Community Governance in Vanuatu through a Critical Institutionalist Lens

Daniel Vorbach

PhD

University of York
Environment and Geography

March 2023

Abstract

For many rural Vanuatu communities, local collective action institutions are the only option to govern services and natural resources. To address this need, the Vanuatu government is introducing generic committee structures, which rarely work as expected. This model of introducing committees has become the foundation of many projects aimed at improving local governance in developing countries despite widespread accounts of poor performance. This thesis explores the overall question: What does the application of critical institutionalism through the lens of institutional bricolage reveal about community governance in Vanuatu? Drawing on critical institutionalist literature and the concept of institutional bricolage, I use the case of three rural communities in Vanuatu to analyse mechanisms behind different forms of institutional change. I explore challenges to institutional design and ways to facilitate the development of enduring and equitable institutions.

Data were collected through *storian* conversations with community members (27f, 28m) and key stakeholder interviews (4f, 13m) and analysed using reflexive thematic analysis. Chapter 4 uses an institutional bricolage lens to unpack how the study communities adapted or rejected introduced water governance arrangements in response to diverse local contexts. Chapter 5 explores the underlying mechanisms that shape autonomous change processes in traditional institutions. It reveals the centrality of two established institutional bricolage processes – elite capture and leakage of meaning – in opening up and closing down spaces for change. Chapter 6 identifies the phenomenon of ghost committees that do not exist in practice yet are referred to as if they were performing their intended roles. I argue that a feedback loop between ghost committees and discourse in favour of the committee model contributes to the persistence of both committees and the model. Chapter 7 draws on the preceding analytical chapters to argue that institutional bricolage and agonistic methods can be combined to support communities in developing enduring and equitable institutions.

Table of Contents

List of Figures

List of Tables

List of Abbreviations

ADB: Asian Development Bank

CBFIB: Community-based facilitated bricolage

CDCCC: Community Climate Change and Disaster Committee

DoWR: Department of Water Resources

DWSSP: Drinking Water Safety & Security Plan

LGBTQI+: Lesbian, gay, bisexual, transgender, queer, intersex, and other diverse genders and sexualities

MDGs: Millennium Development Goals

MFAT: New Zealand Ministry of Foreign Affairs & Trade

NGO: Non-government organisation

SDGs: Sustainable Development Goals

UNDP: United Nations Development Programme

UNICEF: United Nations Children's Fund

WASH: Water, Sanitation & Hygiene

WHO: World Health Organisation

WSB: Wan Smolbag Theatre

Statement of Original Authorship

I declare that this thesis is a presentation of original work, and I am the sole author. This work has not previously been presented for a degree or other qualification at this University or elsewhere. All sources are acknowledged as references.

Acknowledgements

First and foremost, I want to thank the participants of this study for welcoming me into their communities and houses and freely giving their time to share their knowledge, insights, and stories. I am truly grateful.

Thank you to my supervisor, Professor Jon Ensor, for your encouragement and guidance. I appreciate your support, academic advice, patience, and lightning-fast feedback, which shaped this thesis. I could not have wished for a better supervisor.

I am grateful to the *Sensor for Clean Water: Integrated Participatory Technology Development* (iPTD) project facilitation team Margarette Meto-Dick, Georgina Bule, Hillary Garae, Cedric Paniel from Oxfam in Vanuatu and Yvette Camille from Wan Smolbag Theatre for cultural guidance, many insightful conversations, and memorable moments during our visits to the study communities. It has been a joy and privilege to work and travel with you.

I was fortunate to work with 'the scientists' Professor Steven Johnson and Professor James Moir, who repeatedly travelled to the study communities as part of the iPTD project and shared their infectious enthusiasm for research.

Many thanks to Dr John Forrester for your guidance in the early stages of my thesis.

Thank you to the Vanuatu National Cultural Council for approving this research and facilitating my long-term visa.

Special thanks to my parents, who have always supported my endeavours even though this meant that I spent much of my time on the other side of the world. Thanks for your unfailing belief in me.

Last but not least, I thank my partner, Dr Amy Savage. Thank you for your love, support, understanding, and encouragement during our shared PhD journeys. I could not have done this without you.

I conducted my research while working for the *Sensor for Clean Water: Integrated Participatory Technology Development* (iPTD) project, funded by the United Kingdom Research and Innovation (UKRI) under the Engineering and Physical Sciences Research Council (EPSRC) grant EP/P027571/1 and Economic and Social Research Council (ESRC) grant ES/T00259X/1.

Publications

Vorbach, D. and Ensor, J. (2022). *Autonomous Change Processes in Traditional Institutions: Lessons from Innovations in Village Governance in Vanuatu.* International Journal of the Commons, 16(1), pp.173–188. DOI: http://doi.org/10.5334/ijc.1170

Ensor, J., Johnson, S., Vorbach, D., and Moir, J. (2023). *Equitable technology development: methods for scientists and engineers.* Environmental Innovation and Societal Transitions (Under Review)

Chapter 1: Introduction

For many remote Vanuatu communities, local collective action institutions are the only option to govern and manage services and natural resources. The geographic nature of Vanuatu, along with financial and human resource constraints, make community-based governance and management approaches indispensable for the foreseeable future to ensure the provision of basic services in rural communities, such as the provision of safe water. To address this need, the Vanuatu government, assisted by NGOs, has and continues to introduce generic committee structures to local communities. However, the resulting institutions rarely work as expected.

Vanuatu is not alone in this. Despite widespread accounts of poor performance, the committee model of local governance has become the foundation of many projects aimed at improving community governance and management of community-run services and common resources in developing countries. Since local institutions play significant roles in governing local service provision and natural resources, understanding institutional change processes and improving interventions to support the creation of enduring and equitable local institutions and governance outcomes are key challenges facing rural communities in Vanuatu and other developing countries.

This thesis draws on critical institutionalist literature and the concept of institutional bricolage, which describes how people assemble or modify institutional arrangements from locally available institutional building blocks to make them suit the local context or respond to changing situations. I seek to answer the question: What does the application of critical institutionalism through the lens of institutional bricolage reveal about community governance in Vanuatu? This question is explored by applying critical institutionalist theory to unpack how attempts by national actors to introduce water committees are impacted by pre-existing local institutions (Chapter 4), analyse the mechanisms behind autonomous change processes in traditional institutions (Chapter 5) and explore the phenomenon of 'ghost committees' that do not exist in practice, yet are referred to by stakeholders at different levels as if they were performing their intended role (Chapter 6). Finally, I discuss how

institutional bricolage processes could be facilitated to support the creation of more enduring and equitable local institutions (Chapter 7).

1.1 RESEARCH CONTEXT: VANUATU

The Republic of Vanuatu covers a slingshot-shaped group of over 80 small, volcanic islands with a landmass of about 4,700 square kilometres in Melanesia in the southwest Pacific region (Valjavec, 1986; Foster & Willetts, 2018; Boege & Hunt, 2020). It is situated between New Caledonia and Australia to the west, Fiji to the east and the Solomon Islands to the North (Taylor, 2015).
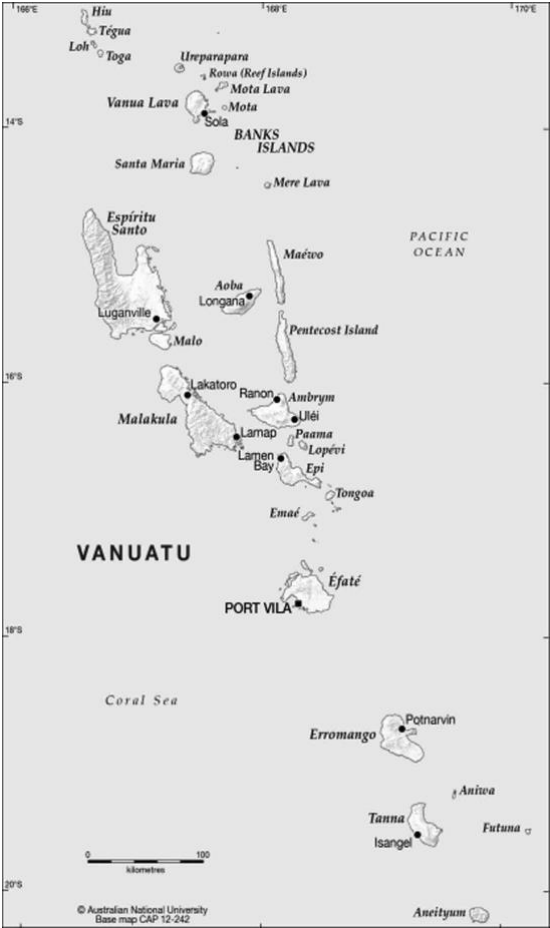

Figure 1: Map of Vanuatu

Source: Vanuatu Elevation Map. CartoGIS Services, College of Asia and the Pacific, The Australian National University. https:// asiapacific.anu.edu.au/mapsonline/base-maps/vanuatu-base# (accessed June 29, 2022). License: CC BY-SA 4.0.

Vanuatu's population of about 300,000 (Vanuatu National Statistics Office, 2020), of which over 90% are indigenous (Regenvanu, 2005), is scattered across 65 of these islands (Foster & Willetts, 2018; Boege & Hunt, 2020). Approximately three-quarters of Vanuatu citizens, referred to as ni-Vanuatu, live in rural areas (Vanuatu National Statistics Office, 2020; UNDP), the large majority of which live in extended-kin-based communities on traditionally owned land (Regenvanu, 2005; Huffer & Molisa, 1999).

Vanuatu's population is predominantly young, with a median age of just over 20 years (Vanuatu National Statistics Office, 2020). 59% of the population has completed primary education, 34% secondary education, and only 2% holds a tertiary degree (Vanuatu National Statistics Office, 2020). 48% have access to the internet in urban areas compared to 20% in rural areas (Vanuatu National Statistics Office, 2020). Most of Vanuatu's communities are small, geographically remote and largely reliant on subsistence agriculture without chemical inputs. In rural areas, 95% of households engage in crop production, 80% have livestock, and 40% engage in fishing (Vanuatu National Statistics Office, 2020). Over 80% of households in rural areas use solar lights as their primary source of lighting (Vanuatu National Statistics Office, 2020). In rural areas, 42% of private households rely on rainwater, 39% on some form of piped water, 10% on groundwater wells and 7% on river, lake or spring water as their main source of drinking water (Vanuatu National Statistics Office, 2020).

Vanuatu is home to a plethora of indigenous cultures, many with their own languages and traditions (Jowitt, 2005; McDonnell, 2019b; Morgan, 2013). There are over 110 languages spoken in Vanuatu (Nimbtik, 2020), making it one of the countries with the greatest density of languages in the world (Rothermund, 2006). As a result of the country's colonial history, English, French, and the widely spoken English-based creole lingua franca Bislama are Vanuatu's official languages (Miles, 2007; Taylor, 2015). English and French literacy rates are 76.9% and 40%, respectively, with little difference between men and women (Vanuatu National Statistics Office, 2020). Vanuatu faces significant economic and human development challenges common to many Pacific countries (Buggy & McNamara, 2015). The country's economy mainly

depends on tourism and foreign aid. While many people in rural areas live primarily on subsistence agriculture, some in these communities also have a small cash income from copra, timber, cocoa or kava production or by selling fruit, vegetables or woven mats at local markets (Taylor, 2015). In recent years, seasonal work in Australia and New Zealand has become a significant additional source of income (Petrou & Connell, 2018).

1.1.1 Historical context

Like many countries in the Pacific, ni-Vanuatu communities have a long history of contact with outside influences that shape national and local institutions to this day. The first documented arrival of European ships dates back to 1606, and regular contact between the local Melanesian population and Europeans began in the 19th century with European interests in whaling and Sandalwood and the arrival of missionaries in 1840 (Valjavec, 1986; Regenvanu, 2005; Bolton, 1998). Population numbers decreased drastically during this period, mainly due to imported diseases (Regenvanu, 2005; Lindstrom, 1997). This also led to the loss of culture, traditional knowledge, values, beliefs, and practices, known as *kastom* (Kalontano, Vatu & Whyte, 2003). In the mid-19th to early 20th century, islanders were taken, often by deception or force, to work in the cotton and sugar plantations of Queensland and Fiji, a practice known as blackbirding (Britannica, 2020). The islands came under dual British and French colonial rule in 1906 in an arrangement referred to as the Anglo-French condominium administration of the New Hebrides (Taylor, 2015; Jowitt, 2005; Rothermund, 2006; Bolton, 1998).

However, for the first five decades of colonisation, the colonial administration had limited reach and missionaries, planters, storekeepers, and traders were a far more visible influence on people living on the islands than the condominium government (Morgan, 2013; Bolton, 1998). Kastom governance systems continued to operate in parallel to the colonial social, political, and legal state systems (Jowitt and Cain (Eds), 2010). Missionaries during this period converted ni-Vanuatu to Christianity and introduced their governance systems and hierarchies, bestowing religious titles to local leaders (Miles, 2007; Lindstrom, 1997; Smith, 2016).

Vanuatu became independent in 1980 after 74 years under colonial rule (Taylor, 2015; Jowitt, 2005; Rothermund, 2006). The leaders of the anti-colonial independence movement and the first post-independence government under Vanuatu's first prime minister, Father Walter Lini, drew meaning from kastom to differentiate themselves from colonial influences (Regenvanu, 2005). They raised the profile of kastom and chiefs, borrowing authority and meaning to create unity (Lindstrom, 1997). Discourse about kastom featured heavily in Vanuatu's struggle for independence and post-independence rhetoric to demarcate a clear opposition to and departure from the colonial governments (Jowitt, 2005). Jowitt (2005) notes that as a country with many distinct cultures, the country's post-independence leaders artificially constructed a national kastom to strengthen national unity. While missionaries had also played a key role in suppressing kastom practices (Regenvanu, 2005), missionary-educated independence movement leaders embraced religion alongside kastom and missionaries were actively involved in shaping the nascent state (Miles, 2007; Morgan, 2013).

At independence, Vanuatu's diverse historical influences led to establishing a Westminster-style parliamentary democracy 'founded on traditional Melanesian values, faith in God and Christian principles' (Republic of Vanuatu, 1980). The country's constitution includes elements borrowed from kastom and religion alongside fundamental human rights and individual freedoms (Jowitt, 2005; Vanuatu, 1980). Rights-based and democratic elements at the core of Vanuatu's governance system often conflict with the conservatism of some forms of kastom and Christianity (Jowitt, 2005). For example, most spheres of governance, including national politics, are almost exclusively the domain of men (Morgan, 2013), which reflects the gender norms shared by kastom and local Christian churches. Until 2022, only five women have served in Vanuatu's national parliament since independence (Barbara & Baker, 2020). This number increased to six with the election of Julia King after 14 years of an all-male parliament (Stein, 2022). Voting preferences are often based on island links, local kinship and family ties, and the provision of direct benefits to supporters rather than the desire to influence national

policies and hold elected leaders accountable (Morgan, 2013; Barbara & Baker, 2020).

At the provincial level, provincial governments are expected to implement the work of national government departments but struggle to do so in practice due to a lack of the necessary resources and difficulties in recruiting staff with appropriate skills (Cox et al., 2007). As a result, provincial governments are frequently unable to fulfil the responsibilities that have been devolved to them and often cannot afford to visit communities in their province and support them with the provision of services (Cox et al., 2007).

1.1.2 Community governance

At the community level, it is common for community members to improvise with more or less formalised local governance structures (Allen et al., 2013). While the concept of community as a coherent entity has been criticised for idealising, romanticising, or oversimplifying diverse internal interests and concealing inequalities (Chowns, 2014; McDonnell, 2019a; Love, 2021), it can be practically useful when clearly defined and the heterogenous nature of communities is acknowledged (Dore, 2001). I am using the term community to describe people who live in close geographic proximity and identify as part of a community with shared characteristics, challenges and institutions such as chiefly structures and other governance systems. Following this definition, the three communities in this study consist of central villages surrounded by smaller clusters of houses occupied by extended families, often with their own chiefs (cf., Lindstrom, 2011). This definition reflects what study participants refer to when discussing their 'community', although the exact boundaries are sometimes fluid and context dependent. Community governance is defined by a web of often informal localised institutions that have evolved from kastom, colonial, church, state, and NGO governance systems.

The geography of Vanuatu, with its many islands combined with limited government resources, leads to a situation in which communities are primarily governed by locally available institutions (McDonnell, 2019b). In practice, due to the spread-out geography and resource constraints, most people outside

the largest two islands rarely see their government representatives (Kalontano, Vatu and Whyte, 2003). Kastom practices and Christian churches play an important role in most rural communities and often fill the governance vacuum created by a lack of direct engagement between the state and remote communities (Morgan, 2013; Cox et al., 2007).

Vanuatu has high levels of intergenerational cultural continuity, and a large majority of ni-Vanuatu regularly engage in aspects of kastom (Regenvanu, 2005; Kalontano, Vatu and Whyte, 2003). Local rules that govern everyday life are predominantly determined by chiefs (McDonnell, 2019b; Kalontano, Vatu and Whyte, 2003). Entrenched norms demand that community members respect chiefs. In return, chiefs act to promote community cohesion, setting rules and arbitrating conflicts (Cox et al., 2007). While chiefly governance systems vary between islands (Lindstrom, 1997), chiefs are often supported in these endeavours by assistants or advisors with specific areas of responsibility and the chief's police, whom the chief appoints to enforce rules and decisions (Kalontano, Vatu and Whyte, 2003). Chiefs are also part of local government councils, linking the state and chiefly systems and allowing the government to tap into their role as community leaders to enable smooth administrative functioning (Miles, 2007; Boege & Hunt, 2020; Lindstrom, 1997). Local chiefs also connect levels of governance through their membership in area and island councils of chiefs that appoint chiefs to the Malvatumauri National Council of Chiefs (Miles, 2007; Leathers, 2008).

Chiefs fill community governance, legal and policing roles using kastom law (Kalontano, Vatu and Whyte, 2003). Their work involves arbitrating land and chiefly title disputes, resolving conflicts between community members and overseeing community development (Boege & Hunt, 2020; Aswani, Albert and Love, 2017). Even though a range of criminal offences need to be referred to the formal legal system, in practice, chiefs are often the gatekeepers that decide whether a crime is reported to the police or criminal courts or dealt with locally through kastom processes (McDonnell, 2019b). Village courts run by chiefs are often the only option for local conflict resolution, as state courts are inaccessible and unfamiliar to many community members (Lindstrom, 1997). This role of chiefs as local judges is acknowledged in Vanuatu's constitution,

which states that in addition to Vanuatu's formal legal system, based on British and French laws, 'customary law shall continue to have effect as part of the law' (Republic of Vanuatu, 1980 Art.95(3)). Community members are expected to regularly contribute labour, food, or money to the chiefs, which are generally used to benefit the community, for example, by providing local services, thereby enhancing the chief's status and authority (Cox et al., 2007). However, the authority of chiefs is slowly being eroded as chiefs are no longer able to satisfy changing community expectations (see Chapter 5).

Christianity co-exists alongside kastom arrangements despite containing beliefs that do not appear compatible to outside observers (Jowitt, 2005). Christian beliefs were introduced by missionaries, who proselytised in Vanuatu's communities since the 1900s and remained a defining part of most people's identities to the extent of being perceived as indigenous to Vanuatu (Nimbtik, 2020). Involvement in church activities takes up significant amounts of people's time and resources, and pastors, alongside chiefs, are widely respected and influential community leaders. Most ni-Vanuatu are practising Christians of various denominations (Vanuatu National Statistics Office, 2020) and Christianity and is frequently referred to in public and private discourse.

Kastom or Christianity are conservative influences on community governance (Jowitt, 2005; Cox et al., 2007). Jowitt (2005) describes kastom as an often deeply conservative force in society, indicative of 'rejection of the central role of the state, anti-reformism, quasi-mythical reverence for the place of tradition and incrementalist and anti-rationalist view of social change' (p. 10) and argues that the influence of missionaries and churches also led kastom to adopt many conservative Christian principles. Kastom rules are often particularly restrictive for women and young people in local communities (Lindstrom, 1997). Institutional arrangements, norms and values that are imported from outside the country or region and do not fit within this conservative worldview are often rejected (Jowitt, 2005). In this way, real or fictitious kastom can be invoked by traditional power holders in communities to oppose social change, strengthen the status quo and reinforce their interests (Jowitt, 2005).

Nonetheless, kastom is not static but continuously evolving (Kalontano, Vatu and Whyte, 2003). Vanuatu's first prime minister, Father Walter Lini, recognised this in his independence address, remarking that "it will be the responsibility of successive parliaments and governments as well as the chiefs to preserve our custom but not to preserve it blindly and without reference to change. For custom has always changed with people's ideas, and it must continue to do so" (cited in Valjavec, 1986, p. 619).

While many communities only have irregular interactions with the national or provincial government, Vanuatu also has a long history of externally designed institutions being introduced into local settings to manage governance processes. This includes colonial governance structures prior to the country's independence and, more recently, the introduction of decentralised, community-based approaches to achieve *good governance* based on the principles that underlie liberal democracy through transparent and accountable local institutions (Huffer & Molisa, 1999; Morgan, 2013; Wong, 2010; Haapala & White, 2018). This good governance discourse emerged in the 1990s when interventions aimed at improving community governance became a focus for international organisations such as the World Bank, Asian Development Bank (ADB), and United National Development Programme (UNDP), donors including Vanuatu's largest donors Australia and New Zealand and non-government organisations working in the country (Huffer & Molisa, 1999; Morgan, 2013).

Good governance interventions often failed to take account of the complexities of the local context (Morgan, 2013) as institutions were often added to, and sometimes in competition with, pre-existing kastom and church governance systems. In practice, good governance interventions typically took the form of community-based management institutions in the shape of, for example, generic, externally designed water committees (Whaley, Cleaver & Mwathunga, 2021). This committee model of local governance has been influential in Vanuatu and globally (see Chapter 6) (Whaley, Cleaver & Mwathunga, 2021; Mommen, Humphries-Waa & Gwavuya, 2017).

1.1.3 Water governance context

In the following, I introduce the water governance context in Vanuatu. Water governance is used throughout this thesis as an example of community governance arrangements. Chapter 4 introduces additional background information on water governance in the study communities based on the data gathered for this thesis in the study communities.

Vanuatu's geography, with small communities spread out on often remote and difficult-to-access islands, does not lend itself to standardised water service provision. Neither the private nor public sector provide water supply services outside the urban centres. In rural areas, the onus of managing these water systems falls on the communities (String, Singleton & Latagne, 2017). As a result, access to water varies significantly between the urban centres and rural areas, home to about 75 per cent of Vanuatu's population (Vanuatu National Statistics Office, 2020). In rural areas outside Port Vila, communities mostly rely on small water systems, using groundwater, surface water and rainwater (Nath, Mudaliar and Ioan, 2006).

The Vanuatu government prioritised working towards universal and equitable access to safe and affordable drinking water for all by 2030 (Republic of Vanuatu, 2018d, 2016b), in line with the Sustainable Development Goals (SDG) indicator 6.1 (United Nations, 2015). Previously, Vanuatu performed well against the Millennium Development Goal (MDG) indicator 7C of halving the proportion of the population without sustainable access to safe drinking water and basic sanitation (Republic of Vanuatu, 2018d). However, an analysis of 351 water samples by the Department of Water Resources (DoWR) over several years found biological contamination in over half of the samples taken from community water sources (Rand, 2018). Other academic studies found similarly high levels of contamination (Foster & Willetts, 2018; String et al., 2017). The 2018 Vanuatu WASH Sector Analysis, jointly published by the Vanuatu Government, the United Nations Children's Fund (UNICEF) and the New Zealand Ministry of Foreign Affairs and Trade (NZ MFAT), notes that 'the Water, Sanitation and Hygiene (WASH) situation in Vanuatu is quite poor' (Rand, 2018, p.5).

Groundwater, surface water and rainwater sources are prone to faecal contamination from animals and humans (Foster & Willetts, 2018; Nath, Mudaliar and Ioan, 2006) and, in the absence of widespread water treatment or testing, can be unsuitable for drinking. No regular water testing is conducted in rural Vanuatu communities, and water treatment is rare and only advocated during emergencies (String et al., 2017). A 2013 demographic and health survey found that less than 20% of rural households use appropriate water treatment methods (Secretariat of the Pacific Community, 2014). A 2014 health survey found that overall, around 12% of children under the age of five had diarrhoea, which is a leading cause of mortality in that age group in Vanuatu, in the two weeks preceding the survey (Rand, 2018; Vanuatu, 2013a).

In communities with multiple water sources, communities often choose sources perceived as having good water quality for consumption, while water quantity is a key factor for non-consumption uses (Foster & Willetts, 2018). However, a study by Foster and Willetts (2018) across 10 Vanuatu islands found that communities with access to several different types of water sources did not always prefer the safest one for consumption use since their choice was mainly influenced by the taste and appearance of the water sources. All communities in the study used rainwater for drinking, while less than a third drank groundwater (Foster & Willetts, 2018). In communities where rainwater was the preferred source of drinking water, the authors found high-risk e-coli contamination in more than half of the rainwater sources in contrast to less than one-third of their groundwater sources that were contaminated to a similar degree.

Water collection in Vanuatu is primarily the responsibility of women, which means that poor or poorly maintained water infrastructure places an additional burden on women (Mommen, Humphries-Waa & Gwavuya, 2017; Rand, 2018). Women are also under-represented in water governance, despite the 2016 amendment of Vanuatu's Water Resource Management Act requiring 40% of water committee members to be female for water committees to be registered (Republic of Vanuatu, 2016a). A study on women's participation in water committees in Vanuatu found, in line with global

evidence, that women's involvement in water committees correlated with more effective water management and improved water systems in rural Vanuatu (Mommen, Humphries-Waa & Gwavuya, 2017). The authors argue that improving women's participation in water management, including in key roles, is likely to improve the overall efficiency and effectiveness of water programs (Mommen, Humphries-Waa & Gwavuya, 2017). People with a disability, who account for at least 5% of Vanuatu's population (Vanuatu National Statistics Office and UNICEF, 2014), are also disproportionately impacted by poor or poorly maintained water infrastructure and can experience a range of additional challenges that make it harder to access water.

Vanuatu is exposed to a range of natural hazards (Webb, 2020). It has repeatedly been ranked as a country with high or very high disaster risk in the World Risk Report (Day, S. J., Forster, T., Himmelsbach, J., Korte, L., Mucke, P., Radtke, K., Thielbörger, P. and Weller, D., 2020). The country's location in the 'Pacific ring of fire' and the Pacific cyclone belt (Vanuatu National Statistics Office, 2019) makes it particularly prone to volcanic eruptions, earthquakes, and tsunamis. In addition, communities frequently struggle with weather-related hazards such as cyclones, floods and droughts linked to El Niño Southern Oscillation (ENSO) cycles, rising temperatures, and sea level rise, all of which are impacted by climate change (String, Singleton & Latagne, 2017; Rand, 2018; Climate Risk Country Profile: Vanuatu, 2020).

In the past decade, Vanuatu was affected by several disasters that caused widespread destruction: In March 2015, category five tropical cyclone Pam made landfall in Vanuatu, affecting 195,000 people, and causing severe damage to water supply systems on several islands (Vanuatu National Statistics Office, 2019; Balaei, Wilkinson and Potangaroa, 2019). Shefa province, with the country's capital, Port Vila, and Tafea province were most affected (Vanuatu National Statistics Office, 2019). In 2018, the eruption of the Ambae volcano led to the evacuation of 12000 people from their home island (Vanuatu National Statistics Office, 2019). During the global COVID-19 pandemic, Vanuatu closed its borders to protect its population and the country's health system, significantly impacting its tourism-dependent economy (Republic of Vanuatu, 2020; Terauds, 2022). In April 2020, in the

early stages of the pandemic, another category five tropical cyclone, Harold, made landfall in Vanuatu, adding additional pressure to people's livelihoods and the country's economy (Republic of Vanuatu, 2020; Terauds, 2022). COVID-19 restrictions hindered the humanitarian response to the cyclone (Republic of Vanuatu, 2020; Terauds, 2022). On the 1st and 3rd of March 2023, two cyclones, Judy and Kevin, both category 4, struck Vanuatu, causing significant damage (OCHA, 2023)

Natural disasters are intrinsically linked with water safety (String, Singleton & Latagne, 2017), and frequent natural disasters in Vanuatu impact the availability of safe drinking water in rural areas across Vanuatu (Republic of Vanuatu, 2019). For example, drought conditions, which are often more severe in El Niño years, as well as floods, cyclones, tsunamis, or ash fall from volcano eruptions, can contaminate water and lead to water shortages. Cyclones, earthquakes, and tsunamis can also destroy water infrastructure. Saltwater intrusion due to sea-level rise can make water sources near the coast unusable. High rainfall variability leads to frequent water shortages in rural communities, particularly during El Niño dry seasons (String et al., 2017).

About two-thirds of households already experience water shortages at certain times of the day or the year (Rand, 2018). Vanuatu's high variability of rainfall, which will be exacerbated by climate change, is particularly challenging for the third of Vanuatu households that rely on rainwater (Vanuatu National Statistics Office, 2020; Rand, 2018). The Vanuatu National Statistics Office's Vanuatu Hardship and Poverty Report (Vanuatu National Statistics Office, 2013) argues that access to water in Vanuatu is more dependent on geographical location than other factors, such as the vulnerability status of households. The geographical remoteness of many Vanuatu communities also limits access for government and non-government agencies before and after disasters, impacting their ability to support community disaster preparedness and response (Balaei, Wilkinson & Potangaroa, 2019). My observations, based on working on projects involving communities in rural Vanuatu over the past ten years, confirm that the topography of an area, along with its remoteness from major cities and transport infrastructure, play a significant role in the ability of communities to access safe drinking water. Vanuatu's

geography and transport infrastructure also make procuring infrastructure such as water tanks or large amounts of pipe expensive and logistically challenging. The limited engagement of communities on the outer islands with the cash economy often renders the high costs of installing, maintaining, or repairing water infrastructure out of reach. Apart from difficulties accessing the necessary parts, many communities also lack the skills to carry out repairs. As a result, many of Vanuatu's existing water systems are in disrepair.

1.1.4 Water committees

Prior to the 1980s, government and NGO development initiatives in rural Vanuatu focused on one-off installations of gravity-fed water systems, rainwater tanks and groundwater wells. The International Decade for Drinking Water and Sanitation in the 1980s saw a major global policy shift from top-down water infrastructure provision to involving communities in developing water systems and transferring responsibility for water management (Hutchings et al., 2015; Kemerink et al., 2015). More recently, the Vanuatu government introduced significant reforms in the water sector, including the ambition to establish water committees for each of the more than 2000 small-scale water systems in the country (Republic of Vanuatu, 2018b). Implementing this initiative gained momentum as part of the disaster response to tropical cyclone Pam. NGOs, on behalf of the government, set up or revived water committees to govern and manage repaired or newly established water systems as part of their disaster response activities. However, governance structures in rural communities cannot match the role the state and private sector play in urban areas in service provision and introduced committees frequently stop functioning once external facilitators have left (Cox et al., 2007). In a national census of water points conducted between 2014 and 2016, 69 per cent of all community-owned water systems were not governed by water committees (Mommen, Humphries-Waa & Gwavuya, 2017).

While water committees might appear to be primarily a body responsible for the maintenance and repair of the water infrastructure, a significant amount of their role often involves water governance, such as setting and amending rules related to water access and use, deciding on water fee amount, collection

and exemptions, budgeting and prioritising how funds are being used, resolving water-related disputes, sourcing external support, planning for future developments, negotiate water use agreements with external actors, regulate non-compliance or organise fundraising activities. I, therefore, consider water committees as governance and management institutions.

1.2 RESEARCH QUESTIONS AND OBJECTIVES

Considering this context, this thesis explores community governance in Vanuatu, using water committees as an exemplar in chapters 4 and 6 and village councils and chiefly structures in Chapter 5. As discussed in more detail in Chapter 3, my theoretical framework draws on critical institutionalist literature, which explores how institutions emerge and function, and the concept of institutional bricolage, which describes how people assemble or modify institutional arrangements from locally available institutional building blocks to make them suit the local context or respond to changing situations. This analytical lens enables me to explore institutional phenomena in my data from the study communities, thereby contributing to a better understanding of community governance in Vanuatu. In the process, I contribute to validating the explanatory power of institutional bricolage in a new context.

1.2.1 Research questions

Accordingly, the overarching question that this thesis looks to answer is:

> What does the application of critical institutionalism through the lens of institutional bricolage reveal about community governance in Vanuatu?

This question is explored through four chapter-specific research questions that explore different aspects of the overarching research question and, together, contribute to answering it.

Chapter 4: How do community governance arrangements vary across study communities?

Sub-questions:

How is community governance organised in the three study communities?

How is water governance organised in the three study communities?

What does an institutional bricolage lens reveal about introduced community governance institutions?

Chapter 5: What insights do critical institutionalist concepts offer when applied to autonomous change processes in traditional institutions?

Sub-questions:

How is the agency of bricoleurs to bring about institutional change enabled and constrained by existing social structures?

How are autonomous institutional changes shaped by existing power relationships, and why do they reproduce existing inequalities?

What does agonism reveal about the wider politics of autonomous institutional change?

Chapter 6: What explains the persistence of *ghost committees* – committees that are widely referred to but that do not exist in practice?

Sub-questions:

What is the role of the committee model discourse, which views committees as a solution to community governance challenges?

How do *ghost committees* emerge and endure?

Why does the committee model persist despite evidence that it rarely works as expected?

Chapter 7: How can insights from critical institutionalism support efforts towards equitable and enduring institutional change?

Sub-questions:

To what extent can institutional bricolage be managed?

To what extent can institutional design methods be harnessed to effect equitable and enduring outcomes?

1.2.2 Research objectives

In answering these research questions, I aim to address the following objectives:

1. To provide a thick description of the context and local water governance arrangements in the three study communities in Vanuatu

2. To explore mechanisms behind specific observed phenomena by applying critical institutionalist theory to community institutions in the three study communities.

3. To explore if and how institutional bricolage processes can be facilitated to create enduring and equitable governance arrangements.

An additional objective of activities and publications linked to this thesis is to share practical insights into institutional change mechanisms with policymakers and development practitioners in Vanuatu and elsewhere to support their efforts in improving governance and management of local services and natural resources and create enduring and equitable outcomes.

1.3 THESIS AND CHAPTER STRUCTURE

This chapter (1: Introduction) outlines the research context, my problem statement, and the research questions. I define the research problem and explain my objectives. Chapter 2 provides a literature review that introduces critical institutionalist theory and the concept of institutional bricolage (IB), which form the foundation for my analysis in the analytical chapters. In addition, chapters 5, 6 and 7 introduce literature that focuses specifically on the theory and concepts used for analysis in these chapters. The methodology chapter (3) outlines the methods for data collection and analysis used to explore my research questions. I also reflect on my positionality and research ethics and discuss limitations.

Results are presented in three analytical chapters that draw on primary data generated during fieldwork: The first analytical chapter (4) provides context information on the three rural study communities on Epi and Efate islands in Vanuatu. It introduces the diverse governance arrangements in the

study communities, focusing on the case of water governance. One of the study communities had several committees responsible for governing different aspects of community life. In contrast, most committees were dormant or no longer operational in two of the three study communities. Using the example of the government-mandated water committees that were established in each community, I examine the mechanisms that subsequently gave rise to different water governance structures and outcomes. I use the concept of institutional bricolage as an analytical lens to unpack how the introduced governance arrangements that constitute water committees were adapted or rejected in response to diverse local contexts and pre-existing governance structures.

The second analytical chapter (5), which was turned into a paper published in the International Journal of the Commons (Vorbach & Ensor, 2022), explores autonomous change processes in traditional institutions. While the effects of introducing new institutional arrangements from outside have been widely studied, autonomous changes – that is, those that originate from within communities – are not well understood. My analysis reveals how the interplay of two established institutional bricolage processes – elite capture and leakage of meaning – operated to open up and close down spaces for change. I draw on agonistic accounts to reveal the significance of the political at the local level, through which the social plurality of village life is negotiated, resulting in profound shifts in some norms and the maintenance of others. I conclude with reflections on the prospects of unsettling the deep-rooted exclusion from decision-making of groups such as women and young people through future autonomous changes in village governance.

Chapter 6 identifies the phenomenon of committees that do not exist in practice yet are referred to by stakeholders at different levels as if they were performing their intended role. I investigate the conditions that lead to the emergence of these *ghost committees* and identify a feedback loop between the national and international committee model discourse and the emergence of ghost committees at the community level. I argue that this feedback loop contributes to the endurance of ghost committees and the persistence of the discourse despite evidence that these committees rarely work as intended.

Chapter 7 draws together lessons from the previous chapters to respond to critiques of the usefulness of the institutional bricolage concept in informing development practice. Drawing on critical institutionalism and agonism, I discuss how institutional bricolage processes could be facilitated to further enduring and equitable outcomes and respond to two widely cited obstacles to adopting facilitated bricolage approaches: The perception that development practitioners need to become experts in navigating complex, diverse institutional arrangements in each local context and the challenge that institutional bricolage processes replicate inequalities. I propose a community-based facilitated institutional design (CBFIB) approach to reduce the need for external experts to design enduring local institutions and argue for introducing complementary programs that employ agonistic methods to challenge local norms and values and reduce inequalities over time. In my conclusion chapter (8), I revisit the findings of the chapter in response to my research questions and reflect on their implications for further research.

Chapter 2: Literature Review

This chapter introduces the literature on critical institutionalism, which is an interdisciplinary body of literature that 'explores how institutions dynamically mediate relationships between people, natural resources and society' (Cleaver & de Koning, 2015, p. 1) and the critical institutionalist concept of institutional bricolage, which describes how people assemble or modify institutional arrangements from locally available institutional building blocks to make them suit the local context or respond to changing situations. In the following, I use the term 'institutional bricolage' to refer to my analytical lens and 'bricolage processes' as a collective term for the institutional change processes I identify through this lens. Critical institutionalist theory and institutional bricolage provide the theoretical context of this thesis. I also introduce critical realist literature, which underpins the ontology and epistemology of this thesis.

In addition, chapters 5, 6 and 7 introduce literature that focuses specifically on the theory and concepts used for analysis in these chapters. In Chapter 5, I review critical institutionalist literature on the relationship between structure and agency to explain the formation and alteration of institutions, the role of elite capture and leakage of meaning in the maintenance of inequitable social relations and introduce the nascent body of literature that links agonistic accounts of the political with critical institutional theory. In Chapter 6, I review critical responses to the committee model of local governance and briefly review the literature on the dialectical relationship between discourse, power, and institutions. In Chapter 7, I introduce practice-oriented literature that discusses the potential to facilitate institutional bricolage and *work with the grain* of existing local structures and context.

2.1 INSTITUTIONS

There is little agreement in the literature on how to define institutions or conceptualise the process of institutional change (Liebrand, 2015; KINGSTON and CABALLERO, 2008). While traditional definitions often focused on institutions as formal organisational structures, mainstream institutionalist authors broadened this definition to include informal rules and norms (North,

1990; Ostrom, 1990; Lowndes, 2010). According to North's (1990) seminal definition: 'Institutions are the rules of the game in a society or, more formally, are the humanly devised constraints that shape human interaction' (North, 1990, p. 3). For the purpose of this thesis, I define *institutions* as systems of socially shared rules, norms and beliefs that structure people's day-to-day behaviour and interactions (North, 1990; Hodgson, 2016; de Koning, 2011; Scott, 2014). This enables me to discuss a range of institutions that shape local-level community governance, from readily observable institutions, such as village council rules captured in a policy document, to implicit and hidden norms, such as those around women's participation in meetings (Hodgson, 2016; Mohmand, 2016). Institutions have some degree of permanency (Merrey et al., 2013; Uphoff, 1992) but are not static and change over time.

The literature on institutions for community governance and management in developing country contexts over the past three decades mostly focuses on natural resource management (de Koning & Cleaver, 2012). It can be categorised into two schools of thought with normatively and methodologically distinct approaches to analysing the emergence and functioning of institutions (Johnson, 2004). This divide runs broadly along the lines of economic and anthropological scholarship (Bardhan & Ray, 2006). These two bodies of literature have been variously referred to as collective action and entitlement schools (Johnson, 2004; Hall et al., 2013), economic-institutional and sociological-historical approaches (Mosse, 1997), or mainstream institutionalism and critical institutionalism (Johnson, 2004; Hall et al., 2013; Cleaver, 2012). In the following, I use the terms mainstream and critical institutionalism.

Mainstream institutionalism generally focuses on the role of rules, incentives, and sanctions to bring about efficient collective action to conserve common resources (Ostrom, 1990; Johnson, 2004). They aim to create a general theory that can be used to predict outcomes (Hall et al., 2013). Critical institutionalist theory aims to explain contextually and historically specific outcomes (de Koning & Cleaver, 2012). As with other critical theories, critical institutionalism emphasises and challenges the role of power relationships and inequality (Devetak, 2013). Critical institutional authors' focus is, therefore,

often on unequal access to natural resources and poverty reduction (Johnson, 2004).

In the following, I discuss critical institutionalist literature as it relates to this thesis, starting with the emergence of critical institutionalism as a reaction to the body of literature that falls under the umbrella of mainstream institutionalism. I introduce critical institutionalism and the concept of institutional bricolage as the framework I use to analyse my data and aim to validate and expand by applying it to the context of the study communities.

2.2 MAINSTREAM INSTITUTIONALISM

Since critical institutionalism emerged as a reaction to mainstream institutionalism, it is useful to start with an overview of mainstream institutionalism to point out the key points of difference between the two approaches (Hall et al., 2013). Mainstream institutionalism was itself, in large parts, a reaction to the previously dominant view that natural resource governance was driven by rational, self-interested individuals seeking to maximise their own benefits at the expense of collective action, which would ultimately lead to the overuse or depletion of limited, shared resources (Mosse, 1997; Cleaver, 2012; Hardin, 1968). This idea was most influentially articulated in Hardin's (1968) paper on the tragedy of the commons (Johnson, 2004; Mosse, 1997). It rapidly established itself as the working assumption of many economists and political scientists and was used by some scholars to argue for state management or privatisation of common-pool resources to prevent over-exploitation (Ostrom, 1990).

While successful collective action and institutional arrangements to manage common-pool resources had been captured in many anthropological case studies, this dominant discourse on common-pool resources only changed through the arrival of economic theories of collective action, which marked the beginning of what was to become mainstream institutionalist literature. Mainstream institutionalist scholars set out to disprove Hardin's pessimistic views on the inevitable depletion of shared resources by demonstrating that collective action to manage common-pool resources was not only possible but also widespread in practice (Johnson, 2004).

Mainstream institutionalist scholars employed largely positivist political science and economics methodologies to analyse a large number of case studies to determine favourable conditions for cooperative governance of common-pool resource management (Ostrom, 1990; Johnson, 2004; Mosse, 1997). Based on the assumption that individuals make rational decisions on the perceived costs and benefits of their actions within the limits of a set of shared rules, mainstream institutionalist theories successfully overturned Hardin's thesis and aimed to predict the specific conditions that would lead to efficient resource allocation while preserving the commons (Ostrom, 1990; Johnson, 2004; Mosse, 1997). This approach initially appeared useful to inform future policies and institutional design in a wide range of contexts, which appealed to policymakers, donors, and development practitioners (de Koning & Cleaver, 2012; Hall et al., 2013; Hassenforder & Barone, 2018). As a result, mainstream institutionalism rapidly gained momentum in development policy and practice in the 1990s with a push to introduce institutional reforms based on mainstream institutionalist theories and achieve development outcomes at scale under the umbrella of good governance (Rusca & Schwartz, 2014).

Institutions, such as local water committees, based on generic good governance principles, including participation, decentralisation, accountability, representativeness, transparency, and inclusiveness, were introduced across the developing world under the assumption that this would lead to effective, equitable and sustainable service delivery (Rusca & Schwartz, 2014; Cleaver & Whaley, 2018). In practice, these were often translated into simplified, prescriptive checklists for designing successful institutions (Cleaver & Whaley, 2018). This abstraction has played an important role in the widespread deployment of these models because it allowed them to be rolled out quickly in many different contexts.

2.2.1 Design principles

Mainstream institutionalism is exemplified by political economist Ostrom's (1990) influential book Governing the Commons. Ostrom responds directly to the tragedy of the commons and related versions of the free-rider problem that suggest that rational, self-interested individuals will not engage in

collective action unless they can be excluded from its benefits - even if they know that nobody will benefit if there are too many free-riders (Ostrom, 1990). Ostrom and her team set out to determine characteristics of successful self-governing common-pool resource management institutions to explore how these institutions regulate the collective use of limited resources and maintain their use at sustainable levels. They used coding to transform a large number of existing qualitative case studies on institutions into data, which they analysed empirically through quantitative economic analysis methods (Ostrom, 1990).

Ostrom (1990) found that institutions they considered successful in delivering their intended outcomes display several common characteristics that they believed could explain why shared resource management succeeds or fails. They argue that these could be combined to design new, similarly effective and enduring institutions (Hall et al., 2013). These characteristics, presented as design principles, include conditions such as clearly defined boundaries of resources and the rights to use them, congruence between rules and local conditions, the ability of those affected by rules to be involved in changing the rules, monitoring of appropriate behaviour and graduated sanctions, and conflict resolution mechanisms (Ostrom, 1990). Ostrom (1990) believed that if 'everyone, or almost everyone, follows these rules, resource units will be allocated more predictably and efficiently, conflict levels will be reduced, and the resource system itself will be sustained over time' (p. 43). This search for universally applicable predictions or laws, which are subsequently used to guide the design and implementation of local resource governance, management, and service delivery institutions, is a central part of mainstream institutional literature (Huffer & Molisa, 1999; Australian Agency for International Development, 2000; Hassenforder et al., 2015).

The promise of design principles to improve institutional outcomes offers 'a seductive narrative that continues to justify the committee model of local governance' (Whaley, Cleaver & Mwathunga, 2021, p. 1). This narrative may explain why mainstream institutional theory has influenced the dominant development discourse and has been applied widely to design institutions for the management of common pool resources in developing countries, such as

water, forests, and fisheries (Haapala & White, 2018; de Koning & Cleaver, 2012; Cox, Arnold & Tomás, 2010). Getting institutions right to contribute to good governance became a common mantra for international development donors, NGOs, and governments in the Global South in the 1990s and 2000s (Cleaver & Whaley, 2018).

2.3 CRITICAL INSTITUTIONALISM

Critical institutionalism describes an interdisciplinary body of literature focusing on the role of local institutions in mediating 'relationships between people, natural resources and society' (Cleaver, 2012, p. 1). It brings together diverse authors from different academic disciplines that critique and seek alternatives to mainstream institutionalist approaches that abstract local contexts and people's complex identities and rationalities to predict institutional outcomes rather than considering them vital to understanding institutional change (Hassenforder & Barone, 2018; Cleaver & Whaley, 2018; Hassenforder et al., 2015; Johnson, 2004; Mosse, 1997).

Critical institutionalist scholars are sceptical about the potential of institutional design to promote good governance processes and deliver benefits for poor and marginalised community members (Cleaver, 2012). As institutions designed according to good governance principles were introduced across the globe, critical scholars from a range of academic traditions began to raise concerns as to whether the idea of following a set of design principles can ensure effective, equitable and enduring service delivery (Rusca & Schwartz, 2014; Cleaver & Whaley, 2018). They criticised these assumptions by arguing that, in practice, standardised institutions are moulded to local realities as a result of institutional bricolage processes (Cleaver, 2012; Rusca & Schwartz, 2014). Critical institutionalist scholars point out that social stratification and existing, often hierarchical, institutions will impact how decisions are made, and benefits are shared, thereby reshaping outcomes of standardised models and reproducing power relationships and inequalities (Rusca & Schwartz, 2014).

Critical institutionalists explore the complex and socially embedded processes behind the emergence and evolution of local institutions (Cleaver &

de Koning, 2015; Johnson, 2004; Wong, 2013; Hall et al., 2013). They rarely get involved in the development of general or predictive theories and are generally critical of such efforts (Johnson, 2004; Hall et al., 2013). Instead, critical institutionalist scholars use insights from various disciplines, including anthropology, sociology, political ecology, and psychology, to develop methods to diagnose community governance arrangements (Cleaver & de Koning, 2015). Critical institutionalist authors are also critical of the assumption that individuals make rational choices, which forms the basis of mainstream institutional thinking (de Koning & Cleaver, 2012). They note that people's decisions do not exclusively depend on their rational economic interests but are also socially, emotionally and morally situated (de Koning & Cleaver, 2012). How their agency affects outcomes is, therefore, not predictable (Cleaver, 2012). Instead, critical institutionalist scholars focus on explaining the complexity of institutions in their social, cultural, and historical context (de Koning & Cleaver, 2012).

A critical institutional lens takes account of the historical and political context, including moral codes, agreed values and traditions, which are mostly overlooked by mainstream institutional scholars (Mosse, 1997). For critical institutionalist authors, institutions are 'always enmeshed with and emerge out of people's systems of meaning and culturally accepted ways of doing things' (Whaley, 2018, p. 139). Accordingly, they question the utility of rolling out generic, externally introduced institutions (Cleaver & de Koning, 2015; Liebrand, 2015; Hall et al., 2013). Other recurring themes in the critical institutional literature include the importance of accounting for the complexity of socio-institutional relationships, the interplay between social structures and people's agency, as well as the connections between different levels of governance (Hall et al., 2013; Cleaver, 2012).

Many of these features have their roots in critical realism and other critical theories (Cleaver & de Koning, 2015). A critical institutionalist approach allows for the creation of thick, power-sensitive, and contextualised descriptions and explanations of governance arrangements in local communities (Cleaver & Whaley, 2018). However, the complexity and lack of general, predictive theory and practical guidelines can create barriers for policymakers and implementers

to access and use this information (Hall et al., 2013). Hall et al. (2013) point out that 'making complexity legible' is a significant challenge for critical institutionalists (p. 82).

While both mainstream and critical institutionalists are primarily concerned with the study of institutional arrangements for natural resource management in developing countries, their objectives, assumptions, and methodologies differ fundamentally (Johnson, 2004). Where mainstream institutionalism aims to enable efficient use and management of common resources, critical institutionalist authors often regard poverty reduction and equitable distribution of resources as the key objective (Johnson, 2004). Critical institutionalist literature has a strong focus on how power relationships shape the often inequitable benefits from institutions and highlight challenges for poor and marginalised people to gain and maintain access to natural resources, particularly in the Global South (Johnson, 2004; Cleaver, 2012, 2005; Wong, 2013).

The way in which critical institutionalists explore the complex interactions of phenomena in their broader context does not lend itself to developing prescriptive advice for institutional design (Whaley & Cleaver, 2017). Its strength lies in diagnosing the underlying causes of phenomena (Whaley & Cleaver, 2017). This diagnosis of the problem leads to increased clarity of local governance processes, which can help avoid some of the pitfalls of more prescriptive approaches. This diagnosis acknowledges that development models are not value-neutral and come with their own ideological viewpoints of what constitutes the problem and how it should be addressed (Rusca et al., 2014). For example, the promotion of values such as participation, empowerment, or equity, which appear to be universal, has the potential to disrupt and change existing social structures and power relationships within communities, either by design or inadvertently (Rusca et al., 2014).

Critical institutionalist analysis diagnoses these potential incompatibilities of local and external governance arrangements, which can provide the foundation for more deliberate and informed decision-making and negotiation processes. Whaley and Cleaver (2017) note that 'rather than working from an idealised (typically Western) version of how governance should be, these

political economy analyses instead focus on the specific historical and present-day context of the case in question in order to understand why particular challenges or issues exist'. The time-consuming focus on analysing complexity can make it difficult for time-poor policymakers or development practitioners to translate critical institutionalist approaches into practice, which limits their utility (Cleaver & de Koning, 2015).

Bardhan and Ray (2006) argue that the differences between mainstream institutionalist and critical institutionalist approaches create challenges for interdisciplinary collaborations. However, they hope that acknowledging these differences offers opportunities for dialogue and a better interdisciplinary understanding and appreciation of their respective strengths. For example, Cleaver (2012) considers whether 'the introduction of new institutions provides fresh resources, elements of which can be recombined and altered, so shifting old arrangements and producing something new and different' (p. 196). Hall et al. (2013) agree that the assumptions of mainstream institutionalist and critical institutionalist scholars do not necessarily need to be antagonistic, and Ostrom more recently expressed concern that applying her design principles indiscriminately as "overly simplistic panaceas for 'curing' the tragedy of the commons" could "destroy self-organised solutions that do not fit preconceived notions of an 'optimal' solution" and argues for the importance of studying the role of uncertainty, complexity in relation to institutions (van Laerhoven & Ostrom, 2007, p. 19).

While critical institutionalism does not offer guidance in the form of predictions to inform development practice, it encourages a change in how academics, policymakers and development practitioners think about how institutions emerge, are maintained and who benefits from them, which might be equally important to development practice.

2.4   INSTITUTIONAL BRICOLAGE

In her seminal book Development through Bricolage, Cleaver (2012) explores how institutions emerge, adapt and function and why institutional outcomes are often inequitably distributed by introducing the concept of institutional bricolage. Institutional bricolage synthesises and develops key

elements of critical institutionalism and social theory to explore the underlying mechanisms of institutional change, with particular attention to power relations and how agency is both shaping and shaped by social structures. The concept draws on the work of Mary Douglas (1986), who in turn adapted Claude Levi Strauss' (1966) concept of intellectual bricolage as well as critical realist theory (Cleaver, 2012). In its original meaning, the French word 'bricolage' describes do-it-yourself crafting or construction activities.

Drawing on the literature and supported by empirical case study research, Cleaver argues that institutions can never be fully designed or replicated because socially situated people tend to negotiate, contest, and change certain aspects to make them fit their local requirements and sociocultural context. She suggests that institutions for natural resource management work best when they align with existing local institutional structures and defines *institutional bricolage* as 'a process in which people consciously and non-consciously draw on existing social formulae (styles of thinking, models of cause and effect, social norms and sanctioned social roles and relationships) to patch or piece together institutions in response to changing situations' (Cleaver, 2012, p. 45). The people driving bricolage processes, frequently referred to as bricoleurs, improvise by using available institutional resources within the limits of existing structure (Cleaver, 2012; Douglas, 1986b).

The concept of institutional bricolage has been widely used to explain the emergence and functioning of institutions governing a range of resources in different contexts (Cleaver, 2012). It has, however, rarely been used as an analytical lens in communities living in small island developing states in the Pacific (cf., Cleaver & de Koning, 2015)

Institutional bricolage seeks to describe and explain how institutions emerge, adapt, persist, or fail over time through the reworking of existing elements (Cleaver, 2012). For Cleaver (2012), 'clarity of analysis is achieved not by reducing institutional functioning to a few clear principles but rather by shining light into shadowy places to illuminate the process through which institutional outcomes are formed' (Cleaver, 2012, p. 212). Institutional bricolage draws on many elements at the centre of critical institutionalism

(Hassenforder & Barone, 2018) and is a useful lens for analysing and explaining institutional phenomena. It is at the heart of critical institutionalist explanations for why externally introduced institutions seldom fit with or substitute local institutions (Cleaver, 2012; Rusca & Schwartz, 2014). This incongruity frequently leads to unexpected and undesired outcomes when institutions are introduced in such a way (Rusca & Schwartz, 2014).

2.4.1 Bricoleurs

At the core of institutional bricolage is the practical observation that people improvise institutional arrangements from existing practices and relationships in much the same way an amateur craftsperson would use available skills and whatever materials are at hand to make improvements to an existing object or to create a new one (Douglas, 1986). The people driving bricolage processes, known as bricoleurs, are combining locally available political, social, cultural and symbolic resources and relationships in new ways to craft or shape institutions in response to everyday challenges or new conditions (Cleaver, 2012; Cleaver & de Koning, 2015; Cleaver & Whaley, 2018; Ingram and of, 2015). Bricoleurs remix or reuse components of different institutions in ways that often differ from their original purpose and combine them with new ones (Cleaver & de Koning, 2015). Drawing on old, traditional, and familiar arrangements and logics in this way opens the door for and reduces resistance to adaptations and newly invented or borrowed arrangements (Cleaver, 2012). New, often external concepts or approaches that are deemed appropriate to the local context and reflect local values can also be adopted and legitimised through bricolage processes, while other new ideas fail to establish themselves (Cleaver, 2012).

The ability of bricoleurs to drive institutional change can be understood in relation to pre-existing social structures which limit or enable their agency (Cleaver, 2012; Douglas, 1986). The relationship between structure and agency is thus key to explaining the formation and alteration of institutions; here, *social structures* are defined as relatively enduring patterns of social institutionalised relationships that underly social interactions and enable or constrain human agency (Munkvold & Bygstad, 2011; Sayer, 2000). Agency is

understood as the capacity to create and implement institutional changes. In a critical institutionalist understanding, actors are constrained or enabled by pre-existing structures and use their agency, often unintentionally, to reproduce and, less frequently, transform future structures (Archer, 1995; Bhaskar, 2015; Whaley, 2018).

As bricoleurs assemble new institutional arrangements from those they are already familiar with, aspects of authoritative meaning are transferred from one context to another using metaphors and analogies (Cleaver, 2012; Douglas, 1986; Lund, 2006; de Koning, 2014). This leakage of meaning provides new or changed institutions with familiarity, authority, and legitimacy that helps sustain them and assist their integration into the local fabric, which I refer to as naturalisation (Cleaver & de Koning, 2015; Lund, 2006). In this context, the term *meaning* refers to 'symbolic authority, arrangements, and values' (Koehler et al., 2018, p. 269). Leakage of meaning occurs when bricoleurs take symbols, discourses, and authority from one context and use them in another, making new institutional arrangements instantly familiar and conferring on them the legitimacy associated with earlier arrangements (Cleaver, 2012). This process thus addresses one of the key barriers to institutional endurance: being regarded as illegitimate (Rusca et al., 2014).

Institutions are not only influenced by the local context but also by actors and governance arrangements at other scales (Cleaver & de Koning, 2015). Institutional analysis based on institutional bricolage, therefore, needs to include the role of both local and external agents of change and wider structural factors (Jones, 2015). This includes but is not limited to the influence of national-level rules and laws, which remain the primary path for many governments to try to shape and enforce local institutional arrangements despite frequently clashing with pre-existing local institutions, leading to unexpected impacts (Sidibé et al., 2018). Institutional bricolage, therefore, holds that institutions are never completely new, combining logics and meaning from a range of pre-existing and local governance arrangements while incorporating new and external ones (Cleaver, 2012).

Contrary to the traditional model of designed formal institutions, institutions formed through bricolage are often fuzzy and multi-purpose

(Cleaver, 2012). They rarely perform a single function, and their functions do not necessarily align with their original purpose (Cleaver, 2012). For example, church groups might organise water tanks for schools, water committees might be used to spread disaster preparedness messages, and women's savings groups might also collect water fees. In addition, many institutions are only active when needed and lie dormant at other times (Cleaver, 2012), as might be the case with a disaster management committee that only meets after disaster alerts have been issued or a water committee that only meets in response to a problem or request.

Institutional bricolage, however, does not necessarily lead to the most efficient outcomes and tends to reinforce inequitable power relations and unequal access to common-pool resources that advantage some while excluding others (Johnson, 2004; Cleaver, 2012; Hassenforder & Barone, 2018; Cleaver & Whaley, 2018). Power imbalances within communities mean that some bricoleurs have a more significant influence over the direction of institutional change than others (Rusca & Schwartz, 2014). As a result, institutional change often benefits local elites and reproduces or reinforces existing power relationships and inequalities. These processes of elite capture shape whose vision of governance results from institutional change and allows local elites to secure the benefits and further consolidate their power (Wong, 2010). Elite capture frequently goes unnoticed, unchallenged or can even be encouraged by the community due to existing patron-client relationships or because the role of elites as representatives of the community is ingrained in the social fabric (Rusca et al., 2014; Wong, 2013). Therefore, the legitimacy of institutions relies, in many cases, on the maintenance of highly inequitable social relations (Agrawal & Bauer, 2002; Cote and Nightingale, 2012).

2.4.2 Institutional bricolage and water governance

A growing number of authors have started to draw on institutional bricolage to analyse and diagnose institutional arrangements in different contexts (Rusca et al., 2014; Mirhanoğlu et al., 2023; Houdret & Heinz, 2022; Suhardiman, Manorom and Rigg, 2022; Ingram and of, 2015; Haapala et al., 2016). This includes multiple examples of institutional bricolage applied to

water governance in different settings (Nunes & Fielmua, 2022; Haapala & White, 2018; Peloso & Harris, 2017; Ducrot, 2017).

Rusca et al. (2014) applied institutional bricolage to analyse the transfer of water management responsibilities from state-run irrigation systems to users and explore whether this would lead to more efficient and equitable outcomes. The authors note how the use of an external 'blueprint' water governance model resembling democratic modern institutions changed when it collided with socially embedded institutions during the implementation of the project (Rusca et al., 2014). The authors note that the observed process of institutional bricolage watered down the project's stated desires to create participatory and equitable decision-making leading to affordable, reliable provision of safe water and community empowerment (Rusca et al., 2014). Instead, they found that the model strengthened the authority and privileges of local elites (Rusca et al., 2014). In one example, the prescribed democratic process of electing a committee was, in practice, replaced by nominations by the chief. (Rusca et al., 2014) noted that these types of departures from the model that benefitted local elites went unquestioned by those with less power in the committee (Rusca et al., 2014). The authors concluded that in their case study, the combination of the external institutional model with pre-existing local hierarchical power relationships through a process of institutional bricolage led to entirely negative outcomes, including high water prices, poor maintenance, and inconsistent access to water. They regard this as a cautionary example of how institutional bricolage processes can counteract the intentions of development interventions. Rusca et al. (2014) conclude that to work effectively, newly introduced institutions need to integrate into the local environment and interact with local authorities and rules (Rusca et al., 2014). They note that these insights might apply more broadly to the roll-out of institutions such as water committees by governments and NGOs (Rusca et al., 2014).

Peloso and Harris (2017) use the concept of institutional bricolage to explore the 'messy nature' of institutional arrangements as part of their research on water governance in a peri-urban settlement in Ghana. In their case study site, the authors were unable to identify committees that had a

specific water governance mandate. Instead, they found a range of active participatory, collective decision-making fora that were not directly related to water management. The authors express concern that employing general institutional design principles could undermine such existing governance arrangements in addition to not being embraced because they lack meaning. Instead, they suggest that existing groups might be a good starting point for creating participatory water governance institutions and avoid externally crafted institutions encroaching on the domain of local institutions. This also prevents 'particular Western views and understandings of what types of institutions are needed and appropriate' from setting the agenda (Peloso & Harris, 2017, p. 1502-1503). In line with institutional bricolage thinking, the authors suggest that institutional design processes should draw on and adapt past and present institutional arrangements that are rooted in local history to fit current requirements rather than introducing new institutions, such as water committees from the outside (Peloso & Harris, 2017).

Haapala and White (2018) note that institutional bricolage is a useful approach to explain how institutional change happens in practice. The authors used institutional bricolage as a lens to explore the role of local development practitioners in implementing water institutions in rural Nepal. They found that, in practice, project implementation is shaped by informal interactions and improvisation. Haapala and White (2018) concluded that institutional bricolage processes significantly impacted project outcomes. The authors recommend using institutional bricolage to analyse local projects to researchers, development project managers and decision-makers to increase understanding of and improve how projects work in their local context. (Haapala & White, 2018) note that, in practice, much governance takes place outside formal institutions, particularly in remote, rural communities with weak existing institutions (Haapala & White, 2018).

2.5 CRITICAL REALISM

Critical realism is a philosophical position concerned with both the social and natural sciences. Critical realist research aims to reveal underlying, often

invisible structures and mechanisms[1] in order to explain observed social or natural phenomena. Critical realism as a philosophy of science and social science is generally attributed to the work of British philosopher Roy Bhaskar. Bhaskar outlined his general philosophy of natural science (transcendental realism) and his special philosophy of human sciences (critical naturalism) in his books A Realist Theory of Science (Bhaskar, 2013) and The Possibility of Naturalism (Bhaskar, 2015), originally published in 1975 and 1979 respectively.

Critical realism emerged as an alternative to several philosophical and methodological positions that claimed that reality could be understood objectively or considered reality as constructed. Critical realism disrupts this dichotomy and rejects naïve realist and relativist ontologies, objectivist, constructionist and subjectivist epistemologies as well as positivist and interpretivist methodologies while at the same time borrowing many of their elements (Fletcher, 2016; Danermark, Ekström & Jacobsen, 2005; Edwards, O'Mahoney & Vincent, 2018; Munkvold & Bygstad, 2011). Most notably, critical realism combines the naïve realist ontology that a real world exists and combines it with a constructionist epistemology that what we can know about it is socially constructed and changeable (Vincent & O'Mahoney, 2017).

Despite laying the foundations for critical realist research, Bhaskar and other early authors' texts provide little guidance on how critical realism as a philosophical framework translates into methods for data gathering and analysis (Fletcher, 2016). Subsequent authors have added a stronger focus on practical research methodologies and analysis tools (Archer, 1995, 1996; Danermark, Ekström & Jacobsen, 2005; Sayer, 2000a). My methods are primarily guided by the work of these authors as they provide useful entry points for using critical realism as a foundation for applied research.

While Bhaskar's influence is visible in the work of most critical realist scholars, different authors do not necessarily agree on all concepts or

---

[1] Structures and mechanisms are often used interchangeably in the literature (including by Bhaskar himself), although Bhaskar points out that, in hindsight, he would prefer generative mechanisms to only refer to the causal powers of structured things (Bhaskar, 2015).

terminology. Drawing on ideas from several, I outline my own understanding of the key concepts that I consider important for my research and sketch out the implications of using a critical realist approach to inform my methodology. Rather than providing a comprehensive overview of critical realism, the following aims to map out key critical realist concepts and their implications for my research in the context of an evolving literature that often lacks a settled treatment of central terms and concepts.

Critical realist ontology, as used in this thesis, entails a number of assumptions about the nature of reality and knowledge, which in turn impact the choice of research methods and analyses (Edwards, O'Mahoney & Vincent, 2014). In answering the ontological question 'what is the nature of reality', critical realist scholars share the realist belief that a real, external world exists (Fletcher, 2016; Danermark, Ekström & Jacobsen, 2005; Munkvold & Bygstad, 2011; Bhaskar, 2015; Sayer, 2000b). This realist ontology puts it at odds with subjectivists who question the existence of an external world (Vincent & O'Mahoney, 2017; Edwards, O'Mahoney & Vincent, 2014; Moon and Blackman, 2014). Sayer (2000b), for example, argues that if the world were a product of our knowledge, our expectations would never be confounded. The experience of getting things wrong supports the claim that there is a real world, regardless of what we think of it (Sayer, 2000b). Thus, for many scholars, critical realism is founded on an epistemology in which knowledge of reality is possible because there is a real world, which exists independent of our knowledge of it (Sayer, 2000b).

However, critical realism acknowledges that this knowledge is shaped by people's subjective interpretations and socially framed constructions, which always depend on human activity (Danermark, Ekström & Jacobsen, 2005; Bhaskar, 2015; Sayer, 2000b) and that our experience of these structures can only ever be incomplete (Forsyth, 2004). The assertion that existence does not depend on being observable is a notable departure from empirical realism, which equates reality with what can be observed (Danermark, Ekström & Jacobsen, 2005; Vincent & O'Mahoney, 2017; Edwards, O'Mahoney & Vincent, 2014; Sayer, 2000b; Moon and Blackman, 2014). Critical realism, therefore, occupies a middle ground, acknowledging both the existence of the

real world and our subjective knowledge of it. It combines observations and the attempt to identify unobservable entities through causation to provide causal explanations of observable events and phenomena[2] (Sayer, 2000b). At the same time, critical realists acknowledge that human knowledge can only ever access a small part of a much bigger reality (Fletcher, 2016).

The assertion that there is a real, external world leads critical realist scholars to argue that there can be rational reasons for choosing certain beliefs or theories over others because some are better at approximating reality (Munkvold & Bygstad, 2011; Bhaskar, 2015; Sayer, 2000b). Theories that have been shown to be false or partial can be replaced with newer ones with more or better explanatory power (Sayer, 2000b). This ability to create ever-improving theories to approximate the real world implies that scientific understanding of the world can be practically useful despite its inherent fallibility (Munkvold & Bygstad, 2011; Bhaskar, 2015). The aim of critical realist research, then is to accumulate better knowledge of reality without claiming to know the truth (Sayer, 2000b). Theories at any given time can only ever represent the current state of knowledge about what is real, which can be continuously improved or disproved (Danermark, Ekström & Jacobsen, 2005).

2.5.1 The real, the actual and the empirical

In contrast to flat ontologies such as empirical realism, which conflates the real world and our experience of it, or relativism, which collapses ontology to mental constructions or discourse, critical realists conceptualise reality stratified into three domains: the real, the actual and the empirical (see Figure 2) (Danermark, Ekström & Jacobsen, 2005; Vincent & O'Mahoney, 2017; Bhaskar, 2015; Sayer, 2000b). For critical realists, the world consists of physical or social objects, or entities, that own structures that define them (Vincent & O'Mahoney, 2017). These structured objects reside in the real domain and influence events in the actual and empirical domain through generative mechanisms (Bhaskar, 2015; Smith, 2006). This stratification

---

[2] In the following, I am using the term phenomena synonymous with the critical realist term events

allows critical realist researchers to create theories about the nature of the structures and mechanisms that underlie empirical observations.

The real domain contains all that exists, natural or social, independent of our knowledge of it and regardless of what can be perceived (Bhaskar, 2015; Sayer, 2000b; Forsyth, 2004). Objects of study in the real can be naturally produced and socially defined (e.g., water or water infrastructure) or socially produced and socially defined (e.g., a committee or behavioural pattern) (Danermark, Ekström & Jacobsen, 2005). Critical realism's natural and social objects of research have structures and generative mechanisms in the real domain that cannot be directly observed (Sayer, 2000b). Structures make objects what they are rather than something else. Generative mechanisms, if activated, allow them to bring about change in the actual domain, which we may observe in the empirical domain (Munkvold & Bygstad, 2011; Sayer, 2000b).

Generative mechanisms of structures can take the form of causal powers that give them the capacity to make things happen and liabilities, which makes them susceptible to certain types of interactions with other mechanisms (Sayer, 2000b). For example, power structures linked to gender norms can lead to a number of different gendered events, however, other generative mechanisms can interact with gender mechanisms and de-activate them or change the outcome.

In natural and social science, events are not usually caused by a single generative mechanism. Different mechanisms or structures interact in open systems. This interaction of many different structures and their mechanisms to produce outcomes makes it difficult to determine clear links between a single structure, mechanism, and outcome. In natural science, this is mitigated by artificially trying to create closed-system experimental environments (May, 2002). This process of isolating direct cause-effect chains (i.e., artificially creating a closed system) is difficult to achieve in the natural sciences and is close to impossible when studying social processes. This makes social outcomes inherently difficult to predict and casts doubts on the utility of exclusively using quantitative methods in the social sciences.

Mechanisms can lie dormant when they are not triggered or when they are triggered but not actualised due to other countervailing mechanisms (Vincent & O'Mahoney, 2017). Mechanisms can produce different outcomes at different times, and new mechanisms can emerge through the interaction of existing ones (Danermark, Ekström & Jacobsen, 2005). It is also possible that the same event can be caused by different mechanisms (Danermark, Ekström & Jacobsen, 2005). Because structures and their mechanism interact in this way, they are best understood in their context. Vincent and O'Mahoney (2017) give the example of a coin, which cannot be fully understood outside the context of a monetary system. The existence of specific mechanisms does not necessarily pre-determine what will happen, although it can give an indication of what can or cannot happen (Sayer, 2000b). Critical realists argue that an explanation of change in open systems is possible despite the limited applicability of methods relying on the identification of regularities in open social systems (Sayer, 2000b). While the identification of structures and mechanisms does not allow for predictions, it does create casual-explanatory accounts which contribute to our understanding of the world.

Structured objects that are not directly perceivable can be identified through their way of acting on other structured objects through their causal powers. This applies to social structures but also to some natural structures such as magnetism or gravity (May, 2002). In the social world, structures and mechanisms of objects depend on interactions between people (Sayer, 2000b). For example, a chief is only a chief in relation to a community and their powers to impose a sentence depends on relations and context (i.e., whether community members respect their role as judge and whether chiefs customarily act as judges in this community, i.e., the role of chief as an institution). Even false knowledge or beliefs in physical objects that are not materially real can have mechanisms that cause real social and material phenomena, as could be the case with mythical characters in kastom or religious stories influencing people's behaviour (Danermark, Ekström & Jacobsen, 2005; Vincent & O'Mahoney, 2017). This is of interest in the Vanuatu context, where Christian beliefs and beliefs in supernatural phenomena such as black magic or mythical characters are widespread.

The actual is the domain of reality where generative mechanisms of structures in the real domain cause change (Danermark, Ekström & Jacobsen, 2005; Munkvold & Bygstad, 2011; Sayer, 2000b). It comprises everything that takes place when these mechanisms are activated, regardless of what is perceived (Bhaskar, 2015; Sayer, 2000b). All actual events have the potential to be observed (Tauheed, 2014). Researchers might be able to identify events in the actual level that were not perceived by participants.

Finally, the empirical domain contains a much smaller number of those events, namely those that are empirically perceived (Danermark, Ekström & Jacobsen, 2005). Events from the actual domain enter the empirical domain if they are observed or experienced. Since the actual and real domains remain hidden from view, data can only be collected in the empirical domain, and all research must start here. Making sense of data from the empirical domain requires working backwards and making inferences about what might happen in the actual and the real domain to cause the events we can observe. The development or application of theory is needed to explain these underlying structures and mechanisms that cause events (Danermark, Ekström & Jacobsen, 2005).

However, this process is fallible and of varying usefulness (Danermark, Ekström & Jacobsen, 2005). Empirical data is never experienced directly but always mediated by our own conceptions (Danermark, Ekström & Jacobsen, 2005). Empirical observation, therefore, has an interpretive element and is never identical to reality, which is independent of the observer (Danermark, Ekström & Jacobsen, 2005). The meaning of observations can, therefore, vary between observers based on which theoretical lenses inform their interpretations (Danermark, Ekström & Jacobsen, 2005). Empirical observations also only capture a small part of the events taking place in the actual as they require an observer as well as an event. They are also not very useful for learning about events that could have taken place but did not occur because the underlying structures were not activated or their activation was prevented through the interaction with other structures, their causal powers and liabilities (Sayer, 2000b).
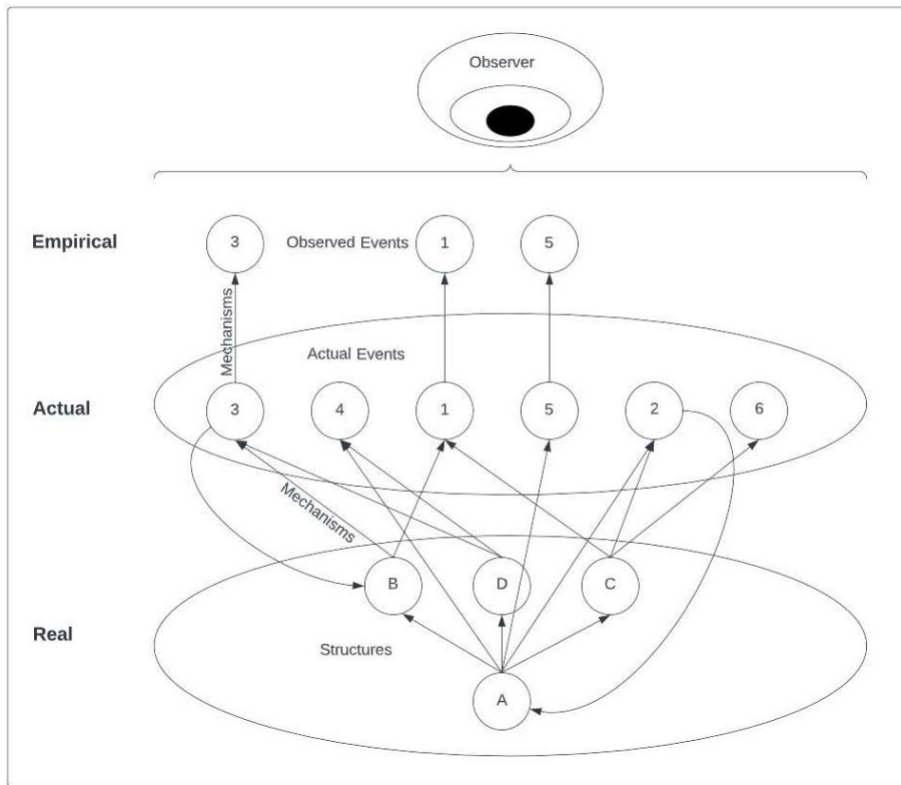
Figure 2: Bhaskar's Stratified Ontology

Critical realists conceptualise reality stratified into three domains: The empirical, which contains observed events, the actual, which contains all events and the real, which contains all that exists regardless of whether it can be perceived. Adapted from Tauheed (2014).

Analysing the underlying causes for empirically observed phenomena in terms of their underlying structures and mechanisms leads to generalisation (Danermark, Ekström & Jacobsen, 2005). Structures and mechanisms identified in such a way should also have explanatory power in different contexts. This stratification of domains is central to critical realist ontology and provides the foundation for the various modes of inference used by critical realist researchers to progressively move from the specific empirical observations to identify more general structures and mechanisms (Danermark, Ekström & Jacobsen, 2005). Since the only things we perceive are in the empirical domain, we need theories to work backwards to describe the actual and real levels. Critical realist research, therefore, aims to move from empirical observation to theory construction or validation by identifying the real underlying structures and powers and their causal mechanisms to explain

events in the empirical (Forsyth, 2004). The introduction of structures and their relationship to action in the real world makes it possible to move beyond pure description of specific events to analysis of their structural roots and contexts (Sayer, 2000b; May, 2002). I describe how I have applied critical realism's modes of inference in this thesis in Chapter 3 (Methodology) below.

Chapter 3: Methodology

In this chapter, I outline my research methodology, which builds on the conceptual framing presented in the literature review. I discuss and justify my choice of methods and critically reflect on how I have undertaken the research. This includes reflecting on my original contribution, epistemological and ontological assumptions, and the anticipated impact of my research. I also explain my choices of research topic, theoretical lenses used to interpret my results, study communities, and research participants. This is followed by an outline of my approach to data collection, coding, and analysis using the talanoa methodology and reflexive thematic analysis.

3.1 ORIGINAL CONTRIBUTION

My thesis makes several specific and general theoretical contributions to the existing body of literature. I apply critical institutionalist theory to the context of the three communities in Vanuatu with the dual aim of contributing to a better understanding of community governance in Vanuatu and validating the explanatory power of institutional bricolage and the concept's general applicability.

Critical institutionalist literature and commons literature more broadly focus primarily on Asia, Europe and Africa (van Laerhoven et al., 2020), and critical institutionalist concepts have not been widely applied as a lens to analyse and explain institutions in the comparatively under-researched Pacific Island countries. Here, I employ critical institutionalist theory developed in other contexts to explore community governance and institutional change processes in Vanuatu (chapters 4, 5, 6 and 7). Vanuatu's particular context, partially shared by other small island countries in Melanesia and the Pacific, makes it an interesting case to explore whether a critical institutionalist lens is useful to make sense of the observed local phenomena. Examples of how the geographic, historical, economic, social, and cultural context of Vanuatu differs from countries in other regions include: The country's small population of 300,000 (Vanuatu National Statistics Office, 2020), which is divided into over 2000 small, often remote and difficult-to-reach communities over many islands.

Vanuatu's high linguistic and cultural diversity (Jowitt, 2005; McDonnell, 2019b; Morgan, 2013), low economic development and limited participation in the cash economy outside urban areas. Vanuatu's situation as a young post-colonial state after over 70 years of dual British and French colonial rule (Taylor, 2015; Jowitt, 2005; Rothermund, 2006; Bolton, 1998) further contributes to the unique set of challenges in relation to community governance in general and water governance in particular as discussed in the following chapters. My focus on governance arrangements and institutional change at the community level has received little attention in a Pacific context. Exploring community-level governance challenges and how to address them is significant in rural Vanuatu, where many communities live in rural areas and have few links with formal state institutions. The research in this thesis is one of the first studies of its kind in the Pacific region and Vanuatu.

Understanding the local processes whereby traditional institutions adapt to external changes remains limited (Abu & Reed, 2018). Chapter 5 builds on critical institutionalist analysis of the interplay between traditional and non-traditional institutions (cf., Cleaver, 2012; Cleaver & de Koning, 2015; Quimby, 2021; Sirimorok & Asfriyanto, 2020) by using institutional bricolage to explore autonomous change processes of traditional institutions. The concept of institutional bricolage was developed for and is still predominantly used in the context of institutions for natural resource governance (Basu et al., 2015; Cleaver & de Koning, 2015). However, the usefulness of institutional bricolage as an analytical tool is not limited to natural resource governance (Whaley et al., 2021). By shifting the focus from the resource being governed to the act of governing, I expand the analysis of the commons as shared natural resources to include the less studied role of institutions in mobilising and managing common social resources or 'social commons' (Coote, 2017; Basu, 2015; Fournier, 2013). I apply the concept of institutional bricolage to institutions that mobilise and manage community members to provide unpaid collective labour to construct, repair, and maintain public, communally used spaces, buildings, and infrastructure.

Chapters 5 and 7 contribute to the nascent body of literature that links agonism and critical institutionalist theory, which, to the best of my knowledge,

is only explored in one other paper to date (Lowndes & Paxton, 2018). I suggest that linking agonistic accounts of the political and the concept of institutional bricolage is a useful framework to deepen our understanding of institutional change and to think about practical ways to address key challenges to facilitating bricolage identified in the literature.

Chapter 6 contributes new insights to critical institutional literature by expanding the use of the concept of institutional bricolage to explore the phenomenon of ghost committees.

Chapter 7 addresses critiques in the literature that suggest that the concept of institutional bricolage is not useful for informing development practice. The chapter contributes insights to the questions of how far bricolage processes can be managed and to what extent institutional design methods can be harnessed to effect equitable outcomes. These questions were identified as areas for further research by Cleaver (2012). I propose a community-based facilitated institutional bricolage (CBFIB) approach, which expands on critical institutional theoretical and practice-oriented literature. The chapter also contributes to the 'need for more research as to how community level development works in Vanuatu, and what kinds of external assistance are most productive' (Cox et al., 2007, p. 56).

3.2 EPISTEMOLOGY AND ONTOLOGY

My methodology and choice of methods are based on critical realist assumptions about the nature of reality and what we can know. I provide an overview of the critical realist literature that informs the ontological and epistemological assumptions of this thesis in Chapter 2 (Literature review). Critical realism provides the underlying philosophy that informs a large part of critical institutionalist thinking (Cleaver & de Koning, 2015). Cleaver, who coined the term critical institutionalism, notes that "in our usage the term 'critical' is used to reflect a debt to critical realist thinking which recognises diversity in social phenomena, the potentially creative effects of individual agency and the influence of social structures in shaping individual behaviour and the patterning of outcomes. The term is also used in the tradition of critical social theories, which suggest that knowledge should be used not just to

explain the social world but to change it in progressive directions" (Cleaver & de Koning, 2015, p. 3). While several critical institutional papers reference critical realism as an underlying philosophy, its role in informing critical institutional analysis is rarely explored in detail.

3.3   STAGES OF EXPLANATORY RESEARCH

In the following, I describe how I use critical realism's different modes of inference in my research. I have adapted Danermark, Ekström and Jacobsen's (2005) six 'stages in explanatory research based on critical realism' for this purpose. Their model is not intended as a manual but as a framework to conceptualise the key stages of critical realist research. Starting with concrete events in the empirical domain, critical realist researchers aim to abstract their fundamental constituents to determine how they cause observed phenomena (Danermark, Ekström & Jacobsen, 2005). While the six stages correspond to distinct elements common in critical realist analysis, in practice, several steps are applied iteratively or even simultaneously.

The description stage involves writing a thick description of the events and phenomena in their complex context based on the empirical data. This is based on observations as well as the perceptions communicated by research participants during formal or informal interactions. The description stage could, for example, highlight how community members describe how local institutions function in their community (see Chapter 4). This stage can draw on both quantitative and qualitative data. This thesis relies on qualitative data gathered using the *talanoa / storian* research methodology (discussed below) as well as observational data and additional context information from the literature. This combination of qualitative research methods lends itself particularly well to producing thick descriptions as it elucidates data on the broader context in addition to the social phenomena under study.

In the analytical resolution stage, the events under study are broken down into their components to reduce complexity. Critical realism, unlike empirical realism, does not rely on constant conjunction across many instances for its analysis (May, 2002). In recognition and expectation that open systems are messy, critical realist analysis as outlined by (Danermark,

Ekström & Jacobsen, 2005) begins instead with the identification of *demi-regularities* through a process of coding and initial inductive analysis (Sayer, 2000b). This process provides guidance as to what is studied and what is excluded. When combined with the *talanoa/storian* methodology, which allows participants to lead the direction of the *storian* conversations, the objects of study are influenced by both participants and researcher.

At the abduction and retroduction stages, researchers depart from events at the empirical level to explore underlying structures and mechanisms that may have caused the observed phenomena by placing the specific events into a broader theoretical context. This allows for generalisations that relate people's concerns to more general structures that might not have been identified by research participants (Fletcher, 2016). In the broadest sense, abduction is concerned with interpreting and classifying the empirical phenomena chosen in the analytical resolution stage to make generalised claims about what we observed (Danermark, Ekström & Jacobsen, 2005). At this stage, existing theory is introduced to explore different ways to make sense of the data.

For the purpose of this thesis, this involves a second round of coding using codes derived from the critical institutionalist literature. This process enables a theoretical redescription and generalisation of the events under study using 'theories and models expressing (assumptions about) more general contexts' (Danermark, Ekström & Jacobsen, 2005, p. 94). By placing empirical events in a new theoretical context, researchers creatively begin to develop their ideas about the events as well as the theories they apply. Abduction allows us to go beyond empirical facts and discover new connections and possible explanations that are otherwise hidden (Danermark, Ekström & Jacobsen, 2005). The abduction stage allows the researcher to make sense of their data and look at new evidence to validate or disprove the theories they use and identify areas that are not sufficiently explained. In the latter case, additional or new theories can be introduced at the abduction stage to better explain the observed phenomena.

Applying critical institutionalist theories and concepts to the identified events allowed me to determine to what extent they are useful to provide an

explanation of observed phenomena and what cannot be explained with the theory in its current form. Since critical institutional theory has not previously been recontextualised to the context of communities in Vanuatu, this process also leads to additional validation of the theory and its practical adequacy as well as potential gaps (Sayer, 2000a).

In the retroduction stage, the events chosen for analysis are interrogated to identify possible underlying structures and generative mechanisms that might produce the studied phenomena. The overarching question could be described as: 'What caused the events associated with the phenomenon to occur?' (Easton, 2010). In practice, this conceptualisation process often coincides with the abduction stage, encouraged by the application of existing theories to the data (Danermark, Ekström & Jacobsen, 2005). According to Fletcher (2016, p. 190), 'successful retroduction is to modify, support or reject existing theories to provide the most accurate explanation of reality'. Danermark, Ekström and Jacobsen (2005) suggest several questions that can be employed to identify these mechanisms and explain how they cause the events that form the phenomenon. They also encourage the researcher to be critical of the social practices it studies (Sayer, 2000b) and provide suggestions for change if mechanisms are deemed to lead to unjust outcomes by asking: How do they cause effects? What triggers them? What inhibits them? How are they reproduced and maintained? Are they politically and ethically legitimate? If not, how can they be changed?" (Connelly, 2001). Critical realism's focus on social justice and its dual aim of seeking to impact academic thinking and policy (Cleaver & de Koning, 2015) made it well suited to my research objectives.

At the comparison stage, the explanatory power of the different theories and abstractions of structures from the previous two steps can be compared to determine which theories (or parts thereof) have lesser or greater explanatory power or whether they are complementary by explaining different components of the same phenomenon.

The final step of concretisation and contextualisation closes the circle by showing how the identified structures and mechanisms operate in the concrete context described in stage one. At this stage, the researcher applies the

knowledge gained through this process to explain some of the concrete events under study. This stage explores interactions between the studied structural conditions and other mechanisms that are part of the context and how this might have affected the specific observed outcomes.

In practice, these stages are iteratively and sometimes simultaneously applied at different stages of my research process to explain different phenomena. For example, during pilot interviews in the early stages of my research, I identified the high-level issue of committee endurance and equity, which led me to explore theories in the literature that might possess explanatory power for this particular phenomenon. This led me to identify critical institutionalism as a possible theory, which I applied to redescribe and recontextualise empirical phenomena that emerge from the *storian* data in the abduction stage.

Using these critical realist concepts, institutions, in the sense of systems of rules, norms and beliefs, can be conceptualised as social objects that have structures and mechanisms which lead to demi-regular outcomes. These can be formal, such as a committee with codified roles and rules, or informal, such as widely shared norms. The generative mechanisms of institutions interact with the mechanisms of other physical and social structured objects, such as local infrastructure or norms that structure social inclusion. In the terminology of critical realism, critical institutionalist theory could, therefore, be described as explaining how different structures and their mechanisms interact to shape institutional outcomes and describing the implications of this process. New institutional arrangements emerge through institutional bricolage processes, assembled from building blocks that are social structured objects, such as 'habitual ways of doing things; well-worn practices adapted to new conditions; organisational arrangements invented or borrowed from elsewhere' (Cleaver & de Koning, 2015, p. 5). By applying critical institutional theory to select phenomena in the case study communities, this thesis aims to identify and isolate the underlying structures and mechanisms of community governance mechanisms and analyse which factors promote or impede endurance and equitable processes and outcomes. Applying critical institutional theory to new

phenomena in a new context in this way also enables me to explore its explanatory power.

3.4   CONDUCTING RESEARCH IN VANUATU

The years preceding and immediately after Vanuatu's independence in 1980 saw a plethora of foreign researchers conducting fieldwork in Vanuatu (Rodman et al., 2007). To regain ownership of the national research agenda, Vanuatu imposed a national moratorium on cultural research between 1985 and 1992 (Rodman et al., 2007). During this period, an indigenous field worker program was established, which involved international researchers working with the *Vanuatu Kaljoral Senta* (Vanuatu Cultural Centre) to train local field workers. This led to greater collaboration between ni-Vanuatu and foreign researchers after the moratorium was lifted in 1992 (Rodman et al., 2007). The director of the *Vanuatu Kaljoral Senta* at the time, Ralf Regenvanu, noted that the methods and approach of researchers that took part in the indigenous field worker program demonstrated that it was possible for foreign researchers to work in a way that benefits the country, respects research participants and allows them to participate in a meaningful way (Regenvanu, 1999). Regenvanu hoped that this way of working would 'augment the academic discourse about Vanuatu, which has always been conducted and constructed outside it in the metropolitan countries' (Regenvanu, 1999, p. 99).

Research in Vanuatu is now regulated by the Vanuatu Cultural Research Policy, which was introduced to encourage collaboration between international and local researchers and ensure mutual benefits and meaningful participation (Rodman et al., 2007; Regenvanu, 1999). The policy specifies that any research in Vanuatu involves and recognises the contribution of indigenous scholars and members of the community in addition to providing training. Research projects must also observe traditional copyright protocols (Republic of Vanuatu, 1992). The *Sensor for Clean Water: Integrated Participatory Technology Development* (iPTD) project and research for this thesis are aligned with these provisions and have been approved by the *Vanuatu Nasonal Kaljoral Kaonsel* (Vanuatu National Cultural Council). Ni-Vanuatu staff of partner agencies Oxfam and Wan Smolbag, who have ongoing

engagement with the study communities, were actively involved in the research, provided ongoing advice, and received formal facilitation training and individual mentoring on research methods.

3.5   THE IPTD PROJECT

This thesis is written as part of the ESPRC-funded *Sensor for Clean Water: Integrated Participatory Technology Development* (iPTD) project (hereafter, iPTD project), which was implemented in the three study communities. Research for this thesis was undertaken alongside the project work. The project brings together representatives from three study communities in Vanuatu and scientists from the University of York to co-develop a water monitoring device and related institutions that govern how the device is used, maintained and repaired and how water monitoring information is shared and acted on. I was involved in all aspects of designing methods and implementing the project in Vanuatu and leading a team of in-country project partners from Oxfam and a Vanuatu-based NGO, Wan Smolbag.

The iPTD project chose to focus on drinking water safety as contaminated water is a common way to contract water-borne diseases such as diarrhoea, which is estimated to account for 3.2 per cent of total deaths in Vanuatu (Carter et al., 2016). The rationale behind the iPTD project is to improve access to safe water by enabling communities to regularly monitor their own water sources to determine which are safe for drinking at any one time. All communities in the project have access to several alternative sources of drinking water, which is the case for over 60% of people in rural Vanuatu (Vanuatu National Statistics Office, 2017). The project tested eight water sources at different times over the period of one year and found that almost all sources were safe to drink without additional treatment most of the time. This makes water testing an effective alternative to continuous water treatment in these communities. If a source is found to be contaminated, communities are able to investigate and address the cause while using an alternative, uncontaminated source. Even when no alternative source is available, communities will know when drinking water needs to be treated, for example, by boiling.

Water governance and governance of the water testing device were recurring themes in iPTD workshop discussions. The maintenance, repair and expansion of existing water infrastructure was a concern in all three communities. While addressing these concerns is outside the project's scope, mapping links between communities and stakeholders that might be able to support them led to animated discussions on governance structures needed to create stronger links with these stakeholders and proactively ask for support. During the workshops, community members participated in a facilitated process to co-develop and test governance arrangements for using, maintaining, and repairing the co-developed water safety monitoring devices and communicating test results. The scientists participated in the institutional development sessions by questioning how proposed structures and rules might work in practice.

The research for this thesis was conducted separately from the iPTD project activities. However, my role in designing and implementing the project may limit the objectivity of my analysis of the project. This limitation is partially mitigated by making critical reflection an ongoing and central component of the iPTD project. For example, a project pilot phase in one community allowed researchers and facilitators to develop and trial methods for co-producing technologies and related institutions tailored to the local context (Ensor et al., 2023). This provided the foundation for subsequent project phases. Each workshop day during the pilot and later project phases concluded with facilitated participant feedback and a critical reflection meeting between facilitators and researchers. These feedback and reflection processes resulted in iterative changes to the methods employed in each community. Methods were added, adapted or discarded between workshops based on what worked in the local context to achieve the desired outcomes. For example, differences in water use between different groups of water users (e.g., women, men, single mothers, young people, old people and people with disabilities) were evident from the early stages of the project. As a result, the subsequent workshops trialled multiple methods to elicit, share and negotiate different perspectives of technology specifications and rules required for the technology to address the diverse water quality challenges of all community members (Ensor et al.,

2023). Critical reflection on methods and the flexibility to adapt them to suit different contexts is also a key component of plans to implement the project in new locations.

Conducting my research alongside the project also provided a range of opportunities. It enabled me to visit each study community multiple times, repeatedly engage with community members over extended periods and form trusting relationships before conducting storian conversations (see definition of my storian approach below). This contributes to participants feeling comfortable sharing their observations and perceptions. Project workshops provided rich information on the institutional context of study communities. They also provided an opportunity to observe institutional development processes in practice and gain insights into the potential benefits and challenges of community-based facilitated bricolage and agonistic approaches in institutional co-design (see Chapter 7). Workshop data was particularly useful in getting to understand the shared representation of local institutions to provide the context for the individual perceptions gathered through storian conversations. In return, my research iteratively informed the iPTD analysis of and approach to community governance.

3.6   RESEARCH IMPACT

Through my work as an international development practitioner and researcher since 2006, I have been involved in programs that included the participatory development of community-based institutions and the rollout of institutions that were externally designed. These experiences with institutional strengthening projects made me question why many fail to achieve their intended long-term objectives. My interest in the research presented in this thesis is, therefore, not limited to gaining a better theoretical understanding of community-based institutions and institutional change but also supporting practical efforts to improve governance and management of local services and natural resources to create enduring and equitable outcomes. I use the term equitable to refer to community members' access to opportunities and resources in ways that compensate for causes of inequality (Guy & McCandless, 2012).

These aims align with critical realist literature. Like other critical theories, critical realism is not only critical of other theories but also of the practices it studies (Sayer, 2000b). Critical realism focuses on uncovering the role of underlying structures, which provides an entry point for critical realist researchers to identify structural oppression and ways to address it (May, 2002). Bhaskar, Danermark and Price (2017) advocate for research to be critical of social practices and to pursue transformative and emancipatory goals. For example, critical realist research aims to expose incidents where widely accepted shared meanings based on false beliefs or theories lead to social inequality, as is, for example, the case with discrimination based on gender or race (Sayer, 2000b). Critical institutional perspectives similarly view institutional change through a social justice lens (Cleaver & de Koning, 2015).

In line with these ambitions, my research aims to identify and highlight inequalities and inform processes that promote equitable institutional processes and outcomes. A key motivation to engage in this research has been the desire and opportunity to create and share knowledge that can benefit communities and the governments, donors and NGOs that support them. As a development practitioner, I collaborated with researchers and piloted project activities in response to research findings. As a researcher, I want my research to be accessible and practically useful, as expressed in my objective of sharing practical insights into institutional change mechanisms with policymakers and development practitioners in Vanuatu and elsewhere.

While translating research findings into practical impacts is beyond the scope of this thesis, conducting this research as part of the iPTD project and several related side projects opened opportunities to inform institutional co-design processes and to share insights from my research with key government, donor and NGO stakeholders and university scientists and engineers. This includes the key actors involved in designing and implementing policies that directly impact governance at the community level, such as the Department of Water Resources, NZAID, Engineers without Borders and UNICEF. Due to the comparatively small number of contemporary publications on Melanesian countries, published research based on this thesis will likely reach its intended audience of academics, development practitioners

and donors interested in Vanuatu and Melanesia, thereby contributing to knowledge on local natural resource governance in Vanuatu.

3.7   CHOICE OF RESEARCH TOPIC

3.7.1 Institutions

My experience working in the development sector since 2006 and with communities in Vanuatu over the past 15 years led to an interest in community-based institutions. Workshop discussions as part of the iPTD project confirmed that participants considered community governance as crucial for their well-being and quality of life. Similarly, a literature review on the politics of development and aid programs in the Pacific found that 'virtually all' reviewed academic, donor and strategy documents mentioned improved community governance as key to development in the region (Laws.2013). Yet, while community members listed a large number of committees that were set up in their communities, for example, related to water, disasters, climate change adaptation, health, and waste disposal, few of them were active in practice. The literature review for this thesis revealed that this challenge was not unique to Vanuatu and led me to critical institutionalist theory as a potentially useful lens to explore local governance challenges in Vanuatu and potential ways to address these.

3.7.2 Water committees

Throughout this thesis, I return to the case of water governance as an example of community governance and management institutions[3]. Water governance, in particular, the governance and management of access, use, maintenance and repair of water infrastructure, were key themes in most discussions with community members. While the focus on water in these discussions may have been influenced by my role working with the study communities on the iPTD project to co-develop a water safety monitoring

---

[3] While the literature on institutions frequently focuses on their role in community-based management, for example, of natural resources, addressing the challenges that local institutions in the study sites face requires a combination of governance and management activities. For example, water committees in Vanuatu are not only tasked with managing water systems but also with making and enforcing a range of decisions that govern the system. I am, therefore, using the term community-based governance and management to make this explicit.

device and related institutions, participants considered water governance one of the most pressing challenges and essential to ensure enduring and equitable access to safe water. Recent efforts by the Vanuatu government to establish water committees for each of the more than 2,000 small-scale water systems in the country (Republic of Vanuatu, 2018b) make committees a timely and relevant case through which to explore the challenges with externally introduced community institutions and ways to address these in Vanuatu. Water committees are also acknowledged in the literature as a good example of the committee model (Whaley, Cleaver & Mwathunga, 2021).

3.8   CHOICE OF THEORY AND LITERATURE

My research was initially motivated by the desire to explain why the efforts by the government and NGOs in Vanuatu to introduce committees were often unsuccessful. To make sense of this initial observation, I searched the literature for theories that could serve as a starting point to explore institutional successes and failures. This review led me to critical institutionalist theory and the concept of institutional bricolage, which start from the premise that formal rules of how institutions should function are rarely an accurate description of how institutions function in practice. This aligned closely with my observations, and critical institutional concepts looked like promising entry points to help me make sense of the data. Authors associated with critical institutionalism have explored different aspects of why institutions rarely work as expected in various contexts. Yet, the theory has not been applied to community institutions in Vanuatu. Critical institutionalism's focus on 'hidden, informal and everyday' aspects of institutions (Whaley, 2018, p. 137) makes it a good starting point to make sense of the informal and often hidden governance arrangements in the study communities. I suspected and later confirmed that critical institutional theory and institutional bricolage provide a suitable framework to focus my data analysis and explore community institutions in Vanuatu. In Chapter 5, I introduce agonistic literature which draws attention to the significance of social plurality, the inevitable presence of alternative perspectives and the role of struggle in local change processes as a complementary lens to critical institutional analysis. In addition to the academic literature, I consulted a wide

range of secondary data, including government and NGO reports and policy documents.

3.9   CHOICE OF CASE STUDY COMMUNITIES

The choice of study communities was determined by the iPTD project. The project selected communities based on their previous engagement with project partners Oxfam and Wan Smolbag and their use of several different water sources. Communities were chosen to represent different access levels of remoteness from urban centres and access to markets, services, and transport. All communities decided to include participants from so-called *sub-stations*, which consist of clusters of houses located outside the village boundary but connected in different ways and to varying degrees to the governance structures of the main communities. Each community has their own unique context and institutional arrangements that provide a wealth of data. For example, governance arrangements for water maintenance are almost absent in Village C, the responsibility of a single plumber in Village B and implemented by a well-organised water committee in Village A. This kind of institutional diversity is useful to answer the research questions as it allowed me to contrast and compare different institutional arrangements and outcomes.

3.10 CHOICE OF RESEARCH PARTICIPANTS

Participants for my research were predominantly chosen from iPTD project participants through purposive sampling based on their experiences or knowledge related to the research topic, age, gender, and roles within the community and to capture a wide range of perspectives (Dunn, 2005). It is not unusual for researchers or NGOs in Vanuatu to only engage with the key decision-makers in communities, predominantly older men (Republic of Vanuatu, 2015). This approach risks excluding the different priorities, experiences, knowledge and perceptions of women and young people, further perpetuating existing inequalities. Women comprise almost half of Vanuatu's population, and 2 in 5 ni-Vanuatu are between 10 and 30 years old (Republic of Vanuatu, 2012). Despite this, both groups are routinely excluded from

decision-making processes and leadership positions (Republic of Vanuatu, 2015, 2012).

To avoid perpetuating this imbalance of whose voices are heard and captured along established hierarchies in Vanuatu society, I consciously ensured that participants in the iPTD project and my storian conversations represented a range of priorities, experiences and perceptions. I conducted *storian* conversations with an equal number of women and men as well as younger[4] and older participants. I also sought to include community members who do not usually participate in community governance due to other forms of marginalisation related to age, disabilities, poverty, religion, gender identity or because they originated from another island. iPTD project participants were directly nominated by their communities using a set of criteria to encourage a representative sample (Appendix D).

3.11 RESEARCH METHODS

My qualitative study design aims to explore the lived experience of ni-Vanuatu community members. I have chosen to take a critical institutional lens to guide my analysis, which is located in the traditions of critical realist thinking and critical social theories that underpin my epistemological and ontological assumptions (Cleaver, 2012; Sayer, 2000a; Bhaskar, 2015). My methodology is also informed by literature on Pacific *talanoa* and *storian* research methodologies and agonistic methods.

Institutions do not exist independently but are enacted through relationships between people guided by local social structures (Cleaver, 2012). A qualitative approach to data gathering and analysis lends itself to exploring people's accounts of these often-hidden structures and relationships. My data collection methods are based on the *talanoa* methodology (see below). Participant observations, the understanding gained from living and working in Vanuatu for five years prior to the research, and discussions with ni-Vanuatu colleagues also informed my analysis. I subsequently used thematic analysis

---

[4] In the Pacific region, it is common for young people up to age 30 to be referred to as youths, especially if they are unmarried. The Vanuatu National Youth Development Policy defines *youth* as ages 12 to 30 years old (Republic of Vanuatu, 2013b). This research follows the iPTD project's definition of young people as being between 18 and 30 years old.

(Braun & Clarke, 2006) to select and analyse specific observed institutional phenomena from the data to draw out insights that contribute to the understanding of institutional functioning in Vanuatu (Chapters 4, 5 and 6). My analysis also aims to be useful to policymakers, implementers, and communities (Chapter 6) (Richards & Morse, 2012). At the data gathering, coding and analysis stages, I have paid particular attention to issues of inequality and discrimination, their perceived causes and possible underlying structures and mechanisms.

The final stage of my research will include providing feedback to the communities involved, policymakers and other stakeholders in Vanuatu in audience-appropriate formats to stimulate thinking and debate on the identified institutional challenges. Presenting my research in Vanuatu has not been possible yet since two planned visits to Vanuatu were cancelled due to COVID-19 travel restrictions in 2020 and the impacts of tropical cyclones Judy and Kevin in 2023.

3.11.1 Data collection

I collected data through (1) unstructured *storian* conversations with community leaders, water committee members and ordinary community members, (2) semi-structured interviews with key government, UN and NGO stakeholders involved in decision-making, policy and implementation roles related to introducing externally designed committees (3) institutional mapping exercises with groups of study participants and (4) a review of key policy documents. The analysis is also informed by my work coordinating a consortium of international and national NGOs in Vanuatu and as Program Director at Oxfam in Vanuatu.

I visited the three study communities four times between 2017 and 2020 as part of the iPTD project. During these project visits, I facilitated discussions about local institutions and how the project's co-developed water safety monitoring technology should be governed. In addition, I visited the communities in April and May 2019 to conduct *storian* conversations with 55 participants (27 female, 28 male), aged between 19 and 78.

	Female participants	Male participants
Village A	10	8
Village B	10	9
Village C	7	11

Table 1: Participant numbers disaggregated by village and gender

I also conducted unstructured interviews with 4 female and 13 male key stakeholders working in senior roles for the Vanuatu national government, Shefa provincial government, international donors, intragovernmental organisations, and international and local non-government organisations.

I completed data collection before Vanuatu closed its borders between March 2020 and July 2022 to prevent COVID-19 transmission. Each conversation focussed broadly on local institutions and institutional change, and most lasted half an hour to an hour. Since there is no word for 'institution' in Bislama, I used the term 'ol strakja insaid long komuniti', which translates as 'community structures' during *storian* conversations and explained that structures could refer to rules, norms, and beliefs. Participants were recruited through snowball sampling, starting with project participants. Conversations were conducted in Bislama, a Creole language that serves as a lingua franca in Vanuatu. The language is based on English, using some words in French and local languages, and Melanesian grammar (Miles, 2007).

Most *storian* conversations were recorded using a digital dictaphone unless the participant did not feel comfortable with being recorded. This resulted in 42 hours of Bislama and 7 hours of English-language recorded interviews. As part of the broader project, ongoing engagement with the communities allowed for the establishment of trust and relationships before recording the *storian* conversations.

I conducted *storian* conversations with the support of Oxfam's ni-Vanuatu iPTD project coordinator Margarette Dick who assisted with clarifications and provided ongoing cultural advice on the process. Margarette's presence was also vital during *storian* conversations with women who might have felt less

comfortable had I conducted these conversations on my own. In addition, I conducted semi-structured interviews with 17 key stakeholders from the national and provincial government, inter-government, and non-government and donor organisations in Port Vila. The stakeholders were involved in policymaking and the design and implementation of development projects. They included a senior staff member of the government ministry responsible for rural water, current and former advisors to the Prime Minister's office, Department of Water Resources staff, representatives of the New Zealand and Australian High Commissions and UNICEF, as well as NGO staff who have supported communities to set up water committees. The interviews focused on their experiences with, and viewpoints on, establishing, supporting, or interacting with community-based institutions in general and water committees in particular. This provided contextual information and improved my understanding of community data. I triangulated the recorded data with supplementary data from other qualitative methods, including iPTD project workshops, participant observation, and informal discussions. I also attend meetings of community committees or village councils to observe interactions between members in collective decision-making processes, which contributed to my understanding of the study communities and their institutional structures (cf., Peloso & Harris, 2017).

3.11.2 Storian approach

Community members engage with institutions in complex ways that make sense to them, but that sense might not be obvious to an outside observer. Furthermore, there is a danger that some sense might be implied by outside observers that may be considered incorrect by participants. To reduce this risk, I chose methods that foreground participants' voices, perceptions, and realities by using direct quotes from participants throughout this thesis to capture community members' own accounts in a way that reduces the likelihood of influencing the data unconsciously, for example, through my choice of questions (Dunn, 2005).

For this reason, I chose a *storian* approach to data collection based on the *talanoa* research methodology. *Talanoa* is widely regarded as a culturally

appropriate way to engage Pacific communities in research (Vaioleti, 2013). It describes a formal or informal unstructured conversation to create and exchange ideas, knowledge, feelings and information common to many communities across the Pacific region (Vaioleti, 2013). This practice inspired the *talanoa* research methodology, which applies this oral tradition to data collection and analysis. In Bislama, the term storian is commonly used to describe this type of conversation (Warrick, 2009). Using research methods based on talanoa has been described as a move towards decolonising research methodologies (Farrelly & Nabobo-Baba, 2012). Talanoa is defined by a focus on eliciting local voices and critically reflexive research practices (Farrelly & Nabobo-Baba, 2012).

Talanoa research methodology can be likened to, but not equated with, inductive research methods such as semi-structured or informal, unstructured interview methods (Kalavite, 2014 cited in Gremillion, 2021). It also shares similarities with other qualitative research methods, including grounded theory, oral histories, and life histories. Due to my positionality (see 3.12 below), my application of talanoa is influenced by these research methods. However, Pacific research methods differ in their cultural origins and, therefore, have methodological autonomy (Gremillion, 2021). Situating my research in this tradition focused my attention on culturally contextualising my approach to data collection (Gremillion, 2021). This included respecting cultural practices and learning from local ways of communicating and knowledge sharing.

Storian conversations often start with general topics, circling around and slowly focusing on the phenomena under discussion. This allows the phenomena to be approached indirectly from different angles and situated in their broader context. One participant pointed out that the process can also help to clarify one's thoughts: "we *storian*, and it clicks in the mind that oh, yes this is it" (A2). Due to cultural norms of politeness, structured questions frequently elicit superficial answers or even guesses of the answers the researcher wants to hear. In contrast, *storian* allows the researcher to follow the flow of the conversation and ask follow-up questions that explore issues raised by the participant while at the same time ensuring that the conversation stays broadly within the boundaries of the research topic. As with life story

interviews, flexibility and adapting to the situation of each conversation within a broad structure are important components of *storian* (Atkinson, 2018).

My research involves *storian* conversations with one individual at a time. A few participants invited a friend or family member to join the conversation. Conversations took place outside people's homes or in a local church or *nakamal* traditional meeting place. Before sitting down for the recorded conversation, I spent time with each participant to build trust. I explained the research to all participants and provided opportunities to ask questions. Everybody who agreed to participate in storian conversations was patient in explaining the context and keen to share their experiences and opinions. The key advantage of the unstructured nature of these conversations is that they allow participants to influence the agenda by choosing which stories to tell the researcher. It allows the participants' own accounts of community governance and institutions to be explored in a way that reduces the likelihood of eliciting answers aligned with the preconceptions and biases of the researcher. This leaves space for participants to direct the conversation to phenomena previously unknown to the researcher. The method generates the broad range of data required for a comprehensive thick description capturing governance phenomena and institutional change over time (Dunn, 2005; Richards & Morse, 2012), while at the same time allowing for the exploration of specific phenomena emerging from the data.

Due to the time limitations of my research, the topic of the *storian* conversations was not completely open but limited to the areas of community institutions in the widest sense. At the outset of each conversation, participants are asked to talk, in their own words, about anything related to this topic that they perceive as significant (Dunn, 2005). While participants are encouraged to approach the topic broadly and from different directions, the focus is re-established whenever necessary through follow-up questions led by the participants' previous responses in a similar way to normal conversation. In this way, both participants and researchers influence the direction of the conversation. Within these boundaries, the direction of the *storian* conversation remains led by the respondent rather than the researcher (Dunn, 2005), which encourages the discovery of themes and insights that form the

basis of analysis (Vromen, 2010). The approach also allows participants to approach difficult or sensitive issues indirectly, as is customary in Vanuatu.

I trialled and refined the *storian* conversations approach by conducting six pilot conversations in my first year of study to explore whether *storian* was an appropriate method to answer my research questions and what kind of data I would be able to gather using this method. This process influenced my research questions and allowed me to adapt the *storian* method to suit the context of the communities and my own conversation style in a way that engaged participants and made them feel at ease. For example, my attempts to use the established life story method of linking change to key events in a person's life were unsuccessful during the pilot *storian* conversations. Participants preferred to explain change in binary terms of *bifo* (in the past) and *naoia* (nowadays). Similarly, in pilot *storian* conversations, it became apparent that a completely unstructured approach was not suited to the local context. Frequent follow-up questions were needed to keep the discussion flowing or bring the conversation back to institutions when it strayed too far from the topic. The frequency and nature of these follow-up questions were adjusted to suit each individual participant.

The storian conversation provided a wealth of qualitative data and allowed me to gain detailed insights into institutional arrangements in the three study communities. While each *storian* conversation focused on the participant's sense of local community governance, analysis of a range of conversations from the same community allows the exploration of local governance arrangements from the perspectives of individuals as part of the broader community. The highly variable success of committees and other externally introduced institutional arrangements enabled me to compare different community governance arrangements and explore potential mechanisms that explain different institutional outcomes.

When I started data collection, I expected my thesis to focus solely on exploring challenges related to the establishment and ongoing operation of water committees, and, as a result, many of my examples involve water governance. However, as a result of using a *storian* methodology, it became

obvious that the challenges of organising community-level governance through committees are not restricted to water committees.

3.11.3 Thematic analysis

My data analysis is based on the reflexive thematic analysis (TA) approach outlined in Braun & Clarke (2021, 2020, 2019, 2006). TA is an analytical method to organise qualitative data and develop themes by looking for repeated patterns of responses or shared meaning (Braun & Clarke, 2006). This approach to qualitative research offers insights and can uncover phenomena that would not be picked up through quantitative methods. The prevalence of a theme in the data is important in the sense that the researcher is looking for thematic patterns but does not indicate the importance of the theme as it would in more quantitative research methods (Braun & Clarke, 2006). Instead, it is the researcher's judgement to decide on themes and their relative importance depending on their theoretical or analytical focus (Braun & Clarke, 2006). Rather than expecting codes to emerge passively from the text, researchers chose codes based on their interests (Braun & Clarke, 2006). Themes are, therefore, created through analysis rather than passively discovered in, or emerging from, the data (Braun & Clarke, 2006). TA does not rely on research participants answering the same questions, and themes chosen from the data are not necessarily related to the questions asked of participants (Braun & Clarke, 2006). This makes TA a useful approach to analyse *storian* conversations. The authors note that the development of themes is influenced by the researcher's positionality. Since different researchers will not necessarily choose the same themes in a given data set using this method, an agreement between a number of coders is not regarded as a measure of reliability (Braun & Clarke, 2006). Codes can be explicit (semantic) descriptions of what research participants said. Patterns in these codes are subsequently interpreted. Alternatively, interpretative (latent) codes theorise the underlying ideas and meanings. Developing these codes, therefore, involves interpretation from the start, often in relation to existing theories (Braun & Clarke, 2006).

Braun and Clarke (2006) point out that 'there is no one right way to proceed with reading for thematic analysis, although a more inductive approach would be enhanced by not engaging with literature in the early stages of analysis, whereas a theoretical approach requires engagement with the literature prior to analysis' (p.86). In contrast to theoretically informed frameworks such as grounded theory, TA is theoretically flexible and can be employed by researchers from a broad range of epistemological or ontological positions ranging from the realist to constructionist end of the scale (Braun & Clarke, 2006). The approach can be used both inductively and deductively, which makes it well suited for critical realist research, with its dual aim to reflect reality and explore its underlying mechanisms and use of inductive and deductive approaches at different stages of the analysis process (Braun & Clarke, 2006). Because TA can be used with a range of underlying epistemological and ontological assumptions, these should be made explicit (Braun & Clarke, 2006). In line with critical realist research, my analysis focused on identifying possible structures and mechanisms that would explain the observed autonomous changes in traditional institutions (Bhaskar, 2015; Danermark et al., 2005; Easton, 2010).

A total of 35 hours of recorded *storian* conversations with members of the three study communities and 14 hours of key stakeholder interviews were transcribed. The Bislama language interviews were translated into English with the help of Oxfam's iPTD coordinator and an external translator. The transcripts were subsequently imported to NVivo qualitative data analysis software for data management and coding. In line with Braun & Clarke's (2006) approach to TA, I started with a broad focus on exploring and explaining institutional change processes in the study communities. I subsequently developed and continually refined more specific research questions through the coding process, combining an inductive and deductive approach. These narrower research questions correspond to the themes I developed, which form the foundation of the chapters of this thesis (Braun & Clarke, 2006).

In the first round of coding, I focused on coding the data inductively, using explicit codes and developing initial themes. I refined these themes in a second round of coding by combining them into higher-level themes and applying

theoretical concepts from the critical institutionalist literature to develop interpretive codes to help me find possible explanations for the observed events and identify phenomena that have not been explained by the theory. However, in practice, engaging with the literature and the data has been iterative, which meant that the literature I read influenced how I approached coding and the themes I developed from the data influenced the choice of additional literature to support my analysis of identified patterns and underlying phenomena.

3.11.4 Research Ethics

Ethics approval for this research was obtained from the Environment Department's Research Ethics Committee before the commencement of the research in 2018 and updated before conducting the *storian* conversations in 2019. The approval covers my research for this thesis and the iPTD project's participatory community engagement methods. Approval to undertake the research in Vanuatu has been obtained from the *Vanuatu Nasonal Kaljoral Kaonsel* (Vanuatu National Cultural Council).

Free, prior, informed consent was obtained from all participants. This includes consent to record *storian* conversations and key stakeholder interviews. Some *storian* participants chose not to be recorded. In these instances, notes of the conversation were coded in lieu of verbatim transcripts. All research participants received an information sheet (Annex A) and gave informed written consent to participate in the research (Annex B). Participants were made aware of their right to end their participation in *storian* conversations and interviews at any time without giving a reason. To avoid duplication and confusion, the same consent form was used for *storian conversations*, key stakeholder interviews and iPTD workshop participants, as there was a significant cross-over between the groups. The Bislama version of the information sheet and the questions on the consent form were explained verbally to all community participants at the start of the conversations.

The concept of a consent form was treated with suspicion. One chief queried why the group should sign the forms when they had already verbally agreed to take part. Several community members perceived signing forms as

linked to making commitments rather than as a mechanism to protect participants. In hindsight, I would use verbal consent for both the workshop setting and individual interviews since many participants were not accustomed to the formal language in the consent form, and some were illiterate. A shortened version of both forms with simplified questions would have also been preferable. While this may have conveyed less information, it might have facilitated the retention of the key messages. A robust process of documented verbal consent with clear explanations of the key messages and processes that enable everybody to ask questions would have been more appropriate in the context of these communities.

The consent process assured community members that they would not be able to be identified in the research outputs. The promise of anonymity allowed participants to talk more freely and may prevent unintended outcomes of my research for individuals or villages. Nonetheless, it became a challenge when writing up my results. Vanuatu is a small country, and participants in *storian* conversations and interviews are often identifiable by their answers or positions. As a result, I decided to remove potentially identifying information, including village names and key stakeholder positions, even though these may have provided additional depth to the research. Each study participant was assigned a unique identifier comprising a village code (A = Village A, B = Village B, C = Village C) and a number. Quotes are attributed to participants using these identifiers to maintain confidentiality.

Qualitative data associated with all research participants was collected, stored, and processed in line with the Global Data Protection Regulation and Data Protection Act 1998. Electronic audio, text, and image files are stored on a dedicated network drive hosted at the University of York. iPTD project staff and partners only had access to documents required for their involvement in the project.

3.12 REFLEXIVITY AND POSITIONALITY

As outlined above, I chose to use a *storian* approach to foreground participants' stories, perceptions, and priorities. However, critical realist and critical institutionalist authors caution that the use of theory and the

researcher's background influence their analysis. Knowledge is regarded as a social product that is not independent of its production and, therefore, itself subject to be influenced by structures and generative mechanisms (Danermark, Ekström & Jacobsen, 2005; Bhaskar, 2015). For example, the knowledge we produce depends on what research questions we choose to ask and how we choose to answer them (Danermark, Ekström & Jacobsen, 2005). While we cannot avoid these biases, we can reflect on and account for our own practices and agendas (Sayer, 2000b; Bhaskar, Danermark & Price, 2017). By exploring their positionality in relation to the research and research participants and acknowledging their preconceptions, the researcher may be able to reduce their influence on the research (Dunn, 2005). Reflexivity is regarded as essential for critical realist research and as crucial to achieving any objectivity (Sayer, 2000b; Bhaskar, Danermark & Price, 2017). In the following, I outline my reasons for conducting this research and reflect on preconceptions that may have influenced the research.

The research was motivated by my work as an international development practitioner and researcher since 2006. This includes working on development and research projects in Vanuatu for ten years. Studying and working in international development has conditioned me to regard community governance interventions as a desirable means to create positive change. I have, however, also witnessed the failure of externally imposed committees to function beyond project timeframes. This apparent dichotomy sparked my interest in exploring if and how externally introduced institutions could improve community governance, which led me to choose my overall research question.

Living and working in Vanuatu continuously for over five years afforded me some degree of familiarity with context, language, and culture. Nonetheless, there are inherent challenges as a researcher whose social identity was formed in a very different context to understand, analyse, and comment on the context and institutions of Vanuatu communities. I tried to minimise these challenges through ongoing reflection on and awareness of how my experiences, structural privileges and biases impact my interactions with research participants and analysis of the data. I was also cognisant of Vanuatu's recent history of imperialism and colonialism, which many

participants had experienced first-hand, and the risk of neo-colonialist interpretations. I chose to use a *talanoa* approach to data gathering and a reflexive thematic analysis approach to data analysis to acknowledge and value local inputs and pay attention to priorities and explanations found in the data.

Nonetheless, my data analysis relies on existing theory and my experiences in identifying and seeking possible explanations for phenomena that may or may not be visible to communities. Despite efforts to highlight participants' voices, the choice of which quotes to include or omit, and the analysis of what people said, is inevitably filtered through my own positionality. My value system is shaped by my upbringing, education and social environment and influences my conception of what changes are desirable to work towards. As a result, values linked to human rights, gender equity, non-discrimination and inclusion, anti-racism and environmental conservation influence my analysis. This includes challenging some aspects of traditional, non-traditional, and religious institutions that restrict the rights of women, young people, people identifying as lesbian, gay, bisexual, transgender, queer, intersex, or other diverse genders and sexualities (LGBTQI+), people with disabilities and other marginalised groups. Since research participants were subject to different experiences and influences, not everybody would agree with all aspects of my analysis. Recognising that researchers can never be completely neutral and bring their own values and biases to data collection and analysis, I chose to write this thesis in the first person to remind the reader about my positionality in relation to the research.

Direct recruitment of ni-Vanuatu staff into senior positions is still a challenge in Vanuatu due to the limited number of people with the required qualifications and experience, many of whom are already employed in essential positions, for example, in the national government. In situations where direct recruitment is not an option, projects should support current and future ni-Vanuatu leaders and academics by offering skill development and opportunities through recruitment, competitive salaries, and opportunities to develop research and leadership skills. My work as a development practitioner in Vanuatu involved mentoring ni-Vanuatu staff members who went on to work

in leadership roles in government and intergovernmental organisations. This included mentoring and handing over my role as Program Director to a ni-Vanuatu colleague. Regrettably, I was unable to collaborate with ni-Vanuatu academics as part of this research. However, the iPTD project included training components for the ni-Vanuatu facilitation team and offered to fund training, including university courses for Oxfam partner staff to build local research and facilitation capacity. Unfortunately, none of the staff members enrolled in a university course. A core component of the iPTD project was to involve participants as researchers in co-developing a water safety monitoring technology.

3.13 LIMITATIONS

I encountered several limitations while conducting my research. While some of these relate to my research methods, most were the result of logistical challenges and cultural specificities of the research context.

3.13.1 Research methods

My unstructured *storian* approach led to collecting a large amount of data, which contained many interesting themes of which I could only use a fraction for my thesis. While the lack of set questions provided a rich dataset, it complicated the data analysis process. Reflexive thematic analysis proved to be a useful method to structure data by developing themes. My social identity as an outsider to the community and as a man may have limited what was presented to me, and some participants, in particular women and younger community members, may have been more reserved in their answers. While *storian* conversations were conducted in Bislama, some community members also felt more comfortable using their local language to explain difficult concepts. These last two limitations were mitigated to some extent by my previous engagements with many interviewees during project workshops and by being accompanied by a female ni-Vanuatu Oxfam project coordinator.

3.13.2 Logistical challenges

Conducting research in rural Vanuatu communities entails significant logistical challenges. Travelling to some of the communities is difficult and expensive as it involves travel on small planes, boats and four-wheel drives. Adverse weather conditions regularly delayed travel to and from the study communities by several days. The border closures due to the COVID-19 pandemic and, more recently, the impact of cyclones Judy and Kevin prevented two planned visits to Vanuatu to share insights from my research. Conducting my research as part of a funded project allowed me to visit the study communities more frequently and for longer periods of time than would otherwise have been possible.

3.13.3 Cultural specificities

In Vanuatu, as elsewhere, participants may sometimes give the answer they expect the researcher wants to hear (Haapala & White, 2018). Norms of politeness, as well as a history of quiz-style capacity-building engagement with NGOs, were a limiting factor in the local context. As a result, participants often talk about their knowledge of how the community is organised in theory, which, in practice, is implemented only partially or not at all (see also Forsyth, 2009). I tried to address this where possible through follow-up questions and triangulation between interviews and observations.

Storian conversations were not always conducted in private since they took place outside people's houses, where curious community members joined to listen to the conversation. Some participants also brought friends or family. A recently appointed female local government official used the opportunity to travel with me to connect with some of the communities in her area and joined several *storian* conversations to improve her understanding of local institutions and challenges. This led to interesting conversations since community members had few visits from local government officials in the past. At all times, participants appeared to be at ease and able to talk freely in the presence of those around them. While I recognise that these situations may have impacted the data, they appeared appropriate for the context and aligned with the

talanoa methodology and the desire for my research to provide practical benefits to participants.

Finally, the specificity and diversity of governance systems and local kastom in Vanuatu may limit the breadth of generalisation that can be drawn. While many of the characteristics and challenges of the study communities discussed in this thesis are shared with communities in Vanuatu and Melanesia more broadly, the transfer of research findings to other contexts should be approached with care.

Chapter 4: Diverse institutions in three Vanuatu communities

4.1 INTRODUCTION

This chapter provides a thick description of the three study communities on Epi and Efate islands in Vanuatu and maps the diversity of contexts and institutions between the three study communities. One of the study communities had several committees responsible for governing different aspects of community life, while in two of the three study communities, most committees were dormant or no longer operational. Using the example of the government-mandated water committees set up in each community, I examine the mechanisms that gave rise to different water governance structures and outcomes. I use institutional bricolage and related concepts as an analytical lens to unpack how the introduced governance arrangements that constitute water committees were adapted or rejected in response to diverse local contexts and pre-existing governance structures.

The data presented in this chapter are based on *storian* interviews and community observations. The chapter is also informed by a series of workshops in the study communities to co-develop a water monitoring technology and related institutions as part of the iPTD project.

4.2 BACKGROUND TO THE STUDY COMMUNITIES

In the following, I provide a thick description of the overall institutional context and the institutional diversity in each community, with a special focus on water governance arrangements. Participants in all study communities identified water as a priority and one of their key challenges. As one participant pointed out: "Water is our life" (B1)

The three study communities are located on Efate and Epi islands in Shefa province, Vanuatu's most populous province with close to 55,000 inhabitants, or 18 per cent of Vanuatu's total population of 300,000 (Vanuatu National Statistics Office, 2020). All three villages are located near the coast at the base of forest-covered volcanic hills rising in the centre of the islands.

Before the arrival of the missionaries, most families in the study communities lived spread out across the hilly interior but were relocated to fewer, larger new settlements by the coast. One participant explained: "Because of Christianity, when it came in 1885 when the gospel came to Vanuatu and travelled around Efate, the missionaries didn't want to walk to the top of the hill, so they told everyone to come down" (A12). Many houses in the study communities are constructed using traditional designs and building materials such as natangura palm leaves and wood. However, non-traditional building materials such as concrete bricks, concrete floors and corrugated iron roofs are increasingly used in Village A and Village B by those who can afford them. None of the communities is connected to an electricity grid, and solar panels are widely used for lighting and charging mobile phones and other small electronic devices. While it is possible to use mobile phones to make calls and access the internet in all communities, it is expensive, and access can be patchy. Village A and Village B have small stores with a limited assortment of low-quality imported food, plastic household goods, and some hardware. There is no store in Village C.

The location of communities impacts their access to markets and services and their opportunities to earn an income. Village B is a rural village on Efate Island, the same island as Vanuatu's capital, Port Vila. Port Vila is Vanuatu's largest town and has a range of shops, supermarkets, hotels, a cruise ship harbour, and a large market hall. Many goods, such as non-traditional building materials and water infrastructure components, can only be purchased in the capital Port Vila. It is also the home of Vanuatu's national parliament, the *Malvatumauri* National Council of Chiefs and Shefa Province provincial headquarters. Village A and Village C are rural villages in the North and the South of Epi Island. Weather conditions, particularly in the wet season, frequently disrupt travel plans by air, sea, and road in all three locations, making it impossible to travel to and from the other islands or the capital for several days.

4.2.1 Local economy

While income-generating activities are limited in all three communities, significant differences exist. The labour force participation rate in the area where Village B is located is 50%, compared to 36% in the area of Village A and 5% in the area of Village C (Vanuatu National Statistics Office, 2020). Many participants in all study communities derived a small income from selling fruit and vegetables from their gardens at local markets or in the capital. Some also sell coffee, copra, peanuts, cocoa, or fish and make handicrafts such as woven mats. Income varies over the year since some of the produce is seasonal: "When there is the season for fruit, then yes, people carry money from fruit like oranges and mandarins. But when it finished, it's finished" (A7). In Village A and Village B, several younger community members were absent during data collection because they worked in the predominantly foreign-owned tourism and private sector businesses in Port Vila or were employed as seasonal workers in Australia or Zealand. A handful of community members own small convenience shops or guesthouses, drive vehicles that serve as public transport, and one community member in Village A and Village B worked for the local government.

Many people in the communities work without monetary payment, mainly to produce food for their own consumption. Subsistence food gardens, alongside family and community networks, make it possible to live with little money. As a result, money plays less of a role in day-to-day life than it does in the urbanised centres of Port Vila and Luganville. Several participants saw this as a strength. One participant told me that often he did not "have money for a day or a week, but I'm not dead, because we are in Vanuatu, not a different country" (B2). This is, however, changing. Several participants are worried about the increasing role of the cash economy. One participant told me: "Some of the things that have influenced change today, one of those is money - money talks" (A14). Another noted: "Before, I could go and cut down my banana, and I could eat it, but now I don't have a banana that I can eat like that, I must take it to the market, thinking about money is a big thing in the mind of the people now. This thinking about money has spoilt a lot of things" (B3). Some participants reported a shift from communal to increasingly individualistic

thinking alongside the increasing importance of money. They noted that the increasing role of money affects traditional norms and practices, for example, by encouraging individual income-generating activities, such as growing produce to sell, over voluntary collective work, as discussed in Chapter 2. For example, one participant in Village B told me: "many people today think about money: 'Why do we have to waste our time to go and work for the chief, when we should go and plant our garden, so we make money', many people have these kinds of thoughts" (B2). Similarly, a chief in Village A said: "When I ring the bell at the Nakamal the attendance is not good because some will think about money: 'Why would I go and waste my time doing community work when I can work for money'. Others might think: 'I just want to go to my garden it's better than going to do the work down there'" (B14).

Many relayed stories of the increasing role of money in their everyday lives and the associated need for individuals to earn an income. "Life is expensive. Before everything was free" (B3). School fees were the biggest recurring expense mentioned by participants. Community members also needed money to transport produce to the markets, buy imported goods such as rice and support fundraising activities by local churches, schools, and committees. One participant from Village B noted that improved transport to Port Vila made it easier to spend money: "In the past, travelling to Vila was very far, that is why we stay only at home eating local food. From here you can't spend money. But nowadays […] it's much easier to go to Vila and make you spend money. […] It's not good, but we already live with it, we can't reverse it" (B18).

4.2.2 Water infrastructure and governance

None of the communities has access to paid water services since water utility companies only operate in and around the two major cities. Therefore, all communities manage their water supplies, and access to safe water poses a range of governance and maintenance challenges for all communities in the case study. All three study communities have access to a mixture of rainwater tanks, hand-dug wells, springs, and rivers to access water. Village A and Village B also use ageing gravity-fed water systems. Communities choose

between water sources based on whether they are used for consumption or other uses. Most participants preferred rainwater for drinking, while spring water accessed through gravity-fed systems is also used as drinking water. The other water sources are mostly used for cleaning, washing clothes, bathing, and sometimes cooking. Seawater is also used for bathing, washing dishes and boiling vegetables. However, a national census shows significant reliance on secondary water sources as a result of weather conditions or problems with water infrastructure (Foster & Willetts, 2018; Vanuatu National Statistics Office, 2020). For example, less than half of Vanuatu's communal rainwater tanks are used throughout the dry season (Foster & Willetts, 2018; Vanuatu National Statistics Office, 2020).

The gravity-fed systems start with a boxed groundwater source that feeds into a series of storage tanks in the hills above the communities and supplies dozens of tap stands in the main villages and surrounding settlements, locally referred to as sub-stations. Community members that do not have taps near their house use shared taps. Insufficiently sized storage tanks supplying a growing number of community members provide a challenge in Village A and Village B's gravity-fed water systems. In addition, leaks and broken taps, a growing number of new connections and accidental or deliberate cutting of pipes lead to frequent water supply issues, including temporary water cuts and reduced pressure. Neither system has sufficient pressure to reliably reach the sub-stations at the end of the pipes. Village C is the only community participating in the study that does not currently have a working gravity-fed water system.

The geographic location of the communities impacts the cost, procurement, and maintenance of water infrastructure. On Efate Island, water infrastructure components can be sourced from suppliers in the capital and delivered by road. In contrast, water system components need to be imported by boat to Epi Island. The absence of a harbour or road connecting South Epi to North Epi or Efate Island creates additional challenges for transporting larger infrastructure components or machinery. Water committees were established in all three communities as part of an NGO-run Drinking Water Safety and Security Planning (DWSSP) workshop as part of the response to

tropical cyclone Pam in 2015. However, at the time of the research, each community had different institutional arrangements for water governance and management.

4.2.3 Village A

Village A and surrounding sub-stations (pop. ~350) on Epi Island are connected by a sealed road to the islands' two small airports with grass airstrips for use by small inter-island propeller planes and a harbour with regular ferries to Port Vila. Four-wheel drive vehicles serve as public transport, carrying passengers and goods on their open flatbeds. Village A's main settlement is built around a large Nabanga tree close to the beach. Near the tree, the centre of the village consists of a nakamal building, a small stage for community events, a church, and a cooperative shop. A large grassy area in the centre of the village is used for community activities and as a soccer pitch. The cooperative shop sells packaged food and non-food items as well as locally baked bread. A private shop and small guesthouse are a short walk away near the village entrance. Village A has a clinic which was built by a church and is run by a government-employed nurse and a large boarding school. However, the nearest doctor and midwife are on the neighbouring island of Tongoa.

Village A and its sub-stations have shared governance structures, including an active village council, which is accepted as the central governing body in the community, and several community governance committees, including a water committee and a community disaster and climate change committee (CDCCC). Committees are expected to present reports at the village council meeting. However, one participant told me that this was still a work in progress: "People haven't really come to understand the good use of the council yet, but [the chairman] continues to announce and says that every structure is very important: that I report so that the community understands that they [the committee] have been doing work and that I understand why you're doing fundraising so the people will understand the work - that is why they present the reports. But so far only the WASH [committee] is faithful in presenting their reports now the CDC is also starting to do it" (A1).

The village council is a hybrid institution, combining non-traditional and traditional institutional elements. While council activities are organised by non-chiefly community leaders, in line with kastom hierarchies, chiefs continue to play a central decision-making role. One *smol jif* ('small' or assistant chief) outlined the role of the village council as follows: "The village council is a body that we've put in place to look after the people. […] There is a chairman and a secretary and treasurer that are in the council, but if they find out anything, then they must first pass by the chief. […] We are separate villages, but we use one nakamal, we work together. We made the one council to cover all of us, and the chiefs look after us" (A10). He noted that chiefs still commanded a great amount of respect: "The chiefs are our government, in Vanuatu the chief is government, if there is any problem you take it to the chief, you take it to the nakamal and *storian*" (A10).

Many participants mentioned the importance of respecting chiefs, church representatives and elders. One participant told me: "The rules in the community, I would say it like this, one of them is obedience. The community members must be obedient to each other, to the chiefs and the church leaders, and even to the other departments [village council and committees], they must be obedient" (A14). Several participants believed that chiefs have special powers to enforce rules. One participant said that "in *kastom* there are penalties, if you do something wrong there are penalties. […] There is black power, if you do something against the kastom, the kastom will get you" (A14). However, chiefs struggled with fulfilling their governance roles and struggled to enforce local rules, which led to the emergence of new hybrid institutional arrangements described in Chapter 2.

Since Vanuatu's independence, the community has received sporadic support from the state, such as the construction of a school, a health centre and, most recently, a large public project to increase resilience through improved infrastructure, which created some temporary local employment. In 1999, the government installed a large and complex gravity-fed system, which supplies about 80 standpipes and showers in the main village and most of its sub-stations from a distant boxed source. The system was expanded in 2005 with donor funds. One participant mentioned that the installation of the water

system was the biggest change that happened in Village A in their lifetime. He said: "The old grandparents, when we started using the water supply, they were so surprised because life became easy" (A14). Village A has a water committee that is responsible for maintaining the system from the source to the main storage tanks and sub-committees that are responsible for all other pipes, storage tanks and taps. Individual users are responsible for fixing broken taps or accidental damage to pipes. The gravity-fed system is the main water supply for drinking and domestic uses. Rainwater tanks, hand-dug wells, a nearby river and freshwater emerging from certain parts of the beach are primarily considered backup sources. These are mostly used when there is a problem with the gravity-fed system.

Village A's water committee was established by an NGO as part of a DWSSP workshop and plumbers' training. It is the only water committee in the study sites that was active at the time of the study. Before the committee was established, the community had a single unpaid plumber and faced many challenges with their water system, mainly linked to raising funds to buy and repair equipment. The community adapted the water committee's structures to work in the local institutional context. The committee, alongside other committees, presents regular reports on their activities and finances at village council meetings and asks the council to endorse any decisions. This link with the village council encourages transparency and ongoing water committee activity. By endorsing water committee decisions, the village council also imparts authority to the water committee.

However, this did not enable the water committee to collect water fees on an ongoing basis. The treasurer of the water committee explained: "Everyone at the nakamal [traditional meeting place] says 'We must pay water; everyone must pay for water. It is a must. But then when I carry the paper [bill] and give it to them they don't pay" (A4). Another community member told me: "We hear the committee ask for money, but we don't pay it. But when there is no water, then we feel it" (A11). As a result, the water committee continues to rely on fundraising activities to pay for community plumbers and labourers to maintain the water infrastructure and purchase parts. Due to its integration with local institutions, Village A's water committee functions reasonably well.

Committee members meet regularly and are aware of their roles and responsibilities, and, as a result of the committee's work, most community members have consistent access to piped water. Community plumbers are paid to repair or clean the water tank since it is far from the community, and accessing the tank often takes a full day. One community member explained: "If the water doesn't run […], then they go and see the committee and tell them to go and follow the pipe. The water committee are busy, but on the day that they have to go and check the pipe, they know that that morning when they step out of their house, that day they will make 1500 Vatu" (A1).

However, the community shares governance challenges with the other study communities. One of the smaller sub-stations on the outskirts of Village A no longer has access to water due to a lack of infrastructure updates as the number of connections to the overall gravity-fed system increased. Instead, community members in the sub-station use rainwater and water from the nearby river. People living in this sub-station no longer participate in the water committee. A member of the main committee explained: "They don't really see the importance because the water doesn't run; we shared our thoughts, but they say 'If we go what do we talk about, our water doesn't run, so what are we paying a fee for?'" (A1).

4.2.4 Village B

Village B village and sub-stations (pop. ~650) is situated on the northern coastline of Vanuatu's main island Efate. It takes about an hour to drive from the capital Port Vila to Village B on the sealed round-island road, which allows easy movement of people and goods. Village B's sub-stations correspond to family groups relocated by missionaries from the surrounding hills. Privately run minibuses and four-wheel drive vehicles provide paid transport for people and goods to Port Vila, and the community has a permanent stall in the capital's main fruit and vegetable market. The main village has a nakamal (meeting hall), constructed from traditional materials, several small churches, a small shop, and a guesthouse consisting of two small huts. The shop sells a small selection of packaged food and household items. A small health centre is run by a volunteer with basic healthcare training who lives in the village.

Village B has a village council, a school committee, and a health committee. However, at the time of data collection, the council and committee members had recently been replaced because they did not meet. One participant in Village B told me that she thought that: "the committee for the school and the committee of the church work well because their leaders are pushing them so that they complete the work, but some of the committees in the community don't work well because a president or whoever is looking after them is weak and they make the weakness go to everyone" (B3).

While chiefs remain widely respected in Village B, several community members noted that their ability to enforce rules was in decline and that they were no longer successful in mobilising communal work activities necessary for maintaining essential services (see Chapter 5). The community plumber told me: "There is no more respect, the community have no more respect for their chief, the rules are there, but the people do not follow it anymore" (B1). A community member noted: "In the past, people would follow the rules, but I don't know why, now the respect has started to be lost, some people don't follow the rules anymore. For example, Monday is chief's day, and he has created a rule that says if you do not come to [community] work on Monday, or if you don't come to a meeting, the fine is 200 Vatu. It means that people were afraid not to go to the meeting and must go to do the work, but now that doesn't happen anymore. The rules are not strong anymore, so they don't pay 200 Vatu anymore" (B5).

Another participant gave the following example: "There is a rule that they [the chiefs] put in the nakamal that says they [community members] must not drink home-brew and shouldn't smoke marijuana. When they talk to them in the nakamal, then there are some that will listen, and they will abide what the chief will say, but there are some that won't listen" (B3). This is despite the belief that chiefs have special powers to enforce the rules they set as one participant explained: "One of our beliefs here is that the chief has power, and he can use his power to put a curse on your home if you don't abide by the rules of the chief. For example, […] sometimes if somebody is staying home all the time when the bell rings [calling people to community work or meetings], but he doesn't want to go, and he just stays, then he is scared that he will get

sick. […] That is the power of the chief that can attack you and make you sick because you've been disobedient" (B5). A non-chiefly community leader explained that while chiefs still had a special role to play in the community, for example, in their role as kastom judges, many other community activities could instead be governed by a village council of 'resourceful people' (B2). He was working toward this goal by starting an initiative to revive community work on chief's day and possibly influenced by his work for the local government, created a printed community action plan that confers a sense of formality reminiscent of bureaucratic institutions (see Chapter 5).

Village B's water supply consists of a gravity-fed system, rainwater tanks, and a river near the main village. The gravity-fed water system supplies water from a boxed spring in the hills behind the village via a series of tanks to a network of tap stands in the village and its sub-stations. The water pipe travels for 150 meters through a submerged cave, which makes it difficult to repair when damaged. The community reports receiving little government support since the system was installed in the 1980s. As one participant noted: "The government came during the time to install our water and left and did nothing" (B1). Community members use the gravity-fed system for cooking, washing dishes and clothes, bathing, and drinking. The nearby river is mainly used for bathing and washing when the gravity-fed system is turned off to allow the storage tank to refill. Women and men bathe in different parts of the river. Most community members prefer to drink water from communal and individual rainwater tanks instead of water from the tap stands. Some reported that they preferred the taste of rainwater, while others were influenced by a one-off water safety test conducted by humanitarian workers shortly after tropical cyclone Pam in March 2015, which indicated that the tap water was polluted at that point in time. This led to the common perception that water from the tap stands was not suitable for drinking. When the iPTD project sampled the tap water, we found that it was safe to drink at the time of testing.

Village B established a water committee as part of the Vanuatu government's response to tropical cyclone Pam, but the committee no longer meets. A male community member told me: "In 2015, they formed a committee, but the committee never worked. In the monthly report that we submit [to the

village meeting], there is space to put whether the committee met or not, but every time, we must put down 'no' because it didn't happen" (B7). After the committee stopped meeting, a community plumber continued to provide basic maintenance and repairs to the gravity-fed water system to prevent it from breaking down. This community plumber told me that the "committee is weak and scattered, and I am just alone" (B1). Another community member explained: "Today, mainly only the plumber is working, we've been to the meeting, and they say that a committee will take care of that, they say their names, but nothing happens until now" (B2). Since the water committee stopped working several years ago, the plumber has not been paid an allowance, and there are no funds to purchase spare parts.

Community members were concerned that the functioning of their water system relies too heavily on the plumber for whom there are no succession plans: "If the water is not running, and if he did not go and fix it, we could not use water anymore […] if it was a different person, he will say, hey I am fixing the water but I never get paid, I will just leave it, if so, maybe we'll be using only the river" (B4). This concern is perhaps informed by past experience. One female participant told me: "When I was small, there was just one man that would look after the water, not a committee […]. He looked after the water until he became sick, and we lost him" (B5). Another community member remarked, in the past, this system worked better since the chief had more authority to organise community members to support the plumber in carrying out repairs. She told me that the community no longer cooperates as it once did, and that the plumber must do all the work by himself (B6). The community plumber would welcome a return to a system in which a strong chief makes decisions but proposes that, while the chief should be there for authority, he should be guided by a committee: "The committee must have a chief […] they can go and ask the chief to put the rules" (B1).

The current model allows for basic maintenance and repair of the water infrastructure. However, the plumber is not authorised to make or enforce rules. For example, one participant explained that without a governance mechanism to decide how many connections can be added, anyone who can afford to purchase parts and pay the plumber can add new connections to the

main pipe. Some community members made additional connections without consulting with the plumber. While there is an expectation of having one pipe per family, there are no enforced rules. The growing number of connections results in poor water pressure towards the end of pipes and empty water tanks.

Study participants also complained that some people used more than their fair share of water by not repairing broken, continuously running taps and using piped water for water-intensive activities such as making concrete bricks, watering plants or washing cars. A participant in Village B thought that people wasted tap water: "There is a big river that runs every day so water will come down every day. So, they believe they will never be short of water, so it means that we use water carelessly. It's not like when you go to an island where they don't have water, and you see how they use water; they use water wisely" (B5).

Nonetheless, most participants in the iPTD workshops and *storian* conversations focused on the need for bigger tanks and pipes rather than water conservation. For example, one participant told me: "The population has increased, so we need to upgrade everything again; the water system must be upgraded. [...] The main source up the top must be upgraded to become bigger and store more, and some of the pipelines need to be bigger" (A17). The growing number of connections and lack of water conservation measures make it necessary for the plumber to turn off the main water supply pipe most afternoons and during busy periods, for example, on Sunday mornings when people are getting ready for church, to allow the storage tank to refill.

Water pressure is also usually too low to reach households near the end of the pipe. When this is the case, community members living in the sub-station need to pay a driver 500 Vatu (£3.50 at the time of writing) to get water from the river in a 40-litre tank. Although many of these challenges were justifiably blamed on the limited amount and size of storage tanks, they also indicate underlying problems with governance structures.

4.2.5 Village C

Village C and its surrounding sub-stations (pop. ~120) are located in southeast Epi. The original village was located near a large nabanga tree by the beach, but only six community members remain in the original location.

Most of the community is now spread out over six geographically distinct sub-stations that consist mainly of family groups with between six and forty members, most of which are children. Although geographically close to the North of Epi, Village C is more isolated than the other study villages due to transport infrastructure challenges. Village C can only be reached by a combination of boat and four-wheel drive vehicle or on foot from North Epi. It is cut off from North Epi's small airports and does not have a harbour for boats to moor. One participant noted that, although they can see the lights of Port Vila on clear nights, they feel like they live in one of the very remote northern Provinces of Vanuatu. As a result, communities have little access to markets and services and few interactions with government officials or NGOs.

Six four-wheel drive vehicles provide transport for people and goods on the unsealed roads that connect South Epi's villages and sub-stations. It is 15-minute drive from Village C to the furthest sub-station. A few community members own small, motorised boats, but due to high petrol prices, transportation to the North of the island or the neighbouring island of Tongoa is expensive. A weekly boat connects Village C and North Efate Island. The boat is mainly used to transport fruit, vegetables, peanuts, and kava to be sold at the market by relatives who live in the capital Port Vila. An NGO taught women in Village C how to make peanut butter as part of the tropical cyclone Pam recovery program in 2015, but there was no market for it, and they now only make it for their own consumption at Christmas. In contrast to the other study villages, no community members had participated in seasonal workers' schemes.

Village C has no agreed *paramount jif* with authority for the whole village, and each *smol jif* only governs their sub-station, which often consists of extended families or tribes. At the time of data collection, there were no functioning institutions governing collaboration between the main village and sub-stations. The village council was no longer operational, and there was little dialogue between chiefs. Some participants attributed this to ongoing disputes between chiefs of the different sub-stations related to chiefly titles and land issues. In addition, the location of rainwater tanks supplied by an NGO after tropical cyclone Pam has been a source of disputes between chiefs and

members of different sub-stations and may have contributed to reduced collaboration between community members. One participant noted that neither the village council nor the chiefly system was performing their role: "The council is there, but the council is dead. The council is dead. The *namaraki* [chiefly system] is also dead" (C5).

Nonetheless, some of the young community members play sports together, and one young woman told me that she collaborated with young women from the different sub-stations: "There's nothing that works good. If the girls want to organise something, we just do it. School fundraising, for example - this doesn't follow the system of community, and we organise ourselves with everyone from all the communities" (C13). Participants in Village C could not remember the last time they met with their local government official.

The gravity-fed water system in Village C was installed in the early 1990s and used to supply Village C and one of its sub-stations with water. A voluntary plumber maintained the water system with pipes and spare parts left behind by an NGO, but the water system failed once all the parts were used. At the time of the data collection, there was no community plumber in Village C. The system was repaired in 2003, and a committee was put in place. However, as one participant remembered: "Nobody wanted to pay the fees, and so it collapsed again […] and stayed like that until now" (C12). Community members told me there are leaks in the pipes and the taps are broken, so the water storage tank stays mostly locked. Nonetheless, one of the water tanks near one of the sub-stations still functions. One participant told me that when you see that the tank is overflowing: "You must shout out 'hey you, collect the water', then every house must be ready with the containers, fill them up and then shut it off again. Because all the other places they leak and waste the water" (C7).

Most community members in Village C rely on one of several rainwater tanks for drinking and a combination of rainwater and groundwater for bathing and washing. One participant from the main village told me they are "Using the rainwater ferrocement tank to wash, cook and swim [bathe], but it's broken and not clean. We're also using hand-dug well to swim and wash. For drinking, we fill up small buckets with rainwater when it rains. When it doesn't rain, we drink

from the rainwater tank" (C15). The reliance on rainwater is particularly problematic in the dry season when rainwater tanks run low. A study participant told me that "when the tank water level goes down, we tell them not to wash with the rainwater, we just use the rainwater to drink and then you must wash in the ocean and use the underground well" (C7). One of the sub-stations, which was located on a hill at some distance from the well, used a small creek for washing and bathing. The creek can only be reached by a precarious walk on a narrow path down a steep hill. Those that cannot access the creek rely on others to bring them water. One participant from this sub-station told me that 'until recently, one of the sub-stations had no access to water when there was no rain and had to walk for one hour to wash clothes and carry water back to the sub-station' (C1). She remembered that during past dry periods, before installing a new rainwater tank, they would collect runoff water from the corrugated iron roofs in small containers, buckets, and tarpaulins. Food was mostly roasted instead of boiled to save water: "I think we just roasted a lot, roasted food. The little water was just for drinking […] Now it has gotten better but not too much" (C1).

During institutional mapping exercises as part of the iPTD project, it became obvious that there were no clear responsibilities or strategies to repair the water system. As in the other communities, a water committee had been established through a one-off NGO-led DWSSP training as part of the government's tropical cyclone Pam recovery activities but did not become operational, and community members said that they were unclear about who they could contact for assistance and how. One young woman thought the failed committee was due to a lack of support from the chief: 'After the workshop, we had a committee, but they didn't work. It needs the support of the chief for it to work. The big chief needs to support it" (C13). At the time of data collection, each family relied on and managed its own water sources: "When we noticed that the water was not good, we just met in our house and decided to go and fix it ourselves and clean the water source" (C13).

4.3 DISCUSSION

The influence of kastom, church, state and NGOs is apparent in local institutions in the three study communities and shaped the institutional elements available to local bricoleurs to adapt new institutions to fit the local context. This influence of kastom, church and state also applies more widely to communities across the country. Using the example of water committees, a government official explained that "a water committee has lots of things that affect it. For example, there are churches and different types of religion that are part of it that give you different perspectives on how it should be structured. Then you have your kastom and your tradition that tell you this is how we work now: if the chief tells you to do it like this, you have to do it like this. And then we have the modern, modernised structures: a committee has a chairman and a secretary. So, for me, a water committee mixes religion, it mixes kastom, tradition and modern. Which is a good thing, of course, because it allows the water committee to be flexible in its operation" (KS5).

However, local differences lead to distinct institutional outcomes. This creates challenges for attempts to introduce standardised institutions such as water committees. Efforts by the Vanuatu government, donors, and NGOs to establish water committees are frequently unsuccessful. The same government official told me that: "You don't see a water committee functioning for a long period of time; it's not really common here in Vanuatu" (KS5). In the three case study sites, despite efforts to establish formal water committees in all three communities through one-off training workshops implemented by NGOs, only the committee in Village A is still operational.

In the following, I outline shared influences that provided institutional raw materials for institutional bricolage processes. I subsequently identify two underlying mechanisms that play a key role in the diversity of institutional outcomes in the study communities: the pre-existing institutional environment and the role of key individuals in the community.

4.3.1 Communities share similarities

The three study communities share a range of common influences from kastom, church, state and NGOs that have been adopted and naturalised over

time and constitute a significant part of the institutional building blocks available to local bricoleurs.

Kastom rules, norms and beliefs form an important part of how community members in all three communities view the world. The importance of chiefs was widely acknowledged in all communities. A key national government stakeholder called chiefs 'the coordinators of the village' and stressed the cultural importance of engaging chiefs when working with communities: "If there is a chance to go through the chief, you go directly to the chief" (KS2). He believed that "if the chief actually thinks strong and does his work, then he can coordinate everything, there is no need for more. It should be straightforward. It is just a small place" (KS2). Participants from all study communities echoed his assessment that strong chiefs would solve a range of government issues and benefit the functioning of committees. For example, a female community member in Village C explained that their water committee failed shortly after it was set up because "it needs the support of the chief for it to work" (C13). Chiefs were also mentioned as the main link to the national level through the island-level councils of chiefs and the *Malvatumauri* National Council of Chiefs. One participant noted that "the voice of the people will pass to the government through the *Mauvatumauri*" (A13). Others shared this view. When discussing their connections to the national level, the nested system linking community chiefs to the island and the *Malvatumauri* was perceived to be more important than links through the devolved state government system, which is designed to connect communities with the provincial and national government.

However, participants in all communities told me that the authority of the chief and their ability to fulfil their governance roles is declining, for reasons including the introduction of outside influences, increased mobility, increased education levels, the proliferation of *smol jifs*, increasing community size, and the increasing role of the cash economy. All communities mentioned some degree of disputes between chiefs, which limited cooperation between groups within the community governed by individual chiefs (cf., Forsyth, 2009). Nonetheless, in all three communities, the institutional environment is shaped

by the socially embedded institution of the chiefly system, including the ongoing role that chiefs play in non-traditional institutions.

Religion is another shared influence on the institutional environment. Institutional building blocks that were introduced by missionaries and further developed by local Christian churches form an important aspect of community member's life in all three communities. Similarly to kastom, this widely shared importance of religion plays a uniting role. This is, for example, visible in the prominent role of prayer and pastors at opening and closing formalities at secular events such as community meetings. However, because community members are part of several different churches, religion also creates divisions within the community. For example, in Village A and Village C, sub-stations were established because groups of people started following a different church. For example, one participant recounted: "We lived in Village A, I was part of the Presbyterian church, then I went to join AOG [the Assemblies of God church], but then those in Village A didn't want AOG to join with Presbyterians in the one place. So they chased me out, so then I took my family, and we went to this sub-station" (A6).

The state appeared to have little influence on the communities' day-to-day life. None of the participants felt connected to the national government. This was also confirmed by an international stakeholder who noted that communities in Vanuatu were often left to their own devices and had little knowledge of or contact with the government. Several community members said they only see their local member of parliament on the campaign trail in the lead-up to elections. The (externally introduced) principle of democratic representation processes at the national level has also not been universally internalised in a context of traditionally highly localised governance and accountability systems. Nobody mentioned that they expected MPs to represent local priorities and create change at the national level. Several participants mentioned that MPs promised direct benefits, including money, to those who voted for them. For example, one participant told me their MP told the community: "'If you vote for me, I'll provide you a free trip to the markets', so that's why I voted for him" (A15).

Nonetheless, colonial and post-independence bureaucratic state institutions left an imprint on local governance arrangements. For example, institutional elements which resemble bureaucratic state structures, such as the roles of a chairperson, secretary and treasurer and the minuting of meetings, are embedded in local institutions in Village A and Village B. Similarly, the influence of NGOs who have also carried out work as part of development assistance or disaster response programs in all study communities, in some cases on behalf of the government, led to the adoption of additional institutional elements influencing, for example, how meeting agendas are set and followed and how meetings are facilitated (cf., Forsyth, 2009).

Influences from kastom, churches, state and NGOs have been adapted, adopted, and naturalised over time and resulted in hybrid institutions that contain institutional elements of kastom, church, state and NGOs. At the national level, this hybridity is acknowledged in Vanuatu's constitution, which states that "the united and free Republic of Vanuatu is founded on traditional Melanesian values, faith in God and Christian principles" and "a sovereign democratic state" (Republic of Vanuatu, 1980). At the community level, many institutions that community members consider traditional and local, including the role of local chiefs in community governance (see Chapter 5), have gone through cycles of reinvention and hybridisation through earlier bricolage processes that have long become naturalised. Nonetheless, research participants in both villages readily distinguished between governance arrangements that they perceived to be rooted in kastom, the chiefly system, churches, or bureaucratic institutions such as those used by the state. Kastom institutions were viewed as old, local, traditional, and often unchanging, while bureaucratic institutions were perceived as new, modern and externally introduced (see also Cox et al., 2007).

4.3.2 Different institutional systems evolved in the three communities

Despite these common influences of kastom, religion, state, and NGOs, which form key institutional building blocks available to local bricoleurs, diverse institutional arrangements evolved in the three communities. This indicates

that, in addition to the regional, national, or provincial context, the influence of 'internal community characteristics' (Hutchings et al., 2015) plays a key role in determining institutional outcomes. Using the case of the government-mandated water committees set up in each of the three study communities, I use critical institutional concepts to explore key underlying mechanisms behind the emergence of diverse water governance structures and outcomes in the three communities.

All study communities participated in short, one-off DWSSP workshops. These workshops involve the training of community plumbers, identification of improvements the community can make to their water system and assessing the need for future assistance to upgrade or construct water infrastructure. The workshops are also expected to establish or revive local water committees where these do not exist. The workshops were carried out by an NGO on behalf of the government's Department of Water Resources as part of broader recovery efforts in response to tropical cyclone Pam. When the committees in the study sites were established, the DWSSP workshops' focus was predominantly technical, with little consideration or time spent on committee organisation or how they fit the broader local context. Training materials have since been updated to include an increased focus on community governance.

Of the three study communities, only Village A had an active water committee at the time of data collection. However, this committee did not follow the externally imposed committee rules. Village A significantly adapted the introduced committee functions to integrate them with pre-existing governance arrangements. The water committee in Village B ceased functioning shortly after the workshop facilitators left the community. A voluntary plumber continued to perform ongoing maintenance. In Village C, the gravity-fed system was broken at the time of the DWSSP workshop, and the committee never became operational.

The data from the study communities indicates that two factors played a key role in these institutional outcomes: the pre-existing institutional environment and the role of key individuals in the community.

4.3.3 The institutional environment

Institutional bricolage processes do not exist in a vacuum. In addition to challenges related to geographic location and transport infrastructure, *storian* data indicate that differences in the institutional environment in each study community played a key role in determining institutional outcomes. New institutions rely on links with existing institutional structures to become naturalised and enduring. They borrow meaning from existing local institutions to create familiarity, recognition and buy-in (Cleaver, 2012). For example, in Village A, integrating the water committee with existing governance mechanisms improved its accountability and encouraged ongoing operation. Authority was transferred from the chiefly system to the village council and subsequently to the newly created water committees (see Chapter 5). On the other hand, it is more difficult for new institutions to borrow authority and meaning in an institutional environment where these are contested, as was the case in Village C. The existing local institutional environment, therefore, has a significant influence on the outcomes of newly introduced institutions.

Although all study communities established water committees during DWSSP workshops around the same time, only the committee in Village A endured. Compared to the other communities, Village A had strong existing institutional structures at the time the committee was introduced. Although chiefs in Village A, similar to the other study communities, struggled to fulfil their governance roles, this was buffered by the role of the village council performing some of the governance tasks formerly carried out by chiefs. The involvement of chiefs in this process allowed chiefs to maintain their symbolic power and enabled the village council to execute decisions endorsed by the chief. As a result, meaning and authority were transferred (or leaked) from the chiefly system to the village council (see Chapter 5).

Village A's institutional system is assembled from traditional and non-traditional institutional elements, with the village council at its centre offering a structure for the water committee to attach to. The introduced water committee structure was adapted through institutional bricolage processes to facilitate its integration into the existing institutional environment. The water committee borrowed meaning from locally embedded governance structures, making it

feel familiar (see Chapter 5). For example, the committee was linked with the village council through rules that required regular reports and village council endorsement for key decisions. The committee also has a written policy document that outlines the community rules (so-called by-laws) related to water use and the roles and responsibilities of the committees and their members, which is publicly displayed in the nakamal. This mirrors the publicly displayed policy and action plan of the village council, which, in turn, resembles formal local government policies (see Chapter 5). The policy was drafted by the water committee and endorsed by the village council. A committee member explained: "The committee put [the policy] in place, and we took it to the community. They looked at it, some things we changed, some things we added in until it was good, and then we said now this is a by-law that we can follow for water" (A4).

Not all committee rules introduced in the DWSSP workshop were followed. For example, the requirement of the National Water Resources Management Act for 40% of all water committee members to be women (Republic of Vanuatu, 2018a) was not implemented in practice. Instead, the committee follows the predominantly male leadership structures of other committees and the village council. The committee was asked to provide regular reports at village council meetings and required village council endorsement of key decisions but remained a separate entity.

As in Village A, kastom, church, state, and NGOs are key influences on Village B's institutional environment, and bricoleurs in Village B have similar institutional raw materials at their disposal. Nonetheless, water management and governance reverted to the previous system shortly after the committee was established. The volunteer plumber continued to provide basic maintenance of the water system, and key water governance challenges could be raised at village meetings. The presence of the voluntary plumber obscures the absence of the water committee. Water governance is not considered a priority issue until there are issues with the water supply that cannot be fixed by the plumber and require governance, for example, to raise funds or mobilise external assistance. Several participants questioned the sustainability of this

system as many challenges requiring water governance are not being addressed, as outlined in Chapter 6.

At the time of data collection, the broader institutional environment was less stable than that in Village A, several committees had ceased functioning, and the *paramount jif* no longer had the authority to make governance decisions. As a result, many challenges requiring water governance are not being addressed (see Chapter 6). All remaining committees faced challenges in getting committee members to meet, and all village council members had recently been replaced for the same reason. In addition, the previous water committee failed due to misuse of funds. One participant explained that "we collect small water fee, and then we used the money to fix up the leaks and things like this, the first plumber that has been here everywhere there is leak, because there is no money to fix the pipe, because all the money is lost" (B1). As a result, when the current plumber tried to collect a water fee to fix leaks in the water pipe, people were no longer willing to pay.

Village C had few functioning, collaborative institutions above the family level at the time of the introduction of the water committee, which participants attributed to disputes between chiefs. In Village C, the water committee collapse mirrors a wider failure of institutional structures. This meant that the committee could not connect with other structures and could not borrow authority and meaning to perform its assigned tasks. As in Village B, misuse of funds led to the collapse of the previous water committee and made people suspicious of committee structures: "It is the same with every work, if you make something good, but then one man steals, then you can't work anymore" (C5). In addition, shared water systems needed major repairs. Without a functioning institutional scaffold, water committee members were appointed at the workshop but did not meet. In this case, institutions lacked a working institutional environment to adapt to or integrate with.

4.3.4 Individuals make the system work

A small portion of community members in Village A and Village B played a disproportionate role in trying to improve or ensure the ongoing operation of local governance mechanisms. This included chiefs and non-chiefly

community leaders as well as individuals with strong networks beyond the community level and those motivated to and engaged in helping their community.

Community members who are motivated to help the community through active engagement in the village council and committees are crucial for working institutional structures. One participant told me that these individuals are what makes the system work since they give their time and money, cook and organise helpers (A4). However, due to the relatively small community size, there is a limited pool of volunteers to join committees, and several committees in Village A are run by the same people. A handful of these actors in both communities were also actively driving institutional bricolage processes by adapting institutional arrangements to suit the local context and address local challenges. In both communities, these individuals, whom I refer to as bricoleurs, held or had held positions in local government or NGOs, had experience in implementing non-traditional governance processes and in-depth knowledge of the chiefly system without being chiefs themselves (see Chapter 5). As a result, they were able to merge traditional and non-traditional influences to adapt new institutions to the existing institutional context in ways that made sense to community members.

This process of improvising institutional arrangements using more or less formalised local governance structures is common in Pacific communities (Allen et al., 2013). Bricoleurs navigate the limitations of pre-existing structures that determine which aspects of institutions are up for negotiation and assemble new institutions based on elements that are already in use or have been used locally in the past but are put to use in new ways. Since these bricoleurs have internalised the structural fabric of their community kastom, church, state, and NGO influences, they intuitively navigate local structures and, often unintentionally, reproduce, recombine, and transform social or cultural norms (Munkvold & Bygstad, 2011).

In the case of water committees, bricoleurs in Village A designed water committee structures to mirror those of the local village council and created formal ties between the water committee and the village council. This included the requirement for the water committee to provide regular reports at village

council meetings and for water committee decisions to be endorsed by the village council. These links between the village council and the water committee bestowed authority on the committee and encouraged the committee's ongoing operation. A bricoleur in Village B planned to address the issue of multiple committee failures by creatively recombining three separate committees into a hybrid 'super-committee' (B2) to govern water, health, and waste management. In an example of bricoleurs creatively combining available institutional resources within the constraints of their local context (Schnegg, Bollig & Linke, 2016), his rationale was that combining these committees would create sufficient ongoing governance tasks to justify regular meetings. He also argued that combining the committees would make the best use of the limited number of 'resourceful' people who actively engaged in community governance. His role as a non-chiefly community leader gave him the authority within the community to propose these changes (see Chapter 5). Nonetheless, at the time of data collection, the water, health, and waste management committee had not yet met.

In addition to their role in driving institutional change within their communities, bricoleurs' networks with government and non-government stakeholders at other levels also made a difference in institutional outcomes. In the study communities, the communication of community priorities to higher levels of governance rarely followed the established institutional processes. Instead, it relies on individuals and their networks. For example, despite a recently introduced system to formalise requests for support of the provincial plumber, personal contacts still play an important role. As a result of the ongoing relationship between water committee members in Village A and the provincial plumber, he "provides free support and materials to maintain and expand the water system" (A17). Similarly, community members in Village A and Village B had an ongoing relationship with their local government officials because they lived in the same village, while community members in Village C could not remember the last visit of a government official.

4.4 CONCLUSION

Despite being located in the same province and having similar historical institutional influences to draw on, the study communities had different institutional arrangements, which is indicative of the diversity of governance mechanisms in rural Vanuatu. The institutional environment in the three study communities is shaped by influences from kastom, churches, state, and NGOs. These make up the institutional building blocks that are continuously adapted and recombined into hybrid institutions to address local challenges. Differences in institutional context influenced the outcomes of identical processes to establish water committees in the three communities and resulted in a range of water governance arrangements. None of the institutions was implemented as designed. The only institution still functioning at the time of data collection had undergone significant bricolage processes to make it fit the local context.

This illustrates the challenge facing the Vanuatu government's ambition to establish water committees in all communities using the committee model and making them a prerequisite for future funding of community water projects (Republic of Vanuatu, 2018d, 2018a). The pre-existing institutional environment and the agency and networks of individuals in the community were significant factors in determining the outcomes of externally introduced institutions in the study communities. Establishing water committees as part of DWSSP workshops should, therefore, not be assumed to produce the same institutional outcomes across different communities or to lead to enduring water governance arrangements.

More broadly, the results indicate how introducing externally designed committees leads to different institutional outcomes in different contexts and rarely produces the expected results. This mirrors the findings of critical institutional literature in other contexts. The results support the critical institutional claims that externally introduced institutions rarely function as designed (de Koning, 2011). In the case study communities, I found that (a) socially embedded institutions play a crucial role in determining the outcome of introduced institutions; (b) institutional outcomes were largely determined by the skills, creativity, and actions of a small number of bricoleurs; and (c)

networks with external government and non-government stakeholders were significant enabling factors for these bricoleurs. Each of these points is consistent with existing literature applying a critical institutional lens in other contexts (e.g., Haapala & White, 2018; Cleaver, 2012; Rusca et al., 2014; Funder & Marani, 2015). This challenges the notion that institutional blueprints, for example, for establishing water committees, can be transferred between different institutional environments. The diversity in context and existing governance structures between different villages makes it unlikely for one-size-fits-all approaches to result in consistent outcomes.

Chapter 5: Autonomous change in traditional institutions

5.1 Introduction

Across many parts of the world, traditional institutions remain a cornerstone of village or community governance and the delivery of public goods (Neupert-Wentz & Müller-Crepon, 2021). In this chapter, I draw on critical institutional literature and agonistic accounts of the political to explore mechanisms underlying the autonomous adaptation of traditional, local-level community governance institutions.

First, I describe recent changes to traditional institutions that resulted in new governance mechanisms in my study sites. I subsequently apply an institutional bricolage lens to explain and conceptualise this phenomenon. I argue that change and reproduction of norms and power relationships are located in the interplay between elite capture and those aspects of pre-existing institutional forms that are carried forward. I highlight the centrality of the political at the local level in explaining how these mechanisms interact and, therefore, in the potential for change in traditional institutions.

I focus on the case of the incremental transfer of governance responsibilities and authority from chiefs to village councils in two of the three study communities. These cases offer examples of what I refer to as autonomous institutional change: shifts in rules initiated from within communities looking to adapt to changing conditions rather than changes resulting from explicit attempts to introduce new institutional forms from outside. Here, I use 'autonomous' in the sense of 'self-initiating' (OED Online, 2022), distinguishing my analytical focus from processes of change that are initiated by external interventions.

This chapter, therefore, focuses on change processes that arise from the agential creativity and innovation of local actors in response to emerging governance challenges, as opposed to those that develop in response to attempts to improve, for example, natural resource management through the introduction of new institutional forms by external actors such as NGOs or

government agencies. While the latter form of institutional change has been widely studied (Haapala & White, 2018; de Koning, 2014; Ostrom, 1990), gaps remain concerning traditional institutions (Feola, 2017; Neupert-Wentz & Müller-Crepon, 2021). In particular, the underlying mechanisms that shape autonomous changes in traditional institutions remain poorly understood.

5.2   Traditional institutions and village councils in Vanuatu

Vanuatu's cultural values, knowledge, beliefs, and practices that originated in pre-colonial times and are widely perceived as traditional are referred to as kastom (Cox et al., 2007; Kalontano et al., 2003). The national government relies on traditional or kastom institutions, including traditional chiefly systems, for local-level governance and provision of the type of services that the state would deliver in other contexts (Barbara & Baker, 2020; Nimbtik, 2020). Government bodies lack the fiscal and human resources to engage with Vanuatu's many remote and difficult to access areas (Cox et al., 2007; Miles, 2007) and kastom institutions under the leadership of local chiefs are a crucial component of local governance (Miles, 2007; Nimbtik, 2020; Regenvanu, 2005). According to Cox et al. (2007, p. 47), 'the strength of these institutions is arguably Vanuatu's most precious asset, helping to offset a range of pressures on traditional communities.'

Most ni-Vanuatu regularly engage in kastom practices, and chiefs have a more significant influence on local governance than the state (Huffer & Molisa, 1999; Regenvanu, 2005). However, kastom and chiefly systems are not static. They have continually evolved in response to changing social and economic contexts and external influences since the arrival of traders, missionaries, and settlers in the 19th century (Bolton, 1998; Forsyth, 2009). Following Vanuatu's independence in 1980, the country's newly elected political leaders combined elements of diverse kastom systems from across Vanuatu to construct a national kastom and unifying national identity to bring together the many geographically distant and linguistically and culturally diverse communities (Cox et al., 2007; Lindstrom, 1997; Miles, 2007). As a result, even the identity of chiefs in its current form is largely a modern construct drawing together diverse traditional leadership positions with

missionary and colonial influences (Cox et al., 2007; Lindstrom, 1997; Regenvanu, 2005).

Today, pressures to adapt kastom institutions continue due to increasingly rapid changes in social and economic contexts, including the growing role of the cash economy and increasing exposure to external influences through opportunities for travel, work, education, and communication (Cox et al., 2007; Forsyth, 2009; Warrick, 2011). The authority and ability of chiefs to govern their communities often suffer due to these changes. For example, the common practice of setting aside one day per week for unpaid community work on 'chief's day' is in decline (Smith, 2018). However, this type of collective work has been essential for local service provision. Its decline places chiefly governance structures under pressure to adapt and avoid failure of the services they coordinate.

In referring to traditional institutions, I adopt and expand on North's (1990) influential definition of institutions as the 'rules of the game' (see Chapter 2). I use the term to denote systems of socially shared rules, norms and beliefs that structure people's day-to-day behaviour and interactions (Hodgson, 2016; de Koning, 2011; Scott, 2014). These range from readily observable institutions, such as village council rules captured in a policy document, to implicit and hidden norms, such as those around women's participation in meetings (Hodgson, 2016; Mohmand, 2016). Far from being static, traditional institutions are dynamic systems of rules, norms and beliefs that continuously evolve to remain relevant when faced with changes in the broader environmental, social, economic, and political context (Feola, 2017; Mowo et al., 2013; Sirimorok & Asfriyanto, 2020; Wallis, 2013; Yaro, 2013).

The processes of agential creativity involved in rearranging and combining institutional components blur the distinction between institutions considered traditional and those categorised as modern (Rusca et al., 2014). Bricolage implies a continuous interplay between traditional and non-traditional institutional arrangements, in the process of which the notion of 'tradition' itself can be invented or reinvented (Cleaver, 2012). For example, in Vanuatu, the role of chiefs in its current form is a hybrid institution composed of diverse local practices and elements introduced by missionaries and the colonial

government, who sought local leaders representing their communities in dealings with outsiders (Bolton, 1998; Cox et al., 2007; Morgan, 2013; Regenvanu, 2005). The hereditary legitimacy and wide-ranging authority of chiefs also draw on a fabricated account of kastom for most Vanuatu communities (Regenvanu, 2005). For example, chief's days, which are considered part of kastom, are thought to combine traditional practices with elements introduced by church and state (Smith, 2016). The hybridisation of traditional and introduced systems has been a critical means through which the traditional chiefly system in Vanuatu has been adapting to changing conditions, which has secured its survival to this day (Kernot & Sakita, 2008). However, hybridisation processes also resulted in the widespread exclusion of women and youth from community governance, which was, in many cases, heavily influenced by norms introduced by missionaries (Regenvanu, 2005). While recognising the fluidity between traditional and non-traditional institutions, here I use the terms to differentiate between institutions that contemporary community members perceive to be local and socially embedded and those they regard as new and externally introduced (Dore, 2001).

The concept of village councils is widely used in Vanuatu and other Pacific Island countries to describe a range of local governance systems, yet they have received little attention in the literature (Kalontano et al., 2003; Love, 2016). Village councils are not included in the Vanuatu government's decentralised structure, which consists of provincial councils in each of its six provinces and area-level councils responsible for several villages each. Area councils are the lowest level of formal state governance in Vanuatu (Republic of Vanuatu, 1994). Area Secretaries, who represent the Area Councils, liaise with chiefs and village councils at the community level. In contrast, the *Malvatumauri* National Council of Chiefs, which advises the national government on matters related to kastom and tradition, has formal links through sub-national councils of chiefs to local chiefs in each village (Miles, 2007; Republic of Vanuatu, 1980) (Figure 3).

While chiefly systems are widely regarded as the traditional form of community governance, it is increasingly common for elected village councils

to carry out some of the day-to-day community governance and administration alongside chiefs (UNDP, 2012). Despite emerging from missionary, colonial and post-colonial roots, village councils are no longer considered foreign forms of governance (Love, 2016). Cox et al. (2007) note that "many chiefs have recognised the need to establish village councils, to provide a forum where representatives of different groups within the community can meet to discuss and decide jointly on local matters" (p. 48). The resulting institutions are "neither the direct continuation of local socio-historic praxis nor a neat appropriation of 'foreign' forms, but rather as dynamic and contested domains of social (re)production" (Love, 2016, p. 125).

5.3   Agonistic accounts of the political

In the following, I briefly introduce literature on agonism as it relates to critical institutionalist theory. The political is implicit in institutional bricolage, as leakage of meaning directs attention to the reproduction or reinforcing of pre-existing power relationships and inequalities that are entrenched in social life (see Chapter 2). Lowndes and Paxton (2018) draw parallels between critical institutional analysis of change processes and agonistic accounts of the political. Agonism focuses politics on social plurality, recognising conflict and contestation as inherent to human societies. While hegemonic discourses may emerge, endorsing particular social arrangements with the appearance of an uncontested truth (Fairclough, 2010), agonism draws attention to the inevitable presence of alternative and (for the time being) subordinate perspectives. The contradictions that arise from the interplay of history, context and agential power in processes of institutional change resonate with this agonistic account of the political, in which "struggle between adversaries" is at the centre (Mouffe, 2013, p. 7).

For critical institutionalism and agonism, institutions are 'discursively constructed power settlements that are animated through the creative action of reflective agents' (Lowndes & Paxton, 2018, p. 703). While agonism centres analytical attention on the political as distinct from the social and cultural, both schools of thought recognise the influence of institutions and actors on each other; the potential for agential creativity to enable institutional change; and

the deep entanglement of institutions with the power relations embedded in broader social structures (Lowndes & Paxton, 2018). Institutional order is, therefore, an expression of a particular configuration of power relations at a given point in time and, as the agonistic view of the political emphasises, 'could always have been otherwise […] every order is predicated on the exclusion of other possibilities' (Mouffe, 2016, p. 1). By considering institutional bricolage alongside agonism, I foreground the significance of social plurality, alternative perspectives, and the fundamental role of struggle and dissent in local change processes.

5.4 Results

My results are structured by the key themes I developed from the *storian* conversations in the context of each of the two study villages. Neither the state nor the private sector provides essential services in the two study communities. Service provision is governed by community institutions and relies on community work; functioning local institutions are, therefore, of practical importance to govern and manage these services on behalf of the whole community. This role traditionally falls on the chiefs. Community work is traditionally carried out on a weekly dei blong jif or chief's day. On these days, chiefs decided what work needed to be carried out by community members. Unpaid communal tasks performed on chief's day often involve constructing, repairing, and maintaining public, communally used spaces, buildings, and infrastructure. For example, tasks mentioned by participants included cutting grass, clearing land, maintaining communal water systems or roads, or managing waste disposal (see also Smith, 2016).

Research participants in both communities noted that attendance on these communal workdays is declining. One woman commented: "It was different before because before, when the chiefs sang out, people would go" (B6); another participant stated that "the work of the village is dead" (A7). An older woman said that in the 1960s, the community was active on chief's day, while today, it is no longer working (A5). These reports are symptomatic of the increasing challenges faced by chiefs in governing their communities. As one participant explained: "A lot of people don't listen to the chief anymore" (B2).

When asked about the reasons for the declining authority of chiefs, research participants mentioned conflicts between chiefs about land or chiefly titles and insufficient capacity or interest of individual chiefs to meet the increasingly complex demands of community governance. Several participants expressed a desire for the chiefly system to be strengthened to improve community governance.

Both communities addressed the governance vacuum created by the declining authority of chiefs by transferring some authority and responsibilities from chiefs to village councils. These councils developed new rules and processes as needed to take on the additional governance and management tasks. In the two study villages, village councils took the form of hybrid institutions with elected leaders and chiefs working together to carry out some of the roles and responsibilities that were traditionally the sole domain of chiefs (for example, mobilising the community for collective labour on chief's day, and making decisions on the work to be carried out).

The village councils mirrored the structure of, and informally engaged with, higher-level government institutions (Figure 3). They assumed responsibilities of, but did not replace, councils of chiefs, which continued to be widely regarded as a legitimate form of governance. Chiefs remain influential as village heads, landowners, arbiters in local conflict resolution processes and village council members. Local chiefs were linked to Vanuatu's national chiefly system and, like the village councils, maintained informal links with government officials (Figure 3).
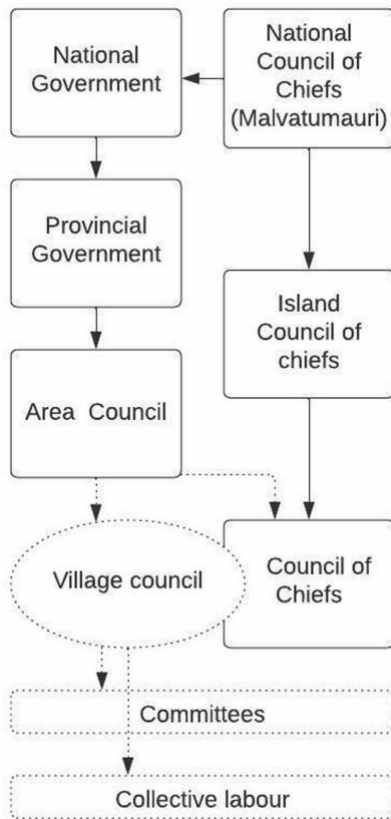
Figure 3: Current institutional structure in the study sites

Governance responsibilities and authority were transferred from struggling local councils of chiefs to village councils composed of elected non-chiefly leaders and chiefs. Solid lines represent formal relationships, while dotted lines represent informal ones.

In the next sections, 5.5.1 and 5.5.2, I set out how respondents describe the transfer of authority from chiefs to village councils in each of the two villages.

5.4.1 Village A

Chiefly governance in Village A is unresolved, and there has not been a *paramount jif* governing the entire community since before independence. A chief explained that the knowledge of who should be *paramount jif* had been lost due to successive external influences: "After the white men came, like the traders and the missionaries, then the kastom was broken" (A14). The chiefs of the different tribes in Village A have been unsuccessful in establishing a village-level council of chiefs due to ongoing internal disputes. To resolve this impasse, a village council, facilitated by ordinary community members, was

established. A community member explained that "because the chiefs are all disputing with each other about who has chiefly title, we will put some ordinary man inside, some young guys to become council members" (A1). This village council was initially tasked with conducting a process to determine which of the many *smol jifs* rightfully held their chiefly titles and who should be ordained as the *paramount jif*. This process was initiated as part of a national initiative by the *Malvatumauri* National Council of Chiefs to strengthen kastom governance by determining customary land ownership rights and boundaries as well as identifying chiefs, customary land laws and practices. Additionally, the village council was given several governance responsibilities that have traditionally been the domain of chiefs, such as organising community work on chief's day, creating a budget, collecting money, and approving reports from committees in the community (Village council policy and action plan, n.d.). These tasks were outlined in a written policy and an action plan, which was displayed on the community noticeboard.

The village council policy and action plan were drafted with input from and approved by the chiefs. The policy is very high level and leaves room for improvisation. For example, the village council is tasked to "give overall direction", "coordinate and organise people for all community developments", and increase cooperation between the different tribal groups as well as groups from various churches (Village council policy and action plan, n.d.). The village council thus fills the governance vacuum created by the disunity of the villages' *smol jifs* and lack of *paramount jif* while at the same time leading a process to find a new *paramount jif* and re-establish strong kastom governance.

Mirroring the composition of the former council of chiefs, the village council meetings included chiefs from each sub-station. However, unlike a council of chiefs, the meetings I observed were attended by ordinary community members in addition to chiefs. Several women observed the meetings but did not participate in the discussion despite having the right to do so according to the village council policy (Village council policy and action plan, n.d.). The council chairman explained that women "have a representative inside [the village council], but it's not really a woman, but a man that will talk on behalf of the women. […] In Vanuatu, women are not allowed to talk in the

nakamal, so that is one challenge for us. But here in [Village A], in our system, we want to make sure that there is a voice for everyone" (A2). Meetings were facilitated by an elected chairman using a meeting format reminiscent of local government meetings and meetings organised by NGOs. For example, in the meetings I attended, the village council chairman reviewed the agenda, introduced each agenda item, and facilitated subsequent discussions. The meetings were minuted by a secretary and attended by a treasurer. Representatives from community committees, including the water committee, disaster committee, women's committee, and youth committees, were called to report their activities "so that the chiefs and the council will know what is going on in the community" (A2). Meetings were opened and closed by a local pastor with a prayer. None of the 'executive member' roles was held by chiefs, possibly due to a rule that executive members needed to stay neutral in discussions (Village council policy and action plan, n.d.). Some of the chairman's facilitation techniques, such as encouraging participation, steering the discussion, and ending with a meeting summary and documenting the next steps, were not dissimilar from facilitation techniques employed in workshops run by NGOs in Vanuatu.

Some community governance matters, such as the budget and "other issues", which are not further defined in the policy, must be discussed in a meeting with the whole community rather than the village council (Village council policy and action plan, n.d.). These meetings, traditionally organised by chiefs on chief's day, are now called by the village council chairman. He noted that "when I call a meeting nearly everyone comes, I think they like it, […] many people are interested to join, I don't feed them, but they like to come" (A2). My observations and *storian* conversations suggest that the partial transfer of authority and responsibilities from chiefs to village council members has revitalised community governance. Nonetheless, participants widely regarded the village council as an interim solution whose role would change once a *paramount jif* was ordained. A *smol jif* explained this arrangement: "Because we don't have a big chief, the council makes [community rules] on behalf of the chief" (A13). The village council seemed to be perceived as working for the chiefs, not as a threat to the chiefly system. A chief in Village

A told me that: "the council are my workmen, so a lot of their activities and projects that pass through the council, that is on behalf of me, […] they are my workmen, so when they handle it, they handle it with my power" (A14). Importantly, the council succeeded in creating a platform to facilitate agreement between the different chiefs. One participant remarked that the chiefs "really respect the council" (A1).

Since the original purpose of the village council was to appoint a *paramount jif* with extensive decision-making authority, it was unclear what would happen to the council once a *paramount jif* was ordained. Opinions were divided. Some thought that the village council would advise the *paramount jif* and share governance responsibilities; others envisaged the *paramount jif* would take over community governance, relying only on the advice of other chiefs in the community. Several community leaders envisioned the future of the village council and committees as integrated into a kastom structure, sitting underneath the *paramount jif* and his council of chiefs. The council chairman envisioned a structure similar to old kastom practices, which involved assistant chiefs advising the *paramount jif* on different aspects of community governance.

"In our plan, once we find the chief, he is the man that sits down and talks, but he has advisors, including representatives of youths, chiefs and women" (A2).

The *paramount jif* would, however, maintain the authority to make the final decisions, as one *smol jif* who is also a council member explained: "The village council will still be there, but the big chief will be the authority of the village. If the village council wants to make something, then it must go under the authority of the big chief" (A13).

5.4.2 Village B

In Village B, a single *paramount jif* controlled all areas of community governance until he died in the early 2000s. One of the women explained that "it was only the chief that would instruct [the community], and they would do what he told them" (B3). This concentration of power in the hands of a single chief changed when the current *paramount jif* appointed the leaders of each

sub-stations as *smol jifs*. Several community members noted that this has diluted the authority of the *paramount jif*'s role and reported that differences between these chiefs weaken the community. One woman noted: "When all the other chiefs come on top, they make too much headache" (B3). Several participants reported declining respect for chiefs in their community and that people have stopped following the rules, which is apparent, for example, in the declining participation in weekly meetings and communal work on chief's day.

In Village B, community governance was predominantly the domain of the village council, which, in addition to the *paramount jif*, was made up of three *smol jifs* from the sub-stations, their assistants, as well as a chairman, treasurer and secretary and other council members representing the different tribes, including a small number of women. Council members, including the chairman, were elected by the community at a village meeting and did not need to be chiefs. Asked about the requirements for becoming chairman, a woman responded that "any man can do it as long as he can be a good leader" (B5). One non-chiefly community leader described his plan to "use some of our resourceful people to be in the council to properly engineer the council so that the community can work" (B2). Despite these significant adaptations to traditional structures, several participants continued to refer to the resulting hybrid institution as council of chiefs rather than village council. While women participate in village council and village meetings, which involve the whole community, one young woman noted that "not a lot of young women talk because they are afraid" and that "one of the things they practice at the nakamal today is that the ideas of the men take priority" (B5).

Community members could submit requests or complaints in writing to the chairman to be discussed by the village council. In particular cases – such as when there is no agreement between council members or community members requesting permission to start a business or community development project – a village meeting was called to discuss these agenda items at the nakamal. One woman explained the process of introducing new projects: "The whole community will get together to discuss how they will go about it. The whole community because the whole community will do the work"

(B3). A *smol jif* explained that these community meetings are "always held on Monday because that is the chief's day in this place" (B12).

The role of organising community work on chief's day and allocating tasks was no longer the responsibility of the chiefs in Village B following a village meeting called by one of the non-chiefly community leaders. He explained that "the community faces a lot of problems today […], but they don't know how to solve them, so when I call this meeting and tell the chief that I want to *storian* with them to make a plan, we have 136 people in the nakamal, that is the highest attendance" (B2). After the meeting, an action plan was drawn up, printed, and endorsed by the chiefs. The plan resembles government and NGO project planning documents. It splits community members into groups across tribal lines to implement activities outlined in an action plan. The leadership of each group was randomly assigned to one of the *smol jifs*.

Similar to Village A, the village council was described as an extension rather than an alternative to the chiefly system. Two participants, including a *smol jif*, described the council and village meetings as playing an advisory role to the chiefs who have the power to make final decisions. One non-chiefly community leader described the village council structures as an embellishment of long-standing kastom governance:

"Yes, yes, these kinds of things are just how we try to decorate it. […] Because there are a lot of people, if it were just [the chief], then it would be very hard. So you must delegate the work to the chairman, to the spokesman, or to whoever is a member of the council. So that we are giving a hand to the *paramount jif*, so the *paramount jif* can sit quietly, and all these people will do the work" (B13).

Despite recognising a need for pragmatic reforms such as improving the governance of essential services, community members in Village B preferred the chiefly system to continue. Even the non-chiefly community leader responsible for many of the current institutional reforms argued in favour of preserving the chiefly system: "We must not lose the idea of our chiefly system, […] it will be a hard thing for us to do it, but we have to do our very best, maybe it will take time, but we will try our best to come up with a good idea" (B2). He equated a functioning chiefly system with a strong community and notes that

"Where the chiefly system has been down, that makes that the community is not good and we don't want to become like this, we want to hold on tight to what we have now" (B2).

In practice, the role of the *paramount jif* in day-to-day community governance appeared to be largely symbolic as the village council and its chairman already carried out many of the tasks traditionally associated with the role of the *paramount jif*. For example, the council chairman regularly gave speeches on behalf of the chiefs, and the *paramount jif* authorised him to make decisions on his behalf. Nonetheless, some aspects of community governance remain the exclusive domain of the chiefs: "some of our issues, we just need the chiefs only to sit down, because they have the power, they have the title to do this work so only they can do it" (B2). These governance tasks include mediating conflicts in the community and imposing traditional restrictions referred to as tabu, for example, on access to fishing.

5.5 Discussion

My *storian* conversations drew attention to autonomous change processes in traditional and local institutions, particularly the partial transfer of responsibilities and authority from chiefs to village councils. While others have observed this phenomenon in Vanuatu and neighbouring Pacific Island countries (Allen et al., 2013; Cox et al., 2007; Love, 2016), the underlying mechanisms that determine the scope and pace of change have not been explored or explained in detail. In the following, I draw on institutional bricolage to elicit some of the processes that underlie autonomous change of local governance arrangements and how they shape the resulting institutions.

I analyse the results around two themes: (i) how the agency of bricoleurs to bring about institutional change is enabled and constrained by existing social structures, and (ii) how autonomous institutional changes are shaped by existing power relationships and why they reproduce existing inequalities. In the process, I demonstrate the utility of institutional bricolage to explore the underlying mechanisms behind autonomous institutional change and illustrate how the embeddedness of institutions works against the potential for more radical or transformational change.

5.5.1 Social structures and the agency of village-level bricoleurs in Vanuatu

My results show discontent with chiefs' decreasing ability to govern certain aspects of community life as the social and economic context changes. Since chiefs' authority relies on community support, such discontent opens spaces in which local institutional arrangements can be negotiated to address these governance challenges and renew support for the chiefs. In the two study communities, non-chiefly community leaders proposed new governance arrangements under the umbrella of village councils to respond to these challenges. The agency of these bricoleurs to bring about change in local institutions and shape future social structures was enabled, constrained, and shaped by local and external structures.

In both communities, non-chiefly bricoleurs, with support from community members, suggested tasking village councils, instead of chiefs, with organising collective work. Local chiefs agreed to trial the proposed changes since they had been unable to mobilise the community and address the associated decline in services. However, due to the central role of chiefs in all aspects of community governance, which was taken for granted by community members, authority to organise collective work was only partially transferred from chiefs to village council. Chiefs continued to play an influential role in deciding on and leading community work. In village B, the community action plan, which outlined changes to the community work regime, was framed as a continuation or revival of traditional practices. Community work tasks allocated in the action plan were scheduled to be carried out on weekly chief's days, *smol jifs* were appointed as group leaders, and the plan was endorsed by the *paramount jif*. This borrowing of language associated with the traditional institution of the chiefly system made the new arrangements appear instantly familiar, thereby assisting their naturalisation and, potentially, their endurance. At the same time, it reproduced and reinforced the traditional authority of chiefs in these new community governance arrangements (Whaley et al., 2021).

Research participants also discussed village councils more generally in terms of supporting, rather than replacing, the chiefs' work. In village A the village council was firmly anchored in the chiefly system and explicitly tasked

with restoring its functionality. The village council was initially set up to lead the *Malvatumauri* National Council of Chiefs' initiative to confirm chiefly titles and find a *paramount jif*. Village council meetings, attended by all the chiefs, performed this role alongside other community governance tasks. In addition, community leaders and chiefs described the village council as a new version of much older forms of governance that were no longer practised. These governance arrangements, transmitted through oral history, involved a *paramount jif* overseeing a council of assistant chiefs with different sectoral governance responsibilities. One chief appealed to this history by referring to councillors as 'chief's workmen' (A14), thereby positioning the village council as an extension of or even a return to these traditional institutions.

Similarly, in Village B, the village council was perceived as an embellishment or adaptation of traditional governance arrangements in response to new challenges rather than a separate new institution. The framing of village councils as supportive of the chiefly system ensured that new institutional arrangements were not regarded as a threat to the chiefly system. Presenting committees as advisors to the chief opens up opportunities to strengthen the chiefly system without losing aspects of the current interim system that have proven effective in governing the community. It also helped gain the endorsement of chiefs and community members and further contributed to the naturalisation of village councils (Cleaver & de Koning, 2015; Lund, 2006).

The agency of bricoleurs in both communities was underpinned by their position in the community (Funder & Marani, 2015; Haapala & White, 2018). Influential bricoleurs in both communities share some, or all, of the following characteristics: they have attended school, are related to chiefs, own local businesses, work for local government or NGOs, and volunteer on community or church committees. Without exception, these bricoleurs passionately articulated their plans to improve the communities. Several explained how they mobilise other community members to carry out these plans. One bricoleur told us: "A lot of my work is voluntary. That is my testimony. Many people think that I make a lot of money for all this work but actually most of the work is a sacrifice. I just want to make sure that everyone has access to these things"

(B2). Bricoleurs are also referred to by others as leaders. For example, one participant said about one of the bricoleurs that "he is a strong man in the community, he is a man who thinks strong about doing things [...], and he pushes some of the other men to get the work done" (E3).

As a result of being related to influential chiefs, bricoleurs had in-depth knowledge of the chiefly system. Their kinship ties and knowledge of traditional institutions enabled them to judge which institutional elements were negotiable at a given point in time and enabled them to propose reforms that were not regarded as a challenge to chiefs or widely accepted norms. They also held leadership roles in other aspects of community life, such as local government, NGOs or churches, which expanded their skills and conferred authority. Bricoleurs' knowledge of both traditional and non-traditional governance arrangements enabled them to propose a set of governance arrangements that felt familiar, fit the cultural context, and promised to address new governance challenges. In the words of one non-chiefly community leader, bricoleurs are 'resourceful people' (B2).

However, the limited institutional raw material also brings its constraints. Bricoleurs borrowed from their experience of local government councils, church committees and NGO projects, and as a result, many local governance arrangements emerging out of autonomous adaptation processes share similarities. For example, the facilitation techniques bricoleurs introduced to village councils in both communities stem from their previous experiences facilitating workshops for local government and NGO projects. The written policy and structured meetings in village A resembled those of formal local government institutions, and village councils in both communities adopted the titles and roles of chairman, treasurer, and secretary to denote their leadership roles. By mimicking familiar governance structures, terminology, and associated meaning, bricoleurs created the impression that village councils possess some of the authority of the state, church or NGOs – despite lacking official sanctioning. The borrowing of traditional institutional elements and their associated meaning, and the positioning of village councils as supporting the chiefly system, strengthened the perceived legitimacy and familiarity of new institutional elements. This legitimacy and familiarity enabled bricoleurs to gain

support for their proposed institutional change. However, the close alignment of village councils to traditional institutions also defined the boundaries of what changes were possible, which constrained the agency of bricoleurs and prevented a more radical departure from pre-existing social structures.

5.5.2 Elite capture, leakage of meaning and the politics of autonomous institutional change

The bricoleurs who led the process of shaping village councils also became influential in their implementation. In the sense that already influential bricoleurs were able to further their vision of governance, this reflects a process of elite capture. By taking on critical roles in village councils, bricoleurs expanded their role in community governance, which bolstered their authority and increased their ongoing influence on institutional changes. The factors that enabled them to lead institutional bricolage processes, such as leadership skills, kinship ties, authority, and familiarity with traditional and non-traditional institutions, made bricoleurs a seemingly obvious choice to lead the governance arrangements they introduced. Chiefs, however, wielded a different power that enabled them to retain their influence. Their pre-existing power and authority secured them an influential role in village council meetings as established power structures were reproduced. These new institutions, in turn, relied on the legitimacy and familiarity of the chief, illustrating the potential for leakage of meaning to enable elite capture. However, leakage of meaning does not imply an absolute reproduction of the status quo: the emergence of bricoleurs as an elite with powers comparable to chiefs illustrates a significant shift in the ordering of authority in the adapted institutions. Leakage here implies a form of lopsided reciprocity that bestows legitimacy and requires a sharing of power.

Those peripheral to decision-making, for the most part, remained so. In common with findings from the analysis of externally introduced institutions (Rusca & Schwartz, 2014), autonomous changes to institutional arrangements improved access to decision-making for individuals in positions of power but not for those who were already excluded, such as women and young people. For example, women and young people were present at village council meetings but did not actively participate in discussions. Despite some efforts

on behalf of the bricoleurs to include women and young people in village councils, gender and age-based inequalities persisted. New institutional arrangements reproduced deeply ingrained cultural and religious rules, norms and beliefs that place constraints on women and young people in particular, as in the case of the adapted institution in Village A, where women are represented in decision making by a man (Cox et al., 2007; Lindstrom, 1997). Deep-seated norms, such as gender and age-based roles in society, are embedded within and are part of the legitimacy of institutions (Agrawal & Bauer, 2002) and thus remain significant in the naturalisation of new institutions. Here, leakage of meaning operates to sustain power relationships, making social norms resistant to change irrespective of the intention of bricoleurs. The power to influence decisions in village council meetings thus reflected pre-existing patterns of power and authority, retained within an elite group with the balance merely shifted away from chiefs in the new institutional arrangement. From the perspective of the nonelite majority – including women and young people – their power to influence decisions remained marginal, with such power concentrated instead in the hands of a few, mainly older and male, community members.

This analysis draws attention to how versions of elite capture and leakage of meaning operate as critical mechanisms, unpacking institutions as mutable structures. Elite capture opens space for change (such as where bricoleurs drive through their vision for governance reform) and closes it down (where chiefs retain their decision-making power in adapted institutions). Similarly, leakage of meaning may bestow new institutional practices with authority or, as in the case of norms that act against the active participation of women and young people, sustain the status quo and limit the agency of bricoleurs. The interplay of these mechanisms yields change that is narrowly defined: the emergence of non-chiefly actors with power in village life, for example, represents a significant shift in norms, while norms around the position of women in society remain stubbornly intact. Explaining how leakage of meaning privileges some norms over others indicates a need to look at the wider politics of autonomous institutional change. In contrast with emerging trends in critical institutional literature that foreground the significance of higher-scale political

economy (Jones, 2015; Whaley et al., 2021), I point here to a strictly local, agonistic politics through which multiple rationalities co-exist in a village environment that is socially plural (Mouffe, 2000).

By centring institutional change in ongoing processes of political struggle, agonism augments institutional bricolage by identifying the role of hegemonic discourses in sustaining and reinventing social relations. For chiefs, non-chiefly bricoleurs and the wider community, the commonly expressed rationale for change lay in resolving breakdowns in governance that undermined service provision. The political saliency of this issue in village life – at once essential for the well-being of the governed and the legitimacy of those governing – underpinned the emergence of shared discourses supportive of village councils in both study sites, resolving the conflict between chiefly and non-chiefly positions through the framing of village councils as an augmentation of existing norms. These discourses, in turn, drove institutional reform and enabled the ceding of power from chiefs to village councils. Resolving service provision failures required the institutional resources that bricoleurs bring to village governance, while the legitimacy of these new arrangements depended on the persistence of chiefly power. Shifts in the wider patriarchal norms that infuse village life are not a part of this dynamic and thus remain unchanged. This process was not a zero-sum calculus in which liberal democratic discourse was mobilised to trump chiefly tradition, as deliberative democracy's communicative rationality or approach to political consensus would suggest (Kapoor, 2002). Rather, it is illustrative of the indeterminacy central to agonistic politics, where the changed institution exists in a "state of dynamic tension" which has the potential to unravel should its foundational ambiguities expand (Lowndes & Paxton, 2018, p. 704).

Therefore, the newly empowered non-chiefly bricoleurs' worldview may set the stage for further future institutional change. However, the potential for changing the status of women and young people is less than clear. To the extent that the deeply rooted and widely shared norms that sustained exclusive chiefly authority are analogous to those that have made gender and age relations resistant to change, there are lessons to be drawn. On this basis, it would seem that unless or until the role of women and young people becomes

an issue of similar political saliency to that of service provision, chiefs and male community members are not likely to share their authority. While village life is home to a plurality of ideals, experiences, and ways of knowing, it is also suffused with power relations. The case of village committees illustrates that profound shifts in socio-cultural norms are possible but only likely when conflicting ideas are channelled productively such that those shifts meet the needs of power.

These conditions for change could emerge from the accumulation of multiple influences. In the Vanuatu context, the attendance of women and young people at village council meetings, long-term engagement with gender or rights-based NGOs, national policy changes, wider social changes emerging from larger population centres, or the progressive representation of women and young people in television, film and social media are all plausible. These influences may individually or collectively alter how women and young people are perceived and their perception of themselves. If these perceptions were sufficiently widely shared and underpinned calls for equitable participation in governance, those calls would become increasingly hard to resist. In such circumstances, retaining legitimate authority may demand further institutional change and, with it, further ceding of power by established elites. However, as studies within critical institutionalism have made clear, multiple rationalities are likely to persist: the strength of discursively constructed ideas of tradition within the village will be at play alongside the alternative discourse of rights and equality. Whether leakage of meaning operates to support opening up to gender and age equality or closing down in defence of the patriarchal chiefly system will depend on the relative strength of these discourses within the village and – crucially – on how these conflicting views are appreciated and negotiated. Are there opportunities for open and constructive engagement capable of realising the generative potential of conflict (Takala et al., 2021)?

In this context, recent work advocating experiments with agonistic institutional forms, such as participatory budgeting (Paxton, 2019), or the use of theatre and the arts to challenge the construction of shared values (Mouffe, 2016), may have relevance for those working to secure sustainable

institutional reform in the Pacific context. For example, Vanuatu's Wan Smolbag Theatre performs plays that challenge widely held norms and facilitates subsequent discussions, inviting differently positioned community stakeholders to identify and reflect on their differing underlying values (Taylor, 2007). These experiments are valuable as they prefigure modes of democratic practice in which value conflicts are embraced, and a sense of contingency and critical reflection is engendered that enables productive relationships between those with conflicting ideals. As such, they may prove to be a productive source of institutional raw material for future bricoleurs seeking autonomous and equitable institutional change.

5.6 CONCLUSION

This chapter identifies and explores mechanisms behind autonomous institutional change processes in traditional institutions. *Storian* data showed that these change processes were driven by a small number of bricoleurs who combined traditional and locally available non-traditional institutional elements and associated meaning into new governance arrangements. Their agential creativity resulted in shifts to deep-seated norms of chiefly authority that were hitherto central to a shared understanding of traditional governance. However, while non-chiefly bricoleurs took up newly created leadership roles in village councils, many community members, particularly women and young people, remained excluded from community governance. By applying an institutional bricolage lens in my analysis, I revealed the centrality of elite capture and leakage of meaning in the production of the new institutional form. By augmenting this with post-political insights from agonistic politics, I was better able to reveal the shifts in norms as power settlements that draw not only on diverse institutional raw material but are contingent on the emergence of a shared discourse that resolves conflicting ideals of village governance.

I suggest that future research may benefit from further fusing agonistic political analysis with critical institutionalism, centring the study of institutional change on how multiscale influences play out through the context of social structure, agential creativity, and power relations at the local level. Moreover, I note that this assessment of village life draws attention to the overlooked

potential of externally introduced institutions to contribute to future autonomous institutional changes. Village institutions will not remain static, and bricoleurs will play an important role in imagining future change. This suggests there may be value for those engaged in external interventions into village life to focus on introducing a diversity of institutional forms for bricoleurs to draw on. Specifically, exposing villagers to agonistic arrangements intended to realise the productive potential of conflict or contestation may offer a promising route towards more equitable village life.

Chapter 6: Ghost committees

6.1 INTRODUCTION

Despite widespread accounts of poor performance, water committees have become the foundation of water governance and service delivery in many developing countries. In this chapter, I identify the phenomenon of committees that do not exist in practice yet are referred to by stakeholders at different levels as if they were performing their intended role. I refer to these as *ghost committee*s. I place this phenomenon in relation to power and discourse to investigate the conditions that lead to the emergence and persistence of ghost committees. I identify a feedback loop between a persistent national and international discourse that suggests that desired local governance outcomes can be achieved by introducing externally designed committees and the emergence of ghost committees. I argue that this feedback loop contributes to both the endurance of ghost committees and the persistence of the discourse despite evidence that these committees rarely work as intended.

6.1.1 Community-based management and the committee model

Community-based management (CBM) of natural resources has dominated global rural development since the 1980s, replacing top-down approaches to water governance and management (Whaley & Cleaver, 2017). In practice, CBM typically involves setting up generic, externally designed local institutions, often in the form of committees, to perform a particular governance role (Whaley, Cleaver & Mwathunga, 2021). CBM has its theoretical foundation in mainstream institutionalist approaches, associated with New Institutional Economics and Ostrom's design principles (see Chapter 2). In keeping with this trend, since the 1980s UN International Decade for Drinking Water and Sanitation, community-based management has been promoted to establish governance arrangements to install, operate and maintain local water supply systems and transfer ownership and responsibilities to communities (Hutchings et al., 2015; Whaley & Cleaver, 2017; Gasmi et al., 2022). CBM replaced a period of top-down water management approaches with little

community involvement in developing countries, which were largely unsuccessful (Gasmi et al., 2022).

CBM remains the foundation for water governance and service delivery in many developing countries and typically involves setting up water committees (Whaley, Cleaver & Mwathunga, 2021). As a result, water committees have been rolled out across the Pacific region and globally (Mommen, Humphries-Waa & Gwavuya, 2017). These committees are commonly based on standardised institutional designs and introduced by state actors or non-government organisations as a part of development projects (Mommen, Humphries-Waa & Gwavuya, 2017). Water committees are run by local volunteers and tasked with the governance of access, repair and maintenance of water systems installed by government or non-government organisations (Mommen, Humphries-Waa & Gwavuya, 2017). This committee model makes it possible to reach many communities within short funding cycles and with limited funds and satisfy donor requirements to report on short-term outcomes (Gent et al., 2015).

In Vanuatu, the idea that water governance can be improved by introducing community-based committees is widely shared amongst donors, government officials and development practitioners, enshrined in government policy and water committees are established and registered across the country as part of the Vanuatu National Implementation Plan for Safe and Secure Community Drinking Water (Mommen, Humphries-Waa & Gwavuya, 2017; Vanuatu, 2018b; Republic of Vanuatu, 2002).

6.1.2 Critical responses to the committee model

Despite the promise of these initiatives, natural resource management suffers from a discrepancy between ambition and action (Clement, 2010). Global development discourses promoting improved, decentralised governance have not translated to consistent results in practice, where committees introduced by actors external to the community rarely work as intended (Wong, 2010; Whaley, Cleaver & Mwathunga, 2021; Cleaver, 2012; Ferguson & Lohmann, 2016). In the case of water governance, (Whaley, Cleaver & Mwathunga, 2021, p. 1) note that "there is now widespread

recognition that the committee model has largely failed to deliver on its promises". Despite the widespread implementation of water committees in developing country contexts, rates of non-functioning water points remain high (Whaley, Cleaver & Mwathunga, 2021), resulting in a 'hidden crisis' in water access and management (Cleaver, Whaley & Mwathunga). While community-managed water systems often appear effective in the short term, many fail in the first few years (Whaley & Cleaver, 2017).

Critical institutionalism offers an alternative starting point for thinking about local resource management. Institutions are seen as emerging and evolving through a process of institutional bricolage in which people combine available governance arrangements to fit their local context and respond to changing situations (see Chapter 2). As new institutions are introduced in communities, they interact with pre-existing local governance arrangements, which leads to outcomes different from those intended by policymakers and implementing agencies. This way of conceptualising how new institutions interact with pre-existing governance arrangements to fit the broader local context helps to explain why externally designed institutions rarely work as intended (Wong, 2010; Whaley, Cleaver & Mwathunga, 2021; Cleaver, 2012).

6.1.3 Power, discourse and institutions

The committee model discourse, which views committees as a solution to local governance challenges, is widely shared by donor, government, and non-government stakeholders from international to local levels. I adopt Long's (2004) definition of discourse as "sets of meanings, metaphors, representations, images, narratives, and statements that advance a particular version of 'the truth' about specific objects, persons and events" (p. 242). Using a critical realist lens, discourse, power, and social practices exist in a dialectical relationship, with each influencing and being influenced by the other (Fairclough, 2010). In other words, discourse not only reflects reality but also shapes it (Hajer & Versteeg, 2005; Molle, 2008). In this way, development discourse directly influences development practice and vice versa. While it is tempting to think of prevailing development discourses as devised and controlled by bodies such as governments, NGOs, development banks or

communities, in practice, discourses are perpetuated or transformed as they collide with individual actors' ideas and values (Long, 2004). Individual actors such as donor representatives, government stakeholders, community members, and researchers have their explanations for the underlying reasons for social problems and ideas on how to solve them, which interact with prevailing discourse (Fairclough, 2010).

Discourse is a central theme in critical institutionalist explanations of how institutions form and adapt. Mehta, Leach and Scoones (2001) distinguish between institutions as practice (what people do) and institutions as discourse (how representations of institutions are constructed and used for strategic purposes). This way of thinking about institutions is helpful for my analysis as it allows us to distinguish how institutions function in practice from their influence on access to resources, power relationships or policies. For example, local actors might adopt prevailing development discourses to describe their local institutions to render them legible to outside stakeholders and facilitate engagement (Allen et al., 2013; Cleaver, 2012; Scott, 2008). While there have been claims that global discourse, such as the human rights framework, have been used by governments or transnational organisations against the interests of local communities, there is substantial evidence that local actors have also adopted elements of these discourses to bolster their claims (Hoddy & Ensor, 2018). In the case of water governance, international human rights discourses have been used to justify local discourse on exempting economically poor community members from paying water fees (Koehler et al., 2018). Cleaver and de Koning (2015), expanding on Douglas' (1986) concepts of 'leakage of meaning' and 'naturalising' institutions, argues that this is a case of legitimised discourses being borrowed from different settings to lend authority to new governance arrangements and make them appear legitimate in the local context (Cleaver & de Koning, 2015; Cleaver, 2012) (see Chapter 2).

The idea that external experts can devise externally pre-defined institutions through rational design processes to address local problems in developing countries has its roots in colonial institutional settings (Kimengsi & Balgah, 2021). For example, prior to Vanuatu's independence, the French and British *condominium* (joint colonial territory) authorities established local

councils modelled on local government institutions in their home countries (Cox et al., 2007). More recently, mainstream institutionalist literature, most influentially the publication of Ostrom's (1990) influential design principles, contributed to the popularity of CBM and the committee model among donors, governments and NGOs. As outlined in Chapter 2, Ostrom argues that it is possible to identify a set of underlying principles present in institutions that successfully manage common pool resources and use these to inform the design of new, similarly effective institutions (Ostrom, 1990). The idea of design principles appealed to policymakers because it provided practically useful guidelines for the design of institutions (de Koning & Cleaver, 2012; Hall et al., 2013; Hassenforder & Barone, 2018). As a result, this approach became part of the globally prevailing development discourse (Haapala & White, 2018; de Koning & Cleaver, 2012; Cox, Arnold & Tomás, 2010; Sakketa, 2018). In practice, the simplicity of the design principles collides with the complexity of pre-existing local governance arrangements (Cleaver & Franks, 2003). Hegemonic discourse embedded in technocratic development models, such as water committees, can also displace alternative discourses and make it difficult for communities to define their own (Takala et al., 2021). For instance, the predominance of CBM and committee model discourses made it difficult for local communities to define their community governance discourses.

6.2 RESULTS

6.2.1 Water committees in Vanuatu

Due to Vanuatu's geography of often remote and hard-to-access communities spread out over 65 inhabited islands, the government or the private sector have almost no ongoing involvement in water provision or governance at the community level (Republic of Vanuatu, 2018c). Since community-level water governance arrangements are nonetheless crucial to the consistent supply of safe drinking water, committees are an appealing policy option as they shift the responsibility of water governance to the community level. As a result, communities in most rural areas in Vanuatu are expected to govern and manage their water systems. One government stakeholder noted: "In Vanuatu, we're talking about 83 islands. For the

government to actually maintain and operate [all water systems], that's not a reality for us. So our only option is looking toward strengthening water committees" (KS5). Community-managed piped water systems and shared rainwater tanks provide over 60% of the water used for drinking. 20% of rural communities have no access to improved drinking water from sources that are likely protected from contamination (Vanuatu National Statistics Office, 2017).

A key stakeholder told me that the Department of Water Resources "recognises, perhaps rightfully, that they can't really help everyone and that communities have to bear the majority of that responsibility" (KS10). Due to this expectation placed on communities to govern and manage their water systems, social structures in the form of local institutions that govern the access, maintenance and repair of these systems play an essential role in determining access to safe water in rural Vanuatu (Kohlitz, Chong & Willetts, 2020). In Vanuatu, as elsewhere, water committees are expected to play this role. The committee model passed through the professionalised development discourse from international to national and local levels. It is perpetuated by the multitude of international and national development practitioners who are active in the water sector, working for donors, and the international consultants contracted by the government to lead on policy development processes, all of whom have internalised the discourse on CBM and water committees. As a result, the committee discourse is reflected in Vanuatu's National Water Policy, Strategy and the National Implementation Plan for Safe and Secure Drinking Water (Republic of Vanuatu, 2018d, 2018b, 2018c). Vanuatu's Water Resources Management Act gives water committees the power to 'make rules regulating water sources within the relevant community' (Republic of Vanuatu, 2018a, 20H(1)) and registered committees are required to qualify for government support with their water systems (Republic of Vanuatu, 2018d, 2018a), although this rule is not yet enforced (KS5).

Transferring water governance responsibilities to local water committees is attractive to the Vanuatu government. The committee model fits within the government's decentralisation agenda (Republic of Vanuatu, 1994) and promises to address practical challenges posed by the government's limited human and financial resources to assist the country's many remote

communities. Water committees are seen as a path towards meeting Vanuatu's National Sustainable Development Plan target to "ensure all people have reliable access to safe drinking water and sanitation infrastructure" by 2030 (Republic of Vanuatu, 2017) as well as Sustainable Development Goals target 6.1, which aims to 'achieve universal and equitable access to safe and affordable drinking water for all' (United Nations, 2015). The 2002 Water Resources Management Act (Republic of Vanuatu, 2002) and 2016 Amendment of the Water Resources Management Act (Republic of Vanuatu, 2018a), as well as Vanuatu's recent reforms to the water sector (Republic of Vanuatu, 2018b), include an increased focus on training and registration of water committees.

The functions of water committees in Vanuatu, as laid out in the amendment to the Water Resources Management Act (Republic of Vanuatu, 2016a), include management and governance tasks. Committees are responsible for maintaining the water supply schemes, developing a Drinking Water Safety and Security Plan (DWSSP), facilitating community decisions, and devising rules to regulate water management, including setting water fees (Republic of Vanuatu, 2018a). Committees are also given the authority to regulate water resource management issues in the community and create committee governance procedures (Republic of Vanuatu, 2018a). Furthermore, they are responsible for negotiating agreements between landowners and the community to ensure land access to water supply systems (Republic of Vanuatu, 2016a). The Water Resource Management Act also specifies that at least 40% of water committee members must be women.

6.2.2 Vanuatu DWSSP and policy

After tropical cyclone Pam in 2015, the Department of Water Resources organised community workshops to develop Drinking Water Safety and Security Plans (DWSSPs) in affected areas. This effort has been scaled up with the ambition to establish DWSSPs for each community water supply system in the country by 2030 (Republic of Vanuatu, 2018b). While DWSSP workshops predominantly focus on identifying technical issues related to water provision and teaching plumbing skills, they also include a community

development management training module to support communities in setting up or reviving water committees. The training modules were revised in 2021 and are now implemented in one-off multi-day workshops covering various aspects of water committee governance. However, scaling up the number of workshops takes time. A government stakeholder explained: "First of all, the department has to build its capacity; there have to be community development officers and our provincial officers that are actually trained to deliver these training sessions - the same as with the DWSSP. Now you know that DWSSP takes quite a lot of time; we had to train a lot of trainers, we had to have a lot of training of trainers workshops and all those things, and now we have the capacity to roll it out in our provinces. The same will go for plumbers training and financial management training and also the community development management training" (KS5). Most committees in Vanuatu, including the study communities, have, therefore, not yet received this level of support.

6.2.3 Water committees rarely work as expected in Vanuatu

A national census on water points between 2014 and 2016 counted 1175 community-owned water systems, of which 365 were reported to have a water committee (Mommen, Humphries-Waa & Gwavuya, 2017), while the government estimated in 2018 that there are over 2000 community water supply schemes in the country (Republic of Vanuatu, 2018b). The census findings indicated that water committees have some positive effect on the functionality of water systems: 39% of water points in good condition were in communities that reported having a water committee compared to 24% in communities that did not (Mommen, Humphries-Waa & Gwavuya, 2017). However, 29% of water points in communities that reported having a water committee were in poor condition or not functioning (Mommen, Humphries-Waa & Gwavuya, 2017). 56% of committees identified in the survey did not hold regular meetings (Mommen, Humphries-Waa & Gwavuya, 2017). The 2008 Vanuatu National Water Strategy notes that results from setting up water committees vary, and some committees have "little or no effect on water supply in the community" (Republic of Vanuatu, 2014).

Similarly, a mixed-methods study in four countries, including Vanuatu, found no clear evidence linking Water Safety Plans, which are meant to be implemented by water committees, to improvements in water quality, although they noted that "interviews indicated improved capacity of local committees in understanding their water supply systems and in identifying key risks to the delivery of safe water" (String et al., 2017, p. 1). A government official confirmed that "there are some water committees that exist, but most places don't have any water committee, maybe just one plumber who is a volunteer to maintain or operate the system of a community. In some places, you see that there is only a council of chiefs, and they play the part of the water committee in places where they are absent. Only in a few places can we see active water committees that are in place" (KS5). He also noted, "I have never heard about a water committee that has lasted more than five years. Many times, they last less than that. Some only last 1 or 2 months - the shortest. So it's really hard, it's really hard. When we talk about water committees, it's a big issue for us in Vanuatu" (KS5).

6.2.4 Water governance in the study communities

All three communities in the study sites have access to rainwater tanks, ageing gravity-fed systems, and groundwater wells. Rainwater is the preferred source for drinking, while groundwater wells and rivers are mainly used for washing clothes and bathing. All communities participated in short, one-off DWSSP workshops during which water committees were set up or revived. When the committees in the study sites were established, the DWSSP workshops' focus was predominantly technical, and little time was spent on committee organisation, roles, and responsibilities. The committees stopped functioning in two of the three study communities shortly after the workshop facilitators left the community. The third community adapted the introduced committee functions to integrate them with pre-existing governance arrangements but excluded some of the community from accessing the gravity-fed water system. None of the water committees operated as intended in the case study communities. Nonetheless, I observed that the water committee discourse continued regardless of whether the water committee was functioning or not. Some community members talked about non-

functioning water committees as if they were still operational, while others stated that the community had a water committee, but it was not working.

6.2.5 Village C

In Village C, the gravity-fed system is no longer operational. The communities rely on private rainwater tanks or groundwater wells installed by an NGO after cyclone Pam. A voluntary plumber continued to repair the gravity-fed water system with pipes and spare parts left behind by an NGO, but the water system failed once all the parts were used.

A community member told me, "If you *storian* with the chief, you will hear that there is a water committee", before recounting a time when he bought parts for the committee to repair the water system so that water would reach his home again. He said, "We wanted to go, but they don't have time to go; I keep the joints, but I also don't have water at home" (C14). Others confirmed that the water committee does not meet or perform any water governance or management roles.

As a result, some households are managing their water sources themselves: "When we noticed that the water was not good in [our sub-station], we just met in our house and decided to go and fix it ourselves and clean the water source" (C13).

Village C's governance systems had broken down more broadly due to disputes between chiefs of the different sub-stations. One participant noted that neither the village council nor the chiefly system was performing their role: "The council is there, but the council is dead. The council is dead. The *Namaraki* [chiefly system] is also dead" (C5).

6.2.6 Village B

Village B's water supply consists of a gravity-fed system, rainwater tanks, and a river outside the main village, which is used for bathing and washing. Village B established a water committee as part of the Vanuatu government's response to tropical cyclone Pam in 2015, but this committee no longer meets. An unpaid community plumber continues to maintain and repair the gravity-fed water system to prevent it from breaking down. This arrangement mirrors how

water systems were maintained before the water committee was introduced (see Chapter 4).

While this model allows for basic maintenance and repair of the water infrastructure, the plumber lacks the governance authority usually assigned to water committees. For example, the plumber cannot make or enforce rules, set, or collect water fees to pay for parts or plan and implement improvements to the service (see Chapter 4). The plumber noted: "When it's only me working on the water, I can only maintain the water, but this work cannot extend because there is no committee to make it extend, so that's why I think that there has to be a committee" (B1). This lack of authority is somewhat mitigated by the ability of community members, including the volunteer plumber, to escalate problems to the village council, which has the authority to make and enforce decisions. However, many water governance issues remain unresolved. Study participants complained, for example, that some people were using more than their fair share of water by adding private connections to the main pipes, not repairing broken, continuously running tabs, and using piped water for water-intensive activities such as making concrete bricks or washing cars. As a result, the whole community experiences water shortages most afternoons, and water pressure is usually too low to reach households near the end of the pipe. Although many of these challenges were justifiably blamed on the limited amount and size of storage tanks, they also indicate underlying problems with governance structures.

Community members were also concerned that the functioning of their water system relies too heavily on the volunteer plumber for whom there are no succession plans: "If the water is not running, and if he did not go and fix it, we could not use water anymore […] if it was a different person, he will say, hey am fixing the water but I never get paid, I will just leave it, if so, maybe we'll be using only the river" (B4).

Despite the growing population, the community has no plans to expand the water system. "The population has increased, so we need to upgrade everything again; the water system must be upgraded. […] The main source up the top must be upgraded to become bigger and store more, and some of the pipelines need to be bigger" (A17).

6.2.7 Village A

In Village A, a complex gravity-fed system supplies water to dozens of taps in the main village and most of its sub-stations. It is the only water committee in the study sites that was active at the time of the study. The committee had been significantly adapted and integrated with existing institutions. Before the committee was established, the community had a single unpaid plumber and faced many challenges with their water system, mainly linked to raising funds to buy and repair equipment. Now, plumbers are paid a fee by the committee to carry out repairs. Village A has adapted the water committee structures to work in the local context and linked it with the village council, which is accepted as the central governing body in the community and includes all chiefs. The committee, alongside other committees, reports on their activities at village council meetings and asks the council to endorse any decisions. By endorsing water committee decisions, the village council imparts authority to the water committee (see Chapter 5). However, this did not enable the water committee to collect water fees on an ongoing basis, and the water committee had to rely on fundraising activities instead.

Village A's water committee was established by an NGO as part of a DWSSP workshop and plumbers' training. The village council was established around the same time, and both institutions combined traditional and non-traditional institutional elements. There is a crossover in the leadership of the village council. In line with kastom hierarchies, chiefs play a significant decision-making role. Some council and committee leaders had held positions in government and NGO projects and, as a result, were familiar with non-traditional governance arrangements.

As a result of its integration with local institutions, Village A's water committee functions reasonably well. Committee members meet regularly and are aware of their roles and responsibilities, and, as a result of the committee's work, most community members have consistent access to piped water.

6.3 GHOST COMMITTEES

6.3.1 What are ghost committees

Many externally introduced committees that participants in the three study communities did not operate in practice. In the *storian* conversations and workshops centred on community governance, most participants brought up committees as governance structures in their communities. However, further discussions revealed that many of these committees were not carrying out some or all the governance functions they were designed to perform. For example, water committees no longer met in two out of the three study communities. Committees were also routinely talked about by key stakeholders working for the Vanuatu government and international organisations as if they were performing their intended roles, even though this was rarely the case. For example, the increasing number of water committees is widely regarded as an important step towards improved water governance, even though few existing committees perform as expected in the longer term. The committee model discourse, which presents committees as solutions to local governance needs, is frequently at odds with local realities.

In the following, I explore why institutions that no longer perform their intended roles in practice continue to be talked about by actors at different levels – local, national, and international – as if they were performing their intended roles. I use the term 'ghost committees' to refer to this phenomenon. Ghost committees, which are an unintended consequence of the committee model, create the appearance of effective and persistent local governance where there is none, which in turn strengthens the committee model discourse. My analysis is based on critical realist ontology and epistemology, critical institutionalist concepts, and elements of critical discourse analysis. This allows me to explore possible causal mechanisms that lead to the persistence of the committee model discourse and the emergence of ghost committees (Edwards, O'Mahoney & Vincent, 2018). I expand on critical institutional literature by arguing that the phenomenon of ghost committees, which I identified in the study sites, plays a role in the enduring popularity of the committee model in international development discourse and practice. By identifying ghost committees, I draw attention to a situation in which

committees that are not operational in practice perpetuate the current model of introducing committees and influence the allocation of funds and support for the government and non-government agencies and communities.

The phenomenon of ghost committees has not been discussed in the literature, and offers new insights into the committee model, which enjoys enduring popularity despite evidence that externally introduced committees work as intended. While critical institutionalist literature does not explore the phenomenon of ghost committees, it offers useful tools to explore how ghost committees emerge and persist in discourse (see Chapter 2). In turn, the concept of ghost committees adds additional insights to critical institutionalist explanations as to why the committee model has failed to deliver on its promises.

6.3.2 Conditions for ghost committees to emerge

The conditions for the emergence of ghost committees arise when externally introduced committees do not work as expected, as outlined in the examples above. Institutional mapping exercises conducted as part of the iPTD project and *storian* conversations also revealed that all three communities had many committees initially set up to govern different areas of community life that were not operational or no longer performed their intended role.

During an institutional mapping exercise, participants identified numerous committees in each community. Many of these committees were introduced by the government, NGOs or churches. Further discussion revealed that most of these committees were no longer active in performing their governance or management roles. One female participant told me: "To tell you the truth, there are no committees that work well now. […] Every committee is just one person" (B5). A male community leader remarked that many committees never worked in practice: "a lot of these committees we just write down their names, we go to the *nakamal* [traditional meeting place], we elect members and write down their names, [and then the committees] just sleep in the Nakamal until today" (B2). These general examples show that the phenomenon of ghost committees is not restricted to water committees.

Using the example of the community disaster committee set up by the Red Cross, one participant said: "When the Red Cross comes for us to attend the workshop, we will attend, but when the workshop is over, and we leave, we will forget about everything, we will not go together to meet as a committee or meet to discuss the work, not anymore, we will forget it, we just wait until the Red Cross are here and call us to go back, so we committees go back again, and when they leave, we forget again" (B4). One government stakeholder remarked that when his teams return to communities after some time has passed since the installation of a water system, "there is a lot of work that you must do to fix it up again" (KS2).

Vanuatu's water policy and legislation are based on the assumption that establishing water committees in each community across the country will improve water management outcomes (Republic of Vanuatu, 2018a, 2018c). However, my evidence and the literature suggest that this assumption is frequently inaccurate in practice (Mommen, Humphries-Waa & Gwavuya, 2017; Cleaver, 2012; Rusca & Schwartz, 2014). The *storian* conversations and community workshops indicated that despite participating in a workshop to establish or revive their water committee in line with government legislation, none of the water committees operated how they were designed and introduced to the community.

Water governance and management arrangements in the three communities ranged from a water committee with regular meetings overseeing a complex water system but failing to include all sub-stations in Village A, a single person ensuring ongoing water maintenance in Village B, to the absence of collective water governance arrangements accompanied by the breakdown of the gravity-fed water system in Village C. All three communities also listed their water committee during the institutional mapping exercise carried out as part of the iPTD project, even though only one of the communities had a committee that met regularly and partially met the government's expectations. However, despite these very different water governance situations, discourse at national and international levels treats all three communities as if they had functioning water committees based solely on their participation in the workshop in which the committee was established.

During *storian* conversations, study participants mentioned several reasons why their committee did not perform their governance function as expected. These included challenges within communities that made it difficult to implement the committees and challenges with how committees were introduced.

6.4 DISCUSSION

6.4.1 Why do introduced committees not work as expected

In the following, I outline the main factors community members mentioned to explain external institutions not working as expected. These factors are examples of poor institutional fit and create the conditions for the emergence of ghost committees. They include:

- the proliferation of unnecessary committees set up by development projects
- the disintegration of committees once government or NGO representatives leave
- loss of interest because the committee's function is perceived as low priority or the committee lacks authority to implement decisions
- the voluntary, unpaid nature of committee roles and the over-commitment of skilled community members willing to volunteer
- skilled committee members leaving the community to work in the capital or overseas
- financial mismanagement
- the state of broader community governance structures
- maintenance arrangements, which hide the lack of functioning committees
- the current methods of establishing committees through short, one-off workshops
- the national policy environment

I subsequently examine challenges to the sustainability of committees inherent to the committee model by exploring how the current method of

introducing water committees in Vanuatu impacts their sustainability and further encourages the formation of ghost committees.

Proliferation of committees

The first contributing factor to the failure of many committees was the proliferation of superfluous committees. Community members explained that many committees are part of a continuous stream of new committees established for one of many small-scale projects to manage a specific activity but did not necessarily have clear governance functions. Participants explained that NGOs formed committees to manage chickens, saplings, sowing machines, or a solar fridge that was donated to the community even though they do not necessarily require a complex governance mechanism and could have been integrated with existing institutional arrangements. Participants mentioned the lack of the need for meetings as a reason that several of these committees stopped functioning after the initial project phase, and a single person now manages some, often as a business.

Disintegration of committees

Committees also stop functioning when external government or NGO representatives are no longer present, creating conditions for ghost committees. A female participant told me: "When there is a group that comes to make a workshop, they make a committee, but when the help leaves, the committee doesn't do any work. Too many things that are dead" (B17). A male community leader explained that committee members lost interest in running the committee: "When the NGO is there, like if we are talking about a project, we come and start a project, and everyone sees and were happy about it, the participation for this NGO is still there and the department still there, and that makes the community people feel excited about it, and they nominate themselves to be a committee, but when the NGOs and the departments they move, they don't know what to do, they just sit down and do nothing until the NGO comes back and asked did you do something" (B2). Another female participant noted that some committees are only active "to the middle of the year, and then they become slack or finished. It's not everyone; the committee for the school is faithful until the end, the committee for the church are also faithful until the end of the year. But sometimes in the community, there are

some people that just get lost; after some time, if people come, for example, like you guys [from the iPTD project], and you work with us on water issues, it makes them start again, it wakes them up again. We can't hide anything; that is a real thing that happens in the community" (B3).

Loss of interest in committees

Loss of interest was linked to particular governance issues perceived as low priority or lack of authority given to the committees. For example, in two of the communities, the committee's decisions were disregarded by community leaders, so "their decisions are just a waste […], and that makes when they call for a meeting, the committee members are not interested to attend" (B1). A female participant who was active in several committees told me that some people agreed to join a committee to further their status in the community despite not being interested in acting on the responsibilities this entails: "They say yes, but at the end of the day they don't follow through with their yes. They don't take action" (A7).

Over-committed and unpaid committee members

Participants also mentioned the voluntary nature of committee roles as a reason for rendering committees fragile. They noted that community members with the right skills to join a committee are often over-committed. Several participants believed it was difficult to keep water committees working because committee positions were unpaid. One participant noted that contributing to committees required a specific skillset: "We have to use our resourceful people from the community, water committee. Maybe a teacher, someone who worked with the government before, to be part of it to support them with ideas and not just anyone from the community. We can't just take anyone and put in the committee" (B2). However, not all skilled community members are also motivated to volunteer: A community leader in Village B told me: "500 people are here; why do you have to hold 2 or 3 responsibilities where there are a lot of people are here? Many kids go to school and come back and just stayed home" (B2). Similarly, a female participant in Village A observed that "a lot of people are here, but there are only a few that are willing to do the work" (A7). This lack of volunteers can lead to some people with the right skills becoming overcommitted because they sit on many committees. "At the end of the day,

he can't just do it because he's part of too many committees" (B2). Alternatively, it leads to situations in which people who are not interested in or qualified for the roles are elected. As one male participant in Village B noted: "If nobody puts their hands up, then they will vote for someone" (B3). Another male participant suggested that "some people are lazy, some people don't know how to do it, some people just sleep for a year, and we must change it at the Nakamal and put different people inside" (B13).

Committee members leave

Many people with the skills and motivation to volunteer on committees also leave the community to work in the capital Port Vila or sign up for seasonal work overseas. A national stakeholder told me that this is a big challenge for many water committees: "It's a big challenge because, as I said, the water committee is there, then you hear those two have gone to pick apples or gone to Australia to do this. Or this one has gone to the city to find work in the city. So the consistency of a water committee to last a long time, the chances are very low" (KS5). In one case, this led to a situation where committee members were replaced three times in short succession as they did not attend workshops: "we had a committee, to begin with, and then when we had a workshop they didn't come to the workshop, so we let them go and took a new committee, then when it came to the workshop they didn't show up, so we let them go too, and then just last week we took a new one again" (A7). Another participant told me that "all the water committee members are not here, some went to New Zealand, this kind of stuff contributes to no work going ahead" (A5)

Financial mismanagement

Challenges with managing finances and misappropriation of funds were another reason for the breakdown of water committees in two of the three communities and were mentioned as a concern in the third community. A national stakeholder confirmed financial mismanagement as a common challenge for water committees in Vanuatu: "In many cases, we see a lot of mismanagement, a lot of misuse and a lot of wastage of money going to unnecessary things that have nothing to do with water" (KS5). As a result, there is "no more money to maintain and operate, and over time the system breaks

down, and the water committee disperses" (KS5). For example, participants in Village C attributed this failure of the water committee and the gravity-fed water system to the misappropriation of funds. One participant explained: "The man that was looking after the money, he went, and he ate the money, he used the money. It meant that we couldn't buy any more tanks or repair the keys, so it meant that the water is not working until today; the water was already no good before cyclone Pam came because a man that was looking after the water he used the money for himself" (C5). Another male participant added that if the water committee had "looked after the money, to begin with", they would have been able to buy parts and repair the water system, "but because they misused the money, it is something that is rubbish" (C4).

6.4.2 Community governance context

Broader community governance structures also impact the functionality of water committees. Externally introduced committees do not necessarily have the authority to implement their intended governance tasks but rely on borrowing authority from existing institutions and discourses through leakage of meaning (Cleaver & de Koning, 2015). In the study communities, the water committee in Village A regularly reported to a functioning village council, which cemented its role as a legitimate local institution. Conversely, in Village C, conflicts between chiefs of the village and its sub-stations impacted the functioning of local institutions and eroded the authority of those in leadership positions. Due to its remote location, the village also had few links to external institutions that may have been considered authoritative by community members. In this context, the water committee could not borrow authority and establish itself as a legitimate governance body. The committee disintegrated shortly after being established. In Village B, a participant blamed a lack of oversight by the council of chiefs for the 'weakness' of their committee, stating that "nobody knows who is working and who is not working" (B3). The perception that chiefs are responsible for weak committees was echoed by a government stakeholder who told me that in communities, "only the chief has big power, but if the chief doesn't do his work through all the different aspects of his work, then the team and the committee are weak" (KS2).

Conversely, participants believed that committees are more likely to succeed if they can connect to a network of strong existing institutions. Participants in all three communities were hopeful that committees could be revived or improved if the role of the chiefs was strengthened, and the chiefs participated in or supported the committees. For example, in Village B, "The idea is that the new council of chiefs will become stable, and then they will pull all the committees back, and it will start working again" (B5). These examples illustrate the role of local community governance systems in legitimising externally introduced committees and providing them with the necessary authority to perform their governance tasks.

Maintenance without governance

A lack of functioning governance arrangements may be obscured, for example, if water maintenance is carried out by community plumbers who manage to keep water systems functioning in the intermediate term by carrying out basic maintenance tasks. However, the lack of governance leads to challenges over time and as the system ages and demands on the system grow. I have observed this phenomenon in Village B, where a volunteer community plumber who has received basic training from the Department of Water Resources has maintained the existing infrastructure since the water committee broke down in 2016. As one participant put it: "Now the plumber is the only one that does work from the water committee; the others just relax" (B5). This arrangement appears familiar to the community because water was traditionally the responsibility of a single person: "When I was small, there was just one man that would look after the water, not a committee" (B3). This arrangement worked when the community was much smaller before the complex gravity-fed water system was installed. It is still effective to undertake water system maintenance, management, and minor repairs. However, over time, the absence of water governance causes challenges in providing water to an ever-increasing population.

The plumber in Village B has good technical knowledge about what needs to be done to keep the system operational. He is able to undertake maintenance tasks and carry out minor repairs. Nonetheless, he does not have the authority to make or enforce decisions. Village B currently lacks institutions

to regulate volume, purpose and times of water usage or decide on the number and location of new water connections. Anybody with money to buy pipes can pay the plumber to create new private connections. Nobody feels responsible or authorised to collect a water fee or raise funds to purchase parts to repair or upgrade water systems. A combination of ageing insufficient infrastructure and a lack of rules to limit the use of tap water at certain times or for water-intensive purposes such as brickmaking leads to reduced water pressure or availability and means that storage tanks often run empty before midday. Because the knowledge of water system maintenance lies with a single person, it could be lost if the plumber ends his voluntary service.

This reliance on volunteer plumbers for water maintenance is widespread in Vanuatu. One government stakeholder told me that "In many cases, the plumber does all the work" (KS2), while another said that water maintenance frequently relies on individuals who are willing to volunteer because they want to help their community or because they have a "passion for water and they realise the importance of water, and that's why they just make all these things for free" (KS5). The phenomenon of these *committees of one* is not confined to water governance. For example, a health worker told me: "Since I've been doing this work, we need somebody else to come and join the committee of the aid post, but there is nobody else; they have chosen the people, and then they don't do their work" (B7). These ongoing maintenance arrangements can often keep water systems functional in the intermediate term.

Nonetheless, water maintenance is insufficient in situations where governance and governing authority are called for in addition to technical skills. Maintenance reaches its limits when rules need to be made or enforced or when funds need to be secured and managed, for example, to repair or upgrade a water system. Functioning governance mechanisms are needed to keep water systems operational in the longer term. Community members and visiting government or NGO stakeholders may not suspect the absence of functioning governance mechanisms until the water system stops working. Water maintenance can thus obscure the lack of functioning water governance arrangements and perpetuate the illusion of ghost committees.

Inadequate training

Introducing committees through short, one-off workshops also impacted the sustainability of committees. Although community members did not question the current model of establishing committees in the *storian* conversations, the issue was raised by key national and international stakeholders in the water sector. The Vanuatu government's desire to improve water infrastructure for all communities across the country's many islands, combined with limited human and financial resources, limits the amount of time available to engage with each community and the ability to conduct follow-up visits. Consequently, water committees are introduced as part of short, one-off workshops with the broader agenda of establishing Drinking Water Safety and Security Plans (DWSSPs) (String, Singleton & Latagne, 2017). In practice, these workshops do not allow sufficient time for committee members to internalise new governance roles and responsibilities and have frequently been unsuccessful in establishing lasting water committees. During *storian* conversations with committee members of this committee, I found that while some committee members were able to give detailed accounts of the committee and their role within it, others did not know what their roles entailed and did not attend or talk in meetings.

The main focus of DWSSP workshops in their current form is on building technical skills for water system maintenance, and trainers often have plumbing rather than governance expertise. The plumbing training components of the workshops are likely beneficial, and the water infrastructure assessment helps the government prioritise future assistance and infrastructure upgrades. However, the workshops' water governance and management components rarely achieve the desired outcome of sustainable water governance through water committees. The workshops present water committees as rigid structures, and committee members are nominated to perform pre-defined tasks. One international stakeholder told me that once communities complete the workshops, they "move on with life" (KS10). Another national stakeholder explained in more detail that "what happens is that often we have a water committee, and it's not clear what their roles and responsibilities are. So often, they are a water committee, but they don't know

their functions well. They don't know who is supposed to do what and who has the overall oversight of what to do. They don't even have plans in place; they don't have a proper meeting with proper meeting minutes and all those things" (KS5).

The Department of Water Resources has recognised that the current DWSSP workshops do not necessarily lead to successfully implementing the introduced structures and plans. In response, there have been efforts by the Department of Water Resources and partners to develop new training modules for the DWSSP workshops with a stronger focus on water governance, including detailed guidance on the roles of water committees and committee members. These workshops have not yet been run in any of the study communities. In addition, the Department of Water Resources plans to conduct follow-up visits to all communities participating in DWSSP workshops within 18 months of completion (Rand et al., 2022). While even a single follow-up visit is a significant endeavour given the number of often remote communities, it remains to be seen whether these visits will strengthen local structures and the implementation of DWSSPs. As one government stakeholder put it, "The secret that I have to tell you is that we have to visit them frequently, we have to monitor their progress frequently. Otherwise, if we let them go for too long, then they just lose interest" (KS5).

National policy environment

National-level policies may also create the conditions for ghost committees. In Vanuatu, eligibility for government support to repair or upgrade local water systems is linked to the requirement to complete a DWSSP workshop and set up a water committee (Republic of Vanuatu, 2018d, 2018a). While a key stakeholder told me that this rule would not be strictly enforced due to local realities, it continues to circulate in the local and national discourse, and water committees are widely considered a prerequisite for receiving support. This discourse provides an (intended) incentive for communities to establish water committees and an (unintended) incentive to claim that water committees are performing their intended role even when this is no longer the case. During workshops and storian conversations, participants initially presented ghost committees as if they existed in practice

or were only temporarily not working even though these committees no longer met. For example, one community leader told me that the water committee: "works a little with the plumber" but that the chairperson was "not too active. I think that at the end of the year, we will change him out" (B13).

Further discussions and triangulation in the same community revealed that the water committee had not met for years. The perceived power of water committees to unlock access to government support is activated as soon as committees are established. If water committees stop functioning as designed, this power can be transferred to ghost committees. Therefore, the link between water committees and government support creates conditions that encourage the formation of ghost committees in cases where water committees fail to operate as expected.

6.4.3 Why are ghost committees reproduced at different levels

I have outlined conditions for the emergence of ghost committees in communities and considered how the way in which committees are introduced might impact their sustainability. In the following, I explore how ghost committees perpetuate the model of establishing water committees even though these committees do not play a functional role in water governance. I argue that the committee model discourse, which presents externally designed committees as effective means to achieve desired local governance outcomes, creates the conditions for the emergence of ghost committees. Ghost committees, in turn, sustain the illusion that committees work as expected, which strengthens the committee model discourse and promotes the rollout of progressively more water committees regardless of their performance in practice.

6.4.4 How ghost committees perpetuate the current model

Hierarchical power relationships, particularly the ability to make or influence policy and funding decisions, play a central role in the reproduction of ghost committee discourse across levels of governance. Policy prescriptions and funds flow from donors at the global level to the national governments and non-government organisations implementing projects at the community level.

Committees have become synonymous with the governance component of water projects, and many donors, governments, and NGOs regard the committee model as the standard method to establish water governance and management mechanisms to achieve desired outcomes, such as keeping water infrastructure operational beyond the duration of a project (Whaley, Cleaver & Mwathunga, 2021). As a result, NGOs and governments use the established committee model discourse in most project funding proposals.

A more nuanced approach to water governance that fits the way each community is structured would be more challenging to explain to donors as it does not fit this widely agreed framework and, therefore, is more difficult to fund. In addition, alternative approaches to the committee model are likely to require significantly more community engagement than a basic version of the committee model, which would lead to comparatively higher project costs, adding a further competitive disadvantage. As a result, the committee model favours scale over depth, establishing many committees through short interventions rather than in-depth engagement with fewer communities over long periods. While the latter may lead to more sustainable outcomes, it is less compatible with short project cycles and the emphasis on working at scale.

However, the committee model discourse does not only flow from the global to the local level. Project-level reports influence the national and international policy and funding decisions that provide the framework for project activities. A focus on monitoring the number of committees established through a one-off intervention such as a DWSSP workshop rather than data collection on their performance beyond the project duration may lead to ghost committees going unnoticed in these reports. At the national level, the Vanuatu government currently maintains a record of DWSSP workshops and water committee registrations (Rand et al., 2022; UNIV and UNICEF). While a follow-up monitoring form that includes the question of how many times the water committee has met was introduced a few years ago, this has only been completed for a small number of committees at the time of writing (UNICEF, n.d.). Recording the number of committees established provides measurable and project-specific indicators of short-term project outputs. These outputs are relatively easy for implementing agencies to achieve and monitor.

However, the implied assumption that these short-term outputs will translate into long-term governance outcomes is often flawed. Since the longer-term functionality of water committees is not reported, stakeholders may wrongly assume that ghost committees exist and function. This misperception may lead to policy and funding decisions that are disconnected from local realities. For example, in the study sites, the NGO running DWSSP workshops reported to the government and donors that community members attended DWSSP workshops and formed water committees. At the time of my study, there had not been follow-up visits to verify whether the water committee was still operational and performing its intended roles.

Ghost committees established in local discourse may also skew quantitative monitoring data if community members report them as existing. For example, during an institutional mapping exercise facilitated as part of the iPTD project, community members named a plethora of committees in each community. On further exploration, very few were still conducting committee meetings. This feedback loop between implementation, project reports, policy prescriptions and funding perpetuates a view that the committee model is an appropriate approach to local governance. This overly optimistic impression of the role committees play in local water governance encourages the rollout of progressively more committees and, in the process, inadvertently creates the conditions for more ghost committees.

6.4.5 Discourse adopted independently of reality and better knowledge

The national government, donor, and NGO stakeholders I spoke to knew that many water committees set up through DWSSP workshops no longer function. Nonetheless, the underlying processes that lead to this outcome are rarely discussed and setting up water committees is a central component of the 2017-2030 Vanuatu National Water Policy. After outlining Vanuatu's vision for rolling out water committees across the country, one international key stakeholder remarked, "globally it hasn't worked anywhere else that I know" (KS10). This awareness that committees rarely work as intended raises the question of why national stakeholders continue to use the committee model

discourse to guide their actions despite their knowledge that they rarely produce the desired outcomes.

The pervasiveness of the committee model discourse across levels makes it challenging for national stakeholders to propose alternative ways of working with communities. As discussed above, national stakeholders have internalised the prevailing discourse on water committees or may include committees in their project designs to secure donor funding and satisfy reporting requirements. Water committees play a central role in Vanuatu's Water Resources Management Act (Republic of Vanuatu, 2018a), National Water Policy and Strategy (Republic of Vanuatu, 2018d, 2018c) and the donor-funded National Implementation Plan for Safe and Secure Drinking Water (Republic of Vanuatu, 2018b) that aims to provide technical and capital assistance to communities across the country. When these projects are funded and implemented, the committee model moves from global and national discourse into local practice. In this context, water committees are presented as exit plans that ensure the long-term sustainability of these interventions.

The desire to access support for the much-needed shorter-term objectives to improve water infrastructure further incentivises national government and non-government actors to reproduce the established discourse on committees as an effective form of community governance, even if they know that this diverges from local realities. As a result, even when recognised, the mismatch between discourse and realities in communities does not stop the committee model discourse from prevailing. The shared pretence that committees work as designed results in the committee model discourse becoming further embedded in bureaucratic practices at the national level and projects at the local level and prevents discussion on alternative models of establishing water governance mechanisms.

6.5 CONCLUSION

The committee model discourse, which promotes the introduction of externally designed committees in ways that are frequently at odds with local realities, creates the conditions for the phenomenon of ghost committees. Ghost committees, in turn, mask widespread challenges of the committee

model as it is currently implemented. This contributes to the ongoing dominance of the committee model in Vanuatu as elsewhere. Assigning the category of ghost committees highlights the prevalent disconnect between discourse and practice and the feedback loops that hide the shortcomings of the committee model in its current form and drive its proliferation. Drawing attention to the phenomenon of ghost committees is also significant because it exposes situations in which ghost committees impact the social and physical environment at the local level. In an illustration of the dialectical relationship between discourse, power, and social practice (Fairclough, 2010), ghost committees draw authority and resources away from pre-existing local institutions by creating parallel structures and may prevent alternative institutions that do not follow the committee model from emerging or governing.

A committee with members that do not meet and carry out their governance responsibilities may also make it difficult for existing institutions to step in to perform needed governance tasks, or alternative institutions to develop, because they do not want to infringe on the authority of elected water committee members. This can lead to significant challenges, as in Village B, where the presence of a ghost committee with elected members is an obstacle to alternative water governance approaches, such as reviving the role of chiefs in water governance or the formation of the proposed water, health, and waste management committee (see Chapter 4). In an example of how discourse is interconnected with objects in the physical world (Fairclough, 2010), ghost committees stand in the way of sourcing funds for repairs or organising community members to carry out maintenance tasks and, therefore, impact the functionality of the water system. The committee model discourse at national and local levels impacts community governance and, by extension, the resources being governed even if it does not establish functioning committees.

These insights provide entry points to explore alternatives to the currently prevalent approaches to establishing local institutions (see Chapter 7). Practical ways to engage with communities, favoured by critical institutionalists, often stress the importance of local context, pre-existing instituions, history and power relationships and note that these are frequently overlooked in the implementation of community-based management and the

committee model (Cleaver & de Koning, 2015; Haapala & Keskinen, 2018; de Koning & Cleaver, 2012; Mehta, Leach & Scoones, 2001). This may include questioning which governance arrangements currently work, whether new governance functions could be integrated or linked with existing institutions or whether new governance mechanisms are needed. An emphasis on linking or integrating, rather than replacing, local institutions reduces the number of new committees in communities. For example, less time-consuming governance tasks or those that only need intermittent attention may not warrant setting up a committee and could instead be integrated into existing institutions. The current committee model's prescriptive nature leaves little flexibility to link institutional arrangements to, or integrate them with, existing governance structures.

Significant changes to the current approach to community-based management through the introduction of committees are necessary to break the feedback loops of policy prescriptions, funding, implementation, and project reports that perpetuate the committee model. This includes shifting the focus from the introduction of ready-made governance mechanisms to enabling communities to co-design or modify institutions to fit their local context and moving from a system of reporting on the number of committees established to outlining the process of establishing governance mechanisms and the outcomes of these new localised arrangements. Alternative approaches to institutional design also recognise the importance of existing local institutions in shaping new governance arrangements and enabling new institutions to adapt iteratively to specific contexts (see Chapter 7). Implementing these changes requires a significant shift in donor expectations.

In the study sites, the government faced the dilemma of prioritising between short DWSSP workshops reaching most communities and more regular engagement with fewer communities. Several components of the DWSSP process that are important for communities' water safety and security, such as water system assessments to inform future repairs and upgrades, training in basic plumbing and quick infrastructure repairs, may be achieved in a single community visit. This provides a strong argument for the government's plan to develop a DWSSP in every community by 2030 (Rand et al., 2022).

However, my study and examples in the literature suggest that improving local governance systems requires longer-term, in-depth engagement and skills in facilitating participatory institutional design processes. Since both types of interventions are necessary for long-term water system functionality, additional investment in skilled facilitators and longer-term engagement with communities are needed to achieve lasting outcomes and reduce the occurrence of ghost committees. The link between successful water governance and functioning community governance systems suggests that water governance would benefit from efforts to strengthen community governance more generally.

Chapter 7: Facilitating equitable and enduring change

7.1 INTRODUCTION

This chapter draws on, but goes beyond, the findings of my analytical chapters, placing my results into conversation with existing literature on critical institutionalism (see Chapters 2, 4, 5 and 6) facilitated bricolage (reviewed below) and agonism (see Chapters 2 and 5) to develop new insights and conclusions. This approach enables me to explore how critical institutional concepts could inform practical efforts towards equitable and enduring institutional change. This chapter contributes insights into broader critical institutional debates by addressing the questions of how far bricolage processes can be managed and to what extent institutional design methods can be harnessed to affect equitable outcomes. As Cleaver (2012) asks: to what extent can the power relations that operate through everyday actions and state authority "be channelled to effect equitable and sustainable natural resource management without reproducing entrenched inequalities?"

I draw on the literature review and results chapters to synthesise lessons, presented as principles, to inform policymakers and local government or NGO staff working directly with communities (hereafter referred to as local development practitioners). Following critical realist and critical institutionalist ambitions to go beyond analytical explanations by creating progressive change towards social justice (Cleaver & de Koning, 2015), these principles aim to start a conversation on how to improve engagement with rural communities to work towards equitable and enduring community-based governance and management. This addresses my research objective to explore if and how institutional bricolage processes can be facilitated to create enduring and equitable governance arrangements. It also provides the foundation to address my additional objective of sharing practical insights into institutional change mechanisms with policymakers and development practitioners in Vanuatu and elsewhere to support their efforts in improving governance and management of local services and natural resources and create enduring and equitable outcomes. I use the design of water committees as a practical example of

community institutions based on the importance of water governance in the local context. Nonetheless, my analysis applies equally to other local institutions, such as community disaster and climate change committees or village councils.

The geographic layout of Vanuatu and limited human and financial resources means that water governance and management in rural Vanuatu relies on the ability of communities to govern and manage all aspects of village life, including their own water systems. The Vanuatu government's National Sustainable Development Plan's policy objective to 'ensure all people have reliable access to safe drinking water' by 2030 (Republic of Vanuatu, 2016b) depends, therefore, on reliable ways to establish and support enduring community institutions to govern access, use, maintenance, repair, and expansion of water systems. Faced with the messy reality of how institutions are shaped at the local level, the current approach of establishing externally designed standardised water committees is unlikely to produce the desired outcome of enduring water governance across the country (see Chapters 2, 4 and 6).

National policymakers, donors and development practitioners often regard governance interventions as vehicles to improve equitable decision-making processes and outcomes, as evidenced (Peloso & Harris, 2017). For example, the Vanuatu Water Resources Management Act requires 40% of water committees to be women (Republic of Vanuatu, 2018a) (see Chapter 4). However, deep-seated inequitable norms and values and hierarchical structures persist in many communities (see Chapter 5). This challenges the ability of institutional design interventions to create lasting equitable institutional processes and outcomes. Institutions that clash with local beliefs often struggle to survive in the long term (Knook & Turner, 2020). For introduced water committees to endure requires, therefore, not only a change in practice but also a change in norms and beliefs (Knook & Turner, 2020).

This chapter is organised as follows. The first section introduces literature on approaches that aim to facilitate bricolage processes and work with the grain of the existing local structures and context. These approaches are anchored in critical institutional literature and act as a starting point to

synthesise the results and analysis of the previous chapters from a practice-orientated perspective. I argue that understanding how institutions emerge and adapt through institutional bricolage processes can inform the design of lasting local institutional arrangements and support equitable outcomes. This builds on, but goes beyond, current critical institutional literature on going-with-the-grain and facilitated bricolage approaches reviewed below. I suggest two principles for government and NGO actors working with local communities to address common challenges faced by the committee model. These are:

1. Redirect the focus of community-based governance and management interventions from introducing prescriptive institutional designs to facilitating a process for communities to develop or adapt their governance arrangements

2. Supplement efforts to design institutional arrangements with agonistic methods that provide spaces to share knowledge and experiences and debate norms and values.

To guide development practitioners in implementing these principles, I propose a community-based facilitated institutional bricolage approach that supports communities in designing or adapting their own institutions, complemented by separate long-term interventions using agonistic methods to challenge inequitable norms, values and power relations.

7.2 FACILITATED BRICOLAGE AND WORKING WITH THE GRAIN

Mainstream institutionalist ideas, in particular Ostrom's (1990) design principles, have, perhaps inadvertently, given rise to the proliferation of externally designed institutions, often in the form of committees, in many communities in developing countries (Whaley, Cleaver & Mwathunga, 2021). These externally designed institutions rarely work as intended, which led critical institutional authors to explore the underlying mechanisms of institutional change, frequently employing the concept of institutional bricolage as an analytical tool. However, in contrast to mainstream institutional approaches, which lend themselves to developing institutional blueprints, critical institutional theory has been criticised for being less suited to inform development practice (Cleaver, 2012; Haapala et al., 2016). Nonetheless,

development studies and practice are increasingly paying attention to incorporating local knowledge in institutions and creating conditions that allow people to make choices (Dill, 2010). This includes scepticism of blanket institutional blueprints and widespread recognition that formal institutions are often a poor fit with informal local governance arrangements and should instead work with the grain of the local context (Dill, 2010, p. 23).

While many critical institutionalist authors agree on the importance of taking an understanding of institutional bricolage processes into account in institutional design processes, few have explicitly explored how insights into institutional bricolage could be applied to the design of development interventions to create deliberate institutional change (Whaley, Cleaver & Mwathunga, 2021; Hassenforder & Barone, 2018; Rusca & Schwartz, 2014; Haapala et al., 2016; Merrey & Cook, 2012; Booth, 2012). Common to these practice-oriented critical institutionalist approaches is the desire for governance arrangements to suit the local context. Practical methods informed by critical institutionalism, therefore, aim to work with the complexity and variability of local realities (Whaley, Cleaver & Mwathunga, 2021).

Booth (2012) introduces the metaphor of *working with the grain* to describe these efforts and stress the importance of pre-existing institutions as a starting point for governance reforms. They note that "local problem-solving does exist. [...] Generic templates fail because good institutions solve the collective action problems that are actually posed in particular contexts. Approaches that are imported from a generic concept of good practice are unlikely to work unless there is a serious effort to adapt them to local circumstances. As a rule, arrangements that work borrow institutional understandings from local society – they are practical hybrids, marrying up modern professional standards or scientific principles with the moral economy or established practices of the area" (p. 98).

A number of authors agree that working with the grain of local social structures would strengthen community-based governance and management (Whaley, Cleaver & Mwathunga, 2021; Rusca & Schwartz, 2014; Merrey & Cook, 2012; Booth, 2012). Working-with-the-grain approaches share a focus on anchoring new governance arrangements in existing institutional structures

and contexts with the aim of increasing their chances of taking hold in the local context. They emphasise the need to analyse local structures and how they are embedded in the broader institutional systems across scales in an attempt to capture complexity and tailor governance arrangements to specific local contexts (Whaley, Cleaver & Mwathunga, 2021; Booth, 2012). Working-with-the-grain approaches are thought to improve the endurance of local institutional arrangements and increase their efficiency in achieving their stated objectives (Whaley, Cleaver & Mwathunga, 2021; Rusca & Schwartz, 2014).

Whaley, Cleaver and Mwathunga (2021) argue that 'for a working-with-the-grain approach to gain traction in mainstream development policy, the first step is to move beyond an ongoing preoccupation with the committee model of local governance' and note that 'the resources local governments expend to form and train committees that quickly disband could be better used. For example, these funds might provide training and transport for relevant government staff and finance ongoing work with relevant community actors and institutions' (Whaley, Cleaver & Mwathunga, 2021, p. 13).

Critical institutionalist authors have also explored if and how bricolage processes could be facilitated in practice to improve governance arrangements for community-based management. (Whaley, Cleaver & Mwathunga, 2021; Cleaver & de Koning, 2015; Rusca & Schwartz, 2014; Hassenforder et al., 2015; Merrey & Cook, 2012). These facilitated institutional bricolage (FIB) approaches seek to translate critical institutional insights into practically useful ways to design or adapt institutions. In doing so, they present a significant departure from the committee model. Instead of mechanistically introducing externally designed blueprints for new institutions, these approaches seek to provide 'locally legitimate, inspiring spaces […] for continued learning, adaptation and innovation' and facilitate a process that supports local stakeholders in designing their own governance arrangements (Haapala et al., 2016, p. 1190).

Similar to working-with-the-grain approaches, facilitated institutional bricolage promotes the integration of governance arrangements in the existing institutional environment with the aim of enhancing the endurance of local

institutions (Whaley, Cleaver & Mwathunga, 2021; Whaley & Cleaver, 2017; Merrey & Cook, 2012; Booth, 2012). This may, for example, be achieved by creating hybrid institutional arrangements that build on local structures and may serve multiple governance functions in line with the interlinked nature of different spheres of governance at the community level (Whaley, Cleaver & Mwathunga, 2021; Rusca & Schwartz, 2014; Booth, 2012).

With few exceptions (e.g., Hassenforder et al., 2015), most facilitated institutional bricolage interventions worked with stakeholders at intermediary levels (between local and national) instead of involving community members directly. Whaley, Cleaver & Mwathunga, (2021) argue that resources to facilitate these processes should be focused on those stakeholders who maintain ongoing relationships with communities, regardless of whether they are linked to a government department. While informal traditional and local institutions are frequently regarded as obstacles to institutional reform, they can offer a starting point from which rules can be transformed through a series of small incremental changes (Dore, 2001; Sehring, 2009; Prado & Chasin, 2011).

The room to manoeuvre for bricoleurs to innovate is constrained or enabled by what Sehring (2009) call institutional corridors, which contain the range of options available to bricoleurs in a particular context (Hassenforder et al., 2015). These corridors determine what changes are possible at any given time (Hassenforder et al., 2015). However, the introduction of new institutional elements and their impact on future structures can enable or constrain future institutional corridors, thereby creating or reducing bricolage options for future institutional change. Hassenforder et al. (2015) see this as an opportunity to widen the scope for institutional bricolage and note that 'rather than trying to craft institutions through interventions, the interventions could act as institutional corridors and create favourable conditions for institutional bricolage to occur. Interventions may map out the landscape of the institutional corridor by reminding stakeholders of current governance arrangements. They may set the 'width' of the corridor by suggesting the room to manoeuvre or possible institutional options that different actors have for identifying alternative paths and for reshaping institutions' (p. 998).

Booth (2012) agree that external actors have a role in creating an enabling environment for local problem-solving and note that this may include the involvement of third parties to help those directly involved resolve emerging challenges. However, alongside reflexive practice, this role requires a deep understanding of the problem context. Whaley, Cleaver and Mwathunga (2021) suggest conducting research that investigates existing local institutions and how they are situated in their wider context to better understand the grain. This requirement for local development practitioners to understand the grain to work and deal with its complexity and diversity is a key challenge to implementing the approach (Whaley, Cleaver & Mwathunga, 2021; Booth, 2012).

Another challenge to the widespread adoption of facilitated bricolage and working-with-the-grain approaches is the expectation by donors and policymakers for institutional design interventions to reduce inequalities. Since local norms, values and power relations are part of the grain that provides the institutional material for bricolage processes, they are inevitably part of working with the grain and facilitated institutional bricolage approaches (Whaley, Cleaver & Mwathunga, 2021). Institutional bricolage processes replicate local power relations and shape new governance arrangements to integrate with pre-existing institutional structures (Rusca et al., 2014). As a result, rules that do not fit the local institutional context rarely endure. As discussed in Chapter 5, critical institutionalist approaches to institutional design acknowledge how power imbalances and elite capture impact the ability of interventions to achieve more equitable local governance processes and outcomes (Cleaver, 2012).

In some cases, facilitated institutional bricolage and working-with-the-grain approaches deliberately work with existing power structures to achieve project objectives, for example, by giving leadership roles to local elites since they often play critical roles in local governance (Whaley, Cleaver & Mwathunga, 2021; Rusca & Schwartz, 2014). Recognising the impact of power imbalances and elite capture in this way can be regarded as an opportunity to address them (Rusca et al., 2014). For example, it provides entry points to challenge inequalities through public negotiations as part of the bricolage

processes (de Koning & Cleaver, 2012). However, as Merrey & Cook (2012) argue, 'it is also important to be modest and realistic about what is possible, and, therefore, strategic in terms of what kinds of change we expect' (p. 14).

Facilitated bricolage may, therefore, lead to the selection of institutional arrangements that benefit the powerful rather than arrangements that would benefit actors already disadvantaged by current institutions (Wong, 2013; Sehring, 2009). This may appear to be a point of difference between critical institutionalist approaches and the committee model, which aims to reduce inequality by introducing rules, for example, to increase the participation of women in meetings. However, in practice, these rules are also subject to bricolage processes that shape new governance arrangements to replicate local power relations and integrate with pre-existing institutional structures (Rusca et al., 2014). As a result, newly introduced rules are frequently ignored if they do not fit in with pre-existing norms and practices (Whaley, Cleaver & Mwathunga, 2021; Knook and Turner, 2020; Sehring, 2009).

7.3 DISCUSSION

In the following, I address how insights from critical institutionalism can support efforts towards equitable and enduring institutional change. Drawing on insights from my primary research in the previous chapters alongside critical institutionalist and agonistic literature reviewed above and in chapters 2 and 5, I contribute insights to critical institutional thinking by addressing to what extent institutional bricolage can be managed and whether institutional design methods can be harnessed to effect equitable outcomes. I identify lessons for policymakers and development practitioners aiming to improve community governance institutions at the community level and propose two principles to guide policymakers and development practitioners in supporting local communities to design or adapt their local institutions to produce enduring and equitable outcomes. Finally, I offer examples of how these principles could be put into practice.

7.3.1 Problem context

Challenge 1: Invisible bricolage leads to unplanned and unexpected outcomes

The assumption that committees can be designed to be long-lasting and reduce inequality has been instrumental in the ongoing popularity of the committee model. Nonetheless, it is rarely met in practice. Critical institutionalist literature draws attention to the ways in which rules that govern introduced institutions are altered to fit local norms and power relations in ways that often go unnoticed and, therefore, unmanaged. In the study sites, community-level institutions were significantly adapted to the local context (see Chapters 4, 5 and 6). In all three communities, local governance arrangements are the results of bricolage processes, drawing in varying degrees on the committee discourse (see Chapter 6), kastom governance (see Chapter 5), and institutional elements borrowed from local government, churches, and NGOs (see Chapter 4). While adapting introduced institutions enhances their ability to function in the local context, policymakers and development practitioners using the committee model rarely acknowledge the impact of institutional bricolage on introduced institutions. This frequently leads to unplanned and unexpected outcomes, including the formation of ghost committees, as argued in Chapter 6.

Challenge 2: Complexity and diversity make it difficult to understand the grain

Diversity of contexts presents challenges to facilitated institutional bricolage and working-with-the-grain approaches that rely on development practitioners to have in-depth knowledge and understanding of the local context as an entry point to work with the grain. This requirement for local development practitioners to understand the grain in order to work and deal with its complexity and diversity is a key challenge to facilitating bricolage processes in highly diverse environments. This is the case in the study communities in Vanuatu, where diverse institutional arrangements evolved despite common influences, as outlined in Chapter 4. To understand these, practitioners would need to invest significant time and would require skills in methods to document and analyse the significance of points of similarity and difference and appreciate the consequences for potential interventions.

Challenge 3: Short-term projects struggle to change deep-seated norms and values

NGOs, governments, and donors commonly expect institutional design to reflect good governance principles in addition to achieving their specific governance function. At the community level, this typically includes expectations that decision-making processes must be equitable and include marginalised groups (Rusca et al., 2014). However, short-term development projects aimed at establishing institutions to serve specific purposes, such as water governance, are unlikely to change pre-existing, deeply embedded norms, and values (see Chapters 2, 5 and 6). As discussed in chapters 5 and 6, institutional bricolage processes tend to reproduce widely shared norms, values, and power relations through leakage of meaning, making them resistant to change. Fundamental changes in norms, values and power relations in communities are, therefore, unlikely to occur in the short timeframes of narrowly focused institutional design interventions (Merrey & Cook, 2012). The committee model attempts to address these expectations by designing rules for equal representation, participation and transparent processes. However, the underlying assumptions that these rules will be followed and lead to equitable processes and outcomes are often not realised in practice since unequal power relations are ingrained in the social fabric and slow to change (see Chapter 5).

To address these three challenges, I propose two principles along with practical examples of how these could be implemented.

7.3.2 Principle 1

Redirect the focus of community-based governance and management interventions from introducing prescriptive institutional designs to facilitating a process for communities to develop or adapt their governance arrangements.

The first principle builds on facilitated institutional bricolage and working-with-the-grain literature to inform an approach to facilitated institutional bricolage for community-level interventions that can be implemented in diverse local contexts. It responds to the first challenge (that institutional bricolage

processes, if unacknowledged, lead to unplanned and unexpected outcomes) and second challenge (that it is frequently not possible for development practitioners to have detailed knowledge of the local context in complex and highly diverse environments) outlined above.

Community-based facilitated institutional bricolage (CBFIB)

To illustrate how this principle could be implemented in practice to address these challenges, I propose a community-based facilitated institutional bricolage (CBFIB) approach. This approach expands on critical institutional theoretical and practice-oriented literature, particularly facilitated institutional bricolage and working-with-the-grain approaches. The CBFIB approach is informed by the research presented in the preceding chapters and my wider work with the study communities.

The proposed CBFIB approach engages communities (either as a whole or through representative participants) in a facilitated process to define specific governance challenges, develop ideas on how to address these and negotiate governance arrangements to be implemented. The focus of development practitioners is on facilitating the institutional design process undertaken by community members. This involves creating a space for community members to share knowledge and ideas, explore existing institutional arrangements and links with other levels of governance and negotiate new governance arrangements. Key differences between this approach and most examples of facilitated institutional bricolage and working-with-the-grain in the literature are that (1) development practitioners work directly with community members, (2) the role of development practitioners is restricted to facilitating the process of institutional development while participants are in charge of developing or adapting their governance arrangements, and (3) outcomes are entirely determined by community members rather than development practitioners or stakeholders at intermediary levels.

CBFIB, along with facilitated bricolage and working-with-the-grain approaches, responds to the committee model's difficulties in introducing enduring institutions appropriate for the local context (see Chapters 4, 6) by paying attention to the local context and existing governance arrangements. Institutions designed through CBFIB processes are anchored in the specific

institutional contexts of individual communities, which increases their likelihood of enduring. However, unlike the hidden forms of institutional bricolage that take place when generic, externally designed committees are introduced (see Chapter 6), CBFIB draws attention to institutional bricolage processes and enables participants to deliberately assemble institutional components to address their challenges. Since a CBFIB approach does not specify outcomes, it may result in new governance roles being assigned to existing institutions or new institutions being assembled from locally available institutional components.

While facilitated bricolage and working-with-the-grain approaches are often implemented at intermediary levels (between local and national), the focus of CBFIB on working directly with community representatives ensures that the resulting institutional arrangements integrate with existing local governance arrangements.

A CBFIB approach also addresses the challenge that development practitioners need a detailed understanding of complex and diverse contexts to actively guide the development of context-specific institutions, as is the case in facilitated institutional bricolage or working-with-the-grain approaches (challenge 2). In countries with high diversity between communities, such as Vanuatu (see Chapter 4), gaining in-depth knowledge of the local institutional environment of each community and how it is situated in the wider institutional context would be time-consuming and difficult to achieve. CBFIB addresses this need by shifting the task of understanding the local context from development practitioners to the community members participating in the institutional design process, who are already familiar with their local context. Development practitioners restrict themselves to facilitating the process of institutional design, while participants are in charge of developing or adapting their governance arrangements. This makes it possible to implement projects across diverse institutional contexts while working with the grain.

Introducing external institutional elements

Restricting the role of development practitioners to facilitation does not preclude the introduction of new institutional elements as part of the facilitated process. Working with the grain can pose challenges in environments with few

functioning community governance mechanisms (Whaley, Cleaver & Mwathunga, 2021). While bricoleurs usually have sufficient institutional raw material at their disposal to respond to governance challenges, the limited availability of local institutional elements can result in repetitive governance arrangements (see Chapter 5). External institutional ideas increase the available institutional material to draw on and, if successfully implemented, may contribute to future institutional change (see Chapters 4 and 5).

The *Integrated Participatory Technology Development* Project offers an example of how external institutional elements may be inserted into a CBFIB process. The project chose a process of facilitated co-design of a technology (water safety testing device) and institutions (governing the use of the device and communication of test results). Scientists and communities worked together in a process facilitated by a team of ni-Vanuatu development practitioners from Oxfam and Wan Smolbag. Local government officials joined some of the workshops as resource people. The process was led by facilitators who encouraged participants to explore existing local and external governance arrangements and negotiate concrete governance structures to be implemented (cf., Hassenforder et al., 2015).

The institutional co-design component of the project involved mapping local and external institutions to create shared knowledge of the local institutional context. Participants drew maps of their institutions and discussed whether they were working and why. Participants also mapped their links with stakeholders and organisations outside the community and discussed how these might be helpful. These methods combined knowledge of different community members about the status quo and provided a shared understanding of the institutional context and institutional material to draw on in the subsequent institutional design processes.

Focus on processes, not outcomes

CBFIB, along with facilitated institutional bricolage and working-with-the-grain approaches, addresses the first challenge identified above of hidden institutional bricolage processes leading to unexpected outcomes by deliberately acknowledging and working with bricolage processes and avoiding prescriptive models aimed at introducing specific predetermined

institutional designs. Despite not specifying institutional outcomes, it is still possible to create guidelines that outline the *process* of facilitating institutional development. Implementing a CBFIB approach to institutional design, therefore, involves letting go of the expectation to produce a set of pre-defined institutional features or attributes in favour of facilitated processes to allow community members to surface diverse local challenges and diverse ideas to address these. For example, instead of introducing a specific WASH committee structure following the committee model, CBFIB guidelines would describe the process of developing a WASH governance structure through facilitated engagement.

The quality and quantity of CBFIB processes can be monitored and reported on in the short term. Success of CBFIB interventions is defined as a well-facilitated process rather than a particular institutional outcome. Focusing on processes rather than outcomes also allows stakeholders to move beyond the idea that water governance always requires a dedicated committee and allows exploring how it could best be integrated into the existing institutional context. This is a fundamental shift from focusing on what features institutions should have to be successful to the processes that create an enabling environment for communities to assemble their institutions. A focus on processes does not preclude monitoring the continuing performance of governance arrangements by defining desired outputs as part of the CBFIB process. This allows for experimentation and iterative improvements to governance arrangements and addresses the current lack of monitoring institutional performance in the longer term identified in Chapter 6, which can make ghost committees appear real in project activity reports.

Local knowledge to address complexity

The second challenge identified that development practitioners need to have in-depth knowledge and understanding of each specific context to deliberately influence institutional bricolage processes. This can be addressed by shifting the focus of institutional design interventions from the role or attributes of institutions to the act of facilitating a process in which community members develop their institutions.

Understanding the grain in sufficient detail to steer institutional bricolage processes is a difficult, time-intensive task for development practitioners, particularly if they work with multiple, diverse communities, as illustrated in Chapter 4. Letting go of the assumption that development practitioners need to be or become experts in each local context where they implement governance projects benefits the scalability of facilitated bricolage projects, as a trained team of facilitators can implement the approach in diverse contexts. My results, presented in chapters 4 and 5, indicate that local bricoleurs are well placed to adapt institutional arrangements to fit the local context. Governance arrangements developed in this way are tailored to the community involved in their design and are not directly transferable to other communities. CBFIB relies on the direct engagement of development practitioners with each community.

Example: The Integrated Participatory Technology Development Project (iPTD)

Community members participating in the iPTD project collectively displayed an in-depth understanding of local governance arrangements and the broader institutional context. They confidently navigated the complexity of their local context and provided the team of international researchers and national development practitioners from NGOs and local government agencies with detailed insights into local institutions and informed assessments of why governance mechanisms might work or fail in their specific context. Follow-up research is needed to determine whether these contributions to the co-design process translate to enduring institutions.

However, while facilitated institutional bricolage is well suited to create institutional arrangements anchored in local structures, it is unlikely to produce far-reaching changes in existing norms, values and power relations because of the tendency of bricolage processes to replicate existing structures.

7.3.3 Principle 2

Supplement efforts to design institutional arrangements with agonistic methods that provide spaces to share knowledge and experiences and debate norms and values.

This principle addresses the third challenge identified above: that short-term development projects struggle to change deep-seated norms and values (see Chapters 2 and 5). I propose addressing this challenge by supplementing institutional design interventions with longer-term projects specifically aimed at challenging deep-seated norms, values and beliefs underlying inequality and marginalisation and promoting equitable decision-making and benefit sharing in communities. The aim to work with the grain to create enduring institutions conflicts with the desire of donors, government officials or development practitioners to simultaneously change norms, values and power relations that make up the grain. Chapter 5 illustrates why policymakers and development practitioners need to stay realistic about the sufficiency of measures to improve equity within short-term, narrowly focused interventions. While CBFIB, and other facilitated institutional bricolage approaches, are well suited to developing locally appropriate and enduring institutions, this comes at the cost of replicating and potentially entrenching local inequalities. This limits the utility of these approaches in targeting elite capture and improving equitable decision-making and sharing of project outcomes, creating a practical dilemma for facilitated bricolage processes (see Chapter 5).

Promoting equity in short-term development projects

As discussed in Chapter 5, working-with-the-grain and facilitated institutional bricolage approaches (including CBFIB) can, to some extent, play a part in challenging inequity. They can, for example, model equitable decision-making during institutional design processes and create facilitated spaces for different groups within the community to share their experiences and knowledge and consider and negotiate how to mitigate some of the challenges associated with introducing new institutions. They can also create a platform to discuss different experiences, prevailing norms and values and ways to govern collective action. Integrating equity considerations into development interventions has positive impacts, not least because modelling

equitable processes and goals within institutional design processes may influence institutional materials used in future bricolage processes. For example, promoting women's participation in water committees may be one of multiple influences that normalise women's involvement in local governance over time (see Chapter 5). Despite the importance of challenging inequity in working-with-the-grain and facilitated institutional bricolage and projects, significant changes in norms, values and power relations cannot realistically be expected to result from short-term interventions aimed at designing specific governance arrangements.

The second proposed principle addresses this challenge by proposing to supplement efforts to design institutional arrangements that serve a specific purpose (for example, water governance and management) with separate projects designed to challenge inequitable local norms, values, and power structures. These interventions aim to explore and challenge the grain from within the community instead of working with it. As such, they are not subject to the same limitations faced by facilitated bricolage and working-with-the-grain approaches.

Agonistic methods to challenge deep seated norms, values and power relations

As discussed in Chapter 5, recent work on agonistic methods (Paxton, 2019; Drysdale, 2014; Mouffe, 2016) and case studies of interventions using similar methods in Vanuatu indicate that facilitated agonistic spaces may have relevance in challenging norms and values or transforming power relations. Agonism re-introduces politics into community governance and engages community members in the creative political process of exploring ways to address everyday challenges. It is not subject to the limitations that hinder facilitated bricolage and working-with-the-grain interventions to challenge local norms, values, and power structures. Recent work advocating experiments with agonistic institutional methods demonstrates their potential to promote debates that challenge norms and power dynamics (see Chapter 5).

Employing agonistic methods as part of facilitated institutional design and broader efforts to challenge norms and values is a promising approach to improving shared understanding of challenges and transforming norms,

values, and power relations. Agonistic methods provide opportunities for community members to learn about and consider other people's experiences and challenges and provide a platform to negotiate ways to address these. Openly debating otherwise hidden norms and power dynamics may allow people to challenge their assumptions and provide insights that inform ongoing, iterative bricolage processes of local governance arrangements. Any changes to norms, values and power relations emerge from debate between participants, which means that any influence on institutional arrangements remains locally grounded and, therefore, more likely to endure and adapt to new challenges and changing contexts (see Chapters 2 and 6). In addition, since tools and methods from development programs may leak to become part of local institutional structures, introducing principles of agonistic negotiation to realise the productive potential of conflict or contestation by modelling them in practice may lead to their adoption in local institutional structures and pave the path for more equitable village life as argued in Chapter 5. Agonistic methods may find their way into the array of local institutional materials to be drawn on in bricolage processes and revitalise enthusiasm for local political engagement. Turning conflict or contestation into a productive force in this way may not only advance equitable decision-making but also lead to a shared enthusiasm to enhance institutional structures more broadly (Lowndes & Paxton, 2018).

A change in norms and values to reflect equitable processes and outcomes also widens the institutional corridor that determines which governance arrangements can be chosen and endure in the local context.

Employing agonistic methods in Vanuatu

At first sight, agonism may seem inappropriate in a culture that values unity and conflict avoidance, as evidenced by the prevalence of consensus decision-making processes, top-down hierarchies in which chiefs have the final say and village-level kastom legal systems favouring reconciliation. However, practices that resemble agonistic methods are not foreign to Vanuatu. Huffer & Molisa (1999) described how traditional Nakamals (traditional meeting spaces) and modern nakamals (kava bars primarily found in urban areas) allow a wide range of people to share information and debate

public issues. This 'nakamal way' is 'a process of dialogue in which knowledge from the different components of society is distributed and commented on to be used in decision-making for the benefit of the community' (Huffer & Molisa, 1999, p. 10). The authors argue that the focus of this dialogue is not about seeking consensus but about the opportunity for different groups of society to share their needs and aspirations through *storian* and to examine whether institutions further the well-being of all community members or if they emerged or are maintained for another purpose. The resulting debate has the potential to initiate autonomous adaptation of local governance practices to fit the current context (Huffer & Molisa, 1999).

Storian and shared examination of local governance practices in the Nakamal share similarities with agonistic methods and provide entry points to employ agonism to transform local institutional structures. Applied to development projects, agonistic debates may be encouraged as part of long-term engagement with communities involving facilitated conversations about prevailing norms, values and power relations that lead to inequality and the impact of inequality on individuals and the community. This use of agonistic debate as a method to challenge local norms has been practically demonstrated, for example, by Wan Smolbag Theatre in Vanuatu, which performs plays that draw attention to challenges linked to inequality to encourage agonistic debate to reflect on and challenge underlying values and norms as discussed in Chapter 5.

Example: Oxfam's Gender-Just Social and Economic Empowerment Design (SEED) project

Oxfam's Gender-Just Social and Economic Empowerment Design (SEED) project provides another example from Vanuatu of development projects providing a platform for agonistic debate to challenge local norms and power relations. SEED worked with women and men in several Vanuatu communities with the aim of creating a facilitated space in which community members were able to identify and challenge norms that limit the rights of women and people identifying as lesbian, gay, bisexual, transgender, queer, intersex, or other diverse genders and sexualities (LGBTQI+) (McCormack, Jennings & Kenni, 2020). While the project does not aim to change specific institutions, if it succeeds in changing local norms and power relations more broadly, it will widen the 'institutional corridor' of what institutional changes are considered acceptable and desirable and, therefore, has the potential to impact the broader local institutional structures.

Participants in SEED workshops were encouraged to identify local social dynamics and challenges caused by inequality. This provided an opportunity to discuss topics usually considered tabu (forbidden to discuss by local kastom rules) and to debate what aspects of the division of roles and power were appropriate or needed changing (McCormack, Jennings & Kenni, 2020). Oxfam cautiously reported that in the short term, SEED provided valuable insights and 'showed some success in raising awareness and changing attitudes' (McCormack, Jennings & Kenni, 2020). They note the importance of skilled facilitators and appropriate tools to avoid unintended consequences and of follow-up visits 'to reinforce learning, especially when topics are complex and challenging to existing social norms, as gender and SOGI[5] are' and that 'identifying and addressing persistent challenges - particularly those related to changing societal norms around gender - require ongoing implementation action and M&E that goes beyond the collection of sex-disaggregated attendance data.' (McCormack, Jennings & Kenni, 2020, p. 19).

---

[5] In Vanuatu the term SOGI (sexual orientation and gender identity) is used interchangeably with LGBTQI+

7.4 CONCLUSION

For many remote Vanuatu communities, community-based institutions are essential to organise local services. Improving interventions aimed at creating lasting and equitable institutions and governance outcomes is, therefore, a key challenge facing the country.

The principles outlined above aim to guide policymakers and development practitioners and address three common challenges in supporting local communities to design or adapt local institutions to be enduring and equitable. Insights from critical institutional literature and my analytical chapters into the mechanisms that encourage or prevent institutional change make it possible to foster conditions in which community members can negotiate and influence the outcome of bricolage processes to better meet their needs. I propose a community-based facilitated institutional bricolage approach to support communities in designing or adapting their own institutions, complemented by a separate long-term intervention using agonistic methods to challenge inequitable norms, values and power relations.

A CBFIB approach addresses some of the shortcomings of the committee model as well as the working-with-the-grain and facilitated bricolage approaches outlined above. It can also be a platform to draw attention to the experiences and knowledge of marginalised people and to negotiate how to improve equitable decision-making and outcomes while pragmatically acknowledging barriers and striving for realistic iterative improvements. However, institutional design methods (including CBFIB) are limited in their ability to address the underlying causes of structural inequality. To achieve lasting improvements in institutional structures that promote equitable decision-making and sharing of benefits, programs that challenge norms, values and beliefs that underly inequity and marginalisation need to be funded and implemented. The examples in this chapter demonstrate the type of approaches that can be implemented alongside facilitated institutional bricolage and working-with-the-grain approaches to achieve more equitable institutional outcomes over time.

Chapter 8: Conclusion

8.1 INTRODUCTION

This thesis explores the overall question: What does the application of critical institutionalism through the lens of institutional bricolage reveal about community governance in Vanuatu? This chapter draws together the key insights from my thesis and shows how they address this overall research question and sub-questions and meet my research objectives. I also outline the practical implications of my findings and set out directions for future research.

8.2 CHAPTER SUMMARY

Chapter 1 (Introduction) outlines the research context by providing background information on Vanuatu, including an introduction to the country's historical context and common community and water governance structures. I also outline the problem statement, research questions and research objectives.

In Chapter 2 (Literature), I review mainstream and critical institutionalist literature and introduce the concept of institutional bricolage, which describes how people assemble or modify institutional arrangements from locally available institutional building blocks to make them suit the local context or respond to changing situations. I revisit this literature in more depth in chapters 5, 6, and 7, with a specific focus on the theory and concepts used for analysis in these chapters. Chapter 2 also introduces critical realist literature that forms the underpinning epistemology and ontology for this thesis.

The methodology chapter (3) describes the original contribution of this thesis. This is followed by reflections on conducting research in Vanuatu, my desired research impact, and my choices of research topic, theory, study communities and participants. I subsequently describe the *talanoa* research methodology, which I used to collect my data. I then introduce the reflexive thematic analysis (TA) approach outlined in Braun and Clarke (2006), which I

used to analyse my data. Finally, I reflect on my positionality and research ethics and discuss limitations of my research.

The first analytical chapter (4) is centred on the question of how community governance arrangements vary across study communities. It provides a thick description of the three study communities, demonstrating the diversity of contexts and institutions between them. My results indicate how the outcomes of externally introduced institutions vary based on the local context and pre-existing institutional environment and that these institutions rarely work as expected. This challenges the notion that ready-made institutions can successfully function in diverse contexts. I also note the important role of local bricoleurs and their networks with external stakeholders in determining institutional outcomes. The insights in this chapter are consistent with the existing literature on institutional bricolage, thereby validating the explanatory power of the concept in a new context.

The second analytical chapter (5) examines mechanisms behind observed autonomous changes in traditional institutions in the study communities. Informed by literature on agonistic politics, I reveal how 'the political' at the local level is responsible for profound shifts in some norms, and the maintenance of others. For example, in the study communities, autonomous change processes led to a partial transfer of power from chiefs to village councils while others, such as the exclusion of women from decision-making, remained. I reveal these shifts in norms as power settlements that draw not only on diverse institutional raw material but are contingent on the emergence of a shared discourse that resolves conflicting ideals of village governance. I conclude by considering the impact of this phenomenon on the potential to address inequitable power relations through autonomous institutional change processes.

The third analytical chapter (6) identifies the phenomenon of 'ghost committees' that do not exist in practice yet are referred to by stakeholders at different levels as if they were performing their intended role. I place this phenomenon in relation to power and discourse to explore the underlying mechanisms that lead to the emergence and persistence of ghost committees. This reveals a feedback loop between ghost committees on the one hand and

the national and international committee model discourse that promotes externally designed committees to achieve desired local governance outcomes on the other. In addition, I argue that ghost committees mask failures of the committee model to achieve its desired objectives, thereby contributing to the persistence of the committee model discourse in Vanuatu as elsewhere.

Chapter 7 draws on, but goes beyond, the findings of the previous chapters to answer the question as to how insights from critical institutionalism support efforts towards equitable and enduring institutional change. Here, I place insights from the analytical chapters in conversation with the literature on critical institutionalism, facilitated bricolage, working-with-the-grain approaches and agonism to explore ways of engaging local communities in facilitated processes to develop enduring and equitable local institutions. This exploration contributes to broader debates on the potential to harness insights from institutional bricolage and critical institutionalist theory to inform development practice. I conclude by suggesting principles and practical approaches to guide development practitioners' work in supporting local communities to develop institutions that are enduring and equitable.

8.3   PRACTICAL IMPLICATIONS

Achieving enduring institutions and equitable decision-making processes and outcomes are persistent challenges in development literature and practice. My findings indicate that small incremental changes to the committee model will not be sufficient to create enduring and equitable governance arrangements. Working with the grain of local norms, values, and power relations is often incompatible with challenging them to improve equitable processes and outcomes, as outlined in Chapter 7. Donors, policymakers and development practitioners need to think and work radically differently in order to achieve these twin objectives. This will require changes over the medium and longer term, including the need for donor funding that allows development practitioners to pilot and implement new ways of engaging communities in institutional development processes. Facilitated institutional bricolage and agonistic methods to challenge inequality are useful entry points. Both approaches value negotiation of differences instead of closing down debates

and recognise the need for ongoing adaptation of institutions in order to stay relevant in a changing context. In the immediate term, there is an urgent need for donors, policymakers and development practitioners to acknowledge the limitations of the committee model, including the persistent failure to deliver equitable outcomes and the role of the committee model discourse in driving the phenomenon of ghost committees. This is an urgent and necessary first step toward more far-reaching reform.

8.4   FUTURE RESEARCH

The findings in this thesis highlight a range of persistent challenges in developing and supporting enduring and equitable community-level institutions in rural developing country contexts. While the effectiveness of the committee model is increasingly being questioned in the academic and practice-focused literature, the model is still widely used in development practice (see Chapter 6). This points to the importance of further research to critically examine the challenges involved in developing community-based institutions and to create and pilot alternative ways to develop and adapt community institutions and improve equity in community governance. I have shown that institutional bricolage is a useful lens to explore the underlying mechanisms of institutional change and inform development practice. In addition, recent work on facilitated institutional bricolage has demonstrated that the concept has practical applications that provide alternatives to the committee model.

The combination of the CBFIB approach and interventions that use agonistic methods to challenge inequalities proposed in Chapter 7 would benefit from being piloted in practice to better understand this approach's benefits, challenges, and limitations. CBFIB has the potential to create enduring, locally embedded institutions, but the approach has limitations when it comes to challenging inequalities, as discussed in Chapter 7. Initial experiments with agonistic methods in Vanuatu indicate that it is possible to create a platform to iteratively challenge deep-seated inequitable relations through longer-term engagement with communities. Combining the two approaches in practice as suggested in Chapter 7 and monitoring progress over time would provide evidence of the potential of developing governance arrangements that are both

enduring and equitable. This will also allow further development of the approach, particularly exploring if and how it can be implemented at scale. To do this, pilot projects need to include research partnerships that enable independent academic research that is not subject to the pressures common to development projects to present methods and outcomes in a positive light.

Additional research is also needed to further explore how critical institutional literature can be enhanced by introducing agonistic accounts of the political. As demonstrated in Chapter 5, critical institutional efforts to make sense of local institutional change processes can be augmented by investigating the influence of the political through which the social plurality of village life is negotiated. Agonism provides a complementary lens to critical institutional analysis that draws attention to the significance of social plurality, the inevitable presence of alternative perspectives and the role of struggle in local change processes. This broadens the scope of critical institutional research to analyse the impact of struggles between adversaries at different levels in determining temporary local institutional power settlements and ongoing institutional change processes. Application of this lens in other contexts would deepen understanding of the potential explanatory power offered by agonistic politics to critical institutionalist analysis.

Finally, further research may also benefit from exploring whether the phenomenon of ghost committees exists outside Vanuatu and, if it does, whether ghost committees in other contexts share similar underlying mechanisms and links to the committee model discourse. If this is the case, the concept of ghost committees provides an opportunity to identify challenges with the committee model more broadly and a starting point to discuss how to break the feedback loops that perpetuate ghost committees, influence donor perceptions of the committee model and pilot alternative approaches to establishing institutions.

Bibliography

Abu, R. and Reed, M.G. (2018). *Adaptation through bricolage: Indigenous responses to long term social-ecological change in the Saskatchewan River Delta, Canada.* The Canadian Geographer, 62(4), pp.437–451.

Agrawal, A. and Bauer, J. (2002). *Environmentality: technologies of government and the making of subjects.* Duke University Press.

Allen, M., Dinnen, S., Evans, D. and Monson, R. (2013). *Justice Delivered Locally*. The World Bank.

Archer, M. (1995). *Realist Social Theory: The Morphogenetic Approach*. Cambridge University Press.

Archer, M. (1996). *Culture and Agency: The Place of Culture in Social Theory*, Cambridge University Press.

Aswani, S., Albert, S. and Love, M. (2017). *One size does not fit all: Critical insights for effective community-based resource management in Melanesia*. Marine Policy, 81, pp.381–391.

Atkinson, R. (2018). *The Life Story Interview*, SAGE Publications.

Australian Agency for International Development (AusAID). (2000). *Good Governance: Guiding principles for implementation.*

Balaei, B., Wilkinson, S. and Potangaroa, R. (2019). *Social capacities in fostering water supply resilience in Vanuatu.* Disaster Prevention and Management: An International Journal, 28 (5), pp.706–720.

Barbara, J. and Baker, K. (2020). *Addressing collective action problems in Melanesia: the Northern Islands Market Vendors' Association in Vanuatu.* Development in Practice, pp.1–11.

Bardhan, P. and Ray, I. (2006). *Methodological Approaches to the Question of the Commons.* Economic Development and Cultural Change, 54 (3), pp.655–676.

Basu, S., Jongerden, J. and Ruivenkamp, G. (2015). *Development of the drought tolerant variety Sahbhagi Dhan: exploring the concepts commons and community building.* International Journal of the Commons, 11(1), pp.144–170.

Bhaskar, R. (2013). *A Realist Theory of Science*. Routledge

Bhaskar, R. (2015). *The Possibility of Naturalism: A philosophical critique of the contemporary human sciences*. Routledge.

Bhaskar, R., Danermark, B. and Price, L. (2017). *Core concepts of critical realism*. In: *Interdisciplinarity and wellbeing: A critical realist general theory of interdisciplinarity.* Routledge. pp.1–174.

Boege, V. and Hunt, C. T. (2020). *On 'travelling traditions': Emplaced security in Liberia and Vanuatu.* Cooperation and Conflict, 55 (4), pp.497-517.

Bolton, L. (1998). *Chief Willie Bongmatur Maldo and the role of Chiefs in Vanuatu.* The Journal of Pacific History, 33 (2), pp.179–195.

Booth, D. (2012). *Synthesis report-Development as a collective action problem: adressing the real challenges of African governance*. Africa power and politics programme.

Braun, V. and Clarke, V. (2021). *Can I use TA? Should I use TA? Should I not use TA? Comparing reflexive thematic analysis and other pattern-based qualitative analytic approaches.* Counselling and Psychotherapy Research, 21 (1), pp.37–47.

Braun, V. and Clarke, V. (2020). *One size fits all? What counts as quality practice in (reflexive) thematic analysis?* Qualitative Research in Psychology, 18 (3), pp.328-352.

Braun, V. and Clarke, V. (2019). *Reflecting on reflexive thematic analysis.* Qualitative Research in Sport, Exercise and Health, 11 (4), pp.1–9.

Braun, V. and Clarke, V. (2006). *Using thematic analysis in psychology.* Qualitative Research in Psychology, 3 (2), pp.77–101.

Buggy, L. and McNamara, K. E. (2015). *The need to reinterpret "community" for climate change adaptation: a case study of Pele Island, Vanuatu.* Climate and Development, 8 (3), pp.270–280.

Carter, K., Tovu, V., Langati, J. T., Buttsworth, M., Dingley, L., Calo, A., Harrison, G., Rao, C., Lopez, A. D. and Taylor, R. (2016). *Causes of death in Vanuatu.* Population Health Metrics, 14 (1), pp.1–9.

Chowns, E. (2014). *The political economy of community management: a study of factors influencing sustainability in Malawi's rural water supply sector*. PhD thesis, University of Birmingham.

Cleaver, F. (2005). *The inequality of social capital and the reproduction of chronic poverty.* World Development, 33 (6), pp.893–906.

Cleaver, F. (2012). *Development through bricolage: rethinking institutions for natural resource management*. Routledge.

Cleaver, F. and Franks, T. (2003). *How institutions elude design: river basin management and sustainable livelihoods*. Paper read at The Alternative Water Forum, at Bradford, UK. Bradford Centre for International Development.

Cleaver, F. and de Koning, J. (2015). *Furthering critical institutionalism*. International Journal of the Commons, 9 (1), pp.1–18.

Cleaver, F. and Whaley, L. (2018). *Understanding process, power, and meaning in adaptive governance: a critical institutional reading*. Ecology and Society, 23 (2).

Cleaver, F., Whaley, L. and Mwathunga, E. (2021). *Worldviews and the Everyday Politics of Community Water Management.* Water Alternatives. 14 (3) pp.645-663

Clement, F. (2010). *Analysing decentralised natural resource governance: proposition for a "politicised" institutional analysis and development framework.* Policy Sciences, 43 (2), pp.129–156.

Climate Risk Country Profile: Vanuatu (2021). The World Bank Group

Secretariat of the Pacific Community (2014). *Vanuatu Demographic and Health Survey 2013*. pp.1–430.

Connelly, J. (2001). *Editorial: Critical relism and health promotion: effective practice needs and effective theory.* Health Education Research, 16 (2), pp.115–119.

Coote, A. (2017). *Building a new social commons*. New Economics Foundation.

Cote, M. and Nightingale, A.J. (2012). *Resilience thinking meets social theory*. Progress in Human Geography, 36 (4), pp.475–489.

Cox, M., Alatoa, H., Kenni, L., Naupa, A. and Rawlings, G. (2007). *The Unfinished State: Drivers of Change in Vanuatu.* AusAid Discussion Paper.

Cox, M., Arnold, G. and Tomás, S. V. (2010). *A review of design principles for community-based natural resource management.* Ecology and Society, 15 (4)

Danermark, B., Ekström, M. and Jacobsen, L. K. (2005). *Explaining society: critical realism in the social sciences.* Routledge.

Day, S. J., Forster, T., Himmelsbach, J., Korte, L., Mucke, P., Radtke, K., Thielbörger, P. and Weller, D. (2020). *World Risk Report 2020.* Bündnis Entwicklung Hilft and Ruhr University Bochum, pp.1–71.

De Koning, J. (2011). *Reshaping institutions: Bricolage processes in smallholder forestry in the Amazon.* PhD thesis, Wageningen University.

De Koning, J. D. and Cleaver, F. (2012). *Forest-people interfaces, Understanding community forestry and biocultural diversity*. In: *Forest-people Interfaces: Understanding Community Forestry and Biocultural Diversity.* Wageningen Academic Publishers. pp.277–290.

De Koning, J. (2014). Unpredictable Outcomes in Forestry-Governance Institutions in Practice. *Society & Natural Resources*, 27(4), pp.358–371.

Devetak, R. (2013). *Critical Theory.* In: Burchill, S., Linklater, A. (Eds.), *Theories of International Relations*. Macmillan International Higher Education.

Dill, B. (2010). *Community-Based Organizations (CBOs) and Norms of Participation in Tanzania: Working against the Grain.* African Studies Review, 53 (2), pp.23–48.

Dore, D. (2001). *Transforming Traditional Institutions for Sustainable NaturaResource Management: History, Narratives and Evidence from Zimbabwe's Communal Areas.* African Studies Quarterly, 5 (3), pp.1–18.

Douglas, M. (1986). *How Institutions Think*, Syracuse University Press.

Ducrot, R. (2017). *When good practices by water committees are not relevant: Sustainability of small water infrastructures in semi-arid Mozambique.* Physics and Chemistry of the Earth, Parts A/B/C, 102, pp.59–69.

Dunn, K. (2005). *Interviewing*. In: Hay, I. (Ed). *Qualitative research methods in human geography.* Oxford University Press. pp.149–188.

Easton, G. (2010). *Critical realism in case study research.* Industrial Marketing Management, 39 (1), pp.118–128.

Edwards, P. K., O'Mahoney, J. and Vincent, S. (2014). *Studying Organizations Using Critical Realism: A Practical Guide*. OUP Oxford.

Edwards, P. K., O'Mahoney, J. and Vincent, S. (2018). *Critical Realism and Ethnography*. In: *Studying Organizations Using Critical Realism*. Oxford University Press. pp.132–147.

Ensor, J., Johnson, S., Vorbach, D., and Moir, J. (2023). *Equitable technology development: methods for scientists and engineers.* Environmental Innovation and Societal Transitions (Under Review).

Fairclough, N. (2010). *Critical discourse analysis: The critical study of language*. Routledge.

Farrelly, T. and Nabobo-Baba, U. (2012). *Talanoa as Empathic Research*. In: International Development Conference. (Vol 12), pp.319–330.

Feola, G. (2017). *Adaptive institutions? Peasant institutions and natural models facing climatic and economic changes in the Colombian Andes*. Journal of Rural Studies, 49, pp.117–127.

Ferguson, J. and Lohmann, L. (2016). *The Anti-Politics Machine: "Development" and Bureaucratic Power in Lesotho.* In: Haenn, N., Wilk, R. and Harnish, A. (Eds). *The Environment in Anthropology (Second Edition), A Reader in Ecology, Culture, and Sustainable Living*. New York University Press.

Fletcher, A. J. (2016). *Applying critical realism in qualitative research: methodology meets method.* International Journal of Social Research Methodology, 20 (2), pp.1–14.

Forsyth, M. (2009). *A Bird that Flies with Two Wings: The kastom and state justice systems in Vanuatu*. ANU E Press.

Forsyth, T. (2004). *Critical political ecology: the politics of environmental science*, Routledge.

Foster, T. and Willetts, J. (2018). *Multiple water source use in rural Vanuatu: are households choosing the safest option for drinking?* International Journal of Environmental Health Research, 28 (6), pp.579–589.

Fournier, V. (2013). *Commoning: on the social organisation of the commons. M@N@Gement*, 16 (4), pp.433-453.

Funder, M. and Marani, M. (2015). *Local bureaucrats as bricoleurs. The everyday implementation practices of county environment officers in rural Kenya.* International Journal of the Commons, 9 (1), pp.87–106.

Gasmi, H., Kuper, M., Martins, E. S. P. R., Morardet, S. and Burte, J. (2022). *Sustaining community-managed rural water supply systems in severe water-scarce areas in Brazil and Tunisia.* Cahiers Agricultures, 31, p.21.

Gent, S. E., Crescenzi, M. J. C., Menninga, E. J. and Reid, L. (2015). *The reputation trap of NGO accountability.* International Theory, 7 (3), pp.426–463.

Gremillion, H., Tominiko, F. and Hallie, J., (2021). *The scope of talanoa research methodology: The place of research methods that are not rooted in Pasifika traditions.*

Guy, M. E. and McCandless, S. A. (2012). *Social Equity: Its Legacy, Its Promise.* Public Administration Review, 72, S5–S13.

Haapala, J. and Keskinen, M. (2018). *Influence of different discourses on the outcomes of development policies and projects: Insights from water project implementation in Nepal.* Environmental Policy and Governance, 28 (3), pp.141–152.

Haapala, J., Rautanen, S.-L., White, P., Keskinen, M. and Varis, O. (2016). *Facilitating bricolage through more organic institutional designs? The case of water users' associations in rural Nepal.* International Journal of the Commons, 10 (2), pp.1172–30.

Haapala, J. and White, P. (2018). *Development through Bricoleurs: Portraying Local Personnel's Role in Implementation of Water Resources Development in Rural Nepal.* Water Alternatives, 11 (3), pp.979–998.

Hajer, M. and Versteeg, W. (2005). *A decade of discourse analysis of environmental politics: Achievements, challenges, perspectives.* Journal of Environmental Policy & Planning, 7 (3), pp.175–184.

Hall, K., Cleaver, F., Franks, T. and Maganga, F. (2013). *Capturing Critical Institutionalism: A Synthesis of Key Themes and Debates.* The European Journal of Development Research, 26 (1), pp.71–86.

Hardin, G. (1968). The tragedy of the commons. *Science*, 162 (3859), pp.1243–1248.

Hassenforder, E. and Barone, S. (2018). *Institutional arrangements for water governance.* International Journal of Water Resources Development, 21 (2), pp.1–25.

Hassenforder, E., Ferrand, N., Pittock, J., Daniell, K. A. and Barreteau, O. (2015). *A Participatory Planning Process as an Arena for Facilitating Institutional Bricolage: Example from the Rwenzori Region, Uganda.* Society & Natural Resources, 28 (9), pp.995–1012.

Hoddy, E. T. and Ensor, J. E. (2018). *Brazil's landless movement and rights "from below."* Journal of Rural Studies, 63, pp.74–82.

Hodgson, G. M. (2016). *What Are Institutions?* Journal of Economic Issues, 40 (1), 1–25.

Houdret, A. and Heinz, R. (2022). *Groundwater governance through institutional bricolage? Participation in Morocco's Chtouka aquifer contract.* Water International, 47 (4), pp.1–18.

Huffer, E. and Molisa, G. (1999). *Governance in Vanuatu: In Search of the Nakamal Way.* State Society and Governance in Melanesia.

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

Ingram, V. J. and of, M. R.-T. I. J. (2015). *A fine mess: Bricolaged forest governance in Cameroon.* International Journal of the Commons, 9 (1), pp.41–63.

Johnson, C. (2004). *Uncommon ground: The "Poverty of History" in common property discourse.* Development and Change, 35 (3), pp.407–433.

Jones, S. (2015). *Bridging political economy analysis and critical institutionalism: an approach to help analyse institutional change for rural water services.* International Journal of the Commons, 9 (1), pp.65–86.

Jowitt, A. (2005). *Reconstructing custom: The politics of homophobia in Vanuatu.* Alternative Law Journal. 30 (1), pp.10-14.

Jowitt, A. and Cain, T. N. (Eds). (2010). *Passage of Change: Law, Society and Governance in the Pacific*. ANU Press.

Kalavite. T. (2014). *Exploring Pacific–Tongan research approaches.* In Fairbairn-Dunlop, P. & Coxon, E. (Eds.), *Talanoa: Building a Pasifika research culture.* Dunmore Publishing, pp.159–177.

Kalontano, A., Vatu, C. and Whyte, J. (2003). *Assessing Community Perspectives on Governance in Vanuatu*. Foundation of the peoples of the South Pacific International, pp.1–94.

Kapoor, I. (2002). *Deliberative democracy or agonistic pluralism? The relevance of the Habermas-Mouffe debate for third world politics.* Alternatives, 27 (4), pp.459–487.

Kemerink, J., Munyao, S., Schwartz, K., Ahlers, R. and van der Zaag, P. (2015). *Why infrastructure still matters: unravelling water reform processes in an uneven waterscape in rural Kenya.* International Journal of the Commons, 10 (2), pp.1055–1081.

Kernot, S. and Sakita, L. (2008). *The role of chiefs in peacebuilding in Port Vila.* State Society and Governance in Melanesia, 4, pp.1–15.

Kimengsi, J. N. and Balgah, R. A. (2021). *Colonial hangover and institutional bricolage processes in forest use practices in Cameroon.* Forest Policy and Economics, 125, p.102406.

KINGSTON, C. and CABALLERO, G. (2008). *Comparing theories of institutional change.* Journal of Institutional Economics, 5 (2), pp.151–180.

Knook, J. and Turner, J. A. (2020). *Reshaping a farming culture through participatory extension: An institutional logics perspective.* Journal of Rural Studies, 78, pp.411–425.

Koehler, J., Rayner, S., Katuva, J., Thomson, P. and Hope, R. (2018). *A cultural theory of drinking water risks, values and institutional change.* Global Environmental Change, 50, pp.268–277.

Kohlitz, J., Chong, J. and Willetts, J. (2020). *Rural Drinking Water Safety under Climate Change: The Importance of Addressing Physical, Social, and Environmental Dimensions.* Resources, 9 (6), p.77.

Leathers, A. (2008). *Common Property Resource Management In Vanuatu - Perspectives From A Community*.

Lévi-Strauss, C. (1966). *The Savage Mind*, Weidenfeld and Nicolson.

Liebrand, J. (2015). *Methods for researching institutions: Critical institutional perspectives.* Environment, Politics and Development Working Paper Series.

Lindstrom, L. (1997). *Chiefs in Vanuatu Today.* In: White, G. M. and Lindstrom, L. (Eds). *Chiefs today: Traditional Pacific leadership and the postcolonial state*. Stanford University Press. pp.212–228.

Lindstrom, L. (2011). *Urbane Tannese: Local Perspectives on Settlement Life in Port Vila.* Journal de la société des océanistes, (133), pp.255–266.

Long, N. (2004). *Development Sociology*, Routledge

Love, M.W. (2016). *Making komuniti in Vanuatu (and beyond).* PhD thesis, University of Queensland.

Love, M. W. (2021). *Tabu, MPA and community: nomenclature and the political ecology of marine conservation in Vanuatu. Journal of Political Ecology*, 28 (1), pp.92–110.

Lowndes, V. (2010). *Institutionalism*. In: Marsh, D. and Stoker, G. (Eds). *Theory and methods in political science*. Palgrave MacMillan.

Lowndes, V. and Paxton, M. (2018). *Can agonism be institutionalised? Can institutions be agonised? Prospects for democratic design.* The British Journal of Politics and International Relations, 20 (3), pp.693–710.

Lund, C. (2006). *Twilight institutions: Public authority and local politics in Africa.* Development and Change, 37 (4), pp.685–705.

May, T. (Ed). (2002). *Critical Realist Ethnography*. In: *Qualitative Research in Action.* SAGE. pp.1–21.

McCormack, C., Jennings, S. and Kenni, L. (2020). *Gender and LGBTQI+ Policy and Programming in Vanuatu: Opportunities, challenges, capacity, and tools for change*. Oxfam Research Report.

McDonnell, S. (2019a). *Other Dark Sides of Resilience: Politics and Power in Community-Based Efforts to Strengthen Resilience.* Anthropological Forum, Vol 30, 1-2, pp.55-72.

McDonnell, S. (2019b). *The land will eat you: Land and sorcery in North Efate, Vanuatu.* Talking it Through, p.137.

Mehta, L., Leach, M. and Scoones, I. (2001). *Environmental governance in an uncertain world*. IDS Bulletin, Vol 32 No 4.

Merrey, D. J. and Cook, S. E. (2012). *Fostering institutional creativity at multiple levels: Towards facilitated institutional bricolage.* Water Alternatives. 5 (1): 1-19

Merrey, D.J., Meinzen-Dick, R., Mollinga, P.P., Karar, E., Huppert, W., Rees, J., Vera, J., Wegerich, K. and van der Zaag, P. (2013). *Policy and institutional reform: The art of the possible.* In: Molden, D. (Ed.), *Water for*

Food Water for Life: A Comprehensive Assessment of Water Management in Agriculture. Routledge, pp.193–231.

Miles, W. F. (2007). *Traditional rulers and development administration: Chieftaincy in Niger, Nigeria, and Vanuatu.* Studies in Comparative International Development, 28 (3), pp.31–50.

Mirhanoğlu, A., Özerol, G., Hoogesteger, J., Broeck, P. V. den and Loopmans, M. (2023). *Socio-Material Bricolage: (Co)Shaping of Irrigation Institutions and Infrastructures.* International Journal of the Commons, 17 (1), pp.69–86.

Mohmand, S.K. (2016). *Informal Local Governance Institutions: What They Do and Why They Matter.* IDS Working Paper, 468, pp.1–23.

Molle, F. (2008). *Nirvana concepts, narratives and policy models: Insights from the water sector.* Water Alternatives, 1 (1), pp.131–156.

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

Moon, K. And Blackman, D. (2014). *A Guide to Understanding Social Science Research for Natural Scientists.* Conservation Biology, 28 (5), pp.1167–1177.

Morgan, W. (2013). *Overlapping authorities: governance, leadership and accountability in contemporary Vanuatu.* Journal of South Pacific Law, 2013, pp.1–22.

Mosse, D. (1997). *The symbolic making of a common property resource: History, ecology and locality in a tank-irrigated landscape in South India.* Development and Change, 28 (3), pp.467–504.

Mouffe, C. (2000). *The democratic paradox*. Verso Books.

Mouffe, C. (2013). *Agonistics: Thinking the world politically*. Verso Books.

Mouffe, C. (2016). D*emocratic Politics and Conflict: An Agonistic Approach.* Política Común, 9, pp.1–7.

Mowo, J., Adimassu, Z., Catacutan, D., Tanui, J., Masuki, K. and Lyamchai, C. (2013). *The Importance of Local Traditional Institutions in the Management of Natural Resources in the Highlands of East Africa.* Human Organization, 72 (2), pp.154–163.

Munkvold, B. E. and Bygstad, B. (2011). *In search of mechanisms. Conducting a critical realist data analysis.* In: Thirty Second International Conference on Information Systems (ICIS) Proceedings.

Nath, D., Mudaliar, M. and Ioan, C. (2006). *Water Supply System Assessment*. pp.1–29.

Neupert-Wentz, C., Müller-Crepon, C., (2021). Traditional Institutions in Africa, Past and Present.

Nimbtik, G. (2020). *Governance and Societal Adaptation in Fragile States.* In: Lahai, J. and Ware, H. (Eds). *Governance and Societal Adaptation in Fragile States. Governance and Limited Statehood.* Palgrave Macmillan, pp.237–268.

North, D. C. (1990). *Institutions, Institutional Change and Economic Performance*. Cambridge University Press.

Nunes, R. and Fielmua, N. (2022). *Institutional bricolage in community-based water management: some insights from non-representational theory.* International Journal of Water Resources Development, 39 (3), pp.1–29.

OCHA. (2023). *Vanuatu: Tropical Cyclone Judy and Tropical Cyclone Kevin Situation Report No.2* As of 13 March 2023.

OED Online. (2022). *"autonomous, adj."* Oxford University Press. Available at: https://www.oed.com/view/Entry/13498 (Accessed March 23, 2022).

Ostrom, E. (1990). *Governing the commons: The evolution of institutions for collective action*. Cambridge University Press.

Paxton, M. (2019). *Agonistic Democracy*. Routledge.

Peloso, M. M. and Harris, L. M. (2017). *Pathways for Participatory Water Governance in Ashaiman, Ghana: Learning from Institutional Bricolage and Hydrosocial Perspectives*. Society & Natural Resources, 30 (12), pp.1491–1506.

Petrou, K. and Connell, J. (2018). *"We don't feel free at all": temporary ni-Vanuatu workers in the Riverina, Australia.* Rural Society, 27 (1), pp.66–79.

Prado, M. M. and Chasin, A. C. da M. (2011). *How innovative was the Poupatempo experience in Brazil? Institutional bypass as a new form of institutional change.* Brazilian political Science review, 5 (1), pp.11--34.

Quimby, B. and Levine, A. (2021). *Adaptive capacity of marine co-management: a comparative analysis of the influence of colonial legacies and integrated traditional governance on outcomes in the Pacific.* Regional Environmental Change, 21 (1), pp.1–14.

Rand, E. (2018). *Vanuatu WASH Sector Analysis*. UNICEF, pp.1–73.

Rand, E. C., Foster, T., Sami, E. and Sammy, E. (2022). *Review of water safety planning processes and options for improved climate resilient infrastructure in Vanuatu.* Water Practice and Technology, 17 (3), pp.675-683.

Regenvanu, R. (1999). *Afterword: Vanuatu perspectives on research.* Oceania, 70 (1), pp.98–100.

Regenvanu, R. (2005). *The Changing Face of "Custom in Vanuatu.* People and Culture in Oceania, (20), pp.37–50.

Republic of Vanuatu (2020). *Post disaster Needs Assessment*.

Republic of Vanuatu (1980). *Constitution of the Republic of Vanuatu*.

Republic of Vanuatu (1992). *Vanuatu Cultural Research Policy*.

Republic of Vanuatu (1994). *Decentralisation Act, Revised Edition*.

Republic of Vanuatu (2002). *Water Resources Management Act No. 9 of 2002*.

Republic of Vanuatu (2012). *Youth Monograph, 2009 National Population & Housing Census*.

Republic of Vanuatu (2013a). *Demographic and Health Survey 2013*.

Republic of Vanuatu (2013b). *Vanuatu National Youth Development Policy 2012 -2022*.

Republic of Vanuatu (2014). *Vanuatu National Water Strategy 2008 - 2018*.

Republic of Vanuatu (2015). *National Gender Equality Policy 2015-2019*.

Republic of Vanuatu (2016a). *Bill for the Water Resource Management (Amendment) Act No. of 2016*.

Republic of Vanuatu (2016b). *Vanuatu 2030 - The People's Plan*.

Republic of Vanuatu (2017). *National Sustainable Development Plan 2016-2030, Monitoring and Evaluation Framework*.

Republic of Vanuatu (2018a). *Republic Of Vanuatu Water Resources Management (Amendment) Act No. 32 OF 2016*

Republic of Vanuatu (2018b). *Vanuatu National Implementation Plan for Safe and Secure Community Drinking Water*.

Republic of Vanuatu (2018c). *Vanuatu National Water Policy*.

Republic of Vanuatu (2018d). *Vanuatu National Water Strategy*.

Republic of Vanuatu (2019). *Draft WASH Sector Framework*.

Richards, L. and Morse, J. M. (2012). *Readme first for a user's guide to qualitative methods*, SAGE Publications.

Rodman, M., Kraemer, D., Bolton, L., and Tarisesei, J. (Eds). (2007). *House-Girls Remember: Domestic Workers in Vanuatu*, University of Hawai'i Press.

Rothermund, D. (2006). *The Routledge Companion to Decolonization*, Routledge.

Rusca, M. and Schwartz, K. (2014). *'Going with the grain': accommodating local institutions in water governance.* Current Opinion in Environmental Sustainability, 11, pp.34–38.

Rusca, M., Schwartz, K., Hadzovic, L. and Ahlers, R. (2014). *Adapting Generic Models through Bricolage: Elite Capture of Water Users Associations in Peri-urban Lilongwe.* The European Journal of Development Research, 27 (5), pp.777–792.

Sakketa, T. G. (2018). *Institutional bricolage as a new perspective to analyse institutions of communal irrigation - Implications towards meeting the water needs of the poor communities.* World Development Perspectives, 9, pp.1–11

Sayer, A. (2000a). *Key Features of Critical Realism in Practice: A Brief Outline*. In: Sayer, A. Realism and social science. SAGE Publications.

Sayer, A. (2000b). *Realism and social science*. SAGE Publications.

Schnegg, M., Bollig, M. and Linke, T. (2016). *Moral equality and success of common-pool water governance in Namibia.* Ambio, 45 (5), pp.581–590.

Scott, J. C. (2008). *Seeing like a state*. Yale University Press.

Scott, W.R. (2014). *Institutions and organisations: Ideas, interests, and identities*. SAGE Publications.

Sehring J. (2009). *Path Dependencies and Institutional Bricolage in Post-Soviet Water Governance.* Water Alternatives 2 (1): 61-81

Sidibé, A., Totin, E., Thompson-Hall, M., Traoré, O. T., Traoré, P. C. S. and Olabisi, L. S. (2018). *Multi-scale governance in agriculture systems: Interplay between national and local institutions around the production dimension of food security in Mali.* NJAS - Wageningen Journal of Life Sciences, 84, pp.94–102.

Sirimorok, N., Asfriyanto, A., (2020). *The return of the muro: Institutional bricolage, customary institutions, and protection of the commons in Lembata Island, Nusa Tenggara.* Forest and Society, 4 (1), pp.61-80.

Smith, M. J. (2006). *Realism.* In: Jupp, V. (Ed). *The SAGE Dictionary of Social Research Methods.* SAGE Publications.

Smith, R. (2016). *"The Goal of the Good House": Seasonal Work and Seeking a Good Life in Lamen and Lamen Bay, Epi, Vanuatu.* PhD Thesis, University of Manchester.

Stein, G. (2022). *Vanuatu to welcome first female MP since 2008 after snap election.* The Guardian. Available at: www.theguardian.com/world/2022/oct/21/vanuatu-to-welcome-first-female-mp-since-2008-after-snap-election (Accessed April 25, 2023).

String, G., Singleton, R. and Latagne, D. (2017). *Operational Research on Water Safety Plans: Study in Vanuatu.* Project Report. Tufts University.

String, G., Singleton, R., Mirindi, P. N., Polo, F. and Lantagne, D. (2017). *Operational research on water safety plans: implementations in India, DRC, Fiji, and Vanuatu*. WEDC International Conference Paper, 2721.

Suhardiman, D., Manorom, K. and Rigg, J. (2022). *Institutional bricolage (re)shaping the different manifestations of state-citizens relations in Mekong hydropower planning.* Geoforum, 134, pp.118–130.

Takala, T., Lehtinen, A., Hujala, T., Tanskanen, M., Brockhaus, M., Tikkanen, J. and Toppinen, A. (2021*). Forest owners as political actors.* Environmental Science & Policy, 126, pp.22–30.

Tauheed, L. F. (2014). *A Critical Institutionalist Reconciliation of "Contradictory" Institutionalist Institutions: What Is an Institution?* Journal of Economic Issues, 47 (1), pp.147–168.

Taylor, J. P. (2015). *Drinking Money and Pulling Women: Mobile Phone Talk, Gender, and Agency in Vanuatu.* Anthropological Forum, 26 (1), pp.1–16.

Taylor, R. and Gaskell, I. (2007). *Turning up the volume: a study of the Wan Smolbag Theatre Company.* 3L, Journal of Language, Linguistics, Literature, Vol 13.

Terauds, K. (2022). *Prospects for the post- pandemic tourism and economic recovery in Vanuatu.* UNCTAD Research Paper No. 86 UNCTAD/SER.RP/2022/6.

United Nations (2015). *Transforming our world: The 2030 Agenda for Sustainable Development*.

United Nations Development Programme (UNDP). (n.d.). *Human Development Indicators - Vanuatu*.

United Nations Development Programme (UNDP) (2012). *Nguna-Pele Marine and Land Protected Area Network,* Equator Initiative Case Study Series.

UNICEF. (n.d.). *DoWR – NIP-CAP Information System*.

Vanuatu National Statistics Office and UNICEF. (2014). *Children, Women and Men with Disabilities in Vanuatu*.

Uphoff, N. (1992). *Local Institutions and Participation for Sustainable Development.* International Institute for Environment and Development Gatekeeper Series, 31, pp.1–15.

van Laerhoven, F. and Ostrom, E. (2007). *Traditions and Trends in the Study of the Commons.* International Journal of the Commons, 1 (1), pp.3–28.

van Laerhoven, F., Schoon, M. and Villamayor-Tomas, S. (2020). *Celebrating the 30th Anniversary of Ostrom's Governing the Commons: Traditions and Trends in the Study of the Commons, Revisited.* International Journal of the Commons, 14 (1), pp.208–224.

Vanuatu National Statistics Office (VNSO). (2010). *2009 national census of population and housing: Summary release.*

Vanuatu National Statistics Office (VNSO). (2020). *2020 National Population and Housing Census, Basic Tables Report*, Volume 1.

Vanuatu National Statistics Office (VNSO). (2013). *Vanuatu Hardship & Poverty Report*.

Vanuatu National Statistics Office (VNSO). (2017). *Vanuatu 2016 Post-TC Pam Mini Census Report*.

Vanuatu National Statistics Office (VNSO). (2019). *Republic of Vanuatu Voluntary National Review on the Implementation of the 2030 Agenda for Sustainable Development*.

Vaioleti, T. (2013). *Talanoa: Differentiating the talanoa research methodology from phenomenology, narrative, Kaupapa Maori and feminist methodologies.* Te Reo, 56 & 57, pp.191–212.

Valjavec, F. (1986). *Anthropology in Vanuatu: A Selected Survey of Research.* Anthropos, Bd. 81, H. 4./6., pp.616–629.

Village council policy and action plan (Roles and function of the village council). (n.d.). Authors' photograph of the original document.

Vincent, S. and O'Mahoney, J. (2017). *Critical Realism and Qualitative Research: An Introductory Overview*. In: Cassell, C., Cunliffe, Ann and Grandy, G. (Eds*). The SAGE Handbook of Qualitative Business and Management Research Methods*. SAGE Publishing. pp.1–20.

Vorbach, D. and Ensor, J. (2022). *Autonomous Change Processes in Traditional Institutions: Lessons from Innovations in Village Governance in Vanuatu*. International Journal of the Commons, 16 (1), pp.173-188.

Vromen, A. (2010). *Debating Methods, Rediscovering Qualitative Approaches*. In: Marsh, D. and Stoker, G. (Eds). *Theory and methods in political science.* Palgrave MacMillan.

Wallis, J. (2013). *What role can decentralisation play in state-building? Lessons from Timor-Leste and Bougainville. Commonwealth & Comparative Politics*, 51 (4), pp.424–446.

Warrick, O. (2009). *Ethics and methods in research for community-based adaptation: reflections from rural Vanuatu.* In: Reid, H., Alam, M., Berger, R., Cannon, T., Milligan, A. (Eds.), *PLA 60: Community-Based Adaptation to Climate Change*. Special Edition of Participatory Learning and Action. International Institute for Environment and Development, 1, pp.76–87.

Warrick, O. (2011). *Local Voices, Local Choices? Vulnerability to Climate Change and Community-Based Adaptation in Rural Vanuatu.* PhD Thesis, University of Waikato.

Webb, J. (2020). *What difference does disaster risk reduction make? Insights from Vanuatu and tropical cyclone Pam.* Regional Environmental Change, 20 (1), p.20.

Whaley, L. (2018). *The Critical Institutional Analysis and Development (CIAD) Framework.* International Journal of the Commons, 12 (2), pp.137–161.

Whaley, L. and Cleaver, F. (2017). *Can 'functionality' save the community management model of rural water supply?* Water Resources and Rural Development, 9, pp.56–66.

Whaley, L., Cleaver, F. and Mwathunga, E. (2021). *Flesh and bones: Working with the grain to improve community management of water.* World Development, 138, p.105286.

Wong, S. (2010). *Elite capture or capture elites? Lessons from the 'counter-elite' and 'co-opt-elite' approaches in Bangladesh and Ghana.* Working paper. World Institute for Development Economics Research, 2010, 82.

Wong, S. (2013). *Challenges to the elite exclusion–inclusion dichotomy — reconsidering elite capture in community-based natural resource*

management. South African Journal of International Affairs, 20 (3), pp.379–391.

Britannica (2020). *"blackbirding", Britannica The Editors of Encyclopedia*. Available at: https://www.britannica.com/topic/blackbirding. (Accessed June 10, 2023).

Yaro, J.A. (2013). *Neoliberal globalisation and evolving local traditional institutions: implications for access to resources in rural northern Ghana.* Review of African Political Economy, 40(137), pp 410-427

PARTICIPANT INFORMATION SHEET

PLEASE KEEP THIS INFORMATION SHEET AND A SIGNED COPY OF THE CONSENT FORM FOR YOUR RECORDS

You are invited *to take part in a research project. Before you decide whether to participate it is important for you to understand why the research is being done and what it will involve. Please take the time to read the following information carefully. If there is anything you do not understand, or if you want more information, please ask a member of the research team.*

Title of project: integrated Participatory Technology Development (iPTD)

Lead researcher:
Dr Steven Johnson, Electronic Engineering, University of York
Research team:
Professor Thomas Krauss, Physics, University of York
Professor James Moir, Biology, University of York
Dr Jonathan Ensor, Stockholm Environment Institute, University of York
Kaniz Chowdhury, Electronic Engineering, University of York
Dr Elena Koutsoumpeli, Electronic Engineering, University of York
Dr Cynthia Iglesias, Health Science, University of York
Daniel Vorbach, Stockholm Environment Institute, University of York

What is the research about?
The integrated Participatory Technology Development (iPTD) project is a collaboration between community members in Vanuatu, scientists from the University of York and development practitioners from Oxfam in Vanuatu and Wan Smolbag. Together, we seek to co-develop a new water monitoring technology and related local institutions. The research will also explore how local governance arrangements emerge, why they succeed or fail and why they might create winners and losers.

Who is carrying out the research?
The technology development research will be carried out by University of York scientists from the Electronic Engineering, Physics, Biology and Health Science departments and community representatives from [Village A, Village B, Village C and Village D] on Efate and Epi Islands. Researchers from the Stockholm Environment Institute at the University of York will study the process of integrated Participatory Technology Development supported by NGO practitioners from Oxfam in Vanuatu and Wan Smolbag.

Who can participate?
Workshop participants are nominated by their communities based on a set of criteria displayed at the community noticeboard. In addition, researchers will identify other key stakeholders at community, island, national, regional and international levels to participate in individual interviews.

What does the project involve?
The project involves your participation in four workshops between now and December 2109 and/or your participation in an individual key stakeholder interview or *storian*.
As a workshop participant, you will work with scientists from the University of York to co-develop and trial a new water monitoring technology and related institutions. As a key stakeholder, you will take part in an individual interview or *storian*.

Do I have to take part?
Participation is voluntary - you do not have to take part in the project. If you do decide to take part, you will be given this information sheet to keep and will be asked to sign two copies of the consent form (one copy is for you to keep). If you decide to take part you will still be free to withdraw without giving a reason at any time. If you withdraw from the project, we will destroy your data and will not use it in any way.

What are the possible risks of taking part?
We do not foresee any risks associated with taking part in the project. You should consider possible implications of donating your time to the project as there are no financial incentives to participate.

Are there any benefits to participating?
We expect that the project will provide workshop participants with a diversity of information, opportunities, experiences and networks with relevant decision-makers. This includes enhanced understanding on water quality, new skills in experimenting and technology design and presenting the findings of experimentation and testing to relevant stakeholders. You will also discuss the role of local institutions such as the WASH committee in maintaining and communicating the results of the new water monitoring technology.

Are any of the outcomes uncertain?
Due to the nature of research and technology development, outcomes cannot be completely foreseen. We intend to co-develop a working technology by the end of the project, but this cannot be guaranteed. In any case, you will be involved in monitoring your community's water quality during the project using existing technologies.

What will happen to the data I provide?
The data (information) you provide will be used alongside the data of other participants to feed into the technology development process itself as well as the study of governance arrangements. Results will be shared by means of presentations and publications. Your data will be stored securely in a collaborative network drive hosted at the University of York.

What about confidentiality?
Your identity will be kept strictly confidential. No real names will be used in any presentations or publications unless you specifically agree to this on a case by case basis.

Will I know the results?
Results from the research will be published and summaries will be shared with the four participating communities by means of presentations and information on community noticeboards.

This project has been reviewed and approved by the Departmental Ethics Committee of the Department of Environment at the University of York. If you have any questions regarding this, you can email the Ethics Committee at environment-ethics@york.ac.uk. Permission to conduct research has been granted by the Vanuatu National Cultural Council.

If you have further questions regarding this project, please feel free to contact:

Lead researcher:
Dr Steven Johnson

Electronic Engineering
University of York, Heslington,
York, YO10 5DD
t. +44 1904 322693
e. steven.johnson@york.ac.uk

Doctoral researcher:
Daniel Vorbach

Stockholm Environment Institute
University of York, Heslington,
York, YO10 5DD
t. +678 5968651
e. daniel.vorbach@york.ac.uk

Supervisor:
Dr Jonathan Ensor

Stockholm Environment Institute
University of York, Heslington,
York, YO10 5DD
t. +44 1904 32 4817
e. jon.ensor@york.ac.uk

CONSENT FORM

Title of project: integrated Participatory Technology Development project

Lead researcher:
Dr Steven Johnson, Electronic Engineering, University of York
Research team:
Professor Thomas Krauss, Physics, University of York
Professor James Moir, Biology, University of York
Dr Jonathan Ensor, Stockholm Environment Institute, University of York
Dr Kaniz Chowdhury, Electronic Engineering, University of York
Dr Elena Koutsoumpeli, Electronic Engineering, University of York
Dr Cynthia Iglesias, Health Science, University of York
Daniel Vorbach, Stockholm Environment Institute, University of York

This form is for you to state whether or not you agree to take part in the project. Please read and answer every question. If there is anything you do not understand, or if you want more information, please ask the researcher.

Have you read and understood the information sheet about the study?	Yes ❐ No ❐
Have you had an opportunity to ask questions about the study and have these been answered satisfactorily?	Yes ❐ No ❐
Do you understand that the information you provide will be held in confidence by the research team, and your name or identifying information about you will not be mentioned in any publication unless you specifically agree to this on a case by case basis?	Yes ❐ No ❐
Do you understand that you may withdraw from the study at any time before the end of the data collection session without giving any reason, and that in such a case all your data will be destroyed?	Yes ❐ No ❐
Do you understand that the information you provide may be kept after the duration of the current project, to be used in future research?	Yes ❐ No ❐
Do you agree to take part in the study?	Yes ❐ No ❐
If yes, do you agree to being recorded (audio, photo or video)?	Yes ❐ No ❐
Do you agree to excerpts from your audio/video/photo recordings to be used in presentations or in teaching by the researcher, without disclosing your real name? *(You may take part in the study without agreeing to this).*	Yes ❐ No ❐

Your name (in BLOCK letters): _____

Your signature: _____

Researcher's name: _____

Date: _____

One copy to be retained by the researcher, one copy to be kept by the participant.

Appendix C

UNIVERSITY *of York*

Environment Department, University of York
Research Ethics Approval Form

Read this first

Who should use this form?

You should only use this form if you are carrying out research or consultancy project through the Environment Dept, University of York: This includes:
Members of academic, research and SEIY staff
Honorary members of staff associated with the Department.
Research degree students (masters and PhD).
Undergraduate students and taught postgraduate students who are doing research projects.

Can I begin work before the project is ethically approved?

NO primary data collection can begin until you have approval from one of the following:
The Environment Dept Ethics Committee
An External Research Ethics Committee (NHS Research Ethics Committee, Lead Partner University etc)

What will happen if I proceed without approval or falsely self-certify research ethics approval?

Collecting primary data in the absence of ethical approval or falsely self-certifying the level of risk associated with a project will constitute a disciplinary offence. This will result in:

Student – Disciplinary action resulting in immediate failure in any module or project associated with the research and potentially dismissal from the University.

Staff - Disciplinary action which may potentially lead to dismissal.

If you do not have ethical approval, the University's insurers will not cover you for legal action or claims for injury. In addition, you may face debarment from membership of some professional or statutory bodies and excluded from applying for some types of employment or research funding opportunities. You may not be able to publish your research.

What happens if the project changes after approval?

If after receiving ethical approval your project changes such that the information provided in this form is no longer accurate, then the ethical approval is automatically suspended. You must re-apply for ethical approval immediately and stop research based on the suspended ethical approval.

Is there any help available to complete this form?

Guidance can be found in on the departmental website. Further advice is also available from the Departmental Ethics Committee.

Submit questions and applications to: environment-ethics@york.ac.uk

Which sections of the form should I complete?

If your project involves:	Please complete sections
Desk-research only, using only secondary or published sources	**1, 2** and **16**
An application to an External Research Ethics Committee other than the NHS	**1** to **4** and **16**
Collection and/or analysis of primary, unpublished data from, or about, identifiable, living human beings (either in laboratory or in non-laboratory settings)	**1** to **16**
Collection and/or analysis of data about the behaviour of human beings, in situations where they might reasonably expect their behaviour not to be observed or recorded	
Collection and/or analysis of primary, unpublished data from, or about people who have recently died	
Collection and/or analysis of primary, unpublished data from, or about, existing agencies or organisations	
Investigation of any animal species its natural habitat	**1** to **5, 15** and **16**
Research with invertebrates, other than *Octopus vulgaris*, other than in their natural settings.	**1** to **5, 15** and **16**
Research with vertebrates or octopuses, other than in their natural settings.	**Do not complete this form**. Contact the Departmental Ethics Committee contact for advice
Research with human tissues or body fluids	
Research involving access to NHS patients, staff, facilities or which requires access to participants who are mentally incapacitated.	**Do not complete this form.** Contact the Departmental Ethics Committee contact for advice.

Environment Department, University of York
Research Ethics Approval Form

1 Project Information (Everyone)
a) Title of Project
Sensors for clean water: a participatory approach for technology innovation
b) Name of Principal Investigator (PI) or Research Student and Supervisor
Research student (PhD): Daniel Vorbach, SEI-Y
Supervisors: Dr Jonathan Ensor, SEI-Y and Dr John Forrester, SEI-Y
PI of overall project: Dr Steven Johnson, Electronic Engineering, University of York
c) Degree course (students) or SEI-Y or Env Dept (staff)
PhD in Human Geography
SEI-Y staff
d) Names of Co-investigators (CIs) and their organisational affiliation
Professor Thomas Krauss, Physics, University of York
Professor James Moir, Biology, University of York
Dr Jonathan Ensor, Stockholm Environment Institute, University of York
Elena Koutsoumpeli, Electronic Engineering, University of York
Dr Cynthia Iglesias, Health Science, University of York
e) How many additional research staff will be gathering data for the project?
Names and their organisational affiliation (if known)
The project will work with four Ni-Vanuatu community facilitators from Oxfam in Vanuatu (OiV) and Wan Smolbag (WSB) including Margarette Dick (OiV) and Yvette Camille (WSB). In addition up to four Ni-Vanuatu note-takers will document the workshops.
f) Proposed project start date (At least four weeks in the future)
Project funding started on the 1st May 2018. The third round of community workshops and interviews will commence on the 6th of January 2019. A fourth and final round of workshops will commence in late 2019 and include workshops in Vanuatu and the Solomon Islands.
g) Estimated project end date
May 2020
h) Who is funding the project?
EPSRC
Has funding been confirmed?
Yes

You may find the following codes of ethical practice and conduct relevant to your project:

British Psychological Society code of conduct:
http://www.bps.org.uk/the-society/code-of-conduct/code-ofconduct_home.cfm
BCS Chartered Institute for IT Code of Conduct:
http://www.bcs.org/server.php?show=nav.6030
Society of Environmental Toxicology and Chemistry (SETAC) code of ethics
http://www.setac.org/?page=SETACEthics
Guidelines for the Treatment of Animals in Behavioural Research and Teaching
http://asab.nottingham.ac.uk/ethics/guidelines.php

2. Does this project need ethical approval?	Yes	No
a) Does the project involve collecting primary data from, or about, living human beings?	✓	
b) Does the project involve analysing primary or unpublished data from, or about, living human beings?	✓	
c) Does the project involve collecting or analysing primary or unpublished data about people who have recently died, other than data that are already in the public domain?		✓
d) Does the project involve collecting or analysing primary or unpublished data about or from organisations or agencies of any kind, other than data that are already in the public domain?	✓	
e) Does the project involve research with non-human animals (vertebrates or invertebrates)?		✓
f) Does the project place the participants or the researchers in a dangerous environment, risk of physical harm, psychological or emotional distress?		✓

If you answered **Yes** to any of these questions, please proceed to **Section 3**.

If you answered **No** to all these questions:

• You should type your name in the signature space in the Declaration in **Section 16**. Then email the form to the Ethics Committee for our records.
• Students must ask their Project Supervisor to also type their name in the declaration. Students should not submit your form directly. The supervisor must check the application and submit it.

3) Does the project require Disclosure and Barring Service (DBS) previously known as **Criminal Records Bureau checks?**	Yes	No
a) Does the project involve direct contact by any member of the research team with children or people under 18 years of age?		✓
b) Does the project involve direct contact by any member of the research team with adults who have learning difficulties?		✓
c) Does the project involve direct contact by any member of the research team with adults who are infirm or physically disabled?	✓	
d) Does the project involve direct contact by any member of the research team with adults who are resident in social care or medical establishments?		✓
e) Does the project involve direct contact by any member of the research team with adults in the custody of the criminal justice system?		✓

f) Has a Disclosure and Barring Service (DBS) check been stipulated as a condition of access to any source of data required for the project?		✓

If you answered **Yes** to **any** of these questions, please:

Explain the nature of the contact required and the circumstances in which contact will be made during the project.

According to Vanuatu's Disability Promotion & Advocacy Association, 12 percent of the total population live with a disability, with actual figures expected to be higher due to unsuitable data collection methods (Caleb, 2015). Our workshop participant nomination guidelines aim to recruit a representative sample of community members to contribute their knowledge, needs and priorities. We therefore expect that approximately 12 percent of workshop participants will live with some form of disability. Our project partner Oxfam in Vanuatu works closely with the Vanuatu Society for People with Disability (VSPD) and we will seek their advice on ensuring workshops and interviews will be conducted in a disability inclusive manner.

If you require a DBS check, please contact the DBS or check their website for more details
https://www.gov.uk/disclosure-barring-service-check/contact-disclosure-and-barring-service

4) Is this project liable to scrutiny by external ethical review arrangements?	Yes	No
a) Has a favourable ethical opinion been given for this project by a social care research ethics committee, NHS, The Biology Dept Ethics Committee or by any other external research?		✓
b) Will this project be submitted for ethical approval to a social care committee or any other external research ethics		✓

If you answered **No to both of these questions**, please proceed to **Section 5.**
If you answered **Yes** to either of these questions:
• You should type your name in the signature space in the Declaration in **Section 16**. An email attachment sent from your University inbox will be assumed to have been signed electronically. Then email the form to the Ethics Committee for our records.

• Students must ask their Project Supervisor to also type their name in the declaration, and they should send a copy to the Ethics Committee for checking and filing. Students – do not submit your form directly to us. Your supervisor must check the application and submit it.

5) More detail about the project

a) What are the aims and objectives of the project?

The *Sensors for clean water: a participatory approach for technology innovation* project, is a transdisciplinary three-year collaboration involving social and natural scientists from the University of York, development practitioners from Oxfam in Vanuatu and Wan Smolbag.

The project aims to co-develop a water monitoring technology and related local institutions with community members in four project sites in Vanuatu piloting an integrated Participatory Technology Development (iPTD) approach.

The Stockholm Environment Institute's component of the project is implemented by Dr Jonathan Ensor and Daniel Vorbach. They are responsible for developing and implementing the project's participatory community engagement methods and collate and analyse the findings. Daniel is also writing his PhD thesis on institutional arrangements in the four communities. The results chapters will be published as standalone papers as part of this project.

This Research Ethics Approval Form covers SEI's social science research activities including PhD research for the third series of Workshops in 2019 and third series of workshops in 2020 in Vanuatu and the Solomon Islands. It does not cover ethical considerations related to the development and testing of technologies as part of the project by co-investigators from the University of York departments of Electronics, Physics, and Biology or economic analysis by co-investigators from the University of York department of Health Sciences unless these fall within activities described below. A separate Research Ethics Approval will be completed by the PI for this purpose.

SEIY's specific objectives as part of this project are:

Objective 1: Design and implement a series of workshops that create a shared platform for the development of a technology and related institutions by community members and University of York scientists

Objective 2: Analyse the role of institutions in participating communities and share the findings peer-reviewed journals and a PhD thesis

---

b) Briefly describe the principal methods, the sources of data or evidence to be used and the number and type of research participants/animals who will be recruited to the project.

The principal research methods are multi-stakeholder workshops, semi-structured interviews with key stakeholders, unstructured interviews with community members and observation during and outside the workshops.

The project will take place in four communities in Vanuatu and one community in the Solomon Islands with up to 120 community representatives the attending workshops. In addition, the project will conduct up to 40 unstructured interviews with community members and consult up to 10 external stakeholders from government, non-government organisations and private sector in Port Vila and Honiara by means of semi-structured interviews.

The workshops will consist of participatory exercises aimed at involving community representatives in every part of the technology development cycle, from technology specification, through to design, testing and optimisation. Facilitators will encourage

knowledge sharing between community members and scientists to co-develop a locally appropriate water monitoring device and related institutional arrangements. This includes a simulation exercise, in which workshop participants will use a mock-up device to evaluate different institutional governance arrangements, which they developed in the first round of workshops. Workshop participants will also have an opportunity to interact with, trial, and provide feedback on, working prototypes of water monitoring devices that they co-designed as part of this project.

The vast majority of unstructured interviews will be conducted with workshop participants who have already received the information sheet and signed the workshop consent form to take part in the research, which also covers the interviews.

Community members that are not part of the workshop and other stakeholders taking part in interviews will be given the stakeholder information sheet and consent form to sign and will have an opportunity to ask questions of the researchers before giving or withholding consent. Participant names in interview transcripts will be replaced with anonymised codes that are recorded on a separate coding sheet. This can only be accessed by those involved in the interviews and transcription/translation, which is currently the SEI doctoral researcher and Oxfam program coordinator. The consent form has been updated (Annex 4) to highlight that it covers both workshops and interviews.

Participant observation involves living in the community and taking part in everyday activities such as gardening, attending village or other committee meetings and social activities. Informal conversations and observations will be recorded in field notes and the confidentiality rules of the project will apply. While the project will not be able to seek consent from every community member, the researchers' role will be explained in a village meeting and at the beginning of community meetings and researchers' will be transparent about their role in individual conversations.

c) What research instrument(s), validated scales or methods will be used to collect data?

Participatory workshops

Unstructured interviews

Semi structured interviews

Participant Observation

Simulation exercise

Technology trial

d) If you are using an external research instrument, validated scale or research method, please specify.

N/A

e) If you are not using an externally validated scale or research method, please attach a copy of the research instrument you will use to collect data. For example, a measurement scale, questionnaire, interview schedule, observation protocol for ethnographic work or in the case of unstructured data collection a topic list.

6 Confidentiality, security and retention of research data	Yes	No
a) Are there any reasons why you cannot guarantee the full security and confidentiality of any personal or confidential data (including potentially sensitive data on animals) collected for the project?		✔
b) Is there a significant possibility that any of your participants, or people associated with them, or sites where endangered or otherwise sensitive species, could be directly or indirectly identified in the outputs from this project?		✔
c) Is there a significant possibility that confidential information could be traced back to a specific organisation or agency as a result of the way you write up the results of the project?		✔
d) Will any members of the project team retain any personal or confidential data at the end of the project, other than in fully anonymised form?		✔

If you answered **No** to all of these questions, please:

• Explain how you will ensure the confidentiality and security of your research data, both during and after the project.

6e)

Qualitative personal data associated with each community will be collected, handled and stored in line with the Data Protection Act 1998. In particular:

1. We will obtain informed consent (in writing or verbally, as appropriate) for the collection of sensitive information, within which we will explain the project objective and withdrawal opportunities.
2. The PI will have ultimate responsibility for storage and management of personal data.
3. Personal data will be anoymised using a random code, controlled and distributed by the PI.
4. All manual/ paper files will be destroyed (shredded) after translation.

All qualitative data will be digitised where not originally in a digital format, and saved in common file formats throughout, i.e. mp3 audio, MS Word documents and transcriptions, PDF scanned images, and JPEG/TIFF photographic images. The project will use a dedicated secure collaborative network drive hosted at the University of York, which will act as the primary and default storage location for the latest version of any files created. This will be accessible from remote locations, inc. Vanuatu, via secure WebVPN access. The qualitative data will come from:

- Interviews, workshop discussions and conversations: these will be recorded on digital audio recorders or, where appropriate, hand written notes will be taken. Audio files will be transferred to the central project hard drive as soon as practically possible, along with English transcriptions; notes will be transcribed and stored digitally and the original hard copy notebooks will be stored locally by the PDRA in a secure cabinet until digitised.
- Documentation of participatory exercises: materials produced during participatory exercises (e.g. flip chart notes or diagrams) will be photographed at a resolution appropriate for capturing the detail of the image, and the digital image file transferred to the central project hard drive. Originals will be stored in the project

archival box system. Images from the photo-elicitation exercise will be transferred directly to the central project storage and deleted from the tablet devices. Images and objects will be linked to transcripts and audio via data cataloguing (i.e. with a unique identifier attached to all items related to a particular photo, including the discussion audio and transcript).

Data sharing: All results from the proposed programme will be communicated to the research community and potential beneficiaries through presentations at national and international conferences, workshops, publication in primary archival journals and trade journals. Manuscripts accepted for peer-reviewed publication will be archived locally via the York Digital Library (YDL) and the White Rose Research Online (WRRO) open access repository where it will be available for public download. Archived manuscripts will be accompanied by anonymised digital supporting material containing comprehensive details on experimental procedures, raw datasets, metadata and analysis. There are no security, licensing or ethical issues related to the data generated during technology development activities, and all data will be made available for download by the public.

In cases where quotes need to be attributed to a specific stakeholder to provide context (e.g. direct quotes from the Director of the Water Department or a community plumber), the project will seek specific written permission on a case by case basis.

If you answered **Yes** to any of these questions, please:

• Explain the reasons why it is essential to breach normal research protocol regarding confidentiality, security and retention of research data.

6f) Write your explanation here

7) Informed consent	Yes	No
a) Will all participants be fully informed why the project is being conducted and what their participation will involve, and will this information be given before the project begins?	✔	
b) Will every participant be asked to give written consent to participating in the project, before it begins?		✔
c) Will all participants be fully informed about what data will be collected, and what will be done with these data during and after the project?	✔	
d) Will explicit consent be sought for audio, video or photographic recording of participants?	✔	
e) Will every participant understand what rights they have not to take part, and/or to withdraw themselves and their data from the project if they do take part?	✔	
f) Will every participant understand that they do not need to give you reasons for deciding not to take part or to withdraw themselves and their data from the project and that there will be no repercussions as a result?	✔	
g) If the project involves deceiving, or covert observation of, participants, will you debrief them at the earliest possible opportunity?	N/A	

If you answered **Yes** to all these questions, please:

• Explain briefly how you will implement the informed consent scheme described in your answers.

• Attach copies of your participant information sheet and consent form as evidence of your plans.

7h) Project participants that contribute data as part of workshops and stakeholder interviews and all other interview participants will sign an informed consent form prior to participating in workshops or interviews. They will be read the contents of the forms if required. The project does not involve deception or covert observation of participants.

If you answered **No** to any of these questions, please:

• Explain why it is essential for the project to be conducted in a way that will not allow all participants the opportunity to exercise fully-informed consent.

• Explain how you propose to address the ethical issues arising from the absence of transparency.

• Attach copies of your participant information sheet and consent form as evidence of your plans.

7i) While written consent will be the default, in some cases, for example when presenting information to an entire community or interviewing illiterate individuals, consent may be supplied verbally (and recorded by the interviewer).

Copies of the participant information sheet (Annex 3) and consent form (Annex 4) are attached to this form.

8) Risk of harm	Yes	No
a) Is there any significant risk that your project may lead to physical harm to participants or researchers?		✓
b) Is there any significant risk that your project may lead to psychological or emotional distress to participants?		✓
c) Is there any significant risk that your project may lead harm to the reputation of participants, or their employers, or of any other persons or organisations?		✓

If you answered **Yes** to any of these questions, please:

• Explain the nature of the risks involved, why it is necessary for the participants or researchers to be exposed to such risks.

• Explain how you propose to assess, manage and mitigate any risks to participants or researchers.

• Explain the arrangements by which you will ensure that participants understand and consent to these risks.

• Explain the arrangements you will make to refer participants or researchers to sources of help, if they are seriously distressed or harmed as a result of taking part in the project.

• Explain the arrangements for recording and reporting any adverse consequences of the research.

8d) Write your explanation here:

9) Risk of disclosure of harm or potential harm	Yes	No
a) Is there a significant risk that the project will lead participants to disclose evidence of previous criminal offences, or their intention to commit criminal offences?		✓
b) Is there a significant risk that the project will lead participants to disclose evidence that children or vulnerable adults are being harmed, or are at risk of harm?		✓
c) Is there any significant risk that your project may lead harm to the reputation of participants, or their employers, or of any other persons or organisations?		✓
d) Is there a significant risk that the project will lead participants to disclose evidence of serious risk of other types of harm?		✓

If you answered **Yes** to any of these questions, please:

• Explain why it is necessary to take the risks of potential or actual disclosure.

• Explain what actions you would take, if such disclosures were to occur.

• Explain what advice you will take and from whom before taking these actions.

• Explain what information you will give participants about the possible consequences of disclosing information about criminal or serious risk of harm

9e) Write your explanation here:

10) Payment of participants	Yes	No
a) Do you intend to offer participants cash payments or any other kind of inducements or compensation for taking part in your project?	✓	
b) Is there any significant possibility that such inducements will cause participants to consent to risks that they might not otherwise find acceptable?		✓
c) Is there any significant possibility that the prospect of payment or other rewards will systematically skew the data provided by participants in any way?		✓
d) Will you inform participants that accepting compensation or inducements does not negate their right to withdraw from the project?		✓

If you answered Yes to any of these questions, please:
• Explain the nature of the inducements or the amount of the payments that will be offered.
• Explain the reasons why it is necessary to offer payments.
• Explain why you consider it is ethically and methodologically acceptable to offer payments.

10e) Write your explanation here:

Participants that are not part of the project team will not receive any cash payments for taking part in the project.

The project will follow Oxfam in Vanuatu's community engagement guidelines, which allow for providing morning tea, afternoon tea and lunch for workshop participants. This will be prepared by community members. Community members are given the option to provide accommodation and food for visiting researchers. Payment for these services will be at a standard rate determined by Oxfam in Vanuatu.

11) Capacity to give valid consent	Yes	No
a) Do you propose to recruit any participants who are under 18 years of age?		✓
b) Do you propose to recruit any participants who have learning difficulties?		✓
c) Do you propose to recruit any participants with communication difficulties, including difficulties arising from limited facility with the English language?	✓	
d) Will you inform participants that accepting compensation or inducements does not negate their right to withdraw from the project?		N/A
e) Do you propose to recruit any participants who are very elderly or infirm?		✓
f) Do you propose to recruit any participants with mental health problems or other medical problems that may impair their cognitive abilities?		✓
g) Do you propose to recruit any participants who may not be able to understand fully the nature of the research and the implications for them of participating in it?		✓

If you answered Yes to any of the questions, please:
• Explain how you will ensure that the interests and wishes of participants are understood and taken in to account.
• Explain how in the case of children the wishes of their parents or guardians are understood and taken into account.

11h) Write your explanation here:

The research takes place rural areas in Vanuatu, where most participants speak their local languages and the widely spoken English creole language Bislama as a second language. Workshops will be facilitated in Bislama by Ni-Vanuatu facilitators. Individual interviews will be conducted by the SEI-Y research fellow / PhD student who is fluent in written and spoken Bislama having lived in Vanuatu for five years.

As is customary in the Pacific region, children often accompany family members to workshops and community meetings. Children under 18 years do not participate in the research.

12) Is participation genuinely voluntary?	Yes	No
a) Are you proposing to recruit participants who are employees or students of the University of York or of organisation(s) that are formal collaborators in the project?	✓	
b) Are you proposing to recruit participants who are employees recruited through other business, voluntary or public sector organisations?		✓
c) Are you proposing to recruit participants who are pupils or students recruited through educational institutions?		✓
d) Are you proposing to recruit participants who are clients recruited through voluntary or public services?		✓
e) Are you proposing to recruit participants who are living in residential communities or institutions?		✓
f) Are you proposing to recruit participants who are in-patients in a hospital or other medical establishment?		✓
g) Are you proposing to recruit participants who are recruited by virtue of their employment in the police or armed services?		✓
h) Are you proposing to recruit participants who are being detained or sanctioned in the criminal justice system?		✓
i) Are you proposing to recruit participants who may not feel empowered to refuse to participate in the research?		✓

If you answered **Yes** to any of these questions, please:

• Explain how your participants will be recruited.

• Explain what steps you will take to ensure that participation in this project is genuinely voluntary.

12j) Write your explanation here:

Members of the project team include University of York staff from different departments and NGO practitioners from Oxfam in Vanuatu and Wan Smolbag. They play a dual role in implementing their components of the project as well as being participants in the research.

13) Online and Internet Research	Yes	No
a) Will any part of your project involve collecting data by means of electronic media, such as the Internet or e-mail?		✓
b) Is there a significant possibility that the project will encourage children under 18 to access inappropriate websites, or correspond with people who pose risk of harm?		✓
c) Is there a significant possibility that the project will cause participants to become distressed or harmed, in ways that may not be apparent to the researcher(s)?		✓
d) Will the project incur any other risks that arise specifically from the use of electronic media?		✓

If you answered **Yes** to any of these questions, please:
- Explain why you propose to use electronic media.
- Explain how you propose to address the risks associated with online/internet research.
- Ensure that your answers to the previous sections address any issues related to online research.

13e) Write your explanation here:

14) Other ethical risks	Yes	No
a) Are there any other ethical issues or risks of harm raised by your project that have not been covered by previous questions?		✓

If you answered **Yes** to this question, please:
- Explain the nature of these ethical issues and risks.
- Explain why you need to incur these ethical issues and risks.
- Explain how you propose to deal with these ethical issues and risks.

14b) Write your explanation here:

15) Research with non-human animals	Yes	No
a) Will any part of your project involve the study of animals in their natural habitat?		✓
b) Will your project involve the recording of behaviour of animals in a non-natural setting that is outside of the control of the researcher?		✓
c) Will your field work involve any direct intervention other than recording the behaviour of the animals available for observation?		✓
d) Is the species you plan to research endangered, locally rare or part of sensitive ecosystem protected by legislation?		✓

e) Is there any significant possibility that the welfare of the target species or those sharing the local environment/habitat will be detrimentally affected?		✓
f) Is there any significant possibility that the habitat of the animals will be damaged by the project, such that their health and survival will be endangered?		✓
g) Will project work involve intervention work in a non-natural setting in relation to invertebrate species other than *Octopus vulgaris*?		✓
h) Will project work involve intervention work or handling non-human vertebrates or *Octopus vulgaris**? **If yes, then you might require a licence under the Animals Scientific Procedures Act (1986) – contact the Ethics Committee**		✓

If you answered **Yes** to any of these questions, please:

• Explain the reasons for conducting the project in the way you propose, and the academic benefits that will flow from it.

• Explain the nature of the risks to the animals and their habitat.

• Explain how you propose to assess, manage and mitigate these risks.

* The Animals Scientific Procedures Act (1986) was amended in 1993. As a result the common octopus (*Octopus vulgaris*), as an invertebrate species, is now covered by the act.

15i) Write your explanation here:

16) Principal Investigator's Declaration

Please ensure that you:
• Tick all the boxes below that are relevant to your project and type your name in the declaration below.
• Students must get their Project Supervisor to countersign this declaration.

I believe that this project does not require research ethics approval.	
I have completed Sections 1-2 and kept a copy for my own records.	✓
I realise I may be asked to provide a copy of this form at any time.	✓
I request that this project is exempt from internal research ethics review because it will be, or has been, reviewed by an external Research Ethics Committee.	
I have completed Sections 1-4 and attach/will attach a copy of the favourable ethical review issued by the external Research Ethics Committee. Please give the name of the external Research Ethics Committee here: Environment Department Ethical Review Committee	✓
I request an ethics review and confirm that I have answered all relevant questions in this form honestly.	✓
I confirm that I will carry out the project in the ways described in this form. I will immediately suspend research and request a new ethical approval if the project subsequently changes the information I have given in this form.	✓
I confirm that I, and all members of my research team (if any), have read and agree to abide by the University's Code of practice and principles for good ethical governance	✓

Signatures

Submit this form and any attachments by e-mail including your surname in the filename.

You should type your name in the signature space.

An email attachment sent from your University inbox will be assumed to have been signed electronically.

Principal Investigator

Signed: Daniel Vorbach (Student)

Date: 03 December 2018

Students must ask their Project Supervisor type their name here and submit your application.

This email will be taken as an electronic countersignature

Countersigned Jonathan Ensor (Student's Project supervisor)

Date: 03 December 2018

I have read this form and confirm that it covers all the ethical issues raised by this project fully and frankly. I also confirm that these issues have been discussed with the student and will continue to be reviewed in the course of supervision.