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RESILIENCE AND DEVELOPMENT

RESILIENCE AND DEVELOPMENT PRACTICE IN VANUATU



Jonathan Ensor Stockholm Environment Institute Environment Department, University of York.

July 2016

RESILIENCE AND DEVELOPMENT PRACTICE IN VANUATU

EXECUTIVE SUMMARY

This report draws on two weeks of fieldwork undertaken in November 2015. Discussions and interviews were held in communities with different histories of engagement with development organisations, exploring their experiences of Tropical Cyclone Pam and the on-going El Nino event. The findings reflect on themes found in the academic literature to synthesise recommendations for those responsible for development programming and practice. Analysis focuses on four topics: the significance of differences between social groups in determining resilience outcomes; the nature of local resilience among communities with little or no experience of development interventions; the consequences of development actions for local resilience; and the potential of an alternative framing – resourcefulness – to support a transformation in relationships between communities and different government authorities. Key lessons emerge from this analysis.

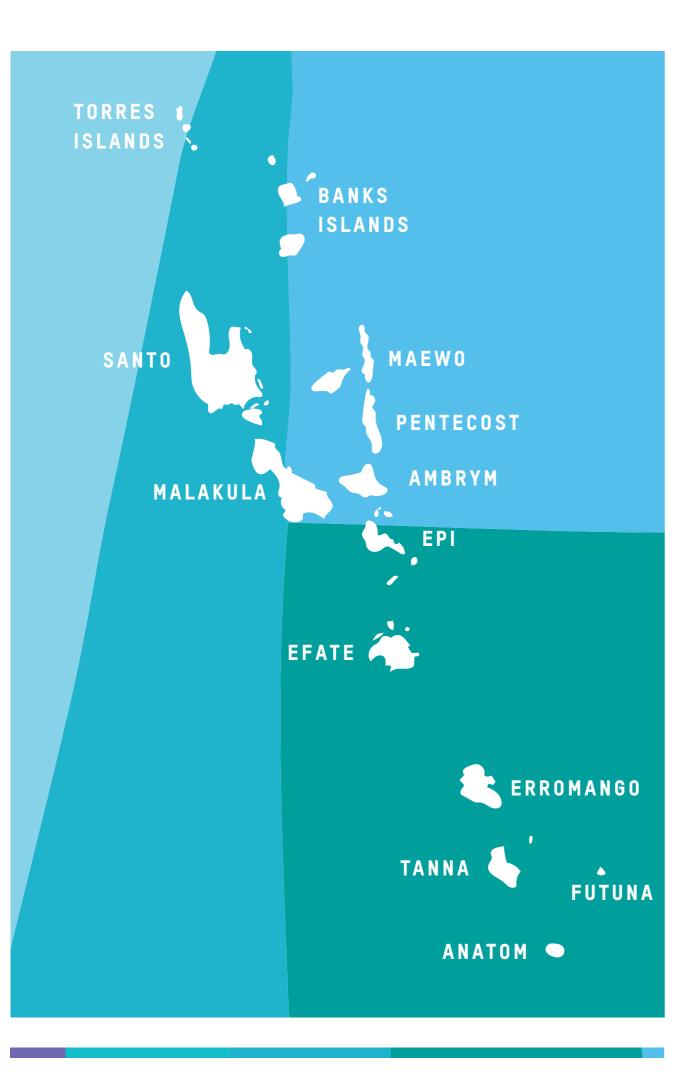
The difficulties of addressing the complex manner in which social difference is produced and reproduced must be a central concern for

development practitioners. Without explicit attention to the deep roots of social and cultural difference, resilience interventions will reinforce or exacerbate existing patterns of vulnerability and exclusion. This remains the case even when participatory approaches such as village development or disaster risk committees are adopted as a mechanism to secure representation of different social groups. In communities that are isolated from development assistance, local resilience is underpinned by intricately woven and diverse livelihood practices and supported by the ability to capitalise on relationships with other actors. There are, however, important limitations to local resilience, much of which is wrapped up in the marginalisation of communities from outside support and formal institutions of government.

Deeply pernicious forms of resilience are also evident in practices of gender-based violence and ostracism of women from other islands. These issues must move higher up the development agenda if resilience programming is to lead to equitable improvements in wellbeing. At the same time, the fieldwork evidence suggests that interventions can undermine local resilience and develop dependency on NGOs as sources of resources, knowledge and skills. NGOs need to develop strategies that gradually build effective and supportive relationships between communities and different levels of government as part of a long term exit strategy.

Finally, the report considers the potential shortcomings of resilience as a framing for development. In development programming and practice, resilience is associated with other frameworks in order to address issues of power and equity. This reflects the neutrality of resilience; it is a concept that has the potential to challenge inequality but is not inherently anti-poverty. As such, adopting a resilience discourse carries a risk, as resilience can and has been taken up by policy makers to justify the continued marginalisation of poor communities from government support. In programming terms, there is cause for significant concern that the weaknesses of resilience overlap with longstanding weaknesses in development practice in supporting communities to challenge resource distribution and the unfair effects of public policy. The report closes by proposing an alternative framing – resourcefulness – as an important counterpoint to resilience programming. **Resourcefulness aims to** support local people to engage in processes that lead to changes that are locally conceived and locally felt. The central concern is with practical support to secure a more equitable share of resources, via a framing that was found to

resonate with the interests and priorities expressed by communities during fieldwork.



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1. INTRODUCTION

This report is based on research undertaken in Vanuatu between 16-27 November 2015, and follows on from fieldwork undertaken a year earlier, during November 2014. Findings and analysis from the first phase were published during 2015 in a joint Oxfam and SEI report, titled "Adaptation and Resilience in Vanuatu: Interpreting community perceptions of vulnerability, knowledge and power for community-based adaptation programming". As with the first report, the aim of this document is to use themes and critical perspectives from the academic literature to provide insights and alternative perspectives on resilience programming. However, the focus of this report is different, and the findings reflect (and reflect on) the changed circumstances in Vanuatu following Tropical Cyclone Pam (March 2015) and the subsequent El Nino event which has led to significant water stress for many communities. In this context, this research has sought to identify key issues related to resilience following Tropical Cyclone Pam that can contribute to in-country, regional and global community-based adaptation and resilience discourse and action. In particular, the fieldwork has investigated:

- the ways that development programming and other interventions supported and
- existing community resilience, and how this can be further supported.

The first report introduced a structure for understanding adaptation and resilience in terms of a spectrum of possible actions: those that aim to support communities to absorb shocks, in adapting to changing circumstances, and in transforming social, economic and/ or political relations to address significant underlying drivers of vulnerability. As Figure 1 illustrates, this spectrum reflects the changing focus of development actors concerned with climate change adaptation. Where the focus is on climate change impacts, adaptations are designed to absorb those impacts in order to secure the stability of existing livelihoods. However, recognition of the ongoing uncertainty associated with climate change has prompted increasing attention to be paid to the ability to adapt. This has meant looking for interventions that enhance flexibility through attention to agency, or the ability of actors to continuously make changes in their own livelihoods.



community resilience in the face of Tropical Cyclone Pam and the subsequent El Nino;



Figure 1: A spectrum of adaptation actions (see also Béné et al., 2014; Pelling et al., 2014).

This marriage of stability and flexibility is the aim of many examples of community-based adaptation practice, where the focus of NGOs has been on both impacts and agency in a bid to support the resilience of communities. The emergence of 'adaptive capacity' as a central aspect of community-based adaptation reflects this, with the ambition being to enable individuals and communities to access the physical, knowledge and decision making resources necessary to make adaptations now and in the future. Where community-based adaptation has been less strong is in relation to recognizing and responding to the structural constraints that limit individual agency and collective action. Addressing these constraints means moving beyond resilience and, in a bid to enable profound changes in vulnerability and human well-being, transforming human and environmental conditions. Versions of this framing of adaptation, resilience and transformation can be found in the academic literature (Bene et al. 2014, Pelling et al. 2014) and a similar approach has recently been embedded into, for example, Oxfam's Resilience Framework (Oxfam 2016). Yet there are inherent challenges to the absorb/adapt/transform framework, as practitioners must focus on understanding the local specificities of complex social relations, while at the same time attend to the significance of cross-scale (local-national-global) power relations in defining the local opportunities for development, adaptation and transformation. These twin challenges – of intra- and inter-community relations – emerged as central issues in exploring the post-Pam context during fieldwork in Vanuatu, and structure the two main sections of this report.

At the community level, cultural and social relations, embedded in long-standing practices, traditions and norms, have created resilience to challenging circumstances. Yet this resilience is unevenly felt among community members, and actions to enhance adaptive capacity are likely to replicate and reinforce these patterns of winners and losers in current and future adaptations if the nature of social relations is not seriously and systematically considered within development interventions. In the academic literature, these issues are captured in concern about social difference, and the potential to decontextualize programming through a focus on the attributes that make up a resilient community rather than on how local conditions inevitably shape the outcome of programming. "Resilience for whom" has emerged as a central question, and there is concern that resilience can lead to undesirable and unintended consequences if it operationalized through a checklist approach of resilience characteristics (Ensor et al. 2016, Cote and Nightingale 2013). In practice, resilience is frequently operationalized by development agencies via participatory approaches, such as community-based adaptation, or with an emphasis on understanding context, and adopting inclusive processes (Oxfam, 2016). Yet the academic literature suggests that there is a deep complexity to social relations, in particular in the interaction of power, agency and institutions – which includes those institutions used to facilitate participatory approaches. There are, therefore, multiple challenges for development practitioners working on resilience in communities. Fieldwork responses drew attention to the significance of social difference to resilience, the nature of existing community resilience, and the consequences of external interventions for local resilience. These topics are covered in section 2.

Despite increasing reference to transformation in discussions of resilience, NGOs appear reluctant to engage with structural relations that cut across scales and constrain a community's viable development trajectories and adaptation options. As argued in the first report, an understanding of context is necessary not only at the community level – it also needs to identify and address structural issues that underpin patterns of local resilience and vulnerability. However, case studies suggest that, while techniques and interventions aimed at absorbing climate change impacts are well represented in programming, activities at the other end of the spectrum – focusing on transformation through attention to structure and agency – are significantly less common. The community members that were consulted for this fieldwork identified numerous structural constraints on their adaptation and development options. In particular, many made observations that suggested programming should focus more directly on their vision for their own development, and their access to, understanding of and relationships with actors and institutions in government at different levels. These observations chime with an approach to programming proposed in the literature as 'resourcefulness', in which support for communities is framed around enabling local people to engage in processes of transformation. Section 3 of the report introduces the concept of resourcefulness, considers its relationship to resilience, and analyses the case studies from this perspective.

Prior to these two substantive sections of the report, there follows a brief overview of the three case study contexts, and an explanation of the methods used during the fieldwork. The final section of the report provides an overarching conclusion (section 4), drawing together ten key findings and making nine recommendations for future resilience programming and practice (section 5).

1.1 THE CASE STUDY: THREE ISLANDS

The fieldwork that underpins the findings in this report was undertaken with communities in the villages of Leitokas (on the island of Malakula), Harald Bay (Futuna) and Tomali (Epi). Leitokas lies on the western shore of Malakula and as such was relatively sheltered from the worst of Tropical Cyclone Pam (see Figure 2). Epi lies the closest of the three islands to the centre of the cyclone and experienced significant destruction, as did, to a lesser extent, communities on Futuna (east of Tanna).

A further important distinction between the case study communities is the degree to which they have prior experience of development interventions. In this regard, Futuna contrasts sharply with Malakula and Epi. Communities on Futuna have experience of working with development organisations for several years, and in Harald Bay a program of work that CARE International started in 2008 was still on-going during November 2015. As noted in the first report, CARE International's work in Futuna was part of the Vanuatu NGO Climate Change Adaptation Program, a consortium of local and international NGOs working across Vanuatu with Oxfam as the lead agency. Malakula has no prior experience of external development projects (although the community in Leitokas is integrated into a turtle conservation program convened by Wan Smol Bag, who Oxfam will be supporting to undertake community development in Leitokas commencing in 2016), and those in Tomali (Epi) were, at the time of the fieldwork anticipating working with Oxfam for the first time. These differences allow the main body of the report to explore post-Tropical Cyclone Pam reflections on programming (in Futuna) and local responses to environmental stresses and shocks (in Epi and Malakula). Moreover, these cases allow for comparison between resilience experiences that have been significantly externally informed, and those that are more local or indigenous in character. The connection to Oxfam in all three cases was essential to securing the access and support necessary for the research reported here to be undertaken.





Figure 2: Track of Tropical Cyclone Pam, approx. 0200hrs 12 March 2015 – 1900hrs 14 March 2015.

There are also important similarities and differences in terms of issues that were identified as significant during the fieldwork interviews and discussions. This context is set out in brief on the following pages, providing background to the analysis in the main body of this report.

1.1.1 HARALD BAY, FUTUNA

Tropical Cyclone Pam and its impacts dominated many discussions in Futuna, with particular attention paid to the role of the Community Disaster and Climate Change Committee (CDCCC). Tropical Cyclone Pam caused significant damage in the community, in the worst cases destroying part or all of people's homes, but also damaging gardens and causing, for many, an acute food shortage that was only relieved when different agencies brought foodstuffs to the island. The CDCCC was crucial in organising people prior to the cyclone, checking that essential activities had been undertaken (such as securing roofs or removing tree branches that could cause damage to property) and bringing support to vulnerable community members, including identifying safe houses in which those with weaker homes could shelter. The CDCCC also provided information in the run up to the cyclone, letting the community know when they could expect the winds to arrive and what needed to be done at particular points in time, and undertook assessment activities and distributed tools and supplies in the aftermath. Overall, the CDCCC were seen by many community members to be crucial in raising awareness, providing training and giving support immediately prior to and after the cyclone.

Water access was ranked as the most significant current issue by participants in each of the focus group sessions. Harald Bay lies on a plain that is accessed by a steep walk up from the beach, and situated below the equally steep sides of the mountain that dominates Futuna. Community members perceive that there is enough water, but a combination of leakages and small storage tanks Emergance of new pests has contributed to crop failure. contribute to persistent shortages and low pressure. Photo: Arlene Bax/CARE This in turn is preventing the community (including the school) from installing flush toilets, with associated effects on hygiene. Those judged to be most vulnerable include children and disabled people. Water access problems are also increasing the workload for those with home gardens, who would benefit from a secure supply for seedlings and vegetables. Community members also identified the failure of their crops as a problem, particularly during the current (El Nino) dry period and with the emergence of new pests following Tropical Cyclone Pam. While some pointed out that their diet had improved after the cyclone, with vegetable planting encouraged by NGOs (who supplied seeds) and supplemented by access to rice and local fish, many expressed concern over whether they would be able to continue to access food if regular rainfall does not return.



1.1.2 LEITOKAS, MALAKULA

While the impacts of Tropical Cyclone Pam were less severe in Leitokas than on Futuna and Epi, the population still experienced significant disruption and hardship, with community members expressing shock at how quickly the cyclone arrived. In the absence of a community disaster committee, individuals heard about the coming cyclone in different ways, with some being taken completely by surprise. Following Tropical Cyclone Pam, damage to homes and access to gardens (which they had become cut-off from by a flooded river) were particular issues. However, for many community members, the current El Nino induced drought has come to be a much more significant and lasting challenge, with long standing water access issues further aggravated by a significant reduction in river flow. The community rations water access for each household, but the drought is killing cattle (a significant household asset) and dramatically reducing yields of subsistence and cash crops (coconut, peanut and cocoa). Decreasing food availability has led to many reports of stealing, and is undermining traditional food sharing practices.

Leitokas, which approximately translates as "mosquito place", lies in an area of flat land on the coast, surrounded by hills that are covered in bamboo forest. In a reflection of the challenges to water access, focus group members described water as "the road to everything". Their vision for water access includes toilets and bathrooms, improved household cleanliness and hygiene, reduced drudgery due to the long distances that they need to travel with water carriers, and being able to build bungalows to house paying guests. However, access to hospital and healthcare also ranked highly in community concerns, in

particular due to the lack of local healthcare and the high cost of boat transport and overnight stays (Leitokas is highly isolated and walking routes to the community are extremely challenging). Vulnerability varies, with the elderly and female headed households experiencing particular challenges in food and water access, while those with larger or more accessible landholdings on the whole remain able to secure food and cash income. Interviews also revealed that violence against women is common and largely unchallenged in the community.

Vulnerability varies, with the elderly and female headed households experiencing particular challenges in food and water access, while those with larger or more accessible landholdings on the whole remain able to secure food and cash income.

1.1.3 TOMALI, EPI

Tropical Cyclone Pam had a huge effect on the community of Tomali, with both wind and waves causing serious damage to houses, crops and livestock in this coastal village. At least one person died while people evacuated their homes during the cyclone, and establishing whether community members were injured was hampered by fallen trees and debris blocking access to houses. Water access became a major challenge following the cyclone, as did food ("children were hungry"), not least due to damage to gardens and the destruction of fences, without which cattle were able to access cultivated plots and eat the remaining crops and young plants. Selling kava usually provides a significant income for the community, but many kava plantations were destroyed. Many individuals were unprepared for the cyclone; those who had heard via radio or mobile phone did not believe that the cyclone would hit and, as a consequence, failed to prepare. In the aftermath, focus groups described being overwhelmed by the number of challenges and being unable to prioritise reconstruction activities (e.g., repairs to houses, kitchens, garden crops, livestock fences and access roads).

Significant support was received from both governmental and non-governmental organisations following the cyclone, but access to cash has been a important barrier to reconstruction, and many homes remain only partially repaired. These income generation problems have been exacerbated by the current El Nino drought, which has undermined peanut and copra production, as well as kava. However, it is water access that is the dominant issue in the village, rooted in a longstanding dispute with a neighbouring village who have cut-off the Tomali water supply. While the community has access to hand pumps, these need repair, cause injury to users and are located at a significant distance from the village. The resulting drudgery is a significant constraint on community activities, and households lack access to adequate hygiene.



1.2 METHODS

Focus group discussions (FGDs) and semi-structured interviews (SSIs) were relied on to gather data in communities, with questions structured to explore the main research themes (the ways that programming supported community resilience; the nature of existing community resilience and how this can be further supported). Focus group discussions were relied on to provide a sense of the shared understanding among participants; while this approach necessarily offers insights that are relatively broad (rather than deep), it also provides a setting in which the issues raised can be discussed between participants and responses debated. In contrast, semi-structured interviews were employed to develop a deeper understanding of individual perceptions and experiences.

In both cases, a guide was produced setting out the methodological approach and listing questions that were intended to open discussions around the key themes. These guides were discussed by the project team during a workshop in Efate, prior to commencing fieldwork, in order to supplement the questions with insights from local practitioners, generate a shared understanding of the methods and their aims, and to produce a Bislama translation of the guides. In addition, the team discussed an alternative approach – life story interviewing – in which the goal is to encourage the subject to tell "the story of his or her life," in his or her own words, prompting only when necessary. Atkinson (1998: 41) suggests that "the less structure a life story interview has, the more effective it will be in achieving the goal of getting the person's own story in the way, form, and style that the individual wants to tell it in". This approach was introduced to supplement the individual SSI guides, with a view to encouraging researchers to pursue a less structured discussion (relying on the question guide as a series of openings for further conversation) and securing more detailed case histories of resilience experiences.

Table 1 provides details of the numbers of interviews and group discussions in each location. For both KIIs and FGDs, men, women and (when available) youth were interviewed separately, and sessions were held in places where participants felt comfortable and were afforded a degree of privacy – in particular, being away from the hearing of others – to support uninhibited discussion. On each island, SSI participants were identified who had fared well and less well during and after Tropical Cyclone Pam and/or the on-going El Nino, in order to explore differing experiences of resilience. An additional FGD (male) was added in Malakula to follow up on specific questions related to the emerging significance of 'resourcefulness'. These additional questions were subsequently integrated into the FGDs or SSIs on Futuna and Epi where appropriate. The fieldwork on Epi was carried out by the Ni-Vanuatu research team, led by those team members who had previously worked with report author on the other two islands.

Some challenges were faced during the data gathering. In Futuna, there was a long process of negotiation to secure access to KII subjects, working with our local contact to establish positive and negative stories of resilience in the community. It appeared that there was reluctance to identify community members who had coped and/or recovered badly during Tropical Cyclone Pam and its aftermath, perhaps reflecting an underlying desire on the part of a leading community member to present a positive picture of community resilience. Generally, there was a mixed response to both FGDs and KIIs, with some groups and individuals willing to talk expansively, and some displaying considerable reluctance. However, despite these challenges, the methods revealed a rich picture of experiences of resilience and vulnerability in each setting.

	Focus group discussions				Key informant interviews						
	Male	Female	Youth		Youth		Male Female		Youth		
			М	F			М	F			
Malakula (Leitokas)	3	2	1	1	4	4		1	16		
Futuna (Harald Bay)	2	2	-	1	4	4*	-	2	15		
Epi (Tomali)	2	2	1	-	1	2	-	1	9		
Total	7	6	2	2	9	10	0	4	40		
Total (Male)	7		2		9		0		18		
Total (Female)		6		2		10		4	22		
Total (FGD/KII)	17		23				40				

Table 1: distribution of interviews and focus groups by location and gender.*Futuna Female KIIs – two older women and two younger women

2 **RESILIENCE REALITIES** 2.1 SOCIAL DIFFERENCE AND RESILIENCE

This section is concerned with the identifying whether resilience is experienced differently by those individuals and groups that live within a particular community. In the first report (Adaptation and Resilience in Vanuatu, November 2015) attention was drawn to how individual perceptions of risk and vulnerability vary within communities, shaped by differing experiences of livelihood opportunities and threats. Patterns of vulnerability emerge within communities: often risks and vulnerability will be unequally distributed, multifaceted, and with drivers that cut across scales (Dodman and Mitlin, 2011). Furthermore, individuals often differ in their influence and capacity to create changes to the situations in which they find themselves. For example, studies highlight how cultural and power relations shape how local risks are understood, prioritised and managed in adaptation decision making processes (Granderson, 2014, Artur and Hilhorst, 2012; Ayers, 2011; Yates, 2012). Environmental change and social, cultural and economic factors interact to generate "causal clusters" that act (unevenly) on communities and their environments (Fook, 2015).



Resilience for whom? Women, particularly widows have a different experience of reslience to others of higher standing in the community. Photo: Arlene Bax/Oxfam

All of this suggests that we need a deep and carefully nuanced understanding of communities. Communities are in fact characterised by unequal access to knowledge, resources and decision making (Yates, 2014). Yet the notion of 'community' can itself be a barrier to understanding this context: 'community' suggests homogeneity and, perhaps, a locality characterised by fair decision making. Instead, local decision making frequently leads to inequitable outcomes. Paradoxically, the real, on-the-ground legitimacy afforded to inequitable decision making institutions can arise from the maintenance of exclusionary social relations (Agrawal, 2005). Simply introducing new participatory decision making rules, via committees or other development-led institutions, overlooks the role played by deep rooted relationships. As a result, these interventions may, in fact, create new and further opportunities for exclusion or marginalisation of vulnerable groups.

Delving deeper means not only recognizing the unequal outcomes of different institutional decision making processes (such as in the home, or in village meetings), but also the "nested political and social processes that give rise to the production and reproduction" of these institutions (Cote and Nightingale, 2012: 481).

Development actors must keep in mind that the outcomes of interventions are socially differentiated, and generated through the interaction of power, cultural values and institutions – often in ways that are not readily observable or immediately understandable.

Gendered outcomes of male-dominated village meetings, for example, are the result of cultural and social relations of power and influence between men and women, played out (i) over time, (ii) in village meetings, (iii) through village meeting decisions, and (iv) outside of the arena of the village meeting. The interaction between men and women, men and men, and women and women at different times and in these different settings ultimately combine to create unequal outcomes. This, then, is the context that efforts to address inequality must address.

This understanding of the production and reproduction of risk and vulnerability leads to questions about the nature and distribution of resilience in communities (Cote and Nightingale, 2012). How do social differences map onto resilience differences? Does the resilience of some come at the expense of vulnerability for others?

2.1.1 SOCIALLY DIFFERENTIATED RESILIENCE

In Futuna, the headmaster of the school holds a respected position in the community, backed by a salaried role, his education and his experiences of living on and outside the island. His social standing was reflected – and consolidated – in the run up to and aftermath of Tropical Cyclone Pam (TCP). As headmaster, he received notification of TCP from the Department of Education well in advance of landfall, which he disseminated to parents via the students. When TCP came closer he received a further update (as did the wider community via the Community Disaster and Climate Change Committee – CDCCC). At this point his priorities were to send the children home and organise the preparation of the classrooms, with the twin aims of providing an emergency shelter and ensuring the protection of the school and its equipment. His relative affluence within the community is reflected in a new (strong) house which he had built, and this was the basis for his preparations for his family. He moved his family, including relations, to his house and told them that they would be safe together. At the same time, he ensured there was food and water in the house, and beds to shelter under if the roof were to be destroyed in the cyclone. Subsequently, he also received older people and widows into his house, as these individuals had been identified by the CDCCC as particularly vulnerable and/or lacking secure shelter ("those with safer houses feel a sense of responsibility to look after those who are more vulnerable"). As a back-up to the house, he and his brothers and nephews also prepared a cave near to the house, which his grandfather had told him would be safe during a cyclone.

The headmaster's resilience reflects and relies on his standing in the community. His access to information and resources flowed from his role as a government employee and enabled

"there are good things coming in [following TCP]; it is a blessing for the island"-School Headmaster

him to prepare, while his major asset – a newly built house, securely constructed using quality materials (brick and strong timbers) – provided him with protection and enabled him to support others. In the aftermath of TCP he was able to protect himself and his family through his ability to buy food during the period of scarcity. His situation and standing were further improved following the influx of resources into the community (for example, he experienced an increase in visitors from NGOs paying to stay at his house; while the school was able to access new books and children's and teacher's kits from Unicef, provided "for the first time ever"). His positive attitude – "there are good things coming in [following TCP]; it is a blessing for the island" - reflects his ability to cope with challenges and thrive during recovery and, as such, illustrates his resilience.

"there is no support in our

A spectrum of experiences were documented during the fieldwork. Some contrasted sharply community for widows... my with that of the headmaster. For example, a children can no longer go to widow with eight children heard about the school because all the money cyclone from a neighbour's radio. She only that I manage to get [from found out at the last minute, and does not live basket weaving] is for food in a strong house, so took bedding, food, water and soap. All the fruit trees and firewood into a cave that belongs to her are down and we have to walk family. She prepared the cave on her own. After TCP passed by, she returned to her house but to get water. My family is the kitchen had been badly damaged. While struggling." she was able to raise some income by catering -Female interviewee for development agency staff who came to assist after the cyclone, she "faced a lot of hardships". At the time of interviewing, she was still trying to rebuild her house: "there is no support in our community for widows... my children can no longer go to school because all the money that I manage to get [from basket weaving] is for food and soap. All the fruit trees are down and we have to walk to get water. My family is struggling." In another case, a man who occasionally works for the construction company on the island found out about TCP from family members who contacted him by mobile phone. He and his family sheltered in the church, but have struggled since then. There are no projects for him to work on with Island Construction, so he supports his wife's weaving. However, there is little they can do until the pandanus grow back following the cyclone. Similarly, he cannot re-thatch his damaged house until suitable thatching plants grow back. His family received seeds after TCP to help replant his garden (his crops had been damaged or destroyed), but these have failed to germinate. The island cabbage he replanted and his taro plants have been destroyed by pests. These pests represent a new problem, and one that has not been resolved by using the pest control techniques that they are aware of.

Similar contrasts were found on Malakula and Epi in relation to water shortages and the current El Nino. As one male interviewee observed, "some are better off than others". In Leitokas, Malakula, for example, one community leader has access to many ancestral lands, a large extended family and many business interests. This provides him

"some are better off than others" -Male interviewee

with relative wealth and influence, and the ability to continue to produce sufficient food even during times of water stress. Another community leader, this time in Epi, has a house of sufficient size and strength to shelter 22 people during the cyclone. His kitchen was destroyed, but has subsequently been rebuilt. Others have very different experiences. A 65 year old female community member in Epi lost her house during the cyclone, and is now planning to relocate back to the island she grew up in (Tongoa) where her family have a brick house and she feels she may be safer in future. A female community member in Malakula, with an abusive husband who frequently abandons the family for days or weeks at a time, is particularly struggling as they have a 4km walk for water. When her husband is absent she is unable to access water as it is too far for her to walk with the containers. At the same time, the family's income is under threat as the dry weather is destroying coconuts and cocoa beans before they can be harvested. Another, younger, women in Malakula recognises that she needs water containers, a radio for early warning and more gardens to provide food even when some fail. However, she lacks the resources to acquire these assets, and is now struggling as the El Nino-induced food stress has led to some within the community stealing from her garden, further reducing her access to food. Thus, in both Malakula and Epi, the different wealth and social standing maps onto very different outcomes following the cyclone. While the community leader in Malakula retains access to sufficient food and regular income, for each of the women interviewed above, increased environmental stress is exposing underlying vulnerability, indicating lower resilience.



2.1.2 RESILIENCE, INSTITUTIONS AND RELATIONS OF POWER

The interplay between institutions and social and cultural relations of power was also evident in the case studies. Violence against women and ostracism of incomer women are examples of significant expressions of inequality that are embedded in social relations, largely hidden from view in the 'private sphere' of the home. These themes emerged in the first report in this series, and were further exposed during this study. Women in Malakula in particular reported domestic violence (in two out of four interviews) and exclusion or marginalisation of incomer women (one interviewee reporting exclusion, another expressing the need to exclude). It was made clear to the research team that violence is endemic. One female interviewee talked about the violence she had suffered and explained that it is simply not discussed in the community – she had never even told her elder sister who lives with her. As Cote and Nightingale (2012) identify, social relations can be a limit to adaptation (and thus resilience). This is the case here, where the influence and decision making power of abused or incomer women is radically undermined by deep rooted norms of violence and exclusion. However, the picture is a complicated one. For example, a woman community leader blames incomer women for undermining institutions that in the past enabled sharing between community members ("they are bringing their way of living and ... changing the generous system"). In saying this, she further undermines the position of incomer women, while cementing her own standing and authority within the community ("my husband and I [will] gather the community together to talk about [this problem]... We must all work together"). Here we see an example of Agrawal's (2005) paradox noted above, in which unequal social relations work to secure the legitimacy of (and thus perpetuate) unequal institutions. In the process, the community leader secures the power and respect that define her resilience, at the expense of that of incomer women.

Participatory development actions inevitably work through institutions – either existing, such as women's groups or village committees – or new – such as Community Disaster and Climate Change Committees (CDCCCs). It is imperative that these approaches simultaneously analyse and address the composition of those institutions, and the underlying social and cultural relations and norms that (for example) supress and marginalise women. The overarching point here is that resilience is 'situated', deeply embedded in the local context (Cote and Nightingale, 2012). The aims of resilience in development practice cannot be reduced to the identification of or support for externally defined characteristics (such as flexibility or diversity), nor can the design of institutions or resource-use rules alone explain or predict the outcomes of participatory development endeavours at resilience building. With the power that development practice confers to intervene, comes the responsibility to understand the 'social life' that those interventions are delivered into and will take on in the future. The relationship between resilience, institutions and social difference is central to this understanding.



2.2 IDENTIFYING PATTERNS OF LOCAL RESILIENCE

This section examines contrasting evidence from the case studies, identifying examples of resilience (both desirable and undesirable) that can be found in collective actions and individual practices in communities. While highlighting the inherent strengths of the communities involved in this study, this section also asks: how can projects distinguish between and appropriately address the sources of desirable and undesirable community activities and norms? As Buggy and McNamara (2015) suggest in relation to Vanuatu, the socio-political context needs to be understood not only to help ensure projects do not exacerbate existing inequalities, but also to prevent projects from weakening existing resilience and adaptive capacity.

Case study evidence from the community of Leitokas, Malakula, offers several examples of resilience strengths and limitations in different forms. All respondents reported access to water as the main challenged faced in Leitokas. The current water supply system was established in 1993, drawing water down to the bay from a source in the hills via a system of pipes attached to a main water tank. The system was funded thanks to money provided by the president of the provincial government, who at that time was related to community members. The opportunity of one of his visits was taken to petition him for a water supply system, which was ultimately built by the government's Rural Water Supply (RWS) officers five years later. However, this system required on-going maintenance, which despite repeated efforts by the community has not been provided by RWS. Over time community numbers have also expanded, increasing demand on an already stressed system. The result is that pressure is now very low due to leakage and the high number of junctions in the supply, and each dry season the available quantity of water reduces dramatically. Community member expressed frustration as they lack the skills to make effective repairs, and believe that RWS should be responsible and held to account. The current El Nino has brought this problem into even sharper focus, with water in the river around which the community is situated - and depends for access to additional water – having reduced in flow to a minor stream.

2.2.1 **RESILIENCE CHARACTERISTICS**

The community response to these challenges displays many attributes that are associated with resilience. Monitoring of water levels and availability has led the community water committee to ration access to a limit of two buckets per household per day, a limit that appears to be enforced and observed across the community, despite the difficulties that it generates for households ("Once you have had your share of that amount for the day, you are not allowed to get more.") Efforts to maintain the existing system centre on a levy (200Vt per household per month), supplemented by fundraising efforts such as events where food is prepared and sold, in order to fund on-going repairs. Community members have invested in water containers for their households, which they fill by walking to distant water sources. Individual households have shifted their gardens to damper or shadier areas (near to stream banks, for example) to compensate for the lack of water for both domestic and food production uses. The chairman of the water committee reports that he has the responsibility to ensure water reaches all, and when the supply runs dry he organises well-digging to provide additional access to water. There have also been experiments with alternative solutions: an underground well with a spiral pipe system to draw water (which worked for a month); accessing a digger, which was being used nearby, to provide two new wells (one rapidly dried, while the other became contaminated with mud); and, using bamboo canes to pipe alternative water supply sites closer to the village (but still leaving the water access point at a considerable distance).

These actions demonstrate self-organized community-based monitoring of natural resources, an acceptance of changing environmental conditions, institutional flexibility and responsiveness to emerging challenges, collective action, and a willingness to undertake experiments. In the setting up of the system the community capitalised on their (limited) cross-scale relationships, drawing on their links to the provincial government. As such, the community has displayed key resilience characteristics that have been identified within the society, ecology and social-ecological systems literatures (Bahadur et al. 2013; Ensor et al. 2016), enabling the community to actively respond to the on-going and changing nature of their water availability and access problems.

Underpinning these responses is further evidence of resilience: a complex pattern of diverse livelihood and household practices in Leitokas. The community itself is split between three (or more) locations in order to capitalise on the opportunities available in this remote region

of Malakula: in the village of Les BonBon, where there is a school and access to the river; near to their gardens and plantations; and in Leitokas, at the coast, to give access to the sea and associated income generating opportunities. As explained by one respondent: "Most of the community have houses up there [at Les BonBon] and near the gardens. But they need to be down here to do business – everything that is sold from their gardens, or comes in from Vila, goes via this community. We have to keep a presence here in order to protect our control over the business area." In Les BonBon, which is almost a day's walk from Leitokas, the community has access to a reliable gravity fed water system. Crucially, when asked about the current El Nino, extreme events and climate change, the respondent replied:

"That's why we have several homes – so that we can cope with the changing weather, and move when we need to."

Another respondent described the local community members as "nomads": because the land that they work on covers such a wide area, a family will frequently have more than 2 houses in the bush. A 37 year old male interviewee described how flexibility and diversity were essential livelihood strategies. In the recent drought his usual water access points had disappeared and an entire day could be spent searching for water. In response, he has stopped keeping cattle, which are highly dependent on water, despite the good potential for cash income. He now relies on copra, cocoa and peanuts for income. He has moved his gardens closer to the river, and, having learnt over time which of his other garden plots may dry out, has left these unplanted. He keeps a second house near the peanut gardens, which he moves into to allow him to bring in the harvest, as these wetter areas are some distance from his home village of Leitokas. He has also planted drought tolerant crops this year – wild yams, taro and navia (a particular drought resistant taro variety) to protect himself against the failure of his cash crops, and has worked hard to plant a rotation of three crop in previous years when the conditions were good. In all these strategies, he is relying on knowledge passed down from his ancestors, and on what he has learnt from his own experiences.

The value of cross-scale relationships, identified above, is also seen in the way the community has been able to connect into the emergence of national and international discourses and policies for sustainability and energy independence (for example, see the Government of Vanuatu's National Energy Roadmap 2013-2020). These developments have given rise to a commitment by Unelco, the energy supply company for Efate, Norsup (Malakula) and Lenakel (Tanna), to progressively increase copra oil use in electricity production (from

current levels at around 20% in Efate, to 28% by 2020)¹. Through financial support provided by the local MP, three Leitokas individuals have started a co-operative to collect copra from community members' small plots and sell into the power plant on Efate. A regular contract provides security to the community members and an outlet for local copra production that is insulated from the challenges of volatility in global markets (identified as a prominent issue on other islands in the first report in this series). An appreciation of other geographical scales was also expressed in several interviewee's concerns about how logging on the island - at the landscape scale – could be influencing water availability in the Leitokas community, while concerns expressed for the future viability of the community and the need to hand down natural resources to the next generation shows thinking that links the short and long term consequences of actions.

Communities have planted more drought resistant crops such as wild yams, taro and navia. Photo: Arlene Bax/CARE



'Unelco/Cofely - driving the Vanuatu energy transition' (2014) www.pecc.org/resources/minerals-aenergy/2161-driving-the-vanuatu-energy-transition/file&usg=AFQjCNGLWrYo0DjW aYDnTrEj8wUKmTTaw

2.2.2 LIMITATIONS TO RESILIENCE

All of this evidence combines to offer a positive interpretation of a community that has evolved practices, norms and institutions that deliver resilience in a difficult environment. Yet, there are also shortcomings and limitations. Efforts to experiment with and develop alternative water sources have failed, not least due to a lack of access to knowledge and resources. The water committee, while instrumental in the key response to shortages (rationing) is seen by some in the community as ineffective (by women in particular, possibly as those most reliant on water access in the home to discharge responsibilities for cooking and washing). Perhaps in part this also explains why the committee cites collecting the water levy as a central challenge - the committee see this as a failure of the community to commit to supporting the water supply, while some community members see a need for skills that have not, to date, been available, and their levy leading to failed projects. Intriguingly, while there is much evidence of collective action to be found within the tasks that have been undertaken by the community, a common concern expressed in the focus groups of men and women was the limited way in which the community help each other: "we need to strengthen working together – it was strong in the past compared to today".

Perhaps more worryingly, there is also a profoundly negative interpretation of resilience to be drawn from the Leitokas evidence. As noted above, the prevalence of gender based violence is a primary concern. Yet this prevalence itself reflects the degree to which violence against women has been normalised within communities, and as such represents a highly resilient practice that has been sustained across generations, between islands, and in the face on international and national prohibition (e.g. Vanuatu Family Protection Act 2009, which criminalizes family violence, and the work of organizations such as the Vanuatu Women's Centre and Wan Smol Bag whose efforts at awareness raising have significantly raised the profile of women's rights). Equally, stories of survival in the face of abuse shared during the research speak to the extraordinary strength – indeed resilience – of the women. Yet this is an abhorrent situation, not a desirable outcome.

While some interpretations of resilience hold that a lack of equity is an outcome of "failed resilience" (Walsh-Dilley et al. 2016), others point out that resilience is a neutral concept and can equally describe situations which have desirable or undesirable attributes (Bene et al. 2014). This use of resilience as a descriptive term ('women are resilient', 'violence against women is resilient') draws attention once again to an important consideration for

resilience practitioners. If resilience is to be prescriptive (we want to 'build resilience') we must recognise that whether or not a situation is desirable will depend on who is being asked, elevating 'resilience for whom' to the central question (Lebel et al. 2006). As noted in the previous section, however, complexity arises from the difficulty of disentangling 'for whom' resilience is being promoted in any given participatory development setting. These examples also reinforce the insufficiency of a checklist approach to resilience: the presence of diversity, flexibility, cross-scale relations, collective action and experiments suggest many important attributes are present, which may be built upon to secure the long term sustainability of the community. But on their own they are woefully insufficient to explain the uneven experiences of vulnerability and risk in Leitokas.

The task, then, for development actors is not only to identify positive resilience attributes that can be built upon in interventions. It is also to understand whether these attributes are positive for some and negative (or absent) for others – and whether interventions are likely to reinforce or address this pattern of winners and losers.



2.3 INTERVENING IN LOCAL RESILIENCE

This section explores examples of where resilience appears to have diminished or been supressed through exposure to new influences and, in particular, following experiences of NGO interventions. While highlighting the significance of NGOs to improving people's lives, analysis suggests that development organisations face a complex challenge. How can projects avoid undermining positive practices and institutions through the provision of new resources or the displacement of decision making power?

In Futuna, as in Malakula, the most significant issue identified by respondents was access to water. CARE International have been working in Futuna since 2008 and initially focused on the water system, providing materials and repairs in interventions that many community members spontaneously and positively referred to during interviews. However, problems remain with water access. Focus group participants reported that there are multiple leaks, from the source to the water tanks, often preventing the tanks – which are themselves too small for an expanded population – from being filled. During drier periods the available water flows to the villages further down the hill, reducing access for those higher up. All of this creates problems for households (in terms of hygiene, cooking and home gardens), and the school (which is looking to upgrade toilets). The men's focus group explained that when the system was first installed (before independence) they sold copra to buy the pipes. Today, they have no active water committee and the number of taps has multiplied after individuals travelled to Port Vila and saw "a different way of living" in which water access was much closer to people's homes.

At one time, there was a water committee which would undertake repairs. Repairs have now become the responsibility of a single individual. The research team were told: "He lives close to the source. Traditional beliefs mean that the only people who can act in this area are those who live there, so it becomes his job." Moreover, "The community does not provide any support to him for the fixing. It's his responsibility." However, when the question of a water committee was raised, it was gradually acknowledged that this might be an advantage. In a lengthy debate between the focus group members, it was concluded: "we could put together a water committee; it would allow us to control water – when to allow water to be used within the community. It's becoming clear to us [through this conversation] that there would be benefit to having a committee." Yet as the conversation progressed, enthusiasm waned: first, "[our] commitments have increased –we have committees for the school, church, aid post. So

we hadn't thought about the idea of a water committee." Worse, people would have no money to give for repairs as very little income comes from selling fish to Port Vila (the main source of cash income); moreover, traditional beliefs prevent payments being made: when fees are charged, the water runs dry. Finally:

"We would like CARE to fix all the problems, from the source to the tanks. The problem will remain otherwise. CARE should fix it as they've been coming often. CARE should finish all the jobs including water."

In contrast with Malakula, at no point did focus group or individual interviewees refer to Rural Water Supply as the appropriate body to facilitate repairs or training. This failure to organise, take action or imagine potential solutions was in evidence elsewhere in Futuna. For example, in interviews a number of individuals identified the presence of new pests as a problem, but no one reported having discussed potential remedies with neighbours. Only during a focus group discussion, when pressed about how the community could help each other, was the idea of exchanging experiences of successes and failures in efforts to address the problem proposed – as something new, that could be tried.



2.3.1 VALUING SELF-RELIANCE

The evidence suggests that NGOs – and CARE International in particular – are held in high esteem on Futuna. The development and training of the CDCCC by CARE International was seen as the CARE International's key intervention. As one respondent observed:

"it [the CDCCC] help us to be better prepared in times of a Cyclone - who should do what I remember in the past we were just running around like crazy in the last minute when the cyclone is already here, trying to get things done. And people just walking around outside wanting to see how the wind is blowing and what damage is occurring."

The large majority of respondents referred to the CDCCC in extremely positive terms, recognising and appreciating the value of organised and informed collective action before, during and after the Cyclone. Credit for this is given to the work of CARE's staff in supporting local self-reliance.

Yet outside of NGO led actions, the community has arrived at a place where their potential for self-organisation, collective action and problem solving is low. The evidence is suggestive of dependence on the main implementing NGO having emerged ("CARE should fix it"). This idea is strengthened by evidence from Epi, where (as in Malakula) there has been limited exposure to development NGOs. Here, initial individual responses to cyclone Pam gave way to collective action when immediate priorities had been addressed, while responses to water stress also show a degree of organisation and initiative. In this case, the community had had its supply cut off by a nearby village. The community responded by making several requests to the government, resulting in the provision of hand pumps by the Department of Geology, Mines and Rural Water Supplies. In focus group discussions, community members concluded "all we want is to get support – funding or a generator" to enable better water extraction; the community would provide labour, transport, access to land where there is a reliable water source, and arrange a maintenance fee to enable on-going management. This contrast with Futuna should not, however, be overstated. First, the absence of similar data prior to NGOs starting to work in Futuna means that it is not possible to track a change in attitudes over time. Second, while the comparison with Malakula is sharply defined by their

contrasting responses to water scarcity, many in Malakula also suggest that (in common with respondents in Futuna) there is a tendency to individualism and a lack of collective action, narrowing the gap between the two communities.

Resilience thinking brings with it a deeply problematic assumption that it is inherently desirable for communities to be self-reliant. In some interpretations, this justifies the retreat of the state and the devolution of responsibility to those least able to deliver (Mackinnon and Derickson, 2013). As noted in the introduction, this emphasis on self-reliance is one that resonates with many NGO approaches to community-based development, which stop short of attending to the challenges of transformation in power relations necessary to overcome structural barriers to adaptation. In Futuna, CARE International's focus on selfreliance has yielded an enormously effective response to a disaster, while simultaneously community capacity to address a wider set of problems has been complicated the NGO's visible presence and positive actions. It is not surprising that when communities uncover a source of resources, knowledge and skills that they value, that they then look to that source as the obvious solution to their most pressing needs. The issue is whether an NGO is always the most appropriate body to be meeting those wider needs. Self-reliance needs marrying with the tools, skills and opportunities for independent organisation and engaging with institutions and organisations beyond the community, if they are to have sustainable access to those with the resources and responsibility to support local problem solving.

Resilience thinking has little to offer development practice on how to support communities to tackle these questions. Can, then, resilience be enhanced by considering alternative framings that better capture the ambitions of communities to overcome structural constraints, and shift the focus of programming more directly onto the problem of transformation? This question is explored in the next section.

3 BEYOND RESILIENCE

A key challenge for resilience in development programming lies in balancing the opportunities (to build on existing local practices that support resilience) and the risks (undermining local resilience and/or generating dependencies on development programs). In this section, it is argued that striking this balance can be aided by stepping back and looking harder at the intentions and limitations of resilience in development practice. An alternative framing – resourcefulness – is explored for its potential to provide insights that contrast with, yet can complement, those derived from a resilience perspective. The aim is to identify how the strengths of resilience can be more systematically exploited in practice.

3.1 IS RESILIENCE THE GOAL?

In introducing resourcefulness, MacKinnon and Derickson (2013) offer three critiques of resilience, the first two of which have already been touched on. First, resilience is 'externally' defined, for example by checklists of characteristics (flexibility, diversity and so on) that have been compiled, refined and reproduced by development scholars and practitioners. The effect of this is that resilience can too easily be treated as a prescription that needs to be applied to communities, reproducing existing patterns of power and inequality rather than 'situating' resilience within the social context. Second, MacKinnon and Derickson suggest that resilience is principally concerned with particular spaces ("resilient communities,"), encouraging a devolution of "responsibility without power" to self-reliant communities, in which resilience means taking "knock after knock", coping with and recovering from shocks (2013: 255). What this overlooks is that it is frequently actors and institutions at other scales (national governments, global markets) that have the most profound influence on opportunities for and limits to the resilience of local people.

The third critique can be read as the culmination of these concerns. For many scholars, resilience is open to being interpreted and applied in deeply conservative ways, as it has a built-in bias towards maintaining existing social relations (Hayward 2013; Fainstein 2015). Desirable but profound changes in power relationships, within communities or between communities and actors at other scales (such as government or private sector operators), represent a breakdown of resilience – a significant step change, redefining the existing

system. Such a breakdown is a defined as a transformation, in which the resilience of the existing social and environmental relationships are overcome. Breaking out of abusive relationships or poverty traps may well demand a transformation, which for development actors means looking at power relationships and capacity building to overcome the conditions that lock people into abuse or impoverishment.

This notion that resilience may be a conservative rather than progressive force is an unusual one for many in development practice, where overarching aims of equality and social justice are assumed. However, it is worth pausing to re-examine the concept of resilience and the role it plays in relation to social-environmental systems (such as those engaged with in development, where there are strong links between the environment and human wellbeing). As Olsson et al. (2015) put it:

"Given its insensitivity to theoretical development of the social sciences and lack of attention to agency, conflict, knowledge, and power, resilience can become a powerful depoliticizing or naturalizing scientific concept and metaphor when used by political actors."

This is more than an esoteric academic observation. There are profound risks that are associated with the rise of resilience in policy discourse and framing. MacKinnon and Derickson, for example, find that in marginalised Scottish communities, the language of resilience is used by politicians to applaud local self-reliance – and avoid accepting responsibility for the disintegration of jobs, opportunities and the wellbeing of communities. The lack of an inherent focus on the politics of poverty and inequality means that development actors need to be cautious in how they employ resilience, and how others may adopt their language for less progressive ends. As Hayward (2013) suggests, the depoliticised language of resilience is not helpful in and of itself in challenging "the drivers of social and economic change that threaten to destabilize our climate, increase social inequality, and degrade our environment" which require "rather less resilience and more vision for compassion and social justice, achieved through collective political action." (p.4).

In development, adaptation and disaster risk reduction programs, resilience has increasingly been employed by practitioners in a normative, prescriptive manner, to describe how things should be. A vision of social justice is usually at the heart of this description, yet to achieve this, resilience needs to be applied while engaging with "structural socialpolitical processes" (Weichselgartner and Kelman, 2014). In other words, for resilience to

be a progressive framing that is capable of addressing inequality and poverty, it must be associated with transformation as much as it is with absorbing and adapting (Figure 1).

Arguably, this is not news to development practitioners. Oxfam (2016), for example, suggest that resilience must be embedded within rights-based and gender-justice approaches. Coupling resilience with these alternative framings can push programming beyond addressing only agency and into confronting structural barriers to rights and justice, thereby seeking out transformation as a component of equitable resilience. However, by coupling resilience with other frameworks, there is an implicit recognition that resilience alone leaves gaps in relation to power and justice. Resourcefulness is of particular interest because it offers a framing that specifically targets the shortcomings of resilience.



3.2 RESOURCEFULNESS

Resilience is a valuable goal for development practice, but it is no cure-all. As discussed in the first report in this series (Ensor, 2015), attention to improving adaptive capacity offers avenues for practitioners to follow that can lead to challenging relations of power and accountability, such as when rooted in rights-based analysis. Yet progress on transformation – as opposed to absorbing and adapting – remains stubbornly weak in development practice. This is where resourcefulness potentially offers something new.

In identifying critiques of resilience and addressing them head on, MacKinnon and Derickson (2013) propose an alternative approach that is explicitly focused on the practical challenge of working towards transformation in marginalised communities. Rooted in their own experiences of community development, they propose resourcefulness as an approach underpinned by a clear normative agenda. The vision is that communities should have the capacity to engage in "genuinely deliberative democratic dialogue... and work in ways that meaningfully challenge existing power relations", in ways that avoid elite capture and the "unintentional reproduction of unequal social relations" (MacKinnon and Derickson, 2013: 263). Resourcefulness is focused on modes of practice that enable priorities and needs to be identified locally, as the basis for a form of self-determination in which communities define their own development trajectory, recognising that this necessitates an on-going contested process in which community members revisit their priorities and struggle to maintain control over the institutions and relationships that determine local outcomes. The focus, then, is both local, on community capacities, and outward looking, towards the relationships and institutions on which communities depend.

While MacKinnon and Derickson see resourcefulness as an alternative to resilience, the intention here is to propose resourcefulness as an effective mechanism for engaging with transformation. As such, it does not displace the value added by resilience (engaging with human and environmental systems; recognising uncertainty and change; looking across temporal and geographic scales) but may add to it in development practice. Moreover, as discussed below, much of resourcefulness resonates with how communities framed their needs during discussions in Vanuatu. In practice, MacKinnon and Derickson's framework for resourcefulness is provisional, and identifies four key elements: resources; skills and technical knowledge; indigenous knowledge; and, recognition. In the following sections

these components of resourcefulness are illustrated in relation to the case study evidence (focusing on Malakula), expanding somewhat on the original framing, which was evolved from thinking about exclusion and marginalisation in Western democracies.

3.2.1 RESOURCES

In Malakula, as in Futuna, the priority issue identified by community members is water availability and access. Resources, in the resourcefulness framework, are significant where there is "material inequality and issues of maldistribution". In other words, the starting point for resourcefulness is to question what resources a community has access to, and why. This is one important sense in which resourcefulness is distinguished from "mainstream conceptions of resilience" (MacKinnon and Derickson, 2013: 264).

The water problem in Malakula is fundamentally an issue about resources, in the broadest sense: the distribution of public sector effort, investment and priorities that results in (for example) the installation of the Leitokas water system, but denies funding for maintenance in the subsequent 25 years. The community believe that Rural Water Supply should be held accountable for maintenance but, equally, would like access to the material and knowledge resources necessary to enable them to maintain their own system. Similarly, in Epi, there were several requests made to the government to resolve their water issues, but these resulted only in the installation of hand pumps. As noted above, the community's view is that "all we want is to get support – funding or a generator" to enable better water extraction. In other words, either access to government investment or material resources.

The resourcefulness framing connects directly to these community concerns and interests through the focus on resource distribution, reflecting the origin of resourcefulness in the experiences of marginalised communities. By adopting this approach, questions of governance, accountability and distributional justice are brought directly into the development picture, channelled through the central political question of how and by whom resources are accessed and shared.

3.2.2 SKILLS AND KNOWLEDGE

In the resourcefulness framework, skills and knowledge refer to the ability to engage in discussions of public policy, and in particular to familiarity with the mechanisms and language of government at different scales. This is a pragmatic concern, rooted in an understanding that to be effective advocates for their own interests, communities will need to be able to lodge their demands with the right people, in the right way, and at the right time. For example, if in Malakula (and elsewhere)

RWS are to be held to account, how can this be achieved; to what extent is it possible; in what ways can accountability be demanded? The concern here is with skills in advocacy and communicating effectively with actors and to institutions at other scales – outside the community, in roles or locations that have the power to effect change locally.

To be effective advocates for their own interests, communities will need to be able to lodge their demands with the right people, in the right way, and at the right time.

The context in which community members in Leitokas called for RWS to be held to account is significant in underlining the importance of skills and knowledge. Having been asked if they had thought about whether they needed particular negotiating skills to address their water supply problems, the community responded that they had not thought about it: "Whenever there is a problem with the water supply we fundraise, buy the materials, and fix it for ourselves. But these fixes are inadequate as we are not engineers. We would like to be able to hold the RWS accountable – and believe that it is RWS's responsibility to fix the supply." While the community response demonstrates admirable resilience, their answer also displays that they are looking to secure more than self-reliance and the ability to cope with "knock after knock" (MacKinnon and Derickson, 2013: 255).

For communities in Vanuatu, the ability (that is, the skills and knowledge) to negotiate and secure accountability is key in their relationships with outsiders. For example, those in Leitokas have a long running land dispute with a neighbouring community. The land in question has been offered (without consent from Leitokas) to a logging company, who have cut down some 1000 hardwood trees per year. The Leitokas community have received no financial recompense, and furthermore believe that logging at this rate and scale is undermining their access to water. In the past, inter-community meetings to resolve the dispute had produced findings against the Leitokas community, as, according to our focus group participants, the other side "has much influence"; those in Leitokas were referred to as manbush (approximately, "they don't have knowledge"). However, in 2007 the community was advised by a doctor from Norsup (the nearby town) to hire a lawyer. Subsequently, they raised the necessary funds, and their influence and confidence has increased. The knowledge and skills provided by the lawyer has been critical to enabling the Leitokas community to advance its case, and will be essential if they are to gain access to – and make their claims in – the formal institutions that adjudicate on national law.

The case studies also provide alternative examples of sources of skills and knowledge. In Futuna – as elsewhere in Vanuatu – a continued NGO presence has done little to drive resources from the national level down to the community; in many cases, the government relies on NGO support to provide services for local communities. In response, NGOs are able to build up local institutions and forge relationships with those at the province. The CDCCC in Futuna, for example, has grown into an effective and representative local body, but lacks the ability to execute projects - in the words of one interviewee, they want to "grow up" and have their own resources, but are reliant on the NGO to facilitate meetings, gather data, and so on. One response that emerged during group discussions is for the CDCCC to access resources via international funds such as the Global Environment Facility (GEF) small grants fund, a portion of which will also support capacity building around the mechanisms of governance and meeting fiduciary standards (in the resourcefulness language, developing "skills"). CARE International's innovative internship program, where one community member forges closer links with – and gains training from – the NGO, is well placed to provide the support (again, "skills and knowledge") that is necessary if the CDCCC is to successfully apply for these funds. The CARE's internship program is perhaps usefully seen through the resourcefulness lens, as it has the potential to be directed towards securing community interests through recognition by GEF.

3.2.3 INDIGENOUS KNOWLEDGE

When MacKinnon and Derickson (2013: 265) talk of indigenous knowledge, they refer to the mobilisation of origin stories as a way of grounding, or making relevant, alternative visions of social and material relations (for example, where marginalised urban communities in Scotland invoke the practices and understandings of the world associated with myths of Highland Scottish life). In Vanuatu, as in many development contexts, indigenous or traditional knowledge plays an everyday role in people's lives through kastom culture, practices and beliefs. The relevance of indigenous knowledge is therefore more immediate and necessary. However, an appeal to tradition is not without risks, and could lead to elite capture or exclusionary or abusive relations (in particular, where it replicates existing social relations, as discussed in the preceding sections of this report). As MacKinnon and Derickson (2013: 265) state in a slightly different context, "the kinds of folk knowledge that ultimately cultivate resourcefulness will necessarily be as attentive to difference as they are to commonality."

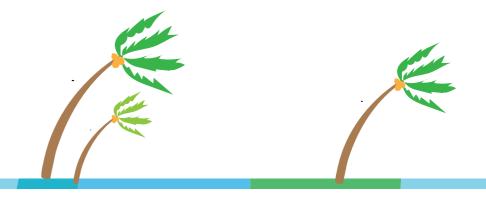
In Leitokas, the success of the Wan Smol Bag turtle conservation program illustrates the role played by indigenous knowledge in resourcefulness. The turtle is strongly connected to indigenous customs and beliefs in Leitokas, as the community is based on a bay where there are 600-700 nests per year. This has created a spiritual connection to the turtle which has become central to kastom – for example, turtle meat is used to inaugurate a Nakamal (meeting place), and timings in the agricultural calendar are linked to turtle nesting behaviour. This link to kastom was the reason why the community agreed to the conservation program. Concern for the long term sustainability of the turtle was viewed in terms of maintaining kastom and the pride that the community feel in having the largest nesting site in Vanuatu. Connecting a vision or cause to sources of identity and local knowledge in these ways can be an important factor in establishing the legitimacy of new ideas and allows the community to operate as a unified entity.

Kastom, as the expression of a shared perception of a link to natural resources, can also provide the basis for new types of collective action. In the logging dispute referred to above, the community agreed to offer kastom exchange (a traditional conflict resolution mechanism) to fix the land boundary; later, the community mobilised to remove and burn the logging company's timber, based on the chief's authority as the embodiment of kastom. Community members also pointed out that kastom forestry practices offer a sustainable approach to logging, based on an understanding and respect for the forest that contrasts sharply with the economic model employed by the forestry companies. The overall point is that kastom – and indigenous or traditional knowledge generally – provides communities with a source of inspiration for alternative visions of the future, and can empower collective action in the pursuit of those visions. Without this, transformation risks becoming an exercise in moving from one externally defined development trajectory to another.

3.2.4 RECOGNITION

Intersecting with each of the above is the final resourcefulness element: recognition. Recognition refers to the acknowledgement of the status of a community, affirming that a community has rights to state or other formal or bureaucratic support, and instilling a sense of self-confidence and self-worth. It is worth noting that recognition can, of course, be conferred (or denied) by informal or traditional bodies or institutions. While significant for securing access to local rights and justice systems, the focus in resourcefulness is on formal systems and their consequences for the distribution, access and control of resources.

Recognition is fundamental to justice and is a critical staging post when communities look to engage with formal processes in pursuit of their entitlements. For example, the formal (legal and bureaucratic) recognition of the legitimacy of the Futuna CDCCC by the Government of Vanuatu is a necessary first step towards accessing GEF funding and support. However, as Borrini-Feyerabend et al. (2007) point out in relation to natural resource management, formal recognition can be a challenge when it means securing governmental (bureaucratic) or legal affirmation of a community's self-defined interests and concerns as legitimate entitlements. Too often, the formal recognition of entitlements is an expression of power (for example, where natural resource extraction rights are granted to powerful actors, over the heads of local communities). Recognition can, then, be the point at which tensions that exist over the distribution of resources come out into the open, bringing communities into conflict with administrative bodies.



3.3 SUMMARY: RESOURCEFULNESS IN PRACTICE

The essence of resourcefulness is found in the combination of skills and indigenous knowledge that enables communities to secure recognition and, thus, a footing in the contested politics of resource distribution and public policy. As such, the aim is for local people to be able to engage in processes that lead to changes that are locally conceived and locally felt. From a resilience perspective, this challenges development programming to balance the local capacity to sustain lives (to cope, knock after knock) with attention to forms of external engagement and resourcing. Malakula offers an example of the consequences of 'unbalance', in which resilient livelihood practices are compromised by a forestry company that is able to use national law to remove trees from land owned locally. Long running issues such as the frequency of the inter-island ship, and copra prices that are set by government but not adhered to by traders (Ensor, 2015) offer similar examples. While resilience points to the need for cross-scale relationships, resourcefulness demands that the quality of these relationships are critically examined and the consequences for distributional justice placed at the centre of development efforts.

The resourcefulness lens brings a new perspective – one that is beyond resilience – and is distinguished by its overt, normative framing around supporting communities to drive their own development agenda. It recognises not only pragmatic issues, such as the technical skills required to engage with government processes, but also the less tangible elements that underpin the ability of a community to recognise and pursue a shared sense of wellbeing. As such, it aligns less with development discourses of participation, and more with the language of activism, which, as Dodman and Mitlin (2011) suggest, is necessary if the transformative potential of community-based adaptation is to be met. In Malakula in particular, the resourcefulness framing seems to resonate with the interests and priorities of local people. Without doubt, good resilience practice may integrate the critical lens that resourcefulness offers. Attention to adaptive capacity points in the direction of empowerment in local and cross-scale relationships, and a rights-based approach to adaptive capacity can aid in the analysis and design of normative and principled development interventions.

However, while resourcefulness promotes a form of active citizenship, it lacks the direct concern with coping and recovery – it is unlikely, for example, to have given rise to an effective disaster risk reduction institution such as the Futuna CDCCC. Similar observations can be made in relation to other resilience attributes that undoubtedly bring local benefits (for example, diversity, learning, appreciation of uncertainty). Despite the appeal to recognise "difference" and work through methods that avoid elite capture, resourcefulness does not prioritise or directly consider social

difference or abuse within communities. There remains a need to scrutinise methods and engage in a systematic assessment of underlying social and cultural relations and norms.

The argument, then, is not that resourcefulness should replace resilience in development programming. Rather, it is to recognise that the power of resourcefulness lies in the direct focus on issues that are required for transformation but frequently overlooked in resilience. The resourcefulness framework can be used to refocus participatory development practice on these issues, enabling them to be systematically considered in programming.



It recognises not only pragmatic issues, such as the technical skills required to engage with government processes, but also the less tangible elements that underpin the ability of a community to recognise and pursue a shared sense of well-being.

4 CONCLUSION

This study has revealed the nature of relationships to be a crucial issue. Individual resilience outcomes are shaped by relations: relations between those with different standing in a community, relations within the private sphere, or via inter- and intra-household relations. In each case, the significance of relations of power and culture has been evident. For NGOs, programming can lead towards relations of dependency, with consequences for pre-existing local resilience. In contrast, resourcefulness demonstrates the need to focus more clearly on the significance of cross-scale relationships for local access to resources. This perspective should help refocus resilience on supporting communities to transform relationships across scales, on their own terms.



4.1 SOCIAL RELATIONS AND LOCAL RESILIENCE

The case study evidence provides a clear sense of how resilience reflects the standing of individuals within the community. Those who are in a stronger position prior to a shock (such as Tropical Cyclone Pam) can also be well placed to consolidate and improve their material resources and social position in the aftermath. In contrast, community members that experience vulnerability in terms of multiple overlapping stressors lack the resources to support their own recovery. They are significantly less able to compensate for material losses, and have found life even more challenging after TC Pam. However, development practitioners should not assume that the benefits of resilience programming can be evenly distributed through the design of institutions such as village committees. Resilience and vulnerability are not just on the surface: they are expressions of deep rooted social and cultural relations of power, mediated through institutions that may be public and observable (such as village meetings) or private and hidden from view (such as in the household). Violence against women and the ostracism of incomer women stand out as particularly shocking examples of how inequality simultaneously sustains and emerges from institutions. It is imperative that development practitioners analyse and address both the composition of institutions and the underlying social and cultural relations and norms that (for example) supress and marginalise women.

This study has revealed diverse resilience practices in communities, reflecting many characteristics of resilience (for example household and livelihood diversity, cross-scale relationships, collective action, experimentation) and enabling communities to sustain themselves in the face of environmental and other challenges. While the complexity of livelihood arrangements in places such as Malakula is impressive, there are shortcomings: experiments frequently fail, collective action is intermittent, cross-scale relationships can be to the detriment of the community. Worse, resilience is also evident in the persistence of violence against women, and in the ability of abused women to cope with and recover from frequent episodes of abuse. This points to the overarching need for a principled approach to resilience. If practitioners are looking to build resilience, then 'resilience for whom' is the central question: if it is 'for' women, then this means overcoming or breaking down the resilience of existing, abusive practices. The task is not only to identify positive resilience attributes that can be built upon in interventions. It is also to understand whether interventions are likely to reinforce or address this pattern of winners and losers.

4.2 SELF-RELIANCE AND SUPPORT

The contrasting evidence from the three case study sites suggests that development interventions have the potential to undermine practices and institutions through the provision of new resources. While the CDCCCs in Futuna are emblematic of the power and effectiveness of NGO-led self-reliance, the evidence also suggests an emerging reluctance to organise, take action on or imagine solutions to new or developing problems. Instead, NGOs are looked to as the default service provider. Yet it is not surprising that, when communities uncover a source of resources, knowledge and skills that they value, that they then look to that source as the obvious solution to their most pressing needs.

The issue here is that resilience says little about how attributes such as self-organisation, flexibility and cross-scale relationships should be arranged so that support for communities can be better balanced with fostering their independence. Resourcefulness, on the other hand, responds to community concerns about governance, accountability and resource distribution. It re-focuses development practice on how to ensure priorities and needs can be identified locally, as the basis for a form of self-determination in which communities define and actively engage in their own development trajectory. It is, in this sense, overtly political, recognising that the distribution of resources is the outcome of contested processes that occur outside of the community. The focus, then, is both local (on community capacities) and outward looking (towards the relationships and institutions on which communities depend). This perspective can bring transformation into resilience programming, helping to guard against the potential to overlook power, to underplay context, and to neglect the desire for accountability.

5 KEY FINDINGS AND RECOMMENDATIONS

Ten key findings and nine recommendations for development programming and practice are summarised from these conclusions.

Key findings

SOCIAL D

Focusing interventions exclusively on technical resilience attributes (e.g. flexibility, learning, diversity) will reinforce patterns of vulnerability and exclusion.

In the communities that were part of this research, resilience closely follows patterns of wealth and social standing.

Interventions following shocks such as Tropical Cyclone Pam can amplify differences in resilience and vulnerability.





	Recommendations
DI	FFERENCE
	The importance of differences between
	social groups must not be underestimated.
	Simply introducing representative
	community committees is unlikely to be
	enough to overcome deep-rooted social and
	cultural differences.
s	
	Addressing inequalities in the distribution of
	resilience and vulnerability means exploring
	and gradually addressing how social
	difference is reinforced through everyday
	interactions between community members.
	Deep rooted norms of gender based violence
	and exclusion were particularly evident in
	the case study locations, and need to be
	addressed if representative participatory
	processes are to have any practical effect.

Key findings	Recommendations			
LOCAL RESILIENCE				
Isolated communities build their own	Development interventions need to carefully			
resilience in the face of challenging	diagnose existing resilience strengths			
environmental and economic conditions,	and weaknesses, including social and			
capitalising on relationships with actors at	ecological components, if projects are to			
different scales, and sustaining complex	provide appropriate support to communities.			
and diverse livelihood patterns.				
	NGOs must recognise and weigh-up			
Limitations to local resilience include	the balance between the value of their			
uneven support for collective action, limited	support and the long term effects of their			
access to knowledge and resources, and	presence, ideally looking to develop exit			
marginalisation from formal institutions.	strategies that gradually build effective			
Interventions can undermine local resilience	and mutually supportive relationships			
and communities can come to rely on NGOs	between communities and different levels			
as sources of resources, knowledge and	of government.			
skills				
	If resilience is to be the goal of			
Relations of abuse and exclusion within	development, it is essential to ask			
communities have proved resilient to	"resilience for whom?"			
change.				

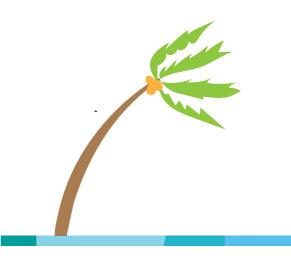
Key findings

BEYOND

Resilience in and of itself is not a progressive concept; to work towards ending poverty and inequality, it must be married with other development frameworks.

Resilience can be – and is – used by some policy makers to avoid accepting responsibility for marginalised or poor communities.

Transformation is frequently poorly addressed in development practice. Resourcefulness offers a new approach for development practice, explicitly orientated towards transforming relations of power and influence between communities and government.



	Recommendations			
R	RESILIENCE			
	NGOs and development actors need to			
	recognise the risks associated with			
	promoting a discourse of resilience, and			
s.	ensure their advocacy does not result in			
	regressive policy.			
	Development programs must guard against			
	synergies that can emerge between the			
	weaknesses shared by the resilience			
	concept and NGO practice in addressing			
	power, politics and transformation.			
	NGOs should explore the potential of			
	resourcefulness to support communities			
	in securing recognition for their interests			
	and a foothold in the contested politics of			
	resource distribution and public policy.			

6 REFERENCES

- Agrawal, A. (2005). Environmentality: Community, Intimate Government, and the Making of Environmental Subjects in Kumaon, India. Current Anthropology, 46(2), 161–190.
- Artur, L., & Hilhorst, D. (2012). Everyday realities of climate change adaptation in Mozambique. Global Environmental Change, 22(2), 529–536. http://doi.org/10.1016/j. gloenvcha.2011.11.013

Atkinson, R. (1998) The Life Story Interview. Sage Publications, London.

- Ayers, J. (2011). Resolving the Adaptation Paradox: Exploring the Potential for Deliberative Adaptation Policy-Making in Bangladesh. Global Environmental Politics, 11(1), 62–88. http://doi.org/10.1111/j.1759-5436.2008.tb00472.x
- Bahadur, A. V., Ibrahim, M., & Tanner, T. (2013). Characterising resilience: unpacking the concept for tackling climate change and development. Climate and Development, 1-11. http://doi.org/10.1080/17565529.2012.762334
- Buggy, L., & McNamara, K. E. (2015). The need to reinterpret "community" for climate change adaptation: a case study of Pele Island, Vanuatu. Climate and Development, 1–11. http://doi.org/10.1080/17565529.2015.1041445
- Béné, C., Newsham, A., Davies, M., Ulrichs, M., & Godfrey-Wood, R. (2014). Resilience, Poverty and Development. Journal of International Development, n/a-n/a. http://doi. org/10.1002/jid.2992
- Borrini-Feyerabend, G., Pimbert, M., Farvar, M., Kothari, A., & Renard, Y. (2004). Sharing Power. Learning by doing in co-management of natural resources throughout the world. IIED and IUCN/CEESP/CMWG.
- Cote, M., & Nightingale, A. J. (2012). Resilience thinking meets social theory: Situating social change in socio-ecological systems (SES) research. Progress in Human Geography, 36(4), 475–489. http://doi.org/10.1177/0309132511425708

Oxfam (2016). The future is a choice. Oxfam, Oxfod.

- Dodman, D., & Mitlin, D. (2011). Challenges for community-based adaptation: discovering the potential for transformation. Journal of International Development, n/a–n/a. http:// doi.org/10.1002/jid.1772
- Ensor, J. (2015). Adaptation and Resilience in Vanuatu. Oxfam and SEI, Oxford.
- Ensor, J. E., Park, S., Attwood, S., Kaminski, A. & Johnson, J. (2016). Can community-based adaptation increase resilience? Climate and Development. In press.

Chung Tiam Fook, T. (2015). Transformational processes for community-focused adaptation and social change: a synthesis. Climate and Development, 1–17. http://doi.org/10.108 0/17565529.2015.1086294

- Granderson, A. A. (2014). Making sense of climate change risks and responses at the org/10.1016/j.crm.2014.05.003
- New Zealand, 2010 and 2011. Ecology and Society.
- ecologyandsociety.org/vol11/iss1/art19/
- MacKinnon, D., & Derickson, K. D. (2013). From resilience to resourcefulness: A critique of doi.org/10.1177/0309132512454775
- Olsson, L., Jerneck, A., Thoren, H., Persson, J., & O'Byrne, D. (2015). Why resilience is org/10.1126/sciadv.1400217
- http://doi.org/10.1007/s10584-014-1303-0
- Walsh-Dilley, M., Wolford, W., & McCarthy, J. (2016). Rights for resilience: food sovereignty, http://doi.org/10.5751/ES-07981-210111
- Weichselgartner, J., & Kelman, I. (2015). Geographies of resilience Challenges and http://doi.org/10.1177/0309132513518834
- Yates, J. S. (2012). Uneven interventions and the scalar politics of governing livelihood org/10.1016/j.gloenvcha.2012.01.007
- Yates, J. (2014). Power and politics in the governance of community based adaptation. In emerging lessons. Rugby: Practical Action Publishing.

community level: a cultural-political lens. Climate Risk Management. http://doi.

Hayward, B. M. (2013). Rethinking resilience: reflections on the earthquakes in Christchurch,

Lebel, L., Anderies, J. M., Campbell, B., Folke, C., Hatfield-Dodds, S., Hughes, T. P., & Wilson, J. (2006). Governance and the Capacity to Manage Resilience in Regional Social-Ecological Systems. Ecology and Society, 11(1), 1–21. Retrieved from http://www.

resilience policy and activism. Progress in Human Geography, 37(2), 253–270. http://

unappealing to social science: Theoretical and empirical investigations of the scientific use of resilience. Science Advances, 1(4), e1400217-e1400217. http://doi.

Pelling, M., O'Brien, K., & Matyas, D. (2014). Adaptation and transformation. Climatic Change.

power, and resilience in development practice. Ecology and Society, 21(1), art11.

opportunities of a descriptive concept. Progress in Human Geography, 39(3), 249–267.

adaptation in rural Nepal. Global Environmental Change, 22(2), 537–546. http://doi.

J. E. Ensor, R. Berger, & S. Huq (Eds.), Community-based adpation to climate change:











