service delivery nor budget disaggregation between hardware (infrastructure) and software (community mobilisation / training and management)**
- **The shift from provincial levies to direct government funding has improved financial stability at the subnational level, enabling better outreach to rural communities**
- **Community contributions for water system O&M are primarily sourced through fundraising, but this is generally ad hoc, reactive, often not sufficient and can be compounded by poor financial management and literacy.**

Summary Findings: Information and Knowledge Sharing

Strong Information and knowledge sharing practices, including comprehensive data management from collection to storage, access, dissemination and consumption, is critical for rural water service delivery. This is one of Fiji's weakest elements (2.25) and thus has ample room for improvement.

The cross-sectoral nature of WASH makes collecting, coordinating, and sharing information a complex and resource-heavy task – this is not a challenge unique to Fiji. However, there has been, and remains, significant challenges with information and knowledge sharing recognised by respondents from all agencies and at both national and subnational levels.

Coordination for data sharing in Fiji's WASH sector began during the MDGs era, leading to the establishment of the National WASH Coordinator position in the MoHMS. Despite these efforts, there is no overarching national coordinating process for information sharing. The *Rural Water and Sanitation Policy 2021* designates the DWS as the leading agency for regulating and vetting water projects and updating WSMP data into their Rural Water and Sanitation Database. Roko Tui's summarise TNK reports for the MTA – which includes a section on water and sanitation – but there isn't a centralised data system which is easily accessible by other departments.

Differences in data were reported by various agencies (e.g., discrepancies in sanitation data between health inspectors and the RTOs/MTA).

With regards to non-government actors, several respondents reported examples of NGOs working in "isolation" and not sharing information.

At the subnational level, there are established processes for reporting and information sharing at the community and district/provincial levels, including for WCs (in both village and settlement contexts).

However, there remains challenges in implementation, consistency, inspection, and inter-department communication associated with these processes. Despite the requirement of WCs to keep logbooks many do not, which makes monitoring, evaluation and learning difficult and works against fostering ownership, accountability and self-help.

The role of ARTs is critical to bridging the communication gap between communities and government agencies. However, challenges such as limited access to council meetings (due to transportation difficulties and resource constraints), and telecommunication challenges hinders effective information sharing. Novel technologies, such as chat groups, are starting to be used, helping to redress some of these challenges.

Each department have their own asset management procedures and guidelines, and there are several policies that provide guidance on asset management procedures.

There is no WASH information easily available to the public (e.g., community, district, provincial or divisional WASH data). This is a gap. Solomon Islands has more publicly available information than Fiji – a surprise given that Fiji has more resources and capacity.

With five-line ministries each having important roles to play in supporting rural community water management, information and knowledge sharing is especially critical.

- **Despite efforts to improve data sharing there is no clear national coordinating process for information sharing, leading to communication breakdowns and inconsistent data among government agencies**
- **NGOs sometimes work in isolation without sharing information with relevant government ministries**
- **Novel digital technologies are beginning to be used to redress data collection and sharing challenges posed by resource and geographic constraints**
- **While processes for reporting and information sharing exist at provincial and community levels, inconsistencies in implementation and a lack of logbooks for Water Committees hinder systematic progress tracking and accountability**
- **Public access to WASH data is limited.**

Summary Findings: Monitoring, Evaluation, and Learning (MEL)

Effective rural water service delivery requires ongoing learning and adaptation, which is reliant on robust data collection, analysis, and application for decision-making at national, provincial, and community levels. MEL was identified as one of the weaker elements in Fiji (2.6).

At both national and provincial levels, the government monitors and evaluates policies and approaches through reference to the NDP. Ministries submit reports prepared on result-based business plans to the MoF, informing future funding allocations. Performance is measured using both quantitative and qualitative targets, including output and outcome indicators. However, challenges such as human resource limitations, a lack of real-time feedback mechanisms, and gaps in data collection and analysis persist across all departments and levels of government with an interest in rural water service delivery.

It remains an open question as to whether the Poverty Monitoring Unit have a role to play in consolidating WASH-related MEL.

The *Rural Water and Sanitation Policy* (2021) outlines the responsibilities of various agencies in monitoring water quality and project implementation. Despite this, there remains ambiguity, a potential duplication of effort, and questions about resource efficiencies – especially with regards to water quality. The Policy also mandates monitoring donor and NGO compliance with regulations and standards, and tasks the Roko Tui's Office with monitoring water and sanitation programs in rural iTaukei koros. This Policy is not universally understood or practiced.

The 2018/2019 UNGLAAS assessment highlighted ad hoc monitoring and insufficient human resources as an issue, but some improvements were evident in the subsequent 2021/2022 UNGLAAS report. Nevertheless, data utilisation for sector review, planning, resource allocation, standards, and regulations, all remain limited.

Periodic sector reviews, generally supported by external stakeholders, assess the effectiveness of WASH initiatives. Select Ministry annual reports (e.g., WAF, MoHMS) provide insights for monitoring workplan progress. Nevertheless, there remains a paucity of data on rural water service delivery.

Fiji aligns its WASH indicators with the SDGs, using tools like Akvo Flow for data collection and management. However, real-time feedback mechanisms are lacking, with progress tracking typically relying on outdated data (e.g., census data).

At the community level, monitoring of water system functionality or household water use by WCs is often inconsistent and weak. Many WCs do not fulfill their stated responsibilities such as keeping a logbook, submitting regular reports – due to lack of resources, poor committee management, and competing priorities which underscores the need for structured training, ongoing MEL and follow-up support.

Fiji's administrative structure is well-positioned to provide systematic follow-up support and monitoring to WCs. The updated *Rural Water and Sanitation Policy 2021* includes the expanded role of Roko Tui's to monitor water and sanitation in koros. However, not only is there a lack of awareness about this Policy but perspectives on this role also vary, with some viewing it as a coordination function and others as requiring direct engagement with WCs and TNKs (see further "Policy…" element).

Addressing challenges in the MEL domain requires a paradigm shift towards a systematic, learning-oriented approach and greater resource allocation.

- **Despite efforts, there is no clear national coordination process for MEL**
- **Reliance on outdated data for SDG 6 progress tracking underscores the need for real-time data collection and analysis mechanisms**
- **Periodic sector reviews and reports provide valuable insights but lack detail on rural contexts, suggesting a need for enhanced investment and capacity building**
- **There is inconsistent community-level monitoring, with many WCs not fulfilling their responsibilities (e.g., keeping logbooks) underscoring the need for structured training, monitoring and follow-up support**
- **While the Policy expands the role of Roko Tui's in monitoring water and sanitation, there is uncertainty and mixed views on how this role should be practically implemented and what exactly it entails.**

Summary Findings: Harmonisation and Coordination

Sustainable and efficient rural water service delivery requires robust harmonisation and coordination mechanisms and hinges on well-defined policies, roles, and relationships, as well as clear communication platforms. In Fiji, harmonisation and coordination were identified as the second weakest element overall (2.2).

There is strong evidence of consultation: The NDP – both the 'old' and the 'new' NDP currently under development – involved consultations with private sector, civil society, community groups, and government entities. The WAF *Strategic Plan* and the Fiji *Water Sector Strategy 2050* were also developed through stakeholder engagements.

There is a recognised lack of a strategic approaches to delivering water and sanitation services to rural communities by government and NGOs. The draft *Rural Water and Sanitation Master Plan* aims to address some of these issues by i) providing a framework for stakeholders to better align their efforts and ensure accountability, and ii) better define responsibility for operation and maintenance to ensure ongoing water system functionality.

There were numerous examples of NGOs not engaging with key line ministries, sometimes leading to redundant effort, wasted resources and less than optimal outcomes.

Policy and strategy alignment are otherwise strong on paper but there are gaps in practice (e.g., awareness and implementation of the *Rural Water and Sanitation Policy 2021*). At the national level, there is some evidence of siloing and "territoriality" among key government ministries and stakeholders. Again, the Master Plan is intended to mitigate these issues.

At the subnational level, the administrative framework supports rural water service delivery and there was ample evidence of DOs coordinating with the RTOs, especially around sharing transport. Effective collaboration depends on the performance of provincial-level coordinators who facilitate stakeholder engagement (i.e., TNKs, RTOs, DACs, DOs, PAs); however, the broad range of responsibilities, and demanding workloads of provincial-level officers, can hinder coordination.

There is arguably a gap in financial alignment and harmonisation at the community level in that the extant training – WSMP, DWSSP and new the WC training – all under-emphasise financial management and the importance of water fees or regular fundraising, highlighting a gap in financial alignment with the CWM model on which the Policy is built.

The proposed Rural Water and Sanitation Program Coordination Committee is designed to provide strategic oversight and direction for implementing the *Rural Water and Sanitation Policy* (2021) as well as support improved sector harmonisation. There were calls for more frequent meetings and forums at the subnational level to enhance collaboration and policy awareness.

- **While the NDP, Strategic Plans and administrative framework support rural water service delivery, coordination and harmonisation at the national level has room for improvement**
- **Access to comprehensive data and regular stakeholder meetings are essential for effective coordination – there were calls for more frequent meetings and forums, especially at the subnational level to improve harmonisation and collaboration**
- **There are instances of NGOs and other external partners not engaging appropriately with key ministries, resulting in redundant efforts and less than optimal outcomes**
- **Fiji's draft *Rural Water and Sanitation Master Plan* aims to address uncoordinated approaches to rural water service delivery by providing a framework for stakeholders to better align their efforts and ensure accountability.**

Summary Findings: Human Resources and Capacity Development

Successful rural water service delivery is contingent upon adequate human resources and capacity development. In Fiji, this element was identified as the weakest of all the elements (1.6) – primarily due to understaffing, subnational-level resource constraints, and the hitherto lack of systematic and standardised Water Committee training.

The policies, and strategies that guide the WASH sector all highlight the importance of capacity development. There are concerns around the loss of senior staff and understaffing: WAF lost 950 staff over four years (due to turnover and migration) and the DWS also face significant staffing constraints. If MoHMS are to increase DWSSP implementation beyond 21 sites a year, they require more resources.

The UNGLAAS assessment highlights a general shortfall in staffing, particularly in policy development, monitoring and evaluation, regulation, design and construction, community mobilisation, operations and maintenance. Provincial-level officers have extensive responsibilities, leading to concerns around burnout.

Fiji participates in several capacity development initiatives and partnerships, but there remains no comprehensive WASH sector capacity development plan or human resource needs assessment. National-level staff from WAF and DWS have participated in various capacity strengthening activities, but more opportunities are required. At the subnational level, the focus is on broad rural development aspirations and there has been little WASH-related capacity-building initiatives. The MTA supports various training and awareness programs, but respondents felt that more training on WASH is needed, especially for ARTs and TNKs. It was suggested that rural WASH-related information – including policy awareness and roles and responsibilities – should be incorporated into the civil service induction resources and job descriptions (especially ARTs).

NGOs sometimes provide community training as part of their WASH projects, but there is limited oversight of these trainings and no database or register to track community training.

WCs are the centre of the governments adopted CWM model, yet water management training has been inconsistent. DWSSP involves community training but is no substitute for foundational WC training. However, this is beginning to be addressed through the development and pilot implementation of three-day WC training, as well as the provision of basic tools for WCs. This fills a substantive gap, but will require continual monitoring, learning and adaptation to be effective.

The hitherto lack of standardised WC training has hindered efforts to normalise the significance of water fees, regular fundraising, and sound financial management. It is too soon to assess the impact of the new WC training, but financial matters are arguably under-engaged with in the current Guide.

Structured follow-up or 'backstopping' for WCs is largely lacking, although on paper the opportunity exists through TNKs and ARTs, as per the Policy. Evidence clearly demonstrates that without regular support most WCs will remain ineffective, and water systems will not meet their designed lifespan. Suggestions from respondents for supporting improved follow-up included: more visible involvement from DWS; training for provincial staff (especially regarding the Policy); and outsourcing maintenance tasks.

- **There are currently substantive staffing and capacity gaps in both WAF and the DWS**
- **Fiji lacks a comprehensive WASH sector capacity development plan and human resources needs assessment**
- **Training opportunities for water sector staff are varied and often insufficient, including at sub-national levels**
- **Water management capacity development efforts have, historically, been ad hoc and largely absent; this is being addressed through the pilot implementation of standardised, three-day WC training**
- **The success of the new training will be dependent on monitoring, learning, and adaptation**
- **Structured follow-up is embedded in the Policy, but lacks clarity and practical implementation.**

Recommendations

The below recommendations were elicited during the June stakeholder validation workshop, where the key findings of the research were presented and discussed with representatives from DWS, WAF, MoHMS, MRMDDM and MTA, as well as UNICEF.

The recommendations are far from comprehensive and focus mainly on policy awareness and sector coordination – two of the most saliant issues highlighted by the research – and some select targeted activities identified by stakeholders. These were consensually agreed upon by representatives from all five key ministries. **Some more suggestive findings have been detailed through-out this report.**

Information / knowledge socialisation and capacity strengthening

- Assistant Roko Tui's to be included in more training and capacity development opportunities, especially with a focus on rural WASH
    - Incorporate WASH-related information (including policy awareness and roles and responsibilities) into the civil service induction resources and job descriptions
- Include Health Inspectors, Conservation Officers and District Officers in future WASH training
- Move towards streamlining reporting on digital platforms
- Mainstream information and resources on WASH – e.g., policies, monitoring requirements/guides, and community resources – into existing Fiji government induction processes that are provided to all new civil servants.

Sector coordination

- Establish the Fiji National WASH Sector Steering Committee/ Rural Water and Sanitation Program Coordination Committee (RWSPC)
    - Given the growing capacity and interest of select staff from the University of the South Pacific in WASH over the last seven years, it was suggested that a representative of USP potentially be included in Steering/Coordination Committee (as an informed but neutral actor)
- Establish WASH steering committees at the provincial level
    - Conduct regular meetings between national and subnational WASH actors
- Link sector coordination with WASH Cluster coordination to better link development with humanitarian response.

References

Asian Development Bank. 2021. Review of opportunities for the Pacific WASH sector. December 2021. Manila, Philippines.

Appana, S & Abbott, M. 2015. Democracy and the Fijian Chiefly System: An Ongoing Problem. Fijian Studies: A Journal of Contemporary Fiji, 13(2): 91-109.

Bain, R., Cronk, R., Hossain, R., Bonjour, S., Onda, K., Wright, J., Yang, H., Slaymaker, T., & Bartram, J. (2014). Global assessment of exposure to faecal contamination through drinking water based on a systematic review. Tropical Medicine & International Health, 19(8), 917–927.

Baumann, E. 2006. Do operation and maintenance pay? Waterlines, 25(1), 10–12.

Bautista, E. 2018. Improving Governance for Effective Service Delivery in the Solomon Island, The European Union CSO-LA Programme: civil society organisations and local authorities.

Boila, S. 2024. Water Strategy 2050 requires $8.7b, Fiji Broadcasting Corporation, https://www.fbcnews.com.fj/news/water-strategy-2050-requires-8-7b/.

Bond, M., Tyndale-Biscoe, P., Clark, K., Francis, N., Nott, T., Galing, K. and Blackett, I. 2014. The sustainability of rural water, sanitation and hygiene in Papua New Guinea. Water: Journal of the Australian Water Association, 42(6): 42-4.

Bossert, T. 1998. Analyzing the decentralization of health systems in developing countries: decision space, innovation and performance. Social science & medicine, 47(10): 1513-1527.

Bossert, T.J. and J.C. Beauvais. 2002. Decentralization of health systems in Ghana, Zambia, Uganda and the Philippines: a comparative analysis of decision space. Health policy and planning, 17(1): 14-31

Bossert, T.J. 2014. Empirical studies of an approach to decentralization: “decision space” in decentralized health systems. Public Administration and Development, 26(4): 303-315.

Brookfield, H.G. 1988. Fijian farmers each on his own land: the triumph of experience over hope. The Journal of Pacific History, 23(1).15-35.

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.

Chand, A. 2023. PSC to recruit PS for climate change, The Fiji Times, https://www.fijitimes.com.fj/psc-to-recruit-ps-for-climate-change/.

Commonwealth Local Government Forum. 2019. The local government system in Fiji, CLFG, London, February 11, 2024. https://www.clgf.org.uk/default/assets/File/Country_profiles/Fiji.pdf

Cross, P., Frade, J., James, A. and Tremolet, S. 2013. WASH Cost End-of-Project Evaluation: Main Report, The Hague: IRC International Water and Sanitation Centre.

Cumpston, I.M. 1956. Sir Arthur Gordon and the Introduction of Indians into the Pacific: The West Indian System in Fiji,” Pacific Historical Review, 25(4):369–388. https://doi.org/10.2307/3636502

Dahan, S. 2018. Rapid review of water knowledge for Pacific Small Islands Developing States, The World Bank, March 6, 2024. https://documents1.worldbank.org/curated/en/532991532957755291/pdf/129020-WP-P165164-PUBLIC-W18018-Pacific-Water-Knowledge-Review-v2.pdf

Dayant, A., Duke, R., de Gorostiza, G., & Rajah, R. 2023. Pacific Aid Map: Key Findings Report. Lowy Institute. 6 March 6 2024, https://pacificaidmap.lowyinstitute.org/Lowy-Institute-Pacific-Aid-Map-Key-Findings-Report-2023.pdf

Derrick, R.A. 1963. A history of Fiji, The Government Press, Suva, Fiji.

Drakeford, K.H. 2019. Climate resilient WASH in rural communities in Fiji, https://www.lboro.ac.uk/media/wwwlboroacuk/external/content/research/wedc/dissertations/2018-2019/DRAKEFORD,%20KATY.pdf

Department of Water and Sewerage. n.d. Ecological Purification System. Ministry of Infrastructure and Meteorological Services, Government of Fiji. Suva: Fiji.

Department of Water and Sewerage. 2012. Rural water and sanitation policy. Ministry of Infrastructure and Meteorological Services. Government of Fiji.

Department of Water and Sewerage. 2021. Rural water and sanitation Policy. Ministry of Infrastructure and Meteorological Services. Government of Fiji. https://waterauthority.com.fj/wp-content/uploads/2021/09/Rural-Water-and-Sanitation-Policy-July-2021.pdf

Department of Water and Sewerage (2024a). NAI VOLA DUSIDUSI NI KOMITI NI WAI NI VEIKORO KEI NA TAUDAKU NI VEIKORO LELEVU [Guidelines for Village and Rural Water Committees]. Ministry of Works, Meteorology, Transport, Lands, and Infrastructure, Government of Fiji.

Department of Water and Sewerage (2024b) VOLA I TUKUTUKU NI VEISOLITAKI NI YAYA NI KISI NI MATAI [Inventory of Issue and Return of Equipment and Tools]. Ministry of Works, Meteorology, Transport, Lands, and Infrastructure, Government of Fiji.

Department of Foreign Affairs and Trade. 2022. drm Country Information Report FIJI, Australian Government, April 3, 2024. https://www.dfat.gov.au/sites/default/files/country-information-report-fiji.pdf

Durutalo, A. L. 1997. Provincialism and the crisis of indigenous Fijian political unity. Unpublished Thesis. USP, Suva.

Dumaru, P. 2015. The Effects of Community Based Adaptation on Enhancing Adaptive Capacity: Lessons from the Koro. PhD Thesis, Melbourne School of Land and Environment, The University of Melbourne.

Fiji Bureau of Statistics. 2017a. Population and Housing Census-Release. 10 Feb 2024. https://www.statsfiji.gov.fj/index.php/census - 2017/census-2017-release-1

Fiji Bureau of Statistics. 2017b. Fiji Statistics at a Glance. 5 Feb 2023. https://www.statsfiji.gov.fj/

Fiji Bureau of Statistics. 2021. Fiji Multiple Indicator Cluster Survey 2021, Fact Sheet. Suva, Fiji: Fiji Bureau of Statistics.

Fiji Bureau of Statistics. 2022. Fiji Multiple Indicator Cluster Survey 2021, Snapshot of Key Findings. Suva, Fiji: Fiji Bureau of Statistics.

Fiji Department of Information. 2024. New National Development Plan, The Fiji Times. 12 December 2023. https://www.fijitimes.com.fj/new-national-development-plan

Fiji Government. 2023. Cooperation essential for integrated development, says Minister Ditoka. Fiji Government, https://www.fiji.gov.fj/Media-Centre/News/COOPERATION-ESSENTIAL-FOR-INTEGRATED-DEVELOPMENT,?fbclid=IwZXh0bgNhZW0CMTAAAR3qO6rCgZdcjmb_iylc1_cWoCadteQwEHzM7d0hTk_KD9SNV7sDYXNmvFw_aem_AViyD7ahIW3jhvM_w45R6X6QaNxTf4-I3nzF9Wm6qW8C0GORX1cTZVUJfj5NEp1ppfYsVx3LNuIxVirIjPm8AZUD.

Fiji Parliament. 2023. Daily Hansard, 30 June 2023. https://www.parliament.gov.fj/wp-content/uploads/2023/07/Daily-Hansard-Friday-30th-June-2023.pdf

Fiji Women's Rights Movement. 2012. Review & recommendations of draft village by- laws. http://www.fwrm.org.fj/images//FWRM-Village-Bylaws-Submission.pdf

The Fiji Times. 2023a. 2023-2024 National Budget: Increase in monthly allowances for advisory councillors, Fiji Times. https://www.fijitimes.com.fj/2023-2024-national-budget-increase-in-monthly-allowances-for-advisory-councillors/

The Fiji Times. 2023b. 2023. Ministry: Various reforms in the pipeline. (26 Sept. 2023). https://www.fijitimes.com.fj/ministry-various-reforms-in-the-pipeline/

France, P. 1969. The Charter of the Land: Custom and Colonization in Fiji. Oxford University Press. Melbourne.

France, P. 1968. The founding of an orthodoxy: Sir Arthur Gordon and the Doctrine of the Fijian Way of Life. The Journal of the Polynesian Society, 77(1): 6–32.

Fraenkel, J. 2013. The origins of military autonomy in Fiji: a tale of three coups. Australian Journal of International Affairs, 3,327-341.

Fouad, M., Novta, N., Preston G., Schneider, T., & Weeranthunga, S. 2021. Unlocking Access to Climate Finance for Pacific Island Countries. Available https://www.imf.org/en/Publications/Departmental-Papers-Policy-Papers/Issues/2021/09/23/Unlocking-Access-to-Climate-Finance-for-Pacific-Islands-Countries-464709.

Gerber, F. 2010. An economic assessment of drinking water safety planning Koror-Airai, Palau, Fiji Islands. South Pacific Applied Geoscience Commission. https://gsd.spc.int/sopac/docs/TR440%20final.pdf

Gillion, K. L. 1962. Fiji's Indian Migrants: A history to the end of indenture in 1920. Melbourne: Oxford University Press.

Green Policy Platform. 2017. 5-Year & 20-Year National Development Plan: Transforming Fiji | Green Policy Platform, May 11, 2024, https://www.greenpolicyplatform.org/national-documents/5-year-20-year-national-development-plan-transforming-fiji

Government of Fiji, UNDP and ESCAP. 2023. Voluntary National Review: Strengthening Resilience to meet the challenges of Climate Change and other global issues. Retrieved from https://hlpf.un.org/sites/default/files/vnrs/2023/VNR%202023%20Fiji%20Report.pdf

Government of Fiji. 2013. Constitution of the Republic of Fiji. http://www.paclii.org/fj/Fiji-Constitution-English-2013.pdf

Government of Fiji. 2016. Fiji National WASH Cluster Terms of Reference. Ministry of Health and Medical Services. https://www.health.gov.fj/wp-content/uploads/2016/04/Terms-of-Reference-Fiji-WASH-Cluster-Approved.pdf

Government of Fiji. 2020. Monitoring and evaluation framework for Fiji's national Adaptation Plan Process. A joint initiative of the Fijian Ministry of Economy Climate Change and International Cooperation Division and the NAP Global Network. https://napglobalnetwork.org/wp-content/uploads/2020/04/ME-Fiji-NAP-Process.pdf

Government of Fiji. 2024. Fiji Water Sector Strategy 2050, Water Authority of Fiji, Suva, Fiji, March 17, 2024, https://waterauthority.com.fj/wp-content/uploads/2024/04/Fiji-Water-Sector-Strategy-2050.pdf

Hall, G. 2019. Dual-Power and Direct Democracy in Fiji: An Analysis of the iTaukei Administration (Capstone Collection. 3190. https://digitalcollections.sit.edu/capstones/3190.

Harries, K. 2018. Fiji National Water, Sanitation and Hygiene (WASH) Summit, 21–25 May 2018. Tanoa International Hotel, Nadi, Fiji. Supported by UNICEF (unpublished report in possession of authors).

Harvey, P. and Reed, B. 2004. Rural water supply in Africa: Building blocks for handpump sustainability. WEDC, Loughborough University.

Hofman, B. and Kaiser, K., 2004. The making of the big bang and its aftermath: a political economy perspective. In (eds.) Alm, J., Martinez-Vazquez, J. and Indrawati, S.M. eds., 2005. Reforming intergovernmental fiscal relations and the rebuilding of Indonesia: The Big Bang program and its economic consequences. Cheltenham, UK: Edward Elgar, pp.15-46.

Howard, G., Bartram, J., Brocklehurst, C., Colford, J. M., Costa, F., Cunliffe, D., Dreibelbis, R., Eisenberg, J. N. S., Evans, B., & Guilherme, C. (2020). COVID-19: Urgent actions, critical reflections and future relevance of "safely managed" water. Frontiers in Water, 2, 1–8.

Huston, A., & Moriarty, P.B. 2018. Understanding the WASH systems and its building blocks: Building Strong WASH systems for the SDGs. IRC WASH Systems Series. The Hague, The Netherlands: IRC.

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): 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.

Hutchings, P., Franceys, R., Smits, S. and Mekala, S., 2017. Community management of rural water supply: Case studies of success from India. Routledge.

Inman, R.P. and Rubinfeld, D.L. 1997. Rethinking federalism. Journal of economic perspectives, 11(4): 43-64.

International Trade Administration. 2024a. Fiji - Country Commercial Guide. Water and Wastewater treatment. https://www.trade.gov/country-commercial-guides/fiji-water-and-wastewater-treatment#:~:text=In%20June%202023%2C%20the%20Fijian,water%20supplies%20in%20rural%20areas.

International Trade Administration. 2024b. Information and Communication Technology. https://www.trade.gov/country-commercial-guides/fiji-information-and-communication-technology

International Women's Development Agency. 2017. Individual Deprivation Measure Fiji Study 2015-2016: Initial findings, https://iwda.org.au/assets/files/IDM_Fiji_6Pager.pdf.

Island Business. 2023. Dr Sivendra Micheal is Fiji's new PS for Environment and Climate Change. Island Business, November 21, 2023. https://islandsbusiness.com/news-break/dr-michael-fiji/

iTaukei Affairs (Amendment) Act 2023. https://www.parliament.gov.fj/acts/act-25-itaukei-affairs-amendment-act-2023/

iTaukei Land Trust Board. n.d. ITaukei Land Trust Board - Ownership & Rights. https://www.tltb.com.fj/Landowners/Ownership-Rights

Jagan L. 1988. Fiji: Country profile. New internationalist, (189), 32.

Jackson, K. and Bazeley, P. 2019. Qualitative Data Analysis with NVivo. (3rd Edition). Sage Publications Ltd, CA.

Jenkins, A. P. and Jupiter, S. D. 2015. Natural disasters, health and wetlands: A Pacific small island developing state perspective. In: Finlayson CM, Horwitz P, Weinstein P, editors. Wetlands and Human Health. Dordrecht: Springer; pp. 169–92.

Jupiter, S.D., Jenkins, A.P., Negin, J., Anthony, S., Baleinamau, P., Devi, R., Gavidi, S., Latinne, A., Mailautoka, K.K., Mangubhai, S. and Naivalu, K., 2024. Transforming place-based management within watersheds in Fiji: the Watershed Interventions for Systems Health project. PLoS Water, 3(7), p.e0000102

Kaplan, M. 1989. Luveniwai as the British Saw It: Constructions of Custom and Disorder in Colonial Fiji. Ethnohistory, 36 (4): 349–371.

Kaplan, M. 2004. Promised Lands: From Colonial Lawgiving to Postcolonial Takeovers in Fiji. In Sally Engle Merry and Donald Brenneis (eds), Law & Empire in the Pacific: Fiji and Hawai'i. Santa Fe and Oxford: School of American Research Press and James Currey.

Khatri, K., Iddings, S., Overmars, M., Hasan, T. and Gerber, F. 2011. Implementation of drinking water safety plans and lessons from the Pacific islands. Waterlines, 30(3): 235-247.

Kimbugwe, C., Davis, T., Goff, F., Greggio, E., Chanthet, S., & Kiap, B. 2022. Strengthening country-led water and sanitation services monitoring and data use for decision-making: lessons from WaterAid experience in four countries. H2Open Journal, 5(2): 348-364.

Knapman, B. 1990. Economy and State in Fiji before and after the Coups. The Contemporary Pacific. 2 (1): 59–86.

Kucharski AJ, Kama M, Watson CH, Aubry M, Funk S, Henderson AD, Brady OJ, Vanhomwegen J, Manuguerra JC, Lau CL, Edmunds WJ, Aaskov J, Nilles EJ, Cao-Lormeau VM, Hué S, Hibberd ML. 2018. Using paired serology and surveillance data to quantify dengue transmission and control during a large outbreak in Fiji. Elife. 2018 Aug 14;7:e34848. doi: 10.7554/eLife.34848.

Lal, B. 1992. Broken Waves: A History of the Fiji Islands in the Twentieth Century. Pacific Islands Monograph 11. Honolulu: Centre for Pacific Islands Studies and University of Hawai'i Press.

Lal, B. 2005. On the other side of Midnight: A Fijian Journey, National Book Trust, New Delhi, Indiana.

Larson, E., & Aminzade, R. 2008. Nation-building in Post-Colonial Nation-States: The Cases of Tanzania and Fiji. International Social Science Journal, 59(192): 169-182.

Lasaqa, I. 1984. The Fijian People: Before and After Independence. Australian National University, Canberra.

Leonard, P. 2019. Land and Belonging in an Indo-Fijian Rural Settlement. The University of Manchester (United Kingdom).

Litvack, J.I., Ahmad, J. and Bird, R.M. 1998. Rethinking decentralization in developing countries. World Bank Publications.

Lockwood, H, & Smits, S. 2011. Supporting rural water supply: Moving towards a service delivery approach. IRC International Water and Sanitation Centre and Aguaconsult, Warwickshire, United Kingdom of Great Britain and Northern Ireland.

Lockwood, H. & Le Gouais, A. 2015. Professionalising community-based management for rural water services. (Briefing notes series, Building blocks for sustainability). The Hague, the Netherlands: IRC.

Love, M., Beal, C., Gonzalez-Botero, D., Bugoro, H., Panda, N., Roiko, A., Benjamin, C., Hagabore, J., Ooi, J., Magreth, C., and Souter, R.T. 2020. Pacific Community Water Management Plus: Phase 1 Findings Report for Solomon Islands. International WaterCentre / Griffith University: Brisbane, Australia; Solomon Islands National University: Honiara, Solomon Islands.

Love, M., Souter, R., Gonzalez Botero, D., Pene, S., and Beal C. 2021a. Pacific Community Water Management Plus: Phase 1 Findings Report for Fiji. International WaterCentre, Griffith University. Nathan: Australia.

Love, M., Hagabore, J., Beal, C., Pene, S., Panda, N., Bugoro, H., … & Souter R.T. 2021b. Backstopping Rural Community Water Management - Lessons from Solomon Islands and Fiji. Practice & Research Brief. December 2021. International WaterCentre / Griffith University: Brisbane, Australia; Solomon Islands National University: Honiara, Solomon Islands.

Love, M., Kotra, K.K., Molitambe, H., and Souter, R.T. 2022. Strengthening Community Water Management through a follow-up DWSSP activity – Results of a pilot in Vanuatu. International WaterCentre, Griffith University. Nathan: Australia.

Love, M., Beal, C., Pene,S., Rarokolutu, Rt. T., Whippy A., Taivoce, S., Shrestha, S., and Souter, R. T. 2023. Social networks and other forgotten components of the WASH enabling environment in Fiji. Water Policy. 25 (1): 38–58. https://doi.org/10.2166/wp.2022.202

Madigibuli, A. 2023. Addressing poverty. The Fiji Times, 1st November 2023 (last updated 3rd February 2024). https://www.fijitimes.com.fj/addressing-poverty-2/

Macnaught, T J. 2016, The Fijian colonial experience: A study of neo-traditional order under British colonial rule prior to World War II, The Australian National University, New South Wales, Australia, https://press-files.anu.edu.au/downloads/press/n1869/pdf/book.pdf.

MacWilliam, S. 2019. The Search for Democracy in Fiji. Discussion Paper. Department of Pacific Affairs. https://dpa.bellschool.anu.edu.au/sites/default/files/publications/attachments/2019-09/dpa_dp_20193_macwilliam_.pdf

Mataiciwa, R. 2021. The Distorted Delusion: A study on the perversion of iTaukei identity (Revised version). 10.13140/RG.2.2.36280.67842

Mills, A., Vaughan, J.P., Smith, D.L., Tabibzadeh, I. and World Health Organisation. 1990. Health System Decentralisation. Concepts, Issues and Country Experience, World Health Organisation, Geneva.

Ministry of Agricultural. 2019. 5-Year Strategic Development Plan, 2019-2023. Government of Fiji. https://www.agriculture.gov.fj/documents/SDP2019-2023.pdf

Ministry of Economy. 2017. 5-Year & 20-Year National Development Plan: Transforming Fiji. Retrieved from https://www.adb.org/sites/default/files/linked-documents/LD4%205yr%20and%2020yr%20DP%20Transforming%20Fiji.pdf

Ministry of Economy. 2018. Planned Relocation Guidelines: A framework to undertake climate change related relocation. Republic of Fiji. https://www.refworld.org/legal/decreees/natlegbod/2018/en/122437

Ministry of Economy. 2022. Economic and fiscal update supplement to the 2022-2023 budget address. Republic of Fiji. 15 July 2022.

Ministry of Education, National Heritage, Culture & Arts. 2012. Minimum Standards of Water, Sanitation and Hygiene (WASH) in school infrastructure. Suva, Fiji, February 13, 2024, https://livelearn.org/assets/media/docs/resources/Fiji_MEHA_WinS_Standards.pdf

Ministry of Finance. 2010. Procurement guidelines - the procurement policy framework. Fiji Procurement Office, Ministry of Finance, Suva. August 2010 https://www.fpo.gov.fj/attachments/article/57/GUIDE_TO_THE_PROCUREMENT_POLICY_FRAMEWORK.pdf

Ministry of Finance. 2022. Strategic Planning, National Development and Statistics: Citizens' Guide to the national budget: Fiscal Year 2023-2024. Republic of Fiji.

Ministry of Finance. 2024, Public consultations on Fiji's new National Development Plan., https://www.finance.gov.fj/public-consultations-on-fijis-new-national-development-plan/

Ministry of Finance, Strategic Planning, National Development and Statistics. 2022. Citizens' Guide to the National Budget: Fiscal Year 2023-2024. Republic of Fiji.

Ministry of Health and Medical Services. 2002. Shaping Fiji's Healthy Islands. Strategies for transforming national policy into local practice. National Environmental Health Action Planning: http://www.wpro.who.int/environmental_health/documents/docs/NEHAPFIJI.pdf?ua=1

Ministry of Health and Medical Services. 2013. Ministry of Health, Fiji. Environmental Health Practitioner. Standard Operating Procedures Manual for Environmental Health Officers, 2013

Ministry of Health and Medical Services. 2016. Fiji National WASH Cluster Terms of Reference. https://www.health.gov.fj/wp-content/uploads/2016/04/Terms-of-Reference-Fiji-WASH-Cluster-Approved.pdf

Ministry of Health and Medical Services. 2020. Strategic Plan: 2020-2025. MHMS. Fiji. https://www.health.gov.fj/wp-content/uploads/2020/05/Strategic-Plan-2020-2025-1.pdf

Ministry of Health and Medical Services. 2023. Annual Report 2020-2021. https://www.health.gov.fj/wp-content/uploads/2023/12/Annual-Report-2020-2021.pdf

Ministry of Infrastructure & Meteorological Services. 2016. National Water and Sanitation Policy. Department of Water & Sewerage. Fiji Government. November 2016.

Ministry of iTaukei Affairs. 2016. Itaukei Affairs (Provincial Council) Regulations: Village Bylaws. iTaukei Affairs Board, Suva. https://fijivillage.com/documents/Draft-Village-By-Laws-English.pdf

Ministry of iTaukei Affairs. 2017. The Ministry. https://www.itaukeiaffairs.gov.fj/index.php/about-us/the-ministry

Ministry of iTaukei Affairs. 2022. Costed Operation Plan. Ministry of iTaukei Affairs, 2022-2023.

Ministry of iTaueki Affair. 2024. Village Improvement Scheme. Ministry of iTaukei Affairs. https://www.itaukeiaffairs.gov.fj/index.php/forms/village-improvement-scheme

Ministry of Lands and Natural Resources. 2015. Fiji Groundwater. Mineral Resource Department. Government of Fiji.

Ministry of Rural and Maritime Development and Disaster Management. 2021. 10 Year Strategic Development Plan. https://www.ruraldev.gov.fj/wp-content/uploads/2022/07/SDP.pdf

Ministry of Waterways and Environment. 2020. Strategic Plan 2020-2024. Government of Fiji. https://www.mowe.gov.fj/wp-content/uploads/2020/03/2020_2024_Strategic-Plan_MoWE.pdf

Ministry of Works, Transport and Public Utilities, Water and Sewerage Department. 2012. Practical Guidelines for Rural Water Supply Management Plan. May 2012. Government of Fiji.

Mohammed, J., Ashton, T. and North, N. 2016. Wave upon wave: Fiji's experiments in decentralizing its health care system. Asia Pacific Journal of Public Health, 28(3): 232-243.

Mommen, B., Humphries-Waa, K., & Gwavuya, S., 2017. Does women's participation in Water Committees affect management and water system performance in rural Vanuatu? Waterlines, 36(3): 216-232.

Moriarty, P., Smits, S., Butterworth, J. and Franceys, R. 2013. Trends in rural water supply: Towards a service delivery approach. Water alternatives, 6(3): 329-249.

Movono, L. & Sas, N. 2024. Banned for almost two decades, Fiji's Great Council of Chiefs is back and pushing for greater influence, https://www.abc.net.au/news/2024-03-04/fiji-great-council-chiefs-pacific-traditional-leaders/103532502.

Movono, A. & Becken, S. 2018. Solesolevaki as social capital: a tale of a village, two tribes, and a resort in Fiji.Asia Pacific Journal of Tourism Research, 23(2),146–157.

Nacei, L. 2018. Water Authority reactivates emergency toll-free contact, The Fiji Times, https://www.fijitimes.com.fj/water-authority-reactivates-emergency-toll-free-contact

Naidu, V., Matadradra, A., Sahib, M. and Osborne, J. 2013. Fiji: The challenges and opportunities of diversity. Minority Rights Group International. https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=d3d5031addfb4de38d4c3ef46b5ebebff132b44c

Nair, S. 1980. Rural-born Fijians and Indo-Fijians in Suva: A study of movements and linkages. Development Studies Centre Monograph no. 24. Canberra, The Australian National University.

Naivalulurua, N. 2022. New National Drinking Water Quality Committee set-up – Dr Waqainabete. November 12, 2022. Fiji Village. https://www.fijivillage.com/news/New-National-Drinking-Water-Quality-Committee-set-up--Dr-Waqainabete-85r4xf/

Nanuqa, J. 2022. Inconsistent reporting by Turaga ni Koro is a concern. Fiji Broadcasting Cooperation. June 10, 2022. https://www.fbcnews.com.fj/news/inconsistent-reporting-by-turaga-ni-koro-is-a-concern/

National Institute of Water and Atmospheric Research. 2017. Korosan Onsite Household Sanitation Guidelines for Fiji. https://niwa.co.nz/sites/default/files/1-Choosing-OWM-170920_0.pdf

Nayacakalou, R. 1975. Leadership in Fiji. Suva: Institute of Pacific Studies/University of the South Pacific; 2002.

Nelson, S., Abimbola, S., Mangubhai, S., Jenkins, A., Jupiter, S., Naivalu, K., Naivalulevu, V. and Negin, J. 2022. Understanding the decision-making structures, roles and actions of village-level Water Committees in Fiji. International Journal of Water Resources Development, 38(3),518-535.

O'Brien, P. 2023. A new era in Fijian politics. Center for Strategic & International Studies. https://www.csis.org/analysis/new-era-fijian-politics

Office of Development Effectiveness. 2015. Working in decentralised service systems: Short report: implications for aid managers. Australian Government Department of Foreign Affairs and Trade.

Office of the Prime Minister, Fiji. 2023. Standard Operating Procedure for Planned Relocation in the Republic of Fiji. Government of Fiji.

Overbeek, J.W., Cox, D. and Pereira-Hill, N. (n.d.). Diagnostics: Pacific Water and Wastewater Association – Water. Pacific Region Infrastructure Facility (PRIF). https://www.theprif.org/document/fiji/water-and-wastewater/diagnostics-pacific-water-and-wastewater-association-water

Pangerl, M. 2007. Notions of insecurity among contemporary Indo-Fijian communities. The Asia Pacific Journal of Anthropology, 8(3), 251–264.

Pauwels, S. 2015. Chiefdoms and chieftaincies in Fiji. Yesterday and today. Journal De La Société Des Océanistes, 141: 189–198. https://doi.org/10.4000/jso.7336

Parke, A. 2014. Degei's Descendants: Spirits, Place and People in Pre-Cession Fiji. Australia: ANU Press.

Pratap, R. 2024. FEO to look into complaint against President. January 11 2024. Fijian Broadcasting Corporation (FBC). https://www.fbcnews.com.fj/news/waf-launches-in-house-training/

Ramesh, S. 2010. Constitutionalism and governance in Fiji. The Round Table, 99(410): 491-502

Reddy, V.R. and Batchelor, C. 2010. Cost of providing Sustainable Water, Sanitation and Hygiene (WASH) services: An initial assessment of LCCA in Andhra Pradesh. Centre for economic and social studies. Hyderabad. https://www.ircwash.org/sites/default/files/Reddy-2010-Cost.pdf

Republic of Fiji. 2013. The Constitution of the Republic of Fiji. https://www.fiji.gov.fj/getattachment/83c1e73e-9e67-490f-afe7-2a4f0ab6948e/The-Constitution-of-the-Republic-of-Fiji.aspx

Rika, N. J., Tuiloa, M., Tuiseke, N., & Finau-Tavite, S. 2008. Accounting and accountability by provincial councils in Fiji: the case of Namosi. Australasian Accounting Business and Finance Journal, 2(1): 15–36. https://doi.org/10.14453/aabfj.v2i1.3

Rotuivaqali, M.B. and White, M.M., 2012. Accountability in an iTaukei corporation: The case for a Fiji provincial company. In Proceedings of the 11th Australasian Centre for Social and Environmental Accounting Research (A-CSEAR) Conference. University of Wollongong.

Saldaña, J. 2013. The Coding Manual for Qualitative Researchers. Sage Publications Ltd, CA.

Saleth, R.M., and Dinar, A. 2004. The institutional economics of water: A cross-country analysis of institutions and performance. Edward Elgar, Cheltenham, UK.

Sanitation and Water for All. 2021. Fiji joins the Sanitation and Water for All Partnership. https://sanitationandwaterforall.org/news/fiji-joins-sanitation-and-water-all-partnership#:~:text=In%202017%2C%2070.1%25%20of%20households,tanks%20for%20drinking%20and%20cleaning.

Sanitation and Water for All. 2024. Mutual Accountability Mechanism. https://www.sanitationandwaterforall.org/about/our-work/mutual-accountability-mechanism

Sayed-Khaiyum, A. 2002. Cultural Autonomy: Its Implications for the Nation-State (Unpublished Master's Thesis). University of Hong Kong, China.

Secretariat of the Pacific Regional Environment Programme. 2024. Loss and damage already Fiji. Climate Change Resilience. https://www.sprep.org/news/loss-and-damage-already-a-painful-reality-for-fiji

Shaheed A, Orgill J, Montgomery MA, Jeuland MA, Brown J. Why "improved" water sources are not always safe. Bull World Health Organ. 2014 Apr 1;92(4):283-9. doi: 10.2471/BLT.13.119594. Epub 2014 Jan 10. PMID: 24700996; PMCID: PMC3967570.

Sharma, U and An, Y. 2018. Accounting and Accountability in Fiji: A Review and Synthesis," Australian Accounting Review, 28(3):421–427, https://doi.org/10.1111/auar.12197.

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.

Souter, R.T., Ruuska, D., Pene, S., Benjamin, C., Funubo, S., Beal, C.D., Sanderson, R., Batikawai, S., Ravai, A., Antoinette-Wickham, T. and Rankin, T. 2024. Strengthening rural community water safety planning in Pacific Island countries: evidence and lessons from Solomon Islands, Vanuatu, and Fiji. Journal of Water and Health, 22(3): 467-486.

South Pacific Commission. 2015. Pacific Initiatives on Climate and Disaster Resilience Showcased in Compendium, Geoscience Programmes, 5 May 2015, Suva Fiji. https://gsd.spc.int

South Pacific Community. 2021. Waimanu River Catchment Integrated Management Plan: Fiji. Retrieved from https://www.pacific-r2r.org/sites/default/files/2022-01/MISC_FJ_01_WAIMANU%20RIVER%20CATCHMENT%20INTEGRATED%20MANAGEMENT%20PLAN%20high%20res_0.pdf

String, G., Singleton, R. & Lantagne, D. 2020. Operational Research on Rural, Community-Managed Water Safety Plans: Case Study Results From Implementations in India. DRC, Fiji, and Vanuatu. Water Research, 170, 115288.

Toren, C. 2000. Making The Chief: An examination of why Fijian chiefs have to be elected. In (eds.) Cabral, J. D. P. &

Lima, A. P. D. Elites: Choice, Leadership and Succession. Etnográfica Press.

Trnka, S. 2005. Land, Life and Labour: Indo-Fijian Claims to Citizenship in a Changing Fiji. Oceania, 75(4),354-367

The Global Initiative for Inclusive ICTs (G3iCT). (2024). Fiji. Retrieved from: https://g3ict.org/country-profile/fiji

Tomlinson, M.A., 2009. In God's image: the metaculture of Fijian Christianity (Vol. 5). Univ of California Press.

Tuwere I.S. [1975] 2002. Vanua: Towards a Fijian Theology of Place. Suva: Institute of Pacific Studies/University of the South Pacific.

United Nations Habitat. 2012. Fiji National Urban Profile. https://unhabitat.org/sites/default/files/documents/2019-07/fiji_national_urban_profile.pdf

United Nations Environment Programme. n.d. iTaukei Affairs Amendment Decree 2010/Dec No. 31 of 2010. https://leap.unep.org/en/countries/fj/national-legislation/itaukei-affairs-amendment-decree-2010-dec-no-31-2010

United Nation Children's Fund. 2016. Strengthening the Enabling Environment for Water, Sanitation and Hygiene (WASH): Guidance Note. New York, NY: UNICEF.: https://www.ircwash.org/resources/strengthening-enabling-environment-water-sanitation-and-hygiene-wash-guidance-note

United Nations Children's Fund. 2023. Financing Water, Sanitation & Hygiene in the Pacific. Retrieved from https://reliefweb.int/report/cook-islands/financing-water-sanitation-and-hygiene-pacific

United Nations Development Programme. n.d. Strengthening leadership capacities and local governance structures to adapt to a modern age. Strengthening Citizen Engagement in Fiji Initiative (SCEFI). UNDP. Suva: Fiji

United Nation Development Program. 2020. Fiji Government drives an integrated approach to rural and maritime development. UNDP. 16 Feb 2024. https://www.undp.org/pacific/press-releases/fiji-government-drives-integrated-approach-rural-and-maritime-development

United Nations Development Program. 2021. Fijian Government launches Strategic Development Plan to support resilient development. UNDP Pacific Office. November 26, 2021 https://www.undp.org/pacific/press-releases/fijian-government-launches-strategic-development-plan-support-resilient-development

United Nation Development Programme. 2023a, Fiji Water Supply, Sanitation and Hygiene (WASH) Disaster Recovery Framework Guide: Disaster recovery series, https://www.undp.org/pacific/publications/fiji-water-supply-sanitation-and-hygiene-wash-disaster-recovery-framework-guide

United Nations Development Programme. 2023b, PDNA Guidelines Water & Sanitation- Fiji Infrastructure sector. UNDP, March 4, 2024, https://www.undp.org/pacific/publications/pdna-guidelines-water-and-sanitation-fiji-infrastructure-sector

United Nations Water Global Analysis and Assessment of Sanitation and Drinking Water. 2019. Fiji finance (GLAAS 2018/2019). https://www.who.int/publications/m/item/glaas-fji-2018-2019-country-highlights

United Nations Water Global Analysis and Assessment of Sanitation and Drinking Water. 2022. Fiji finance (GLAAS 2021/2022). https://glaas.who.int/glaas/highlights/glaas-highlights

Vucukula, E. 2023a. No more financial contributions to province. The Fiji Times, March 17, 2023. https://www.fijitimes.com.fj/no-more-financial-contributions-to-province/?utm_source=ground.news&utm_medium=referral

Vucukula, E. 2023b. 2023-2024 National Budget Debate | Funds for rural housing program, The Fiji Times, https://www.fijitimes.com.fj/2023-2024-national-budget-debate-funds-for-rural-housing-program

Vula, T. 20203. WAF chief executive instructed to urgently review state of asset management. The Fiji Times, March 19, 2023. https://www.fijitimes.com.fj/waf-chief-executive-instructed-to-urgently-review-state-of-asset-management/

Water Authority Fiji. 2020. Water Authority of Fiji: 2017 Annual Report. Parliamentary Paper No. 245 of 2020. Government of Fiji.

Water Authority Fiji. 2021. WAF Annual Report. https://waterauthority.com.fj/annual-reports/

Water for Women. 2023. Climate Finance for WASH: Pacific Region. https://www.waterforwomenfund.org/en/news/climate-finance-for-wash-in-asiapacific.aspx

Welle, K. 2006. WaterAid water point mapping in Malawi and Tanzania. WaterAid Learning for Advocacy and Good Practice. WaterAid; ODI, London.

Wilson, M, Nanau, G, Sobey, M, Lotawa, S. 2021. Water resources management in Pacific Island countries, https://asiafoundation.org/wp-content/uploads/2022/10/Political-Economy-of-Water-Resources-Management-and-Community-Perceptions-in-the-Pacific-Island-Countries.pdf.

Wilson, M., Nanau, G., Sobey, M., and Lotawa, S. 2022. Political Economy of Water Management and Community Perceptions in the Pacific Island Countries. The Asia Foundation.

World Bank. 2017. Sustainability Assessment of Rural Water Service Delivery Models: Findings of a Multi-Country Review. Washington DC: World Bank. http://hdl.handle.net/10986/27988

World Bank. 2021. Climate Risk Country profile: Fiji. https://climateknowledgeportal.worldbank.org/sites/default/files/country-profiles/15854-WB_Fiji%20Country%20Profile-WEB.pdf

World Health Organisation. 1997. Guidelines for Drinking-Water Quality: Volume 3 Surveillance and Control of Community Water Supplies, 2nd edn. World Health Organisation, Geneva, Switzerland.

World Health Organisation. 2004. Guidelines for Drinking Water Quality, 3rd ed. World Health Organisation, Geneva, Switzerland.

World Health Organisation. 2012. Water safety planning for small community water supplies, World Health Organisation, Geneva, Switzerland. https://www.who.int/publications/i/item/9789241548427.

World Health Organisation. 2014. Water Safety Plan: A Field Guide to Improving Drinking-Water Safety in Small Communities. WHO Regional Office for Europe, Copenhagen, Denmark.

World Health Organisation & the United Nations Framework Convention on Climate Change. 2021. Health & Climate Change Country Profile 2021: Small Island Developing States Initiative. Ahttps://iris.who.int/bitstream/handle/10665/339493/WHO-HEP-ECH-CCH-21.01.01-eng.pdf?sequence=1

World Health Organisation. 2021. Reflecting on Trackfin 2012-2020: Key results, lessons learned, and the way forward. https://iris.who.int/bitstream/handle/10665/341793/9789240028432-eng.pdf?sequence=1

World Health Organisation and the United Nations Children's Fund. 2021. Progress on household drinking water, sanitation and hygiene 2000-2020: Five years into the SDGs. Geneva. https://www.unwater.org/sites/default/files/app/uploads/2021/07/jmp-2021-wash-households-LAUNCH-VERSION.pdf

World Health Organisation. 2023, UN-Water Global Analysis and Assessment of Sanitation and Drinking-Water (GLAAS), June 3, 2024, https://www.who.int/teams/environment-climate-change-and-health/water-sanitation-and-health/monitoring-and-evidence/wash-systems-monitoring/un-water-global-analysis-and-assessment-of-sanitation-and-drinking-water

Appendix

Table A1: Interview attributes – Community-level respondents

ID	Gender	Age	Role/Position	Date of interview
VHW-F	F	48	WC member Nurse/Village Health Worker	31/07/2023
TNK-M1	M	57	TNK	31/07/2023
WC-M1	M	53	WC member	07/08/2023
TNK-M2	M	54	TNK	31/07/2023
WC-F1	F	48	Village Nurse/WC member	03/08/2023
WC-M2	M	49	WC Leader	03/08/2023
WC-M3	M	52	WC leader	03/08/2023
WC-F2	F	61	WC member	12/09/2023
WC-M4	M	60	WC member	12/09/2023
TNK-M3	M	46	TNK	12/09/2023
WC-M5	M	40	WC member	12/09/2023
WC-M6	M	48	WC Leader	12/10/2023
WC-M7	M	30	WC member	12/10/2023
WC-F3	F	30	WC member	12/10/2023
WC-M8	M	59	WC Head	12/10/2023
WC-F4	F	42	Women's Group Leader	12/10/2023
TNK-M4	M	35	TNK	16/10/2023
WC-F5	F	31	WC member / CHW	16/10/2023
WC-M9	M	48	WC member	16/10/2023
TNK-M5	M	51	TNK	20/10/2023
WC-M10	M	48	WC Head	20/10/2023

Table A2: Location – community-level respondents

	Tailevu	Naitasiri	Lomaiviti	Macuata	Ra	Total
Water Committee member	2	3	3	5	3	16
TNK	2	0	1	0	2	5
Total	**4**	**3**	**4**	**5**	**5**	**21**

Table A3: Interview attributes – Provincial-level water professionals

ID	Gender	Age	Role/Position	Date of interview
ART-M1	M	36	Assistant Roko Tui	31/07/2023
ART-M2	M	56	Assistant Roko Tui	31/07/2023
CO-M1	M	33	Conservation Officer	02/08/2023
HI-M1	M	46	Health Inspector	31/07/2023
PO-F1	F	42	Senior Economic Planning Officer	02/08/2023
PA-M1	M	49	Provincial Administrator	04/08/2023
ART-M3	M	49	Assistant Roko Tui	11/09/2023
CO-M2	M	26	Conservation Officer	12/09/2023
PA-M2	M	41	Provincial Administrator	12/09/2023
HI-F1	3 F	F34, F23, F35	Health Inspector	11/09/2023
ART-M4	M	52	Assistant Roko Tui	13/10/2023
ART-M5	M	46	Assistant Roko Tui	07/08/2023
CO-F1	F	37	Marine Conservation Officer	13/10/2023
DHI-M1	M	43	Divisional Health Inspector	13/10/2023
PA-M3	M	38	Provincial Administrator	20/10/2023
ART-M6	M	55	Assistant Roko Tui	20/10/2023
CO-M3	M	40	Conservation Officer	20/10/2023

Table A4: Location – Provincial-level water professionals

	Tailevu	Naitasiri	Lomaiviti	Macuata	Ra	Total
Assistant Roko Tui	2	0	1	2	1	6
Conservation Officer	1	0	1	1	1	4
Health Inspector	1	0	1	1	0	3
Senior Economic Planning officer	1	0	0	0	0	1
Provincial Administrator	0	1	0	1	0	2
Total	**5**	**1**	**3**	**5**	**2**	**16**

Table A5: Knowledge and Learning Exchange Participants – Suva, Fiji, November 2024

Name	Position	Organisation	Gender	Country
Gaston Theophile	Provincial Water Supervisor	DoWR	M	Vanuatu
Heather Molitambe	Co-investigator /Country project manager	USP	F	Vanuatu
Collin Benjamin	Co-investigator	SINU	M	Solomon Islands
Sheilla Funubo	Co-investigator	SINU	F	Solomon Islands
Merilyn Vana	Senior Health Inspector	EHD/RWASH	F	Solomon Islands
Sarah Pene	Co-investigator /country project manager	USP	F	Fiji
Suliasi Batiwakai	Co-investigator	IWC (formerly MoHMS)	M	Fiji
Tolu Muliana	Co-investigator	USP	M	Fiji
Peni Wanimala	Research Assistant	USP	M	Fiji
Mark Love	Principal Investigator	IWC	M	Australia
Sachita Shrestha	Project Officer	IWC	F	Australia

End Notes

[1] Adapted from ODE (2015:1)

[2] For examples: Malawi (Lockwood & Kang, 2012), Ethiopia (UNDP, 2006: 102), and Myanmar (Kimbugwe et al., 2022).

[3] Most studies of decentralisation and rural water service delivery have been undertaken in Asia, Latin America and Africa (e.g., Lockwood and Smits, 2001; World Bank, 2017)

[4] See further: Jenkins & Jupiter, 2015; Kucharski et al., 2018.

[5] iTaukei Affairs (Amendment) -25 of 2023 Section 3 inserted 3. The Principal Act is amended after section 2 by inserting the following new section— "Great Council of Chiefs 3.(1) There must be in respect of the iTaukei people a council called the Great Council of Chiefs (Bose Levu Vakaturaga) which must consist of such persons appointed by the President on the advice of the Minister; (2) It is the duty of the Council, in addition to any power or duty conferred on it, to submit to the President any recommendation or proposal as it may deem to be for the benefit of the iTaukei people, and to consider any question relating to the good governance and well-being of the iTaukei people as the President or the Board may submit to the Council, and to take decisions or make recommendations thereon". Prime minister Rabuka has explicitly stated that "[w]hile the body [BLV] is intrinsically linked to the governance and well-being of the iTaukei, it carries a profound obligation to embrace and advocate for every member of our diverse society" (in Movono & Sas, 2024).

[6] Previously, cities and towns had elected municipal councillors but are now administered by government-appointed administrators.

[7] Previously known as the Fijian Affairs Board iTaukei Affairs Amendment Decree 2010 / Dec No. 31 of 2010. The Decree amends the iTaukei Affairs Act Cap 120 by substituting the word native with iTaukei wherever it appears. Additionally, a new section has been inserted after section 2, referred as 2A, which amends all written laws that refer to 'Fijians' or 'indigenous Fijians' and replaces it with the word 'iTaukei'. (UNDEP, n.d.)

[8] Rotuivaqali and White (2012) highlights some issues of corruption among those in power, often involving individuals of chiefly status.

[9] *iTaukei Affairs (Amendment) Act* (No. 25 of 2023) Section 3 inserted 3. The Principal Act is amended after section 2 by inserting the following new section— "Great Council of Chiefs 3.(1) There must be in respect of the iTaukei people a council called the Great Council of Chiefs (Bose Levu Vakaturaga) which must consist of such persons appointed by the President on the advice of the Minister. (2) It is the duty of the Council, in addition to any power or duty conferred on it, to submit to the President any recommendation or proposal as it may deem to be for the benefit of the iTaukei people, and to consider any question relating to the good governance and well-being of the iTaukei people as the President or the Board may submit to the Council, and to take decisions or make recommendations thereon.

[10] Registered under the iTaukei Affairs Board, Declaration of iTaukei Settlements as iTaukei Villages By-law, 2010.

[11] For example: Narara settlement (Ba province, Western Division) is an example of a typical settlement in Viti Levu, with the majority (not all) residents being Indo-Fijians, with half the households practising the Hindu faith (50%), the other half Methodism (44% Methodist, 6% New Methodist) (see Love 2020:41).

[12] A growing number of Indo-Fijians have also emigrated to Pacific rim countries like Australia, New Zealand, the United States and Canada (see Pangerl, 2007).

[13] Vanua is a Fijian term that embodies a concept much broader than just land or territory: It represents a complex and interwoven system of social, cultural, environmental, and spiritual elements that form the foundation of Fijian identity and community life (e.g., Nayacakalou, 1975; Tomlinson, 2009; Tuwere 2002).

[14] The Roko Tui is an appointed government official responsible for provincial administration, while the Tui is a traditional chief with cultural and leadership responsibilities.

[15] The roles of the TNK are defined under Regulation 28 of the iTaukei Affairs (Tikina and Village Council) Regulation 1996, which states that the TNK shall be the representative of government to undertake various functions, including: Collate relevant data (i.e. TNK Report, village profile); and give sound advice on development issues during village meetings.

[16] In recognition of their important role, the government has recently d DACs monthly allowances, reflecting the critical function they serve in data collection and development project coordination, which is essential for the implementation of SDGs and other governmental programs (Fiji Parliament, 2023; The Fiji Times, 2023b).

[17] WC, Church committee (Methodist), Settlement committee, Sugarcane committee, and Temple committee (Hindu)

[18] That said, there is a Village Improvement Scheme run by the MTA which is designed to raise the living standards of indigenous Fijians and Rotuman's residing in the villages through the following programs: Multipurpose Hall/Evacuation Centre; Village Beautification program (landscaping, drainage, footpaths, seawalls/riverwall, rubbish disposal); and, Village Sanitation (which includes "water supply improvement", "toilet construction" or "sewer improvement" (MTA, 2024). Communities must provide a quarter (25%) of the total cost.

[19] E.g., the Pacific Islands Forum, where Fiji served as Chair.

[20] The department is headed by the Director of Water and Sewerage, with a Technical Unit responsible for monitoring and compliance and a Policy Unit responsible for policy and regulatory matters.

[21] WAF was corporatized in 2007 as a Commercial Statutory Authority and operates in in urban (defined as 'metered') and rural (non-metered) places. In 2021, WAF was responsible for providing access to drinking water and wastewater services to over 152,261 residential and non-residential metered customers residing largely in urban areas, as well as setting- up water supply systems in rural schemes, reaching over 829,110 people nationwide (WAF n.d.).

[22] The Ministry of Waterways and Environment was restructured late last year - Waterways was moved to Agriculture to form the new MoA, which focuses on agricultural development, irrigation, flood control, coastal protection, and enhancing irrigation systems (MoA, 2019). Environment now operates under the portfolio of the Prime Minister and is combined with the Climate Change division to form the Ministry of Environment and Climate Change. This restructuring is part of a broader cabinet reshuffle announced by Prime Minister Sitiveni Rabuka, aiming to enhance governance and improve policy coordination and service delivery across the government (Chand, 2023; Island Business, 2023).

[23] For example, in 2012 the then Ministry of Education, National Heritage, Culture and Arts released the "Minimum standards on water, sanitation and hygiene (WASH) in schools' infrastructure for Fiji (MoE, 2012).

[24] Members include: Ministry of Women, Children and Poverty Alleviation, WAF, MIMS, DWS, FRCS (Fiji Revenue and Customs Service), Ministry of Provincial Development - Divisional Offices, WHO, SPC, UNDP, UNWomen, IFRC (International Federation of Red Cross and Red Crescent Societies), Save the Children, AusAID, NZAID, Fiji Water Foundation (Rotary), Fiji Live and Learn, Fiji Water / Aqua, ADRA (Adventist Development and Relief Agency), Habitat for Humanity and UNOCHA.

[25] DWSSP is undertaken by MoHMS in a certain number of communities a year, and these involve both community and WC members. The Operation and Maintenance Manual for EPS (DWS, 2016), stipulates that it is the WCs responsible to look after the EPS. Enabling actors like CSOs have developed and implemented training with WCs on a 'project' basis. However, there is no clear guidance or policy from the government on who runs training for WCs, or what it should contain. The DWS are currently developing a Plumbers Training course with external funding (DWS-M2), but this does not address the all-important 'software' aspect of the CWM model.

[26] See WAF map: https://www.google.com/maps/d/viewer?mid=1xN4ZYkNcBOUJ7D3Lq_GRow9zc_gtDOQa&femb=1&ll=-15.807871249585022%2C175.45215136830177&z=14

[27] Now Rural Water Supply and Sanitation Management Plan (RWSSMP).

[28] Call 334 6777 (national call centre) or toll-free on 1507 or 1508 (Northern Division). There are also customer services centres (n=11) and an inter-active website (see Nacei, 2018).

[29] The *Public Health Act* was amended in 2021 to introduce fines for breaches of COVID-19 protocols.

[30] Produced by the National Institute of Water and Atmospheric Research (NIWA) (New Zealand), the KoroSan Guidelines provide technical advice regarding on-site sanitation in villages, settlements, small towns, and peri-urban areas (NIWA, 2017) and are recognised by the Government of Fiji.

[31] There are numerous policies and regulations regarding water supply construction, dating back to 1955, e.g., Water Supply (pipes and Fitting's) By-laws 1955 (LN of 1955) commenced 8 July 1955, and amended by numerous subsequent laws such as Water Supply (Pipes and Fittings) Amendment By-laws 1979 (LN 19 of 1979).

[32] The thirteen countries are: Cook Islands, Nauru, Niue, Palau, Tokelau, Tuvalu, Kiribati, Marshall Islands, Tonga, Fiji, Samoa, Solomon Islands, and Vanuatu (UNICEF, 2023).

[33] Stipends (which have recently been increased) are as follow: Advisory Councillor's (FJD$200 a month); District Chairpersons ($220); Turaga ni Koro ($150); Mata ni TIkina ($250 per quarter, $325 per quarter and $345 per quarter); and Turaga ni Yavusa ($100 a month) (MoE, 2022: 7).

[34] For example, in Uganda, up to 12% of conditional grants (monies channelled from central to local governments for WASH) is dedicated to software activities only (Lockwood and Smits, 2011:114).

[35] Communities are required to provide at least ¼ of the required funds, see https://www.itaukeiaffairs.gov.fj/index.php/forms/village-improvement-scheme

[36] See: Financial Management Act 2004, Public Procurement Regulations 2010, and MoF Procurement Guidelines framework (2010).

[37] See further: Cross et al., 2013, UNICEF and WHO, 2011, World Bank, 2017; WHO, 1991.

[38] Water treatment plants (WTP) and wastewater treatment plants (WWTP).

[39] Participants were asked to respond to the statement: Some water problems in rural communities are due to a lack of technical skills (e.g., not knowing how to fix the pipes/dam/leaks etc.). Other water problems are more to do with management/governance and social issues (e.g., lack of an active WC, cooperation issues, a lack of fundraising of water fee for spare parts, etc.). Management issues are usually more of a problem than a lack of technical skills - Do you agree or disagree and why?

[40] For Fiji, see: Love et al., 2021a, Love et al., 2021b; Solomon Islands – Love et al., 2020; Vanuatu – Love et al., 2022.

[41] Fifteen WAF staff members and one from the MoiT completed a three-year programme, attending on-site training in Japan, with Fukuoka City Waterworks Bureau staff assisting WAF with capacity building; EMA training was conducted with WAF's technical staff within the three Divisions; nineteen WAF staff attended Training of Trainers Module 2 (TOT) at Fiji National University (FNU); the finance staff attended Fiji Institute of Accountants seminar in Warwick; five WAF employees travelled to India to participate in Indian Technical and Economic Cooperation (ITEC) Programme courses, and; ten WAF staff attended lands survey drafting training at FNU (WAF, 2020: 17, 21, 25, 27).

[42] The Strengthening Citizen Engagement in Fiji Initiative (SCEFI) was supported by the UNDP, European Union and iTaukei Affairs Board and undertaken from 2013 to 2016.

PaCWaM+ PACIFIC COMMUNITY WATER MANAGEMENT PLUS

IWC International WaterCentre

Griffith UNIVERSITY Queensland, Australia

USP THE UNIVERSITY OF THE SOUTH PACIFIC

Water For Women

Australian Aid