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Women and climate change in Vanuatu, Pacific Islands Region

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ABSTRACT

While world leaders met in Egypt in 2022 for the United Nations Framework Convention on Climate Change (UNFCCC) Conference of the Parties (COP 27) and danced around the need for critical global action on climate change, ni-Vanuatu (Vanuatu's citizens) were dealing with its realities. Continuing sea level rises, more intense and frequent cyclones, flooding and landslides are regular occurrences in Vanuatu, challenging the population to adapt. These experiences are made more intense by the knowledge that ni-Vanuatu circumstances are the result of greenhouse gas emissions occurring elsewhere, in countries with higher gross domestic products (GDPs). In this paper, we focus on the experiences of women in Vanuatu to build a greater understanding of the impacts of climate change on women's lives in one of the most disaster risk countries in the world. In focus groups conducted in 2021 with women in five communities across Vanuatu, women shared their experiences in dealing with climate change, the impacts on food production and food security and the gendered societal expectations that shape the complexity of women's experiences. We note the way gender relations build on climate change impacts to shape the lives of Vanuatu women. In so doing we highlight the expressed desire of women to bring their experiences of climate change to the international community and to be part of the critical global conversation on climate change.

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Introduction

As world leaders debated greenhouse gas reduction targets at the United Nations Framework Convention on Climate Change (UNFCCC) Conference of the Parties (COP 27) meeting in Egypt in 2022, communities in the Pacific

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Island nation of Vanuatu continued to live with the reality of climate change. The diplomatic obfuscation relating to the lived reality of climate change - including loss and damage and differential gendered impacts - was evident at this meeting despite these issues being evident for some time. In a 2021 speech to the UN General Assembly alerting the world to the dire situation in Vanuatu, the Prime Minister, Bob Loughman, argued that the impacts of climate change are beyond the capacity of individual governments to address and that what is needed is determined and focused international cooperation (Surma 2021). However, the COP meeting outcomes suggest that the chasm between international commitments to climate justice and the lived reality for at-risk nations remains wide, deep, and largely impregnable. Indeed, the pleas of Pacific Island nations, including Vanuatu, appear to go unheeded, as leaders at COP 27 in Sharm El Sheik looked for ways to nuance their commitments and climate actions around distant target dates. Meanwhile, Vanuatu has petitioned the International Court of Justice (Surma 2021) with a draft resolution to protect the rights of present and future generations of ni-Vanuatu (Vanuatu's citizens) from the loss and damage wrought by increasingly unusual, and devastating, climate-induced weather events caused by greenhouse gas emissions emanating from more developed countries (Carreon 2021).

Mcleod et al. (2018) note that, while Pacific Island countries are at the forefront of climate impacts, there is a perception by more powerful stakeholders in the international community that there is a dearth of knowledge emanating from those most deeply impacted, and therefore, limited intelligence on which to base international efforts and commitments. In fact, Mcleod et al. (2018, 179) note that the prevailing understanding of impacts in these at-risk regions focuses on 'perceived fragility, high vulnerability, and a lack of adaptation options' rather than on mitigation and social support for the island nations. This approach ignores the agency and autonomy, particularly of women dealing with the impacts of climate change, a view also supported by Gay-Antaki. Her research with Mexican women notes the need for women from lower GDP nations to negotiate global understandings of their vulnerability.

In this paper, we bring greater attention to the knowledge and social outcomes of climate disasters in Vanuatu by focusing on the gendered impacts of climate change as articulated by women across Vanuatu. Our material is drawn from responses given in women-only focus groups held in five communities across three islands of Vanuatu - Efate, Tanna and Santo in 2021. These communities were chosen because they were proposed sites for the Green Climate Fund's (GCF) 'Climate Information Services for Resilient Development in Vanuatu' project activities. Our aim is to provide an understanding of the way climate change is shaping the lives and experiences of women in a particular cultural context and, in so doing, to build a greater understanding of the need for urgency in international responses to climate change. In this regard, ni-Vanuatu women's experience of climate change is heightened

precisely because they are women living within a particular gender dynamic within the social, cultural, and environmental context of Vanuatu. Likewise, gender inequality in Vanuatu is exacerbated by the impacts of climate change and disasters such as the Covid-19 pandemic. Global commitment to action on climate change would help mitigate these threats to women's lives. In assessing these issues, it is critical to note that both United Nations and Vanuatu-generated statistics, policies and literature reinforce gender binaries. Thus, within this paper our focus is also on the gendered relationships as experienced by women. Our research highlights that ni-Vanuatu women have much to offer to international debates about their future in the context of this 'great moral challenge of our generation' (Hudson 2017, 1).

Gender and climate change

Research and policy literature acknowledges that gender is a critical factor in exposure to climate disasters (see, for example, Arora-Jonsson 2014; United Nations Office for Disaster Risk Reduction [UNDRR] 2015). The United Nations Sendai Framework for Disaster Risk Reduction, which has been ratified by 101 countries (Mizutori 2020), for example, acknowledges gendered impacts, noting that women and girls are 'disproportionately affected' by climate disasters (UNDRR 2015, 3/15). This view is supported by research and INGO reports emanating from the Pacific Island nations including Vanuatu (see, for example, Alston 2015; CARE 2015, 2017). However, feminist writers note that while global policies acknowledge the gendered impacts of climate change, they warn against making gendered assumptions about women, for example, as caring, homogenous, and vulnerable (Andersen, Verner, and Wiebelt 2017; Arora-Jonsson 2011; Lau et al. 2021). Further, Djoudi et al. (2016, 248) warn against arguing for a 'feminisation of victimisation'. Critically it is also important to acknowledge the significance of intersectionality in framing gender research. Drawing on writers such as Crenshaw (1991) we note that characteristics such as age, place, level of ability and education can shape and compound gendered experiences. Further, Collins, Gonzaga da Silva, and Martinez-Palacios (2019) argue that oppressed groups will not only develop survival and resistance strategies but will build resilience within the context of their oppression. In this paper we take gender to refer to the accepted patterns of behaviour, or gendered relationships, that are expected and valued in women and men in a given context, time and place (Kinnvall and Rydstrom 2019). These patterns of behaviour ultimately shape power relations and determine culturally accepted opportunities and responsibilities in any given society. Further they are heavily policed and endorsed by cultural sanctions - ensuring that gender shapes and moulds the lives and experiences of women and men (Butler 2002), and of trans and non-binary peoples, and this is further exacerbated when religious strictures reinforce a

subordinate position for women (Ahmed 2020), a situation evident in Vanuatu. However, we also acknowledge the layers of resilience and resistance evident in the experiences of Vanuatu women and the capacity of women to negotiate their position in incremental ways.

When a crisis such as a climate disaster occurs, it is important to note that it does so in a socioeconomic and political context where women's rights and autonomy may already be constrained. Hence gender inequality is magnified within the context of major climate-induced disasters. These inequalities may be further enhanced through processes of resource distribution and gender-blind policies and practices that occur within the context of post-disaster activities, resulting in climate impacts that are more strongly felt by women in lower GDP nations (Alston, 2020; Kinnvall and Rydstrom 2019; United Nations Development Program [UNDP] 2014). Our research with women in Vanuatu is analysed and assessed with this understanding in mind. We adopt a gendered lens that allows us to view the impacts of climate change on women and their families and the gendered power relations that exacerbate these impacts. Furthermore, we highlight the detailed understandings women have of climate change, and the efforts required of them to mitigate and prevent the impacts. In doing this we provide complexity and nuance to the vague understandings of climate impacts evident in some countries' responses on display at COP 27.

Vanuatu, Pacific Islands Region

Vanuatu is an ethnically diverse archipelago comprising 13 principal and 70 smaller islands located to the east of Australia and to the west of Fiji in the Pacific Islands region (Adams 2021) (see Figure 1). Vanuatu's population of 319,137 is spread across its many islands (World Bank 2022a). The largest population centre is the capital, Port Vila, which is located on Efate Island. Luganville is the other major population centre, located on the island of Espiritu Santo. The majority of the population (75%), however, predominantly resides outside its urban centres in rural areas and rely on subsistence agriculture (FAO and SPC 2019). Many households still rely on the sale of agricultural and other handmade products including predominantly craft items made by women (Naupa et al. 2017, 307). A vast majority of households (88%) participate in vegetable crop production, 57% in the production of cash crops such as kava, and 49% in fishing (Vanuatu National Statistics Office & Ministry of Finance and Economic Management 2017). Consequently, reliance on natural resources and seasonal agriculture production is critical. Electricity and mobile phone technology are increasingly available with 67% of the population having electricity in 2020 (World Bank 2022b) and 78% of the population having a mobile phone subscription in 2021 (World Bank 2022c).



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In addition to agriculture and fisheries, many ni-Vanuatu communities are also heavily reliant on tourism for their livelihoods – the country attracts people from across the world because of its natural beauty. Before the Covid-19 pandemic, for example, the World Bank (2021b) estimates that in

2019, 256,000 people had visited the country providing a significant boost to the Vanuatu economy. At the time of our focus groups, the country was in lockdown and tourist arrivals had ceased, causing major financial issues for families whose income relied on tourism. The Covid-19 lockdown and its impact on tourism gives some insight into what might lie ahead if climate-induced disasters such as sea level rise continue to erode the islands and their economies. Should the land and sea scapes be eroded, the critical features that make the islands so appealing to tourists will be destroyed. Further, the reliance of local people on small scale agriculture for both their own needs and for selling in the local markets, is highly dependent on stable and predictable weather.

Policies and kastom (culture)

Vanuatu is a member of the United Nations and, as such, supports the UNFCCC, the Convention on the Elimination of all forms of Discrimination Against Women (CEDAW), and the Beijing Platform for Action. At the regional level it supports the Pacific Platform for Action on Gender Equality and Women's Human Rights 2018-30, and at the national level the National Policy on Gender Equality. The country has a democratically elected government and Vanuatu's parliamentary representatives, and departments are, on paper and in national, regional, and international fora, forthright in their support for, and policy commitment to, gender equality. At the same time, honour and respect are deeply held principles, which guide a patriarchal system of governance and processes such as male-dominated land rights which may prevent women's meaningful participation in decision making. Indeed, ni-Vanuatu identity, or the core characteristics that shape local understanding of what it means to be a citizen of Vanuatu – largely defined by occupational status as small-scale agricultural producers, fishers, market stall holders - is shaped by kastom, which represents tradition and cultural understanding deeply embedded in relationships and place, with a history that precedes Christian influence.

Kastom is the word in Bislama [the local language] for cultural tradition, or indigenous knowledge and practices particularly those that differentiate ni-Vanuatu (indigenous citizens) from foreigners and expatriates. Kastom is often invoked in nationalist imaginings of Vanuatu as the common sense, static and timeless cultural bedrock upon which national sovereignty is built. However, simple definitions and notions of timelessness do not adequately convey the complexity, hybridity, and unevenness of kastom as it is embodied, negotiated, and experienced in the everyday lives of ni-Vanuatu. (Cummings 2008, 133)

For ni-Vanuatu women, kastom underpins much of their everyday lived experience. *Braed praes* (bride price) for example, is still practised widely in Vanuatu and reinforces the belief that women and their bodies are the

property of their husbands (Servy 2020; Tokona 2021). Further, away from Port Vila, many communities support a traditional governance system based on chiefs who operate as the key decision makers in their communities. Various cultural traditions, supported through the chiefs, act to reinforce traditional practices of gender inequality. These can relate to issues such as land ownership, decision-making practices, and gendered roles. One example is the *nakamal* (an Indigenous structure and concept relating to a sacred meeting space). Traditionally, there were three *nakamals* in each community – a men's *nakamal*, a women's *nakamal* and a community *nakamal*. However, over time, *nakamals* became men's domain, and the cornerstone of village governance. Today, although women are permitted in *nakamals*, their active participation in community decision making is restricted and local-level decisions are generally made by men (Vorbach and Ensor 2022).

Christian influence is another factor that continues to dominate Vanuatu's island communities, with over 80% of the population identifying as Christian, and a vast majority being active in their church communities (Clarke 2013). These church communities operate along patriarchal lines with male preachers influencing gendered patterns of behaviour, reinforcing the gender-inequitable practices prescribed by *kastom* (Clarke 2015).

These patriarchal governance practices are not confined to rural areas and local level decision making. In fact, since independence in 1980, there have only been five female members of parliament and currently there are no women representatives in the Vanuatu government (Australian Government Department of Foreign Affairs [DFAT] 2020a). This lack of female representation is not based on the reluctance of women to stand for election. In fact, Kaviamu (2016) notes her own story of standing for parliament against the wishes of men who often resorted to violence to ensure that the status quo was maintained.

Gender in Vanuatu

The Pacific Women Shaping Pacific Development 2012-2022 report (Pacific Women Support Unit 2021) notes significant gender inequalities remain across the Pacific. In Vanuatu, women and girls are underrepresented in educational attainment, employment, and political representation. While they account for just a third of workers in the formal sector, women are more likely to be employed in microenterprises or agriculture. Meanwhile, men may view their earnings as their own and may spend a significant amount on kava or alcohol (CARE 2017). At the same time, much of women's time is taken up by household tasks including, where necessary, the fetching of water and firewood, and the preparation of food, cooking, childcare, cleaning, gardening, and animal husbandry (CARE 2015). There has been an acknowledgement of these inequalities, and their impact on women and girls, by the government. As a

result, there has been some progress in addressing these, including through the development of the National Gender Equality Policy in 2016 (Alpira, Kidd, and Morioka 2017). Yet McCormack, Jennings, and Kenni (2020) note that progress is impeded by a continuance of patriarchal values, limited capacity to implement changes, and resistance within departments. This supports Arora-Jonsson (2014) notion that, in many countries, gender mainstreaming remains a tick-a-box exercise rather than a radical campaign of action.

Gender-based violence is a significant issue in Vanuatu with over 60% of women and girls having experienced violence at the hands of an intimate partner or family member, and 72% of these being left with a permanent injury (DFAT 2012; UN Women Asia and the Pacific 2021). Violence is reportedly two-and-a-half times higher for women who have been the subject of bride price (Takono 2021).

Gender research from across the world reveals that violence against women and girls escalates during and after disasters (see, for example, Parkinson and Zara 2013 in the context of Australian bushfires; and Whittenbury 2012 in the context of Australian droughts), that women and girls are particularly at risk during these times and that violence can escalate depending on intersecting factors such as place, race, and socio-economic circumstances. In post-disaster circumstances, women and girls can experience escalated violence, reduced access to education, increased workloads, and reduced food security (McLeod et al. 2018; Alston and Akhter 2016). As climate disasters increase in frequency and intensity, it will be the responsibility of the international community and the national government of Vanuatu to prevent exacerbated harm to women and girls in Vanuatu.

Climate change in Vanuatu

In Vanuatu, climate-induced disasters are manifest through more powerful cyclones, extreme temperatures, droughts, and sea-level rises that are swamping coastal villages (Esswein and Zernak 2020). These are accompanied by heat stresses, changing rainfall patterns, reduced agricultural production, health impacts and food insecurity (Esswein and Zernak 2020; McLeod et al. 2017). Agricultural and food production, and the once-vibrant market garden economy are under threat. Cyclone Pam in 2015, for example, was the most intense cyclone ever recorded in the Pacific, leaving a trail of destruction across the islands, destroying houses and infrastructure, and impacting food production and gardens. This was followed by Cyclone Harold in 2020 that had similar impacts on more than 40% of the population across the northern islands of Vanuatu (Esswein and Zernak 2020).

The risk of a major climate event/hazard becoming a disaster is highly dependent on the living conditions of the people affected, and the capacity to respond (The World Risk Index 2022). Under these criteria, Vanuatu is listed

as the most at-risk country in relation to climate change in the United Nations University World Risk Index (The World Risk Index 2022). It is against this background that we undertook our research.

About the research

This study emerged from a much larger project funded by the Global Climate Fund (GCF) through the Secretariat of the Pacific Regional Environment Programme's (SPREP). The larger project was designed to deliver climate information services to Vanuatu through Vanuatu's Meteorology and Geo-Hazards Department. The project, known locally as the Vanuatu Klaemet Infomesen blong Redy, Adapt mo Protekt, or Van-KIRAP, aims to strengthen disaster preparedness through greater access to climate information. As part of this project, co-authors Fuller and Alston, were funded to deliver a gender and social inclusion analysis and action plan. This article is based on findings delivered in the final report (Fuller, Alston, and Kwarney 2021).

This research was initially to be conducted in 2020. Due to the Covid-19 pandemic and lockdowns in both Vanuatu and Australia, the research was delayed until 2021. As lockdowns persisted through 2021, co-author and post-graduate student from the University of the South Pacific (USP), Nikita Kwarney, a naturalised ni-Vanuatu citizen, based in Vanuatu, was recruited to undertake the field work components of the project. Supported by SPREP and her co-authors, Kwarney conducted focus group discussions, in five target communities from three islands: Santo, Efate and Tanna. Kwarney's input proved invaluable as she is fluent in the local language, Bislama, and was able to nuance the discussions around local conditions. Focus group discussions were recorded and later translated and transcribed into English by Kwarney who also documented her observations through rich text-based personal participant observations.

Our wider research project incorporated 22 focus groups discussions with various groups within the country on climate impacts, household responsibilities, and climate information service needs. This paper draws on results from five women-only focus groups discussions held in Epau on the island of Efate, Port Resolution and Greenhill on the island of Tanna, and Lonnoc and Sarakata on Santo. In total, 62 women participated in these focus groups (see Table 1). While focus group discussions were chosen to maximise participation,

Table 1. Women's focus groups.

Island	Community	Number of women participants
Efate	Epau	8
Tanna	Port Resolution	16
Tanna	Greenhill	17
Santo	Lonnoc	11
Santo	Sarakata	10
		Total 62

they do have limitations including participants' reticence to intervene in discussions in front of peers for fear they may have views that might be criticised by other members, and participant unavailability at the chosen time. However, as Walters (2020) and Harrison and Ogden (2021) note, feminist focus group research requires a relinquishing of control on the part of the researchers and an acknowledgement of the participants as experts. Kook, Harel-Shalev, and Yuval (2019, 87) also note that adopting feminist principles in focus group research 'not only allows for the collective construction of meaning and knowledge', but also means research subjects will not be isolated from their social context. The conducting of the focus groups in local language, in women-friendly, open and familiar spaces, with food available, and with an innate understanding of local *kastom* and issues, enabled Kwarney to endorse local expertise, put women at ease and build a strong rapport which elicited valuable local information. Participants were asked a series of questions relating to social, cultural and climate change, their livelihoods and daily routines, experiences with climate disasters, traditional knowledge, agriculture and food security, decision-making, early-warning systems, how best to relay climate information to people, and gendered experiences.

Thematic analysis was undertaken on the final transcribed and translated data in a series of steps including familiarisation with the data, identifying categories, searching for themes, mapping relationships between the variables and highlighting typical quotes (Braun and Clarke 2006; Nowell et al. 2017). This was done without the use of a computer program. The research was given approval by the University of Newcastle ethics committee.

In discussing Vanuatu women's lives and the uncertainties of climate change, it is important to pull back from defining a unidimensional, vulnerable 'third world woman' constituted through patriarchal, post-colonial power (Mollett 2017, 150) or indeed a 'virtuous woman' intent on saving the environment (Arora-Jonsson 2011, 745). The women who took part in this study note the gendered constraints that shape their lives and work at the same time as they push for recognition of their rights and circumstances. Women have agency and are ideally placed, through their work in food production and the maintenance of livelihoods, to advise and shape global responses to climate change. As we move on from a lacklustre COP27, it may be time for the world to stop posturing and to critically understand that the impacts of climate change are shaped by complex contextual factors that disproportionately threaten the lives of women and girls, particularly in low GDP countries. The urgency that this task demands was not on display among the critical leaders at the COP meeting. In fact, one might argue, we were instead viewing the inner workings of the *global* patriarchy focused, not on the lives of those most at risk, but on economic development prioritised over global human rights. COP leaders might note the wisdom of ni-Vanuatu women to grasp the impacts of climate change and to understand the experiences of

those most affected. In doing so, they might come to know women's resilience and the capacity of island peoples to advise global leaders on this global moral dilemma.

Observable social changes

Across the three islands, and adding to the complexity of climatic changes, women note population increases placing pressure on resources and food security. At the same time, education levels are rising and there is an increasing trend for men to seasonally out-migrate to earn remittance income. Thus, the abrupt closing of borders because of the Covid-19 pandemic had a significant impact on livelihoods, not only halting the outmigration of workers but also affecting women's roadside stalls and market produce sales. Paradoxically, another significant change noted by all groups, is that *kastom* appears to be breaking down under these circumstances.

Nonetheless women's daily routine remains largely unchanged revolving largely around children, church, community work, bible study, fellowship, washing clothes, cleaning and income earning. 'We don't waste a single day' ... 'We're the managers' (Lonnoc women). Women across the various communities corroborated this gendering of roles, noting that women are very busy doing cleaning, cooking, working in gardens, washing, looking after children, and collecting firewood. 'The workload is very huge for me' (Greenhill women).

Climate change and cyclone experiences

The impacts of climate change in Vanuatu are evident within the communities of Vanuatu. Sea-level rises, more intense and frequent cyclones, temperature changes, loss of food sources and ecosystems are well understood within the communities. Physical impacts including damages to houses and other infrastructure, to family homes and beaches, and to loss of biodiversity were evident to the research team member conducting the focus groups. For families, climate change is manifest in several ways - in the damage to their homes and gardens and physical infrastructure such as schools and churches, in the loss of secure food sources, in changing seasonal conditions and in loss of livelihoods. For communities, in tabulating these impacts it might appear that climate change is gender-neutral. Yet, this is not the case because, as we have documented, power dynamics and *kastom* place restrictions on women that ensure climate change impacts will be magnified.

All groups of women articulate serious evidence of climate change and its impacts. 'Climate change is the main global issue affecting us today' (Port Resolution women). Evidence of climate hazards vary across the islands. In Sarakata, women note that, as the sea levels rise so, too, does the river, creating erosion and damaging trees along the bank. Sarakata women whose

homes are near the river are also in danger of losing their homes as some houses have already washed away. One woman describes how her house had fallen into the river leaving her and her children homeless. Women in Sarakata note that temperature changes are no longer predictable – it can be unseasonably cold in April/May, impacting their ability to grow seasonal crops. Women in Lonnoc refer to devastating cyclones, the loss of mango trees and rising temperatures, leading to a loss of crops. They also note that the beaches have eroded away and ‘the beautiful place we once saw in the past has disappeared.’

Epau women report declining resources including fish, trees, coral, mangroves, crabs, clam shells, and flying foxes. They observe that sea levels are rising, their fishing is poor, and that their gardens and food crops are attacked by wild pigs leaving little or no produce for markets. Port Resolution women note that sea levels are rising and affecting their beaches – ‘the sea will dig it [the beach] up’. They note that big trees have fallen and that the crossing to Cook Island is harder to navigate because there are deeper and higher tides. They also commented that, because of sea level rises, their school will need to be relocated within 20 years and that landslides have changed the landscape. ‘This was paradise’ they state, and now it’s not. They describe the size of yams as smaller with one woman noting she was ‘ashamed’ to offer these at her sister’s wedding ceremony. Staples like taro now easily rot, and fire ants and cabbage worm are eating the yams, taro, and cabbage. Bananas, watermelon, cucumber, and corn are now scarce and edible shells are gone. The coral has turned all white and fish are moving out of the coral to deeper waters. The hot springs are affected as they are now covered by rising seas and the path to the sea is harder to navigate. Greenhill women note that wild cane – that used to be a fundamental building material – is now limited or gone, and this has impacted the building of homes and shelters. They also note that there is too much rain and the food crops rot after a very short time. The taro and yam are smaller, and they also note that edible shells have disappeared. Where once fish could easily be caught, they now must ‘spend longer hours than before trying to catch something.’

Sarakata women discussed their experiences during a cyclone. One woman recalls, ‘we ran to the school, we saved ourselves there’ – but her house was destroyed. ‘I was just crying like a crazy person,’ she said. Another woman, commenting on the aftermath of cyclone Harold in 2020, notes, ‘I couldn’t find my house. I tried hard to locate it ... then I saw there was a hole and that my entire house had fallen into the hole.’ Another woman recounts, ‘When the cyclone came, I went to hide and hide all the children. When we came out of hiding after the cyclone, I found that my house wasn’t there anymore. ... our daddie [husband] is not with us and the cyclone damaged me as a mamma.’

Sarakata women note that their houses are unstable and susceptible to weather events. Some ‘live in houses that aren’t straight – they are rotten.’ Port

Resolution women note that their houses are now unstable – ‘when it rains the ground keeps collapsing.’ Sarakata women discuss the difficulties associated with fixing their houses when they are on their own – ‘we don’t have anyone to help us.’ This is a particular concern after cyclones. One daughter discussing impacts on her mother following a cyclone noted: ‘she had to pay for transport to go to the garden to replant all the food so that she can sell it in order to rebuild back the house that we lost during the cyclone.’ Another woman recalls having to ‘to seek shelter ... while I built back my house again.’ Several women discuss the difficulty related to feeding and looking after children in these circumstances. Most women have experienced hardship, this is particularly true for women who have no husband, or whose husbands are absent.

Greenhill women note that cyclones now come at random times in contrast to previous experiences so ‘some people are unprepared.’ Now the ‘cyclone comes almost every year and destroys plant crops in the garden – then after the cyclone there is rain and people don’t have a chance to plant again or rebuild houses.’ They also note that ‘the cyclone causes the water to become dirty and then children get diarrhoea ... sickness comes so quickly every time after a disaster’ and that it also affects women’s menstrual cycles. They note that violence against women can escalate after cyclones when houses collapse and they might have to sleep in the church building. In this environment, women feel unsafe.

Gardens and food security

Market gardens are highlighted as important to every participant in our research regardless of age or where they live. Gardens are a source of household food subsistence and market produce that results in income. Women work in their market gardens regularly and sell their produce in the markets. Sarakata women note that they produce island cabbage, banana, bok choy, and flowers. ‘Everyday is just home, garden and back ... I have freedom and I am my own boss.’ There is general agreement that climate change is having a detrimental impact on gardens and that there are changes in what can be produced. Lonnoc women state that these changes dramatically affect food security. ‘We don’t have large food crops like before, so we don’t have good food to sell and earn income.’

Women in Greenhill note that population increases are putting pressure on land, resulting in smaller areas for gardens and this is impacting on their capacity to produce food for consumption and sale. They note an increasing trend for rice and tinned meat replacing traditional foods, stating this is having a detrimental effect on their and their children’s health. Responding to the official campaign urging families to revert back to traditional foods, one woman questions ‘Where should I get food to feed my children?’

Women were asked to comment on their daily routines, and while many discuss getting children to school, implicit in their comments is the difficulty

some women have providing food for their children: 'they see the same food again and again with just coconut milk,' 'they need meat.' Married women note that if their husband spends all their money on kava 'this makes the children face a hard time to eat and find food.' Others note that 'sometimes there is no money to buy bread,' 'sometimes the food is not enough,' and 'it's like a cyclone, every day we get up and face challenges regularly.' Those who are on their own speak of hardship 'where our daddies [husbands] left us' and how they struggle to feed children.

In Sarakata, several women have formed a cooperative venture to help each other with market interactions. Having attracted microfinance, they are in business selling their produce at the roadside food market. 'We work together in one team.' 'We cooperate together as one group – all of us are from 6 houses – we come together and build up to help our lives together.' One woman notes that, after the cyclone, the produce grew 'big and good.' Another notes that their 'living has improved' since they formed the group. They have found solidarity together, particularly after the cyclone and the need to rebuild.

Gender and decision-making

There is little doubt that constructions of power constrain the lives of women in Vanuatu and that women's everyday responsibilities are shaped by gendered expectations that are supported by *kastom* and traditional practices. Sachs and Patel-Campillo (2014, 5) explanatory concept of 'inequality regimes' is useful in understanding gendered power relations in Vanuatu. This is defined as those systems of power that are deliberately shaped to support masculine power and privilege. In Vanuatu inequality regimes support the dominance of masculine power and privilege and these are dictated very powerfully, but not solely, by *kastom*. Political processes also act to ensure that women are excluded from public positions of power. While the country has embraced gender equality policies from global to local levels, the reality is more complex. Structural issues such as the chiefly system, the dominance of the church, and the prominence of male-dominated *nakamals* in decision making place constraints on women and reinforce a male-dominated system of power. This, in turn, impacts women's lives and circumstances, including their experiences of violence and their capacity to respond to the increasing threats posed by climate change.

Evidence of inequality regimes are not hard to find in Vanuatu. There are no women in parliament, men control land and resources and dominate local decision making through the chiefs and *nakamals*. Women's experiences of violence and the continuance of bride price are but two examples of practices that reinforce this male privilege. Thus, when we discuss the impacts of climate change on women and girls in Vanuatu, we understand that these impacts are overlaid on the lives and work of women, already shaped by

inequality regimes, supported by systems of traditional power, and through intersectional oppressions (Crenshaw1991). Rather than simply stating (as is common in climate and gender discourse) that this renders women particularly vulnerable, we argue that the responsibility to address climate change and gender inequality is heightened. The women of Vanuatu expect more and deserve better.

Women in all focus groups were asked what gender means to them. Many interpreted the concept as relating to equal rights. For example, 'Gender is about equal rights – where women have the same rights as men.' One woman in Epau sees it as an empowering concept, 'When we talk about gender all mammas (mothers) are glad because many times all papas (fathers) they think highly of themselves and that they have more power than all the mammas.' Lonnoc women suggest that gender is about 'two groups of people working together. That is when men and women share their ideas and work together.' Some feel gender is about 'the differences between men and women' (Sarakata women), while others had not given it much thought: 'we do not know what gender really means' (Port Resolution women). A woman in the Greenhill group noted, 'there should be training to help and support people to understand gender.'

Overall, women discuss the gender role stereotyping that occurs in their communities and families, creating unequal power relations and an increased burden of work for women. Comments from women include, 'men and women share responsibilities although women have different challenges as well.' Another noted that she is 'a busy mother, I do all the chores myself while the father wakes up in the morning and walks around doing nothing until afternoon when he drinks kava.' Another noted that 'mothers have a lot of work to carry out unlike fathers who waste time sitting around waiting for two or three in the afternoon to drink kava.' The artificial nature of gender stereotyping is revealed by women who are not tied to strict gender roles. For example, one woman in the Port Resolution group noted that she is 'a divorced woman so I can pick up a chainsaw and there is no problem.'

Not surprisingly, discussions of gender, gender-based violence, and gendered workloads arose in discussions. The issue of male violence against women crosses all age groups. One woman in Sarakata confesses, 'we have to talk to the girls, saying that when they go to school, they have to come back safe.' Women note that men can be jealous, and this makes them prone to inflict violence. For example, if a woman is late home she might 'receive a black eye.' However, if a dispute escalates, this can be addressed at the local level by the chiefs, as one woman points out, 'if me and my husband have an issue, then I will talk to his [the Chief's] police, they pass on information to the chief then they call a meeting to solve the issue.'

Women in all groups agree that the chiefs lead decision making in their villages 'but we are the busiest ones.' Because of the way power is structured

around the local chief and the male-dominated nakamals, women may only participate in the lower ranks of decision making. Leadership positions are overwhelmingly filled by men, a source of some frustration for women, 'they forget that all mammas have a little knowledge that they can share' (Epau women). The chief determines what work is to be done in the community and allocates tasks accordingly. Greenhill women note that power lies with the chiefs, but also with pastors. Epau women, too, state women's time is dictated by their work for the chief or the church, 'we do what the chief tells us to do' and 'women will obey whatever instruction men give.'

Women are also physically excluded from decision making spaces. A woman in Greenhill notes that, 'men will not allow women to come inside the nakamal because only men have the right to talk inside the nakamal but not women – so I see this as a challenge.' Further, the 'nakamal is like a church where men slap their chest and are bossy.' They also note that this environment means that 'sometimes during meetings in nakamals where there's a lot of men, we're scared of giving our thoughts.'

The processes and power structures at local levels are evident in the local committee structure answerable to the chief, and thus women feel that they have little power at this level. Consequently, there is a degree of resistance to local power processes. 'I'm tired of men being bossy and wanting to take the lead every time. I want them to give me a chance too and take part in the community' (this comment was followed by clapping from the other women). Another woman in the Greenhill group noted that, 'It's time for change where women will stand up for their rights in order for work to be successful'.

These criticisms of inequitable power and women's agency go beyond local processes. Commenting on the way International Non-Government Organisations (INGOs) operate at the local level, a woman from Greenhill notes that INGOs 'never choose a woman to be chair lady – women can be members of the committee and men talk and talk giving directions about what must be done – then later on you will not see any men come to carry out the work, only the women.' In these cases, men gain the glory and good standing, and women bear the brunt of workload responsibilities and time constraints.

Globality

Women are forthright in discussing the impacts of climate change to their lives and work and are very aware of the global significance of their challenges. They believe their experiences are of value to global discussions, as is their knowledge of climate change and its daily face-to-face intersection with climate adaptations. Women understand that they have much to offer to global understandings of climate change and to ways the international communities can respond.

We are women of resilience ... try to push us down but we try to come back up and stand our ground ... we come to sit and listen and contribute to global-wide issues ... we will be here. We will wait for your return so we can move forward as to how to address these issues that affect our future. (Port Resolution women)

Women articulated the reasons they came to a meeting to discuss climate challenges. One responded that it is because 'many times I go to the sea but don't catch fish, [here] I have a chance to speak and say something so they can help us to grow back the coral and help us to plant all natong tong (mangroves) to help the future of our pikinini (children)'. Another notes that she is 'sharing my thoughts and hoping there is something that will come out of it that will help us – we will be glad ... we sat down to achieve something today.'

Conclusion

In this paper we have presented our findings on the experience of the impacts of climate change as highlighted by ni-Vanuatu women. In so doing the study exposes the reality of climate change for people living daily with its consequences including food insecurity, catastrophic weather events, changing seasonal patterns and destruction of homes and infrastructure. However, we note that ni-Vanuatu women's lives and circumstances are impacted heavily not only by climate change but also by existing gendered structural arrangements and power imbalances typified by restrictions on their access to nakamals, decision-making, and to positions of power. These findings seek to inform global discussions of climate change, which appear bogged down by arguments relating to climate targets and, consequently, a reduced focus on the harsh reality of living daily with the manifestations of climate change.

In providing an understanding of the lives of ni-Vanuatu women, we draw attention to the need for both an understanding of rigid gender binary constructions and of intersectional factors that can exacerbate experiences. Yet in presenting the voices of women, we do not wish to label women as endlessly vulnerable. Rather this research exposes the resilience of the women of Vanuatu, as well as their strengths and their wisdom. We urge national leaders meeting in global halls of power to look beyond distant targets decades into the future. For the women of Vanuatu whose houses are falling into the sea, whose small agricultural plots no longer produce enough food, whose lives are bound by the increasing threat of food insecurity, we argue that the time is now to hear the voices of women and to acknowledge that we must act now to protect countries most at-risk to the impacts of climate change.

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References

- Adams, Ron. 2021. "Vanuatu." *Britannica*. Accessed 8 November 2021. <https://www.britannica.com/place/Vanuatu>.
- Ahmed, Sarah. 2020. "Women Left Behind: Migration, Agency and the Pakistani Woman." *Gender & Society* 34 (4): 597–619. <https://doi.org/10.1177/0891243220930698>
- Alpira, Cecilia, Allannah Kidd, and Kate Morioka. 2017. "Climate Change Adaptation in Pacific Countries: Fostering Resilience through Gender Equality." In *Climate Change Adaptation in Pacific Countries*, edited by Walter Leal Filho, 225–239. New York City: Springer International Publishing AG.
- Alston, Margaret. 2015. *Women and Climate Change in Bangladesh*. Routledge, Abington, Oxon
- Alston, Margaret, and Badi Akhter. 2016. "Gender and Food Security in Bangladesh: the impact of climate change." *Gender, Place and Culture* 23 (10): 1450–1464.
- Alston, M. 2020. "Social Work and Environmental Advocacy." In: Todd S., Drolet J. (eds) *Community Practice and Social Development in Social Work*. Social Work. Springer, Singapore.

- Alston, Margaret. 2021. "Gendered Livelihood Adjustments in the Context of Climate-Induced Disasters." In *Gender, Climate Change and Livelihoods*, edited by Joshua Eastin. Wallingford: Cabi Press.
- Andersen, Lykke E., Dorte Verner, and Manfred Wiebelt. 2017. "Gender and Climate Change in Latin America: An Analysis of Vulnerability, Adaptation and Resilience Based on Household Surveys." *Journal of International Development* 29 (7): 857–876. <https://doi.org/10.1002/jid.3259>
- Arora-Jonsson, Seema. 2011. "Virtue and Vulnerability: Discourses on Women, Gender and Climate Change." *Global Environmental Change* 21 (2): 744–751.
- Arora-Jonsson, Seema. 2014. "Forty Years of Gender Research and Environmental Policy: Where Do We Stand?" *Women's Studies International Forum* 47 (Part B): 295–308.
- Australian Government Department of Foreign Affairs and Trade (DFAT). 2020a. *Pacific Women Shaping Pacific Development: Vanuatu Country Plan Summary*. Accessed 13 November 2021. https://pacificwomen.org/wp-content/uploads/2019/01/Vanuatu-Country-Plan-Summary_Overview-of-all-activities_Aug-2020.pdf.
- Australian Government Department of Foreign Affairs and Trade (DFAT). 2020b. *Pacific Women Shaping Pacific Development: Vanuatu Country Plan Summary*. Accessed 7 November 2020. https://pacificwomen.org/wp-content/uploads/2019/01/Vanuatu-Country-Plan-Summary_Overview-of-all-activities_Aug-2020.pdf.
- Braun, Virginia, and Victoria Clarke. 2006. "Using Thematic Analysis in Psychology." *Qualitative Research in Psychology* 3 (2): 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Butler, Judith. 2002. *Gender Trouble*. Abingdon Oxon: Routledge.
- CARE. 2015. *Rapid Gender Analysis: Cyclone Pam Vanuatu*. Accessed 14 November 2021. <https://care.ca/wp-content/uploads/2018/12/RGA-Cyclone-Pam-Vanuatu-7-April-2015.pdf>.
- CARE. 2017. *Rapid Gender Analysis: Covid 19 Vanuatu*. Accessed 11 December 2021 <https://www.care.org.au/wp-content/uploads/2020/04/Vanuatu-Rapid-Gender-Analysis-COVID-FINAL-17.04.20.pdf>.
- Carreon, Bernadette. 2021. "Vanuatu to Seek International Court Opinion on Climate Change Rights." *The Guardian*. Accessed 8 November 2021. <https://www.theguardian.com/world/2021/sep/26/vanuatu-to-seek-international-court-opinion-on-climate-change-rights>.
- Clarke, Matthew. 2013. "God Works and God's Work, a Case Study of Churches and Community Development in Vanuatu." *Asia Pacific Viewpoint* 54 (3): 340–351. <https://doi.org/10.1111/apv.12030>
- Clarke, Matthew. 2015. "Christianity and the Shaping of Vanuatu's Social and Political Development." *Journal for the Academic Study of Religion* 28 (1): 24–41. <https://doi.org/10.1558/jasr.v28i1.25723>
- Collins, Patricia Hill, Elaini Cristina Gonzaga da Silva, Emek Ergun, Inger Furseth, Kanisha D. Bond, and Jone Martínez-Palacios. 2021. "Intersectionality as Critical Social Theory." *Contemporary Political Theory* 20 (3): 690–725. <https://doi.org/10.1057/s41296-021-00490-0>
- Crenshaw, Kimberlé Williams. 1991. "Mapping the Margins, Intersectionality, Identity Politics and Violence against Women of Colour." *Stanford Law Review* 43 (6): 1241–1299. <https://doi.org/10.2307/1229039>
- Cummings, Maggie. 2008. "The Trouble with Trousers: Gossip, Kastom and Sexual Culture in Vanuatu." In *Making Sense of AIDS: Culture, Sexuality and Power in Melanesia*, edited by Lesile Butt and Richard Eves, 133–149. Honolulu: University of Hawai'i Press. Accessed 26 July 2021. <http://www.jstor.org/stable/j.ctt6wqmp8.13>.
- Department of Foreign Affairs and Trade (DFAT). 2012. *Pacific Women Shaping Pacific Development 2012-2022*. Accessed 14 November 14. <https://www.dfat.gov.au/sites/default/files/pacific-gender-equality-strategy.pdf>.

- Djoudi, Houria, Bruno Locatelli, Chloe Vaast, Kiran Asher, Maria Brockhaus, and Bimbika Basnett Sijapati. 2016. "Beyond Dichotomies: Gender and Intersecting Inequalities in Climate Change Studies." *Ambio* 45 (Suppl 3): 248–262. <https://doi.org/10.1007/s13280-016-0825-2>
- Esswein, Ann, and Felie Zernak. 2020. "Pushing Back against the Tide: Vanuatu's Climate Fight." *The New Humanitarian*. Accessed 12 November 2021. <https://www.thenewhumanitarian.org/news-feature/2020/12/1/pacific-vanuatu-disappearing-island-climate-change-cyclone-lawsuit-migration>.
- FAO and SPC. 2019. Country gender assessment of agriculture and the rural sector in Vanuatu. Port Vila. Accessed 16 February 2021. https://spccfpstore1.blob.core.windows.net/digitallibrary-docs/files/79/796dfaa9351782aedf7174717e3c01b3.pdf?sv=2015-12-11&sr=b&sig=AYrHiWkDERB8YhysfnOZ4NP2UNtrovmM10VfUKJDEw%3D&se=2023-05-23T12%3A59%3A24Z&sp=r&rsc=public%2C%20max-age%3D864000%2C%20max-stale%3D86400&rsc=application/pdf&rscd=inline%3B%20filename%3D%22Country_Gender_Assessment_of_Agriculture_and_the_Rural_sector_in_Vanuatu%22.
- Fuller, Sascha, Margaret Alston, and Niki Kwarney. 2021. Gender equality, disability and social inclusion (GEDSI) considerations for the climate information services for resilient development in Vanuatu (VAN-KIRAP) project. Final report prepared for SPREP, October. Accessed 15 February 2022. https://www.sprep.org/sites/default/files/vankirap/Van%20KIRAP_Gender%20Assessment_Final%20Report.pdf.
- Harrison, Katherine, and Cassandra A. Ogdén. 2021. "Knit 'n' Natter': A Feminist R Methodological Assessment of Using Creative 'Women's Work' in Focus Groups." *Qualitative Research* 21 (5): 633–649. <https://doi.org/10.1177/1468794120945133>
<https://pacificdata.org/data/dataset/oai-www-spc-int-0608e051-cd19-4fe7-97b5-ef696c99b0b5>.
- Hudson, Marc. 2017. "It's Ten Years Since Rudd's Great Moral Challenge, and We Have Failed It." *The Conversation*. Accessed 22 November 2021. <https://theconversation.com/its-ten-years-since-rudds-great-moral-challenge-and-we-have-failed-it-75534>.
- Kaviamu, Mary Jack. 2016. *The Long Journey: Political Acceptance of Women*. Accessed 21 November 2021. <https://devpolicy.org/long-journey-political-acceptance-women-20160308/>.
- Kinnvall, Catarina, and Helle Rydstrom. 2019. "Introduction." In *Climate Hazards, Disasters and Gender Ramifications*, edited by Catarina Kinnvall and Helle Rydstrom, 1–25. London: Routledge.
- Kook, Rebecca, Ayelet Harel-Shalev, and Fany Yuval. 2019. "Focus Groups and the Collective Construction of Meaning: Listening to Minority Women." *Women's Studies International Forum* 72 (2019): 87–94. <https://doi.org/10.1016/j.wsif.2018.12.004>
- Lau, Jacqueline D., Daniker Kleiber, Sarah Lawless, and Phillipa J. Cohen. 2021. "Gender Equality in Climate Policy and Practice Hindered by Assumptions." *Nature Climate Change* 11 (3): 186–192. <https://doi.org/10.1038/s41558-021-00999-7>
- McCormack, Caitlin, Steve Jennings, and Linda Kenni. 2020. "Gender and LGBTQI Policy and Programming in Vanuatu." Oxfam Research Report September. Accessed 17 November 2021. <https://oxfamilibrary.openrepository.com/bitstream/handle/10546/621057/rr-gender-lgbtqi+-policy-vanuatu-280920-en.pdf?jsessionid=1BCD23D3EE82490DFD4F3E47AB04AB45?sequence=1>.
- Mcleod, Elizabeth, Seema Arora-Jonsson, Yuta J. Masuda, Mae Bruton-Adams, Carol O. Emaurois, Berna Gorong, C. J. Hudlow, et al. 2018. "Raising the Voices of Pacific Island Women to Inform Climate Adaptation Policies." *Marine Policy* 93: 178–185. <https://doi.org/10.1016/j.marpol.2018.03.011>
- Mitzutori, Mami. 2020. "Reflections on the Sendai Framework for Disaster Risk Reduction: Five Years since Its Adoption." *International Journal of Disaster Risk Reduction* 11: 147–151. <https://doi.org/10.1007/s13753-020-00261-2>

- Mollett, Sharleen. 2017. "Gender's Critical Edge: Feminist Political Ecology, Postcolonial Intersectionality and the Coupling of Race and Gender." In *Routledge Handbook of Gender and the Environment*, edited by Sherilyn MacGregor, 146–158. Abingdon, Oxon: Routledge.
- Naupa, Anna. 2017. "Making the Invisible Seen: Putting Women's Rights on Vanuatu's Land Reform Agenda." In *Kastom, Property and Ideology: Land Transformations in Melanesia*, edited by Siobhan McDonnell, Matthew Allen, and Colin Filer, 305–326. Acton, Australia: ANU Press.
- Nowell, Lorelli S., Jill M. Norris, Deborah E. White, and Nancy J. Moules. 2017. "Thematic Analysis: Striving to Meet the Trustworthiness Criteria." *International Journal of Qualitative Methods* 16 (1): 1–13. <https://doi.org/10.1177/1609406917733847>
- Pacific Women Support Unit. 2021. *The Pacific Women Shaping Pacific Development 2012-2022* Accessed 17 November 2021. <https://pacificwomen.org/#program-overview>.
- Parkinson, Debra, and Claire Zara. 2013. "The Hidden Disaster: Domestic Violence in the Aftermath of Natural Disaster." *Australian Journal of Emergency Management* 28 (2): 28–35.
- Sachs, Carolyn, and Anouk Patel-Campillo. 2014. "Feminist Food Justice: Crafting a New Vision." *Feminist Studies* 40 (2): 396–410. <https://doi.org/10.1353/fem.2014.0008>
- Servy, Alice. 2020. "We've Paid Your Vagina to Make Children!": Bridewealth and Women's Marital and Reproductive Autonomy in Port-Vila, Vanuatu." *Oceania* 90 (3): 292–308. <https://doi.org/10.1002/ocea.5280>
- Surma, Katie. 2021. "Is It Time for the World Court to Weigh in on Climate Change?" *Inside Climate News*. Accessed 13 November 2021. <https://insideclimatenews.org/news/04102021/international-court-of-justice-vanuatu-ecocide/>.
- Tokona, Mavuku. 2021. *Covid-19 financial strain drives up Vanuatu 'bride prices.'* ABC Pacific Beat. Accessed 21 November 2021. <https://www.abc.net.au/radio-australia/programs/pacificbeat/high-bride-prices-vanuatu-despite-covid-19-financial-strain/13443442>.
- UN Development Program (UNDP). 2014. *Human Development Report – Sustaining Human Progress: Reducing Vulnerabilities and Building Resilience*. Accessed 5 September 2020. <file:///Users/margaretalston/Downloads/hdr14-report-en-1.pdf>.
- UN Women Asia and the Pacific. 2021. *Vanuatu*. Accessed 20 November 2021. <https://asiapacific.unwomen.org/en/countries/fiji/co/vanuatu>
- United Nations Office for Disaster Risk Reduction (UNDRR). 2015. *Sendai Framework*. Accessed 14 November 2021. <https://www.undrr.org/implementing-sendai-framework/what-sendai-framework>.
- United Nations University (UNU) and Alliance Development Works. 2014. *World Risk Report 2014*. Accessed 11 December 2021. <https://i.unu.edu/media/ehs.unu.edu/news/4070/11895.pdf>.
- United Nations University (UNU). 2016. *World Risk Report*. Accessed 12 November 2021. http://collections.unu.edu/eserv/UNU:5763/WorldRiskReport2016_small_meta.pdf.
- Vanuatu National Statistics Office & Ministry of Finance and Economic Management. 2017. *Vanuatu 2016 Post-TC Pam Mini-Census Report*. Accessed 14 November 2021.
- Vanuatu Women's Centre in partnership with the Vanuatu National Statistics Office. 2011. *National Survey on Women's Lives and Family Relationships*. Accessed 23 November 2021. <https://pacificwomen.org/wp-content/uploads/2017/09/womens-centre-survey-womens-lives.pdf>.
- Vorbach, Danie, and Jonathan Ensor. 2022. "Autonomous Change Processes in Traditional Institutions: Lessons from Innovations in Village Governance in Vanuatu." *International Journal of the Commons* 16 (1): 173–188. <https://doi.org/10.5334/ijc.1170>
- Walters, Rosie. 2020. "Relinquishing Control in Focus Groups: The Use of Activities in Feminist Research with Young People to Improve Moderator Performance." *Qualitative Research* 20 (4): 361–377. <https://doi.org/10.1177/1468794119847633>

- Whittenbury, Kerri. 2012. "Climate Change, Women's Health, Wellbeing and Experiences of Gender Based Violence in Australia." In *Research, Action and Policy, Addressing the Gendered Impacts of Climate Change*, edited by Margaret Alston and Kerri Whittenbury. New York City: Springer
- World Atlas. 2021. *Map of Vanuatu*. Accessed 30 November 2021. [https://www.pinterest.cl/pin/352336370829432079/?amp_client_id=CLIENT_ID\(_\) & mweb_unauth_id=& simplified=true](https://www.pinterest.cl/pin/352336370829432079/?amp_client_id=CLIENT_ID(_) & mweb_unauth_id=& simplified=true).
- World Bank. 2013. *Going Mobile in Vanuatu*. Accessed 12 November 2021. <https://www.worldbank.org/en/news/feature/2013/11/19/going-mobile-in-vanuatu>.
- World Bank. 2015. *Power to the people of Vanuatu*. Accessed 12 November 2021. <https://www.worldbank.org/en/news/feature/2015/10/21/power-to-the-people-in-vanuatu>.
- World Bank. 2021. *Vanuatu International Tourism, Number of Arrivals*. Accessed 21 November 2021. <https://tradingeconomics.com/vanuatu/international-tourism-number-of-arrivals-wb-data.html>.
- World Bank. 2022a. *Vanuatu*. Accessed 15 February 2022. <https://data.worldbank.org/country/VU>.
- World Bank. 2022b. *Access to Electricity – Vanuatu*. Accessed 15 February 2022. <https://data.worldbank.org/indicator/EG.ELC.ACCS.ZS?locations=VU>.
- World Bank. 2022c. *Access to Mobile Phones – Vanuatu*. Accessed February 2022. <https://data.worldbank.org/indicator/IT.CEL.SETS.P2?locations=VU>.
- World Risk Index. 2022. Accessed 15 February 2022. <https://weltrisikobericht.de/weltrisikobericht-2022-e/#:~:text=%C2%A9%20Haddad%20/%20Welthungerhilfe-,WorldRiskIndex,mean%20of%20exposure%20and%20vulnerability>.