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Research Report

Taking locally led climate and security actions seriously in Papua New Guinea

Report

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Report

Taking locally led climate and security actions seriously in Papua New Guinea



ODI Global

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December 2025



Taking locally led climate and security actions seriously in Papua New Guinea

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Workshop participants discussing the results of the session 3. Photo: Camille Lavielle/ODI. / 23

Acronyms/Glossary

CBO	community-based organisation
CCDA	Climate Change Development Authority
COP	Conference of Parties
FBO	faith-based organisation
GBV	gender-based violence
HDP	humanitarian, development and peacebuilding
IPCC	International Panel on Climate Change
NDC	National Disaster Centre
ND-GAIN	Notre Dame Global Adaptation Initiative
NGO	non-governmental organisation
PDC	Provincial Disaster Centre
PNG	Papua New Guinea
REDD+	Reducing Emissions from Deforestation and Forest Degradation
SARV	sorcery accusation related violence
WASH	water, sanitation and hygiene

Executive summary

Working with local actors and grassroots organisations is increasingly framed by international development and humanitarian agencies as part of the efforts to ‘decolonise’ humanitarian, development, and peacebuilding (HDP) approaches. In Papua New Guinea (PNG), one of the 20 most vulnerable and least prepared countries to the impacts of climate change,¹ communities already largely rely on established local networks and actors to respond to shocks. Traditional social support systems, particularly the *wantok* system,² remain central to coping with climate- and conflict-related challenges but have struggled to absorb the growing scale and frequency of shocks, including displacement, rising food insecurity, and protection needs.

This study draws on interviews and a participatory workshop organised by ODI Global and Sustineo with grassroots, local, national and international actors active in PNG to examine how larger-scale external interventions can be integrated with existing local efforts. We find that collaboration with local actors is essential for improving climate and conflict responses, enhancing service delivery, and strengthening social cohesion, particularly in remote or insecure areas. However, persistent structural barriers – including weak government capacity, fragmented interventions, short-term funding, and limited donor understanding of

local needs and expectations – undermine trust, constrain collaboration, and limit the long-term impact of local efforts on resilience and stability.

Based on these findings, we provide actionable recommendations for external actors, including the PNG Government and donors, to strengthen local engagement, improve coordination and support sustainable outcomes across sectors and timeframes.

1 According to the ND-Gain Index, see <https://gain.nd.edu/our-work/country-index>.

2 ‘*Wantok*’ is a Tok Pisin term meaning ‘one language’. *Wantok* can be understood as a ‘bond of people with a basic, kinship community, speaking the same tongue, living in the same place, and sharing values’ (MacDonald 1984). However, in contemporary Melanesia, the term is also used of other connections between people, hence *wanwok* (colleague), *wanskul* (schoolmate) and so forth (Schram 2015). The ‘*wantok* system’ (or *wantok* support system) describes a fluid network of social ties grounded in collective reciprocity, in which members provide mutual social and economic support (Kelman, 2010).

1 Introduction

Located in the southwest Pacific, Papua New Guinea (PNG) sits on the cyclone-prone South Pacific and the Pacific Ring of Fire, making it one of the world's most hazard-exposed countries. More than a million people live near active volcanoes, while the country's 5,150-kilometre coastline leaves communities and livelihoods vulnerable to sea levels – rising at more than double the global average – and accelerating ocean acidification. PNG is among the 20 most vulnerable countries to climate change, while ranking among the least prepared to enhance resilience according to the ND-GAIN index.³ It is also classified as 'high risk' to humanitarian crisis by the 2025 INFORM index⁴ due to the high physical exposure of the population to natural hazards and violence, the high predisposition of the population to be negatively affected (i.e., high socio-economic vulnerability and presence of vulnerable groups), and very limited national coping capacity⁵ (Marin-Ferrer et al., 2017).

For most Papua New Guineans, daily life is lived in rural and remote areas. Around 88% of the population (about 8.8 million people) depends on subsistence farming in regions with rugged

terrain, high poverty, limited infrastructure, and scarce services (CCDA, 2020). Local actors – including grassroots organisations, churches and other community-based groups – are deeply embedded in local social structures and are essential partners for the government in delivering everyday service and responding to crisis in PNG's remote regions. For instance, community and church groups provide up to 50% of health and education services (Brimacombe, 2020). Most church-run schools are fully integrated into the government system, with the state providing teachers and covering their salaries (Howes et al., 2012). This situation reflects longstanding practices that have evolved in the absence of the state and the limited reach of international actors. As a result, local actors are frequently the first responders when disasters strike and often have access to areas beyond the reach of both government and international organisations.

Wantok systems are central to coping with crises. During the 1997 El Niño drought and frost, most Papua New Guineans survived with support from relatives and friends through the *wantok* system,

-
- 3 The Notre Dame Global Adaptation Initiative (ND-GAIN) Country Index is a free, open-source tool that measures a country's current vulnerability to climate disruptions and its readiness to mobilise public and private investments for adaptation. ND-GAIN VULNERABILITY index measures a country's exposure, sensitivity and capacity to adapt to the negative effects of climate change. ND-GAIN measures overall vulnerability by considering six life-supporting sectors – food, water, health, ecosystem service, human habitat, and infrastructure. ND-GAIN READINESS index measures a country's ability to leverage investments and convert them to adaptation actions. ND-GAIN measures overall readiness by considering three components – economic readiness, governance readiness and social readiness.
 - 4 The INFORM Risk Index is a global, open-source assessment tool that measures countries' risk of humanitarian crises and disasters that may overwhelm national response capacities. It supports decision-making on prevention, preparedness, and response, using three core dimensions: hazards and exposure, vulnerability, and lack of coping capacity.
 - 5 The lack of coping capacity dimension in the INFORM index assesses a country's ability to manage and respond to disasters through formal, organised systems – including government efforts, institutional strength, and existing infrastructure – that help reduce disaster risk.

either staying in their communities or migrating to areas with better food access (Allen and Bourke, 2001). Yet these safety nets proved insufficient to prevent widespread famine at that time (ibid). Since then, traditional safety nets have become increasingly strained by climate impacts, including in terms of displacement, food and protections needs (Care, 2015; 2017; Jacka and Posner, 2022). For instance, the 2015 El Niño episode of drought and frost revealed that *wantok* systems did not support migration anymore in some provinces (Jacka and Posner, 2022). Kinship resources are overstretched and repeated environmental disruptions have made these systems increasingly inadequate, unreliable and unsustainable (Government of Papua New Guinea, 2010: 24; Kelman, 2010: 23–24). At the same time, citizens maintain high expectations of development, services and infrastructures from the government, even where its presence is limited (Bainton and Skrzypek, 2021).

This growing mismatch between local coping capacities, citizen expectations, and institutional reach underscores the need to understand how external actors – such as non-governmental organisations (NGOs), donors and government agencies – can support communities effectively without undermining existing social structures or duplicating local actions.



Milne Bay, Papua New Guinea. Photo credit: Sarah Lewis/Shutterstock.com.

This research investigates **how external actors can more effectively integrate human security measures into climate responses in PNG**. It focuses on what local actors and communities are already doing, how these efforts function, and where opportunities exist for collaboration with regional, national and international actors. By centring local experiences, the study contributes to the growing evidence on **how locally led action can support climate resilience and peace in fragile settings**.

International and national commitments increasingly recognise the importance of such locally led approaches. The COP28 Declaration on Climate, Relief, Recovery, and Peace,⁶ endorsed by PNG and multiple HDP actors, highlights the need to prioritise local ownership, align financing with

6 See www.cop28.com/en/cop28-declaration-on-climate-relief-recovery-and-peace.

4 Taking locally led climate and security actions seriously in Papua New Guinea

local priorities, and strengthen operational partnerships across governments, civil society, and communities. This research aligns with these objectives by exploring practical ways to connect local initiatives with broader interventions.

The results are based on a targeted literature review, stakeholder mapping, field engagement, and interviews with provincial and local governments, community-based organisations (CBOs) and church-based groups, ensuring that diverse perspectives were represented. A workshop held in Port Moresby on 5–6 November 2024 provided an opportunity for participants to share experiences and discuss entry points for coordinated and locally relevant action.

The rest of the report is structured as follows: the next section outlines PNG's climate and security context, followed by a review of literature on local, national and international perspectives on climate security, and a description of the report's research methods. The main findings are then presented in three parts: (1) why local actors often operate independently of the government, (2) what locally led actions look like in practice, and (3) potential pathways for collaboration between local, national and international actors. Lastly, the report concludes with key recommendations to strengthen locally led climate and security responses in PNG.

2 Context

2.1 Climate and disaster risks in PNG

PNG regularly faces extreme weather and natural hazards, including droughts, tropical cyclones, earthquakes, volcanic eruptions, and sea-level rise. Currently, extreme and unpredictable rainfall drives frequent floods and landslides across the country (GGGI, 2019), and the 2022–2030 National Adaptation Plan anticipates that climate change will intensify these pressures, with significant impacts on human security, displacement and sustainable development (CCDA, 2023).

Climate risks vary greatly across PNG's diverse topographies and ecologies:

- Mountainous regions: frequent floods and landslides cut off transport routes and destroy farmlands. Highland communities face rising temperatures, prolonged droughts and frost events that undermine crops and livelihoods (Michael, 2019; GGGI, 2019).
- Coastal and low-lying areas: rising sea levels threaten villages with inundation, storm surges, and saltwater intrusion on farmland. Increased cyclonic activity in southern PNG worsens these threats, displacing communities and eroding livelihoods (Bourke, 2018; Bingeding, 2018; GGGI, 2019).

- Urban centres: Cities such as Port Moresby are projected to face more frequent and intense heatwaves, with consequences for public health and energy demand (Connell, 2018).

Around 60–85% of rural households rely on staple crops such as sweet potato, taro, banana, sago and yams, alongside coffee and cocoa for cash income (Michael, 2020). These crops are increasingly affected by climate extremes: prolonged droughts linked to El Niño, more intense rainfall and cyclones, shifting temperatures, and rising pest pressures (Jacka, 2019; World Bank, 2024; Cox and Tararia, 2023) are increasing levels of food insecurity (Fleischman, 2022).

Most importantly, hazards rarely occur in isolation. Cyclones, floods, landslides, volcanic eruptions and droughts often overlap, turning into complex disasters that claim lives, damage critical infrastructure, disrupt food and water access and displace populations. Disaster impacts are magnified by deep social and economic vulnerabilities. For instance, according to the 2024 Global Multidimensional Poverty Index (MPI), PNG is one of the lowest-scoring countries globally, implying a large share of its population suffers from multiple, overlapping deprivations in health, education and standard of living (UNDP and OPHI, 2024). In 2017, 37.5% of Papua New Guineans were living below the poverty line – the second-highest

poverty rate in the Asia-Pacific.⁷ In remote areas with limited access to essential infrastructure such as electricity grids and WASH (water, sanitation and hygiene) facilities, climate change is likely to significantly exacerbate existing challenges outlined above.

2.2 Security risks in PNG

The population of PNG is exposed to a wide range of security risks, including direct physical confrontations, murders, mob violence, mutilations, and the destruction of property. Sorcery accusation-related violence (SARV) and in some cases gender-based violence (GBV) are sometimes a component of broader intergroup fighting or may occur as distinct occurrences (Abay et al. 2024). These incidents are largely driven by ongoing intercommunal tensions, tribal disputes, ethnic clashes, and land-related conflicts that continue to undermine safety and stability across the country.

While such incidents occur nationwide, the drivers and dynamics of violence in rural PNG vary considerably across the country's highly diverse regions. Intergroup violence has been especially severe in the Highlands and is relatively well documented. It arises from a range of factors often linked to land disputes which are driven by large-scale resource

extraction, accelerating migration, population growth and expansion of cash cropping (Allen and Monson 2014).

The root causes of violent intercommunal clashes are diverse (Reilly, 2000). Many are linked to community histories and identities, often intertwined with a cycle of revenge stemming from past conflicts or land disputes (Banks, 2008). Another recurrent explanation lies in the erosion of traditional conflict-resolution systems (Allen and Monson, 2014), especially among younger generations (Kobylnski, 2022). In some cases, projects linked to the extractive industries (such as the PNG Liquefied Natural Gas project) have been the igniter of tribal violence by inducing a large but unsustainable financial windfall for the communities (e.g., land compensation and employment of well-paid local workers) (Regan, 2014; Main, 2021a; Higgins et al. 2022). The purchase of guns and the communities' frustration at the absence of promised economic development fuelled clan wars in September 2016 (Main, 2021b).

It is worth noting that PNG's diverse ethnic composition prevents any single group from consolidating national power. Even in the highlands, where nearly half of the population lives, internal divisions undermine the possibility of acting as a unified bloc (Reilly, 2000). In this context, violence tends to remain localised, and no organised armed groups pose a challenge

⁷ All the figures in this paragraph come from the Asian Development Bank Key indicator database: <https://kidb.adb.org>.

to the state.⁸ There is some evidence that provincial conflicts can spill over into cities, but direct linkages should be interpreted cautiously. Repeated feuding occurs in Port Moresby between tribal groups that have migrated from rural areas, yet these disputes are generally not connected to ongoing violence in the provinces. In some cases, however, attacks in a province have led to revenge targeting in the city (ACLEDD, 2024).

Violence results in widespread displacements and humanitarian needs. Statistics from the Internal Displacement Monitoring Centre⁹ indicate that violence in PNG led to the displacement of 64,000 individuals in 2022, in addition to (and largely above) the 9,600 people displaced because of natural hazard-related disasters.

Therefore, the complexity of these security risks creates an environment where tensions can quickly escalate, and government institutions, particularly at the provincial level, lack the resources and authority to effectively ensure the security of the population, with communities instead receiving support from traditional leaders and local grassroots practitioners.

This report uses a targeted approach to reviewing the literature to analyse how the complexity and local specificity of security risks may result in external interventions doing more harm than good. The next section unpacks the ‘Climate-Security Nexus’ by presenting the

human-security framing and the different ways ‘vulnerability’ is understood at the international, national and local levels. It also highlights clear examples from the literature that suggest how varying positionalities and understandings affect development outcomes.

8 As noted in 1970 by Kenyan academic Ali Mazrui: ‘The worst troubles we have had in Africa have been in countries with very big tribes competing with each other. To this extent, one of Papua New Guinea’s greatest assets may well be its acute ethnic fragmentation. Small ethnic groups may fight each other, but because there are so many, their conflicts may remain localised. They need not shake the nation to its very foundation, as did the tensions between big ethnic giants in Nigeria, the Congo, Kenya, and Uganda.’

9 Displacement data for PNG: www.internal-displacement.org/countries/papua-new-guinea.

3 A review of local, national and global insights on climate security in PNG

3.1 Vulnerability dynamics in PNG

Vulnerability to – or the propensity or predisposition to be adversely affected by – climate change is not an inherent trait but socially constructed through economic, political and ecological contexts (Schipper, 2020). Some groups in PNG face longstanding exclusion rooted in social structures, while others experience new vulnerabilities through disruptive change such as displacement or poorly planned relocation (ibid).

For some social groups in PNG, vulnerability is inherited from longstanding exclusion rooted in social structure and may manifest as *voicelessness* in decision-making at different levels. In PNG, voicelessness is particularly evident among women and the young, who are under-represented in local and national decision-making (Strouboulis et al., 2022; IOM, 2016).

These uneven dynamics determine who can access resources, influence decisions, or benefit from development. By overlooking the power relations that determine whose voices shape climate responses (Lucke et al., 2014; Dalby, 2022), the exclusion of women and youth from decisions on how risk is defined and addressed (Strouboulis et al., 2022; IOM, 2016), and the human security risks that stigmatise affected groups and create structural inequalities that underpin vulnerability (Daoudy et al., 2022; Thomas and Warner, 2019; Barnett, 2020), climate responses risk reinforcing inequalities and silencing the very people most affected.

Climate responses that overlook these conditions risk reinforcing existing inequalities and producing maladaptation – adaptation efforts that unintentionally increase vulnerability (IPCC, 2022; Schipper, 2020). Adaptation initiatives may strengthen already privileged groups, deepen rural–urban divides, or entrench food insecurity. The International Panel on Climate Change (IPCC) underscores that effective adaptation must be context-specific and inclusive (IPCC, 2022). In PNG, this requires recognising how uneven development shapes vulnerability and ensuring that climate action addresses not only environmental hazards but also the social and economic dimensions of human security.

3.1.1 Gender

Women and girls face cultural barriers, limited access to electoral finance, and threats of violence that severely constrain political participation, leaving them underrepresented in parliament and other leadership spaces (Baker, 2018; Bizhan and Gorea, 2022; Howes and Pillai, 2022). Yet this does not mean women are entirely excluded: women, for example, have an influence at the village and local community level, even if their representation in parliament is limited (Tararia 2022).

SARV and GBV are regular forms of violence in PNG. Each year, more than 1.5 million women and girls are estimated to experience GBV tied to intercommunal conflict, political intimidation, sorcery-related accusations, and familial and intimate partner abuse (Abay et al., 2024).

Women and girls also face gender-specific barriers to land, financial services, and livelihoods: women are 29% less likely than men to access formal finance, over 50% of rural women work in unpaid subsistence agriculture, and many rely heavily on natural resources to which they have no secure rights (Strouboulis et al., 2022).

3.1.2 Age

People under 25 years old make up around 60% of PNG's population. Many face poverty, violence and barriers to education and livelihoods. Young men are often pulled into cycles of violence through trauma and lack of opportunity, while girls are at risk of exclusion from education, child marriage and trafficking (Abay et al., 2024; Ambelye et al., 2021). Climate shocks amplify these challenges, disrupting schooling, livelihoods and access to essential services (Plan International, 2024).

3.1.3 Rural/urban divide

Rural and urban spaces in PNG are marked by sharp disparities shaped by colonial legacies, extractive industries and global markets (Cox et al., 2022). While external actors often depict rural communities as static and self-sufficient (Cox et al., 2022; Tammisto, 2019), in reality they are embedded in dynamic networks: people migrate between rural and urban areas, remittances sustain livelihoods across administrative boundaries, and communities engage simultaneously with state institutions, companies and informal markets (Dalsgaard, 2013; Cox et al., 2022).

3.2 External responses to climate insecurity

There is no one-size-fits-all approach to human security in PNG. Indeed, PNG is a patchwork

quilt of vastly different types of socio-economic activity that shape social relations and development outcomes in very different ways (Cox et al., 2022).

A recurring critique of external interventions in PNG is that they tend to default to generalised ethical frameworks, contributing to what Sanders et al. (2023) call 'ethical distance.' Ethical distance refers both to the way that projects tie together entities that are geographically, historically and culturally removed from each other, and to the distant 'centres' of decision-making separating the donors, experts, and many others (Sanders et al., 2023). For instance, global environmental objectives with their associated architecture, funding instruments and technologies can be geographically, culturally and linguistically distant from the nuanced, negotiated relations that define local lives and livelihoods in places like PNG. International interventions, such as those observed in REDD+ pilot projects, often introduce fixed categories for land, carbon and people, which can deny local communities the ability to negotiate relations in ways that stabilise their own boundaries and understandings (Sanders et al., 2023).

The literature suggests that reducing ethical distance and fostering more equitable interactions requires slowing down the reasoning process behind decision making, attending closely to the partiality of different perspectives, and critically questioning universalising categories that can restrict reciprocal learning and engagement with local differences (Sanders et al., 2023). In the PNG context, scholars note that external HDP interventions often operate within a 'methodological nationalism' framework, focusing on national-level data and understandings to inform, describe and act on development challenges (Wimmer and Schiller, 2020).

At the same time, research indicates that concentrating solely on one community, town or location can overlook the broader patchwork of socio-economic activities – a complex network of people and resources that move across districts and provinces (Cox et al., 2022). Initiatives run by grassroots actors are shaped by these shifting social realities and vary across the country, making them difficult to map. Consequently, the literature emphasises the importance of engaging with the local leaders who drive these initiatives (Abay et al., 2024).

3.3 Working with grassroots actors

In practice, much of the response to climate insecurity in PNG comes from non-governmental and grassroots actors. Given weak state presence and epistemic challenges in external interventions, local actors in PNG have developed their own strategies to address insecurity, often drawing on older traditions.

These responses are not seen as simply remnants of the past but as adaptive to contemporary challenges, including climate change (Bizhan and Gorea, 2022). Examples from the literature illustrate how these actors build on local knowledge, social networks, and informal governance structures to address both immediate hazards and longer-term social risks (Bizhan and Gorea, 2022; Garap, 2019). These cases also highlight the strengths and limitations of locally led adaptation, including structural constraints such as funding gaps and limited geographical reach (Abay et al., 2024).

Informal safety nets, such as the *wantok* system, remain a vital source of resilience in PNG, providing mutual aid and resource sharing (Bizhan and Gorea, 2022). Building on these informal social safety nets, various grassroots women’s groups have emerged since the 2000s (Garap, 2019). Not only have these organisations had considerable success on the ground by creating tangible impact in their missions, such as in addressing gender-based violence, but they are also led by strong women and have become effective change agents as people’s movements (Garap, 2019; Abay et al., 2024). These include the work of committed CBOs such as Kup Women for Peace, Voice for Change, Highlands Human Rights Defenders, Kafe Women’s Association, PNG Human Rights Defenders Association and Tribal Foundation (Forsyth et al., 2020; Garap, 2019).

Enacting community by-laws and revitalising community governance arrangements has become a promising local response to problems of violence and social breakdown in some areas. In the context of PNG, community laws are a form of rules and regulations developed by communities, giving them rule-making and executive powers to target specific social issues (Eves, 2017). Moreover, community laws are encouraged by the PNG Government and has its legal basis in *The Organic Law on Provincial Governments and Local-Level Governments* (1998), which allows Local-level Governments to make laws for ‘maintaining peace, good order and law through consultation, mediation, arbitration and community forums’ (ibid).

To give one example, Voice for Change¹⁰ has worked with local leaders in Jiwaka Province to

10 Voices for Change (PNG) is a provincial women’s organisation based in Jiwaka, working towards all forms of violence prevention and advancing equitable provincial development with a focus on gender equality and peace. See <https://voiceforchange.ngo/about.html>.

take ownership of GBV and other law and order issues by creating community laws aimed at preventing and sanctioning this kind of behaviour. Local female activists are organising and driving violence prevention by leveraging their social networks and reaching populations that conventional programmes often miss (Howels et al., 2022; Abay et al., 2024)

Furthermore, PNG has several home-grown grassroots youth-led climate initiatives, such as the Youth Empowerment in Climate Action Platform (YECAP), World Vision's youth-led adaptation projects in Madang, and the Nature4Climate sessions highlighting Indigenous youth leadership, but these often tend to focus on urban or more accessible areas, leaving rural youth underrepresented in climate governance and adaptation efforts (YECAP, 2025; World Vision, 2025; Nature4Climate, 2025).

Nevertheless, one major issue faced by all grassroots movements working with youth and women in PNG is the lack of funding (Abay et al., 2024; Garap, 2019). One PNG community leader (Garap, 2019) points that donor partnerships are almost exclusively established with formal organisations that have physical offices, bank accounts and so forth. While community leaders are involved in certain projects implemented by NGOs and donors, they are often overlooked for funding (Abay et al., 2024).

4 Research design

4.1 Methods

The purpose of this study is to investigate how human security can be incorporated into climate responses in PNG by:

1. Examining how local actors operate in practice and the concrete challenges they encounter
2. Identifying opportunities for mutually beneficial collaboration with regional, national, and international actors.

To ensure relevance and alignment with local priorities, the inception and design phase included a targeted literature review that synthesised academic studies, government policies and grey literature, alongside stakeholder mapping to identify key actors for engagement. This process was also informed by field presence and key informant interviews, which allowed the research team to build meaningful relationships with stakeholders from PNG's provincial and local governments, CBOs and church-based groups (see Appendix 1 for details on key informant institutions). Special attention was given to amplifying voices that are often marginalised in decision-making spaces (see Appendix 2 for details on the stakeholder consultation design).¹¹

The final stage of research involved a workshop, held on 5–6 November 2024 in Port Moresby, to discuss findings from the desk research and interviews. The workshop served as a platform to

foster open dialogue among key stakeholders,¹² enabling participants to share experiences, identify pressing challenges, and propose entry points for enhancing collaboration. These discussions aligned with the COP28 Declaration on Climate, Relief, Recovery, and Peace objectives, particularly Objective 13, which emphasises optimising the complementarity of mandates and expertise across climate, development, humanitarian, disaster risk management and peace actors.

4.2 Research questions

This research explores how external actors can more effectively integrate human security measures into climate responses in PNG. To do so, it responds to five key questions:

1. How does the PNG government currently organise and support local climate action?
2. How do local communities and actors in PNG perceive and respond to climate and security challenges?
3. How do external actors engage with local systems, and what risks arise when local perspectives are overlooked?
4. How are locally led actions involving vulnerable groups, such as women and youth?
5. What collaborative interventions between local, national, and international actors are needed to strengthen resilience and build peace in PNG communities?

11 The workshop achieved gender parity, demonstrating a strong commitment to equitable participation.

12 Workshop participants comprised representatives from bilateral and multilateral agencies, sub-national PNG government actors, civil society organisations, church-based groups, and research institutions, all engaged in advancing integrated approaches to resilience and development. An overview of the workshop sessions is provided in the Appendix 3.

4.3 Limitations

The research sought to gain an overview of issues relating to the PNG experience as a whole but was limited in its ability to undertake field consultations or province-specific enquiries. As such, whilst it draws on several examples from diverse PNG geographies and communities, the research does not seek to describe a great level of detail on any single location. There is scope to follow up with more detailed exploration of the issues raised, and potential responses to them, in sub-locations of PNG to investigate how local traditional structures and systems interplay with formal governance and the aid sector.

There are some sectoral gaps among the workshop participants. Most notably, **PNG government representatives were unavailable and therefore not represented**. While this limited the range of perspectives, it also allowed participants to speak more openly and critically about their experiences, including their expectations of the state, without concern for official oversight. These discussions provided rich insights into local priorities, frustrations and community-led approaches that might have been harder to surface in a mixed setting. A second gap was the under-representation of the private sector, despite the significant influence of the extractive industries on climate and development. Follow-up consultations could help explore the perspectives and potential contributions of private actors.

5 Research findings

5.1 How and why local actors work around and not with the government

5.1.1 Limitations in national government capacity

PNG has a decentralised structure of government from national through provincial, district and local government levels.¹³ In theory, this multi-tiered governance system allows policies and responsibilities to flow downward and be adapted to local realities. In practice, however, participants noted that **policy implementation remains largely absent and, at best, uneven across provinces.**

Few participants saw national government policy as driving meaningful change locally, pointing to how limited resources and capacity have long prevented the fulfilment of the basic conditions for peace and sustainable development. They highlighted the chronic neglect of essential services, reflected in poor educational outcomes, deteriorating health facilities, and inadequate or unreliable transport and communications networks.

Many local practitioners thus regarded **policy as largely performative and disconnected from service delivery** or other practical realities. During interviews, others argued that PNG's development policies are not delivering benefits to the

people because they are following the wrong model. A former public servant, for example, suggested that the country's development direction itself contributes to the problem, relying heavily on extractive industries while neglecting economic diversification. Many respondents were also concerned about the politicisation of service delivery through District Services Improvement Program grants and the hollowing out of provincial governments and the national public service (cf. Cox et al., 2022). The District Development Authority is intended to facilitate local development but is largely driven by political imperatives.

This disconnection between levels of government has created an **atmosphere of distrust and disengagement** that also affects how aid actors operate. Government funding is sometimes promised but not delivered. One CBO leader gave an example of government funding being allocated to them in annual provincial budgets but never actually delivered. Grassroots peace activists mentioned similar circumstances where the failure of government to deliver funds has created suspicion and distrust because communities hear that money has been promised, do not see it being delivered, and assume that their own leaders have misappropriated the funds (even though it was never disbursed).

¹³ PNG has four regions and 22 provinces. Each province contains between one and 10 districts. Each district comprises between one and 12 local-level governments, making a total of 326 across PNG.



Motuan village near the city of Port Moresby. Photo: Jappasta/Shutterstock.com.

Against this backdrop, **international humanitarian and development agencies are often central to bridging governance and coordination gaps**. They formally recognise government leadership but, in practice, often rely on coordination within the aid community itself. As one senior international representative explained:

We are here to support the government, not necessarily to push our approach to the job. But this [lack of capacity/proactiveness] obliges us to step in often in situations that, you know, in the Philippines or Indonesia, [national authorities] do actually do meetings and

high-level coordination and information management, but here we need to be much more proactive.

5.1.2 Fragmented leadership in disaster and climate governance

Two institutions formally coordinate climate change and disaster response at provincial and district levels: the Climate Change and Development Authority (CCDA) under the Ministry of Environment, Conservation and Climate Change, and the National Disaster Centre (NDC) under the Ministry of Defence. Both coordinate action through provincial committees¹⁴ but differ in mandate,

14 There is a Provincial Climate Change Committee and a Provincial Disaster Committee in each one of the 22 provinces of PNG.

structure, and influence (details about their respective mandates can be found in Appendix 4).

Although national frameworks exist, the mechanisms for translating them into provincial and local action remain weak.

The NDC and the CCDA ultimately rely on subnational actors to implement national strategies, yet workshop participants observed that these local institutions often fail to deliver the intended benefits at community level for the following reasons:

1. **Limited outreach** – Each of Papua New Guinea’s 22 provinces is meant to have both a Provincial Disaster Committee and a Provincial Climate Change Committee to ensure coordination between national and local levels. In practice, this structure is unevenly developed. Disaster Committees date back to 1984, while Climate Change Committees are in a pilot phase and still in the process of being established. It is therefore uncertain whether these committees are present – or effective – in all provinces.
2. **Limited visibility** – Participants rarely mentioned the Provincial Disaster Committees and did not refer to the Climate Change Committees at all. These gaps can have serious impacts. One participant further noted that disaster preparedness policies, procedures, and protocols are not enforced, so during water shortages many health centres and schools simply cease to function because their WASH (water, sanitation, and hygiene) facilities fail.
3. **Limited capacity** – Furthermore, as with local government agencies

responsible for delivering basic services to communities, the NDC and the CCDA suffer from resource and capacity constraints that limit their vertical coordination capacity. Several interviewees noted the NDC’s limited staffing and funding and observed that coordination challenges worsen when provincial officials are based in Port Moresby rather than in their provinces, sometimes due to conflict. One PNG interviewee explained:

There is low capacity at the NDC. There are five or six pivotal staff to make decisions. DMTs [Disaster Management Teams] are only supposed to be advisory, but decision-making is often offloaded to DMT. Sometimes traditional partners step over their mandate. It takes a skilful individual to negotiate relationships within the DRM sector. Within NDC, the capacity to negotiate and stand up is not there.

Yet **some provinces demonstrate better results thanks to the strong commitment of certain individuals.** East New Britain has a fully functional Provincial Disaster Centre (PDC), and the Highlands PDC coordinates effectively when paired with motivated local leadership. One interviewed expatriate programme lead explained:

Some provinces are much better managed than others. [...] When the NDC has a good relationship with the local PDC or coordinator, the humanitarian assistance and the military

and aid goes much faster and everything is easier. When they don't, it doesn't probably have a very deep impact. They just tend to ignore each other, and they just go ahead, but it's not ideal and it creates confusion in the approach.

5.1.3 Most local actors rely on informal networks

Local leaders with strong networks and negotiating skills usually fill the gaps left by weak state systems by drawing on personal connections and informal information-sharing. Over time, certain 'efficacious personalities' – such as church leaders, community elders or politicians – build considerable status as mediators, brokers, and decision-makers (Demian and Tinning, 2023: 18). Their standing enables them to open channels of communication or intervene when flows of resources are blocked. A community worker recounted how an MP in Simbu Province responded to the April 2024 landslide, by mobilising his own resources to bring in an assessment team of public servants, delivering a timely intervention that bypassed slow state bureaucracy. As one international humanitarian worker explained:

Some individuals find a way of moving things forward. A good member of parliament can be very proactive

Churches have taken up many key responsibilities related to climate change, humanitarian action, peacebuilding and development.

Interviewees almost always regarded churches as essential to working in PNG because of their permanent embeddedness in society and their reach into the most remote parts of the country. They also have a role in conflict mediation because of their ability to build social capital and their deep integration in communities (Hauck, 2009). Churches can also provide connection and communication around local conditions and events that is essential for accessing further support. For example, following Cyclone Guba which hit Oro province in 2007, Caritas PNG provided shelter, food and hygiene kits to flood victims, and provided ongoing developmental support by supporting rebuilding of homes and rehabilitation of local agriculture.¹⁵ Church organisations have also developed strong donor ties, such as through the Australian Humanitarian Partnership and the PNG Church Partnerships Programme, and coordinate humanitarian activities through networks like the Church Agencies Network for Disaster Operations (CAN DO).¹⁶

Where government coordination is effective, it often depends less on formal structures and more on long-term trust-based relationships, frequently leveraging local networks, including churches. Some sectoral or regional coordination bodies

15 See www.caritas.org/where-caritas-work/oceania/papua-new-guinea.

16 Established in 2015, CAN DO is a consortium of nine Australian aid agencies with a specific purpose of providing disaster response, risk reduction and resilience building support predominantly through the AHP (Australian Humanitarian Partnership). See: www.churchagenciesnetwork.org.au/index.php/cando-faqs.

provide examples of effective integration. The United Church Development Unit, for example, demonstrates high capacity in liaising with communities and internal church structures. The Highlands Humanitarian Hub, originally organised for the 2018 Highlands earthquake, coordinates multisectoral response in the province, involving provincial disaster coordinators, faith-based organisations (FBOs) and NGOs, and private sector actors.

Nevertheless, partners stressed that **sustainable progress requires strengthening local governance capacity, leadership, and commitment to collaboration**; otherwise, community-level actions remain fragmented and under-resourced. For example, addressing long-cycle issues like sea-level rise requires long-term engagement that transcends short-term political cycles.

5.2 Locally led actions addressing climate and security challenges

Practitioners in PNG define their work through deeply context-specific meanings that often diverge from international frameworks, such as the IPCC's conceptualisation of climate risk (IPCC, 2022) or the triple nexus linking humanitarian, development, and peacebuilding actions.¹⁷ Rather than imposing these external frameworks, our approach prioritises understanding how

local knowledge shapes action on the ground, recognising that the impacts of climate variability and conflict are highly uneven across communities.

In practice, this means acknowledging interpretations of disasters that are sometimes rooted in spiritual or sorcery frameworks. Focusing solely on such differences risks treating local knowledge as inferior and enforcing an external vision of 'what should be done' (Radcliffe et al., 2016). Instead, the goal is to create space for dialogue where local and external perspectives interact and evolve, producing practical strategies that enhance resilience while respecting cultural practices, demonstrating that effective climate and conflict responses are not a matter of whose knowledge is superior, but how diverse insights can inform grounded, context-sensitive action.

5.2.1 How local perspectives shape action

Communities and grassroots actors in PNG usually understand climate impacts through the lens of disasters and immediate responses. What is referred to as 'climate action' is frequently expressed through disaster preparedness and response activities – such as coping with floods, droughts or landslides – rather than long-term adaptation. Yet many community-based programmes already

¹⁷ Although the triple nexus is frequently referenced in international literature, its terminology remains largely confined to UN agencies. PNG government documents make little mention of it, and most officials and civil society actors we interviewed were unfamiliar with the term – even as their work often reflects the integrated approaches it promotes.

build resilience indirectly, for example by promoting climate-tolerant crop varieties or strengthening food security.

Across these perspectives runs a strong awareness of **the connections between climate change, livelihood loss and displacement**. One civil society spokesperson highlighted the centrality of customary land to human security in PNG:

There is a direct correlation between climate change, displacement and security. Because of customary land, your first protection is your tribal boundaries. Whether it is a landslide or sea level rise or a tribal fight, all of these things drive displacement – and people know that this pushes them off their land and onto someone else’s.

This emphasis on **customary land** was echoed throughout our work. For many Papua New Guineans interviewees, land underpins not only physical and food security but also social belonging and identity.

Workshop participants highlighted the importance of community-based safety nets, which form established responses to shocks through clan (*wantok*) systems and shared resources rooted in historical exposure to hazards. Clan, tribe and *wantok* groups¹⁸ contribute to what has

been described as ‘strong microsocieties’ in terms of bonds and social structures (Bizhan and Gorea, 2022). These systems often serve as mechanisms for addressing community needs and delivering public goods. Therefore, after disasters, people often rely on family and friends and the wider community (e.g., church) rather than on a formal government response. Talking about the 2018 Hela earthquake, one workshop participant indicated:

Almost every home in Hela was a care centre.

By ‘care centre,’ the participant did not mean a formal institution, but rather the way each household opened its doors to others – embodying care through the sharing of food, shelter and emotional support within the *wantok* system. This sense of collective responsibility highlights how recovery in Papua New Guinea is often socially rather than institutionally organised, drawing on kinship and faith networks that mobilise support far more quickly than formal mechanisms can.

Recognising these knowledge systems is not enough; it is also essential to acknowledge ongoing **knowledge losses**. Environmental degradation, particularly from industrial activities such as river

18 ‘*Wantok*’ is a Tok Pisin term meaning ‘one language’. *Wantok* can be understood as a ‘bond of people with a basic, kinship community, speaking the same tongue, living in the same place, and sharing values’ (MacDonald, 1984). However, in contemporary Melanesia, the term is also used of other connections between people, hence *wanwok* (colleague), *wanskul* (schoolmate) and so forth (Schram, 2015).

catchment modification, undermines local knowledge, which is vital for managing climate risks.

5.2.2 Consequences of overlooking local perspectives

Informants noted that **external programmes often fail when donors impose their approaches without adapting to local identities, power dynamics, cultural expectations and preferences**, sometimes exacerbating challenges instead of addressing them. During disasters, communities may have expectations about how recovery should unfold, shaped by tribal traditions that can differ between neighbouring groups. Problems can arise when formal government institutions intervene, as official processes may not align with local tribal traditions or recognise customary leadership, creating friction in recovery efforts. At the same time, external actors often lack familiarity with these traditions and leadership structures, which can lead to missteps that further slow or complicate recovery.

External actors may not always recognise the local capacities that exist for response outside of formal humanitarian mechanisms, which leads some communities to see external support as disrespectful to normal community coping mechanisms. For instance, a workshop participant explained that during a recent displacement, community members expected compensation for their losses based on traditional customs,

but uncertainty over who should provide it created tensions between provincial governments and relief actors:

It was all about money. No one taught about taking into consideration the people's wishes. The people's wishes were simple: help us get rid of people that are here because they complicate our lives. They are demanding money to compensate them. The society has means to absorb them into the community. The PNG society, the extended family that we have: we are able to absorb people into our family. The people there were saying the same thing: 'but before we go, you have to set us free by doing the rituals that we are supposed to do'.

Resettlement projects frequently fail when they disregard cultural ties to land, traditional ways of living, norms and livelihoods. At the same time, resettlement to land belonging to different tribes is often contentious if local land ownership as well as cultural traditions within and between tribes are not respected.

Workshop participants also highlighted that **unplanned or poorly planned population displacement often triggers conflict**, particularly when internally displaced persons move into areas that were previously restricted by traditional norms. Violence, they noted, is not only driven by long-standing grievances and traditions but also by opportunistic

responses to immediate crises, including political developments, climate shocks or economic disruptions.¹⁹

5.2.3 Local perspectives on youth and women in peacebuilding

Both women and international programme managers interviewed mentioned **the risk of trying to target women in gender equity programmes without also engaging men**, a common critique of international gender approaches in PNG (e.g. Sepoe, 2024). One interviewed practitioner explained:

We cannot target women alone. There are specific groups who have a specific role like men, youth, [and] elderly who need to be involved in the project if we want everyone to chip into the expected outcomes, especially in terms of gender equality. So, we created a different approach where we involved the whole community.

Local actors noted that **programme approaches targeting training and mentoring focusing on women's human rights and gender roles are successful when both men and women are involved**, especially for peacebuilding. They explained that local decision-making systems and conflict resolution mechanisms in PNG are largely dominated by men and influential women working with male allies (i.e., men making

consistent and intentional efforts to support and advocate gender equity and inclusion). A practitioner shared an example of grassroots peacebuilding efforts led by a local women's human rights organisation and representatives from the district authority in areas on the brink of tribal conflict in Jiwaka Province. When tensions escalate and communities prepare for tribal fights, they approach each group separately with a straightforward and non-prescriptive message. They outline the potential consequences of violence, such as destroyed coffee crops, burned houses, damaged infrastructure, and the heightened risk of sexual violence against women, emphasising that the decision lies with the community.

Although young people make up the majority of the PNG population, participants noted that **young people are rarely taken seriously by community leaders**. Many young people feel robbed of pathways for advancement and personal development and feel neglected by their elders who are fixated on issues that young people care less about. In turn, youth and particularly young men are routinely blamed for social problems and seen as potentially dangerous because of their involvement in tribal fights, sorcery accusation related violence and other violent crimes. For instance, youth unemployment – reported at 62% in 2020 – is a key driver of young people's involvement in crime and violence, though

¹⁹ Although they indicated that many conflicts and climate-related disasters remain underreported beyond local levels – for example, conflicts in the southern islands often go unnoticed by the United Nations and the government.

it stems from deeper structural issues such as poverty and the mismatch between education and labour market expectation (Melpa, 2020).

Several practitioners recognised **the willingness of young people to take initiative and to challenge traditional roles expected of both young men and young women**. The Youth Ambassadors for Peace model, first developed in Hela Province in 2001, has been training young people in mediation and has had successful impacts on numerous tribal conflicts in Hela. Several interviewees also pointed to the leadership role that university students are expected to have when returning to their home communities, especially those from more remote communities, and saw an opportunity to engage with them while they are studying together in Port Moresby or other urban centres.

However, **most young people do not have access to platforms for articulating their needs and concerns or lack the capacity to engage with them when they exist**.

Current youth work generally targets young people who are already active in their communities, church groups and CBOs. Participants warned that there are still great challenges in building communication with ‘hardcore’ youth (a self-description of some armed Highlands young men engaged in violent crime).

Even programmes informed by gender equality, disability and social inclusion (GEDSI) principles can fail to engage young people. Those that have succeeded have specifically targeted them as a distinct constituency and **identified the barriers**

to their ownership and engagement at the right level. For instance, some agencies, notably CARE International and the United Nations Development Programme, mentioned youth-centred programmes which succeed in engaging more alienated young people. The better youth-centred approaches recognise the need to deal with trauma and build the capacity of young people to participate in collective activities.

5.3 Pathways for collaborative climate and security action

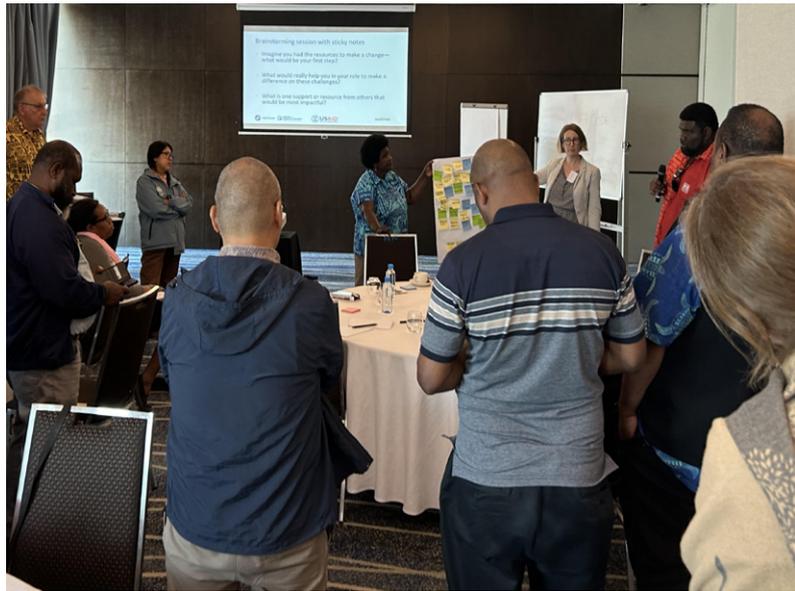
5.3.1 Local actors recognise the risks associated with fragmented local responses

Individual leadership

In crisis situations, responses can become competitive as donors, NGOs and politicians rush to be seen to be providing assistance. These tensions can lead to fragmentation, lack of local ownership of programmes, misunderstandings, and sometimes rent seeking or misappropriation. The proliferation of responders is very frustrating for agencies that run longer-term programmes in affected areas. Numerous interviewees expressed their concerns about the impacts of new players, particularly when they distribute goods in ways that distort local perceptions of what assistance is available, or in tokenistic ways that ignore underlying conflict dynamics. Several practitioners mentioned the rise of ‘self-appointed leaders’ or ‘spoilers’ who claim to represent the affected communities but primarily seek personal gain. Others

mentioned desperation for money as interfering in community-based climate adaptation programmes. One interviewed peacebuilding practitioner explained:

When those big organisations come, the community says that money is coming. Then everybody wants to be a leader; everybody becomes a peace builder. They just see their pocket.



Workshop participants discussing the results of the session 3. Photo: Camille Laville/ODI.

Gaps between the roles of different agencies or individuals can also lead to poor outcomes, particularly when those responsible for distributing aid are not properly matched to the known needs of affected communities. Respondents shared several stories about relief supplies being distributed unevenly, favouring certain groups or more accessible areas while overlooking remote communities. Better connection between grassroots actors (who have good skills and community access) and systems of distribution of aid are needed.

Participants highlighted that **these dynamics also affect the very production of data during disasters**. One humanitarian programme lead explained:

Recently in Enga, we worked with the common rolls to establish population, but we found that it's science fiction,

it was completely inflated, we couldn't relate it to the people on the ground. And we will ask five focal points about the population of their village, and they will come up with five completely different numbers, and if we ask them again, it can be a different number again, and the number goes up and up, and it gets inflated.

In the absence of robust systems, population figures and disaster details are often shaped by local politics and informal authority. Participants noted that whether a disaster is formally recognised and responded to can depend heavily on political affiliations, particularly with Members of Parliament. As information travels through these channels, it can be inflated or selectively reported, making needs assessment and resource allocation even more uneven.

In this sense, reliance on local leaders and personal networks is a double-edged sword: they provide the only viable pathways to mobilise a response, but they also introduce distortions, contestation and fragmentation that undermine coordinated action.

Churches

Local actors recognise that religious divisions among various Christian denominations can also reflect other social fault lines that contribute to conflict. One international representative of a faith-based development and relief agency mentioned that churches may not have institutional structures that can sustain peacebuilding programmes (with donor requirements like security assessments misaligned with their practice) and that religious leaders may also be suffering from the same trauma as the communities they service, highlighting that there remains a need for sustained capacity support and specific skills development in these areas.

Church engagement can also create fragmented responses. Different denominations often keep resources and information within their own circuits, making collaboration difficult. Theological differences can also lead to conflicting approaches in disaster recovery. For example, a faith-based organisation actor explained during the workshop that some denominations such as the Seventh-day Adventists have called for abandoning traditional compensation practices after disasters, arguing that they fuel money-driven conflict. Other churches, however,

continue to see compensation as an essential reconciliation process that must be handled with respect for tradition.

This shows that some faith actors are aware of the risks stemming from denominational hierarchies, competition, and differing interpretations of local practices – illustrating both the indispensable role and the internal tensions of churches in disaster and climate response.

5.3.2 Need for more effective collaboration with external actors

The workshop and interviews revealed a widespread feeling of disconnect among local actors with donors who often fail to take local contexts seriously or prioritise meaningful collaboration with grassroots organisations. While both national and international stakeholders acknowledged the importance of fostering local leadership and adopting context-sensitive strategies, many local practitioners expressed frustration with the ways that **external agencies too often fail to adapt their programmes to local contexts in PNG.** One programme manager commented on unrealistic expectations of impact from donor-funded workshops and one-off training sessions. Several PNG informants complained of high turnover of staff in donor agencies and the difficulty of building working relationships with newcomers who do not understand the context or specific programme history.

This gap is compounded by **barriers to accessing climate finance.** Funding is

critical not only for implementing climate actions embedded in communities but also for **strengthening trust and mutual understanding between local actors and external partners**. When local initiatives are supported and resourced, communities see that their knowledge, priorities and capacities are recognised, reinforcing social cohesion and the legitimacy of external interventions. Conversely, rigid compliance requirements and bureaucratic hurdles frequently prevent grassroots actors from accessing finance, undermining both the effectiveness of climate actions and the trust needed for sustainable, locally led solutions.

National and international actors acknowledged the effects of **short-term project cycles and financial (and power) differentials between donors and recipients** as factors that undermine the kind of local engagement that is required to make humanitarian and other interventions effective. Several grassroots activists were angry at the amount of money flowing through international aid programmes to PNG while they themselves were faced with great difficulties in accessing small amounts of money, often having to divert resources from service delivery to grant-writing.

During interviews, grassroots practitioners emphasised that donor accountability requirements often impose rigid frameworks, predefined outcomes or strict theories of change, leaving little room for local actors to define what is useful or realistic in their communities. They highlighted the need for compliance requirements to be managed in a way

that **minimises administrative burdens**, enabling local agencies to focus on delivering support in rapidly evolving contexts, and adapting interventions to local needs. For instance, one local peacebuilder spoke of having to write a child safety policy when in fact she was struggling to accommodate a group of some 40 villagers (including children) who had come to her organisation fleeing SARV. From her perspective, she was already demonstrating her capacity to keep children safe through her work and did not need the diversion of her energies into external compliance requirements.

5.4 Strategies identified by local actors to address challenges collaboratively

Workshop participants responded to guided questions about their first steps if resources were available, supports needed in their roles, and external support that would be most impactful. Based on those, they proposed a set of actionable strategies to enhance the long-term resilience and security of communities in four regions of PNG: Southern, New Guinea Islands, Highlands, and MOMASE (see the map in Appendix 5). They highlighted a shared set of priorities across regions (see Table 1), including:

- Improved alignment and complementarity of stakeholder actions.
- Strengthened disaster leadership and accountability at provincial levels.
- Increased community-level participation in climate and security discussions.
- Evidence-based frameworks for prioritising actions and investments.

- A stronger focus on the protection and empowerment of vulnerable populations.

To analyse these outputs, we added **structured information on key actors and expected timeframes** for each proposed action. This allowed us to move beyond a list of ideas to identify broader patterns across regions, highlighting four key elements:

1. **Multi-level, multi-actor engagement is essential** – Effective action requires coordination across local, district and provincial governments, NGOs, CBOs, FBOs, research institutions and HDP partners, highlighting the complexity of collaboration in PNG.
2. **Short-term actions focus on trust, alignment, and capacity gaps** –

Immediate priorities like coordination hubs, stakeholder mapping, and community consultations aim to build relationships, reduce duplication, and ensure interventions reflect local realities.

3. **Medium- to long-term initiatives build institutional and human capacity** – Activities such as governance strengthening, leadership development, technical support, and curricula creation reflect the need for sustained investment to integrate climate and disaster resilience into formal structures.
4. **Context-specific, regionally tailored approaches are necessary** – Regional differences require targeted interventions with realistic timeframes, emphasising that one-size-fits-all solutions are ineffective.

Table 1 Key priorities, actors and timeframes to move toward a climate resilient future

Key priority	Activity/action	Key actors	Timeframe between implementation and first results	Objective
Coordination and partnership	Establish coordination hubs of climate and disaster interventions such as the Highlands Humanitarian Hub	CCDA, NDC, Local government, HDP actors, NGOs, CBOs, FBOs	Short term (few weeks to a year)	Improving alignment and avoiding duplication of efforts
	Conduct stakeholder and policy mapping to analyse capacity gaps, power dynamics, and connections at the local, district and province level	CCDA, NDC, Research institutions, Local, District and Provincial government, HDP actors	Short term (a few weeks to a year)	Promotes trust and strategic collaboration among actors while reducing fragmented efforts

	Develop best-practice repositories for climate and disaster action to share knowledge between actors and districts	CCDA, NDC, Coordination hub, HDP actors, NGOs, CBOs, FBOs	Medium term (1–5 years)	Encourages data-driven decisions and cross-regional learning in regions facing similar risks
Governance strengthening	Provide technical support to subnational governance bodies (e.g., Conservation and Environment Protection Authority, National Weather Service, Department of Agriculture and Livestock, National Forest Authority)	Provincial government, technical agencies, HDP partners	Medium to long term (6–20+ years)	Strengthens institutional capacity for integrating climate action into governance structures
	Develop provincial-level disaster response and climate leaders with strong, inclusive policies and priorities	Provincial government, technical agencies, provincial and local government, HDP partners	Medium to long term	Improved disaster preparedness and response outcomes
	Pilot accountability frameworks to track the equitable use of climate and disaster resources	CCDA, NDC, Local governments, donors, NGOs	Short to medium term	Transparency mechanisms build community trust and ensure vulnerable groups are prioritised
	Strengthen the justice system	Provincial and local government, development and peacebuilding partners	Medium to long term	Demonstrate accountability
Context understanding	Conduct baseline surveys and mapping of hazards, vulnerabilities, and climate risks in target regions	Local research organisations, HDP partners, community leaders	Short to medium term	Ensures interventions are grounded in a clear understanding of local dynamics and future risks
	Facilitate community consultations to address vulnerable groups' priorities (e.g., women, youth, disabled)	NGOs, CBOs, FBOs, community leaders, HDP partners	Short term	Builds trust and ensures that interventions align with on-the-ground realities
	Define region-specific sustainability metrics for HDP programming tailored to community definitions	HDP partners, community leaders, NGOs, CBOs, FBOs, local research bodies	Short to medium term	Avoids one-size-fits-all solutions by creating context-specific indicators for resilience and sustainability
Capacity building	Develop disaster response/risk management curricula for schools	Local government, HDP partners	Medium term	Prepares future generations with the skills needed for long-term resilience

	Implement practical/ technological trainings for local NGOs, CBOs, especially on risk management and food security	NGOs, CBOs, FBOs, HDP partners	Short term	Strengthens human resources for better disaster response capacity
Community engagement	Establish regular consultations with local stakeholders and feedback mechanisms to ensure community voices shape HDP interventions	NGO, CBOs, FBOs, experts, community leaders, HDP partners	Short-term	Promotes transparency, accountability, and adaptive programming in rapidly changing environments
	Establish community disaster leaders and risk management plans	NGOs, CBOs, FBOs, community leaders, local government	Short to medium term	Strengthen disaster response capacity while fostering local expertise
	Operationalise the Free, Prior, and Informed Consent (FPIC) process for infrastructure development	Local governments, private sector, HDP partners	Medium to long term	Ensures that interventions respect community rights and avoid generating grievances
Region-specific priorities	New Guinea Islands: Early warning systems, biodiversity protection, and resilient infrastructure	All	Medium to long term	Critical due to the region's vulnerability to climate extremes and reliance on natural resources
	Southern Region: Expand civic education and create sustainable livelihood pathways	All	Medium to long term	Enables long-term resilience and stability by addressing economic challenges and educational gaps exacerbated by climate change
	MOMASE: Strengthen context-based strategies and realistic timeframes for programming	All	Medium to long term	Addresses diverse regional challenges with tailored approaches
	Highlands: Reduce vulnerability through the development of sustainable livelihood options and infrastructures	All	Medium to long term	Tackles entrenched vulnerabilities by creating sustainable economic opportunities

Source: Authors, based on participants' work during workshop

5.5 Summary of key findings

The findings in this section explore how locally led actions in PNG contribute to climate resilience and human security, and how national and international actors can support these efforts effectively.

By examining the experiences of communities, grassroots organisations and church-based groups, the analysis identifies practical opportunities for coordination, highlights barriers to

effective engagement, and points toward strategies that align external interventions with local priorities.

Local perspectives and systems underpin climate action. Communities in PNG are historically exposed to frequent natural hazards. As a result, climate change is often understood through the lens of immediate disasters, such as floods, droughts or landslides, rather than as long-term and slow-onset changes. Communities link these impacts to livelihood loss, displacement, and the importance of land and kinship networks, and rely on community-based safety nets for recovery, which are primarily social rather than institutional. These systems are increasingly fragile due to environmental degradation and changing weather patterns, and while participants recognised losses in local knowledge, the full extent of these capacity gaps is not yet clear.

Ignoring local knowledge and practices can lead to maladaptation and exacerbate security risks. In most communities, responses to climate shocks and natural hazards are rooted in kinship and wantok networks. Grassroots practitioners, local leaders, churches and other community actors – collectively ‘local actors’ – respond to disasters in the absence of effective government presence, drawing on local knowledge, belief systems, ties to land and community, and leadership structures. Failing to recognise these local perspectives often leads to interventions being rejected by communities, slower recovery, and perceived disrespect for local action.

Neglecting these factors can even fuel intercommunal conflicts, as official, top-down approaches to disaster relief frequently overlook the centrality of land and social belonging in shaping responses.

Local actions are a driver of social change for vulnerable groups.

Community-led action reflects local understandings of social norms and can engage vulnerable groups, such as women and youth, as drivers of change rather than passive victims. Participants highlighted this as a critique of current programmes, noting that interventions targeting women without also engaging men risk failure, and that youth – who comprise 60% of the population – are key to challenging the status quo and identifying local leaders who can strengthen community resilience. Supporting these locally led approaches can therefore reinforce social cohesion, build human security, and enhance the effectiveness of external interventions.

Local climate action in PNG remains highly fragmented. Much responsibility falls on individual actors and church leaders, which can create blind spots, reinforce local biases, increase competition, and place undue burden on communities. The lack of coordination can also exacerbate local tensions and conflicts, undermining the overall effectiveness of interventions.

There is very limited coordination across local, national and internal climate actors – coordination between donors, local actors and national agencies is minimal. While there is strong interest in closer collaboration, efforts are hampered

by information asymmetries and siloed approaches. Donors are often unaware of existing local initiatives, while externally driven projects are sometimes perceived as undermining local leadership. The CCDA and the NDC could facilitate coordination and increase the visibility of national efforts, but they are largely absent from this role according to local actors.

Short- and long-term interventions are both urgently needed – local actors emphasised the importance of combining immediate and sustained approaches. Short-term actions – such as coordination hubs, stakeholder mapping and community consultations – help build trust, align efforts, and address capacity gaps. Medium- to long-term initiatives – such as governance strengthening, leadership development, technical support and curricula creation – are essential to integrate climate and disaster resilience into formal structures and ensure lasting impact. While these interventions yield results over different timeframes, both are considered priority actions to strengthen resilience in PNG communities.

6 Conclusions and recommendations

The word most often used during the workshop was ‘disconnection’, referred to as the disconnection between local needs and national priorities, between institutions and communities, and between short-term responses and long-term resilience. In PNG’s fragmented political and geographic landscape, where state presence is limited and local governance remains central to daily life, these disconnections are not just logistical – they are structural.

Working with local actors is not a utopian ideal in PNG, it is a practical necessity. Local knowledge helps limit blind spots in climate and conflict responses, while local networks – whether faith-based, community-led, or traditional – can often reach further than formal institutions. Collaboration with these actors enhances service delivery, strengthens social cohesion, and helps align layered interventions across timeframes and sectors. This is especially important in remote or insecure areas, where external actors struggle to engage effectively.

Yet, despite widespread agreement on the importance of local engagement, persistent structural barriers remain. Weak national government capacity, fragmented landscape of largely individual-driven interventions, low coordination, short-term donor funding cycles, and competition among numerous actors undermine trust and hamper effective

collaboration. Compliance burdens and a lack of donor understanding of local realities further marginalise grassroots organisations. These challenges limit the ability of local efforts to translate into sustained climate resilience and long-term stability without stronger, more inclusive coordination across all levels.

The following key recommendations emerged for the Government of PNG and its international partners:

1. **Support and strengthen locally led action** by grassroots practitioners, local leaders, churches and CBOs as the primary drivers of climate resilience and human security. Seek to build on and reinforce existing efforts rather than replace them.
2. **Require genuine listening to local knowledge and practices** – including perspectives on land, kinship, gender and community-based recovery systems – in all externally driven projects to prevent maladaptation and conflict exacerbation.
3. **Improve coordination and information-sharing** between donors, local actors and government at all levels through lightweight, demand-driven mechanisms (regular dialogue, stakeholder mapping, community consultations and sub-national or provincial platforms) and by clarifying

mandates and strengthening the capacity of national coordination institutions (CCDA and NDC) so they can play their intended facilitation role without overburdening local actors.

4. **Increase direct capacity-building support to local actors and to government institutions** at national and provincial levels through leadership development, technical assistance, training, curricula creation, and (where requested) embedded advisors and additional resourcing – always co-developed with local partners.
5. **Develop evidence-based frameworks to ground resilience building in actions strengthening what is already implemented locally.** Support immediate actions such as community consultations or stakeholder mapping to build relationships, reduce duplication, and ensure interventions reflect local realities, alongside medium- and long-term initiatives like governance strengthening, leadership development, technical support, and curricula creation to embed climate resilience and disaster response into formal structures. These should be co-developed with local actors to reinforce – not overburden – their existing capacities and responsibilities.
6. **Embed conflict sensitivity as a core principle in all climate and disaster programming,** treating it as essential to resilience-building, not an add-on.

References

- Abay, N.A., Kuehnast, G., Peake, M. and Demian, M.** (2024) *Addressing gendered violence in Papua New Guinea: Opportunities and options*. Special Report no. 528. Washington, DC: United States Institute of Peace (www.usip.org/publications/2024/03/addressing-gendered-violence-papua-new-guinea-opportunities-and-options).
- ACLEDD** (2024) 'Q&A: The Worsening Trend of Violence in Papua New Guinea'. 27 February (<https://acleddata.com/brief/qa-worsening-trend-violence-papua-new-guinea>).
- Allen, B. J. and Bourke, R.M.** (2001) 'The 1997 drought and frost in PNG: overview and policy implications'. In, Bourke, R.M., Allen, M.G. and Salisbury, J.G. (eds) *Food Security for Papua New Guinea*. Proceedings of the Papua New Guinea Food and Nutrition 2000 Conference, PNG University of Technology, Lae, 26–30 June 2000. ACIAR Proceedings No. 99, pp 155–163 (www.aciar.gov.au/sites/default/files/legacy/pr99_-_abstract_x_17._drought_related.pdf).
- Allen, M. and Monson, R.** (2014) 'Land and conflict in Papua New Guinea: The role of land mediation' *Security Challenges* 10(2): 1–14 (www.jstor.org/stable/26467878).
- Ambelye, I.** (2021) 'Educated young women and the challenges of reintegration in rural villages of Papua New Guinea' *Directions* 35(2): 57–64 (www.academia.edu/download/95063239/489540117.pdf#page=64).
- Bainton, N. and Skrzypek, E.** (2021) 'An absent presence: Encountering the state through natural resource extraction in Papua New Guinea and Australia', in Bainton, N. and Skrzypek, E. (eds) *The absent presence of the state in large-scale resource extraction projects*. Canberra: ANU Press (<https://doi.org/10.22459/AP.2021>).
- Baker, K.** (2018) 'Women's representation and electoral system reform in Papua New Guinea: The limitations of limited preferential voting' *Asia and the Pacific Policy Studies* 5(2): 208–219 (<https://doi.org/10.1002/app5.235>).
- Banks, G.** (2008) 'Understanding 'resource' conflicts in Papua New Guinea' *Asia Pacific Viewpoint* 49(1): 23–34 (<https://doi.org/10.1111/j.1467-8373.2008.00358.x>).
- Barnett, J.** (2020) 'Global environmental change II: Political economies of vulnerability to climate change' *Progress in Human Geography* 44(6): 1172–1184 (<https://doi.org/10.1177/0309132519898254>).
- Bingeding, N.** (2018) 'Papua New Guinea's response to climate change: Challenges and ways forward', in Crook, T. and Rudiak-Gould, P. (eds) *Pacific Climate Cultures: Living Climate Change in Oceania*. Warsaw: De Gruyter Open (<https://doi.org/10.2478/9783110591415-011>).

- Bizhan, N. and Gorea, E.G.** (2022) 'A weak state and strong microsocieties in Papua New Guinea', in Bizhan, N. (ed.) *State fragility: case studies and comparisons*. Abingdon: Routledge (<https://doi.org/10.4324/9781003297697-7>).
- Bourke, R.M.** (2018) 'Impact of climate change on agriculture in Papua New Guinea', in Quartermain, A.R. (ed.) *Climate Change: Our Environment, Livelihoods and Sustainability*. Climate Change Conference 2018, University of Goroka (www.researchgate.net/publication/327930392_Impact_of_climate_change_on_agriculture_in_Papua_New_Guinea).
- Brennan, K., Vidotto Caricati, C., Jay, S., et al.** (2023) *An analysis of cross-sector climate adaptation in Papua New Guinea*. Capstone Workshop Program. New York: Columbia University (www.sipa.columbia.edu/climate-change-security-analysis-crosssector-climate-adaptation-papua-new-guinea).
- Brimacombe, A.M.B.** (2020) *Climate change and human security in Small Island Developing States: the case of Papua New Guinea and its UN-REDD/REDD+ Program*. Thesis, University of Prince Edward Island (<https://islandscholar.ca/islandora/object/ir:23209>).
- Care** (2015) 'Our food is running out. By the middle of October, everything will be gone'. *Assessment on the Impact of the El Niño Event in PNG*. Care International (<https://wrd.unwomen.org/sites/default/files/2021-11/CARE-PNG-Drought-Assessment-Report-October-2015.pdf>).
- Care** (2017) *2015-2016 El Niño Response Papua New Guinea Gender in Emergencies Lessons Learnt*. Care International (<https://reliefweb.int/report/papua-new-guinea/2015-2016-el-ni-o-response-papua-new-guinea-gender-emergencies-lessons>).
- CCDA – Climate Change and Development Authority** (2020) *Papua New Guinea Enhanced Nationally Determined Contribution 2020*. Port Moresby, Papua New Guinea (https://pacificndc.org/sites/default/files/2020-12/PNG%20Enhanced%20NDC%202020_3.pdf).
- CCDA** (2023) *Papua New Guinea National Adaptation Plan*. Port Moresby, Papua New Guinea (<https://unfccc.int/sites/default/files/resource/NAP-PNG-Finale-2023.pdf>).
- Connell, J.** (2018) 'Effects of climate change on settlements and infrastructure relevant to the Pacific islands', *Pacific Marine Climate Change Report Card*, pp. 159–176 (<https://vanuatu-data.sprep.org/system/files/10-settlements-infrastructure.pdf>).
- Cox, J. and Tararia, A.** (2023) 'Climate change as a driver of conflict in Papua New Guinea', in Peake, G. (ed.) *Examining conflict dynamics in Papua New Guinea*. Washington, DC: United States Institute of Peace (www.usip.org/sites/default/files/2023-04/dp23-examining-conflict-dynamics-papua-new-guinea.pdf).
- Cox, J., Walton, G.W., Goa, J. and Lawihin, D.** (2022) 'Uneven development and its effects: Livelihoods and urban and rural spaces in Papua New Guinea',

in Howes, S. and Pillai, L.N. (eds) *Papua New Guinea: Government, Economy and Society*. Canberra: ANU Press (<https://library.oapen.org/bitstream/handle/20.500.12657/53657/book.pdf>).

- Dalby, S.** (2022) *Rethinking Environmental Security*. Rethinking Political Science and International Studies Series. Cheltenham, UK; Northampton, MA: Edward Elgar Publishing.
- Daoudy, M., Sowers, J. and Weinthal, E.** (2022) 'What is climate security? Framing risks around water, food, and migration in the Middle East and North Africa' *WIRES Water* 9(3) (<https://doi.org/10.1002/wat2.1582>).
- Dalsgaard, S.** (2013) 'The politics of remittance and the role of returning migrants: Localizing capitalism in Manus Province, Papua New Guinea', in McCormack, F. and Barclay, K. (eds) *Engaging with capitalism: cases from Oceania*, pp. 277–302. Bingley: Emerald Group ([https://doi.org/10.1108/S0190-1281\(2013\)0000033013](https://doi.org/10.1108/S0190-1281(2013)0000033013)).
- Demian, M. and Tinning, Z.** (2023) 'Lae: City at the center of Papua New Guinea', in Peake, G. (ed.) *Examining conflict dynamics in Papua New Guinea*. Washington, DC: United States Institute of Peace (www.usip.org/sites/default/files/2023-04/dp23-examining-conflict-dynamics-papua-new-guinea.pdf).
- Eves, R.** (2017) *Developing community laws to address sorcery and witchcraft-related violence in Papua New Guinea*. Australian National University (www.researchgate.net/publication/316983916_Developing_Community_Laws_to_Address_Sorcery_and_Witchcraft-Related_Violence_in_Papua_New_Guinea).
- Forsyth, M., Dinnen, S. and Hukula, F.** (2020) 'A case for a public Pacific criminology?', in Carrier, N. and Fraser, A. (eds) *Routledge Handbook of Public Criminologies*, pp. 163–178. Abingdon: Routledge (<https://doi.org/10.4324/9781351066105-18>).
- Garap, S.** (2019) 'Time for donors to do development differently'. DevPolicy Blog, 11 November (<https://devpolicy.org/time-for-donors-to-do-development-differently>).
- GGGI – Global Green Growth Institute** (2019) *Green Growth Potential Assessment: Papua New Guinea country report*. Seoul: Global Green Growth Institute (<https://gggi.org/report/green-growth-potential-assessment-of-papua-new-guinea>).
- Government of Papua New Guinea** (2010) *Papua New Guinea Vision 2050*. National Strategic Plan Taskforce (<https://sustainabledevelopment.un.org/content/documents/1496png.pdf>).
- Hauck, V.A.** (2009) 'The role of churches in creating social capital and improving governance in Papua New Guinea: Lessons for working in fragile situations' *Public Administration and Development* 30(1): 1–79 (<https://doi.org/10.1002/pad.546>).
- Higgins, K.S., Darwish, L., Raicu, B., Monteiro, C. and O'Toole, S.** (2022) *Conflict Challenges and opportunities for building peace in Hela Province, Papua New Guinea*. London: Conciliation Resources (www.c-r.org/learning-hub/conflict-challenges-and-opportunities-building-peace-hela-province-papua-new-guinea).

- Howes, S., Mako, A. A., Swan, A., et al.** (2014) *A lost decade? Service delivery and reforms in Papua New Guinea 2002–2012*. NRI-ANU Promoting Effective Public Expenditure (PEPE) Project (https://pngnri.org/images/Publications/OP_-_201410_-_Howes_-_Lost_Decade_2.pdf).
- Howes, S. and Pillai, L.N.** (2022) *Papua New Guinea: government, economy and society*. Canberra: ANU Press (<http://doi.org/10.22459/PNG.2022>).
- International Organization for Migration – IOM** (2016) *How Pacific women view human security in the context of climate-related mobility*. IOM Regional Office for Asia and the Pacific. <https://roasiapacific.iom.int/stories/how-pacific-women-view-human-security-context-climate-related-mobility>
- IPCC** (2022) ‘Summary for Policymakers’, in *Climate Change 2022: Impacts, Adaptation, and Vulnerability*. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge, UK; New York, NY, USA: Cambridge University Press, pp. 3–33 (<https://doi.org/10.1017/9781009325844.001>).
- Jacka, J.K.** (2019) ‘In the time of frost: El Niño and the political ecology of vulnerability in Papua New Guinea’ *Anthropological Forum* 30(1–2): 141–156 (<https://doi.org/10.1080/00664677.2019.1647832>).
- Jacka, J. K., and Posner, S.** (2022) ‘How the Enga cope with frost in the 21st century: food insecurity, migration, and development in the Papua New Guinea Highlands’ *Human Ecology* 50(2): 273–286 (<https://doi.org/10.1007/s10745-022-00312-w>).
- Kelman, I.** (2010) *The inequality of vulnerability: the unequal impacts of climate change on Small Island States*. weADAPT (https://weadapt.org/wp-content/uploads/2023/05/small_islands_vulnerability_inequality_climate_change.pdf).
- Kobylinski, A.** (2022) ‘Tribal Violence in Papua New Guinea’. International Committee of the Red Cross, 15 March (www.icrc.org/en/Tribal-Violence-Papua-New-Guinea).
- Lucke, F. von, Wellmann, Z. and Diez, T.** (2014) ‘What’s at stake in securitising climate change? Towards a differentiated approach’ *Geopolitics* 19(4): 857–884 (<https://doi.org/10.1080/14650045.2014.913028>).
- MacDonald, M.** (1984) ‘Melanesian communities: past and present’ in Whiteman, D.L. (ed) *An introduction to Melanesian cultures*. Goroka, PNG: The Melanesian Institute.
- Main, M.A.** (2021a) ‘Absence as immoral act: The PNG LNG project and the impact of an absent state’, in Bainton, N. and Skrzypek, E. (eds) *The absent presence of the state in large-scale resource extraction projects*. Canberra: ANU Press (<https://doi.org/10.22459/AP.2021>).
- Main, M.A.** (2021b) ‘The land of painted bones: Warfare, trauma, and history in Papua New Guinea’s Hela Province’ *Anthropological Forum* 31(2): 129–147 (<https://doi.org/10.1080/00664677.2021.1895070>).

- Marin-Ferrer, M., Vernaccini, L. and Poljansek, K.** (2017) *Index for Risk Management (INFORM) Concept and Methodology Report – Version 2017*. EUR 28655 EN. Luxembourg: Publications Office of the European Union (<https://doi.org/10.2760/094023>).
- Mazrui, A.** (1970) 'An African's New Guinea' *New Guinea* 5(3): 54–55.
- Melpa, J.** (2020) *Youth Unemployment in Papua New Guinea: causes, effects and way forward*. Papua New Guinea National Research Institute (PNG NRI) Public Policy Blog, no. 20 (https://pngnri.org/images/Blogs/PPBLOG_No20.pdf).
- Michael, P.S.** (2019) 'Current evidence and future projections: A comparative analysis of the impacts of climate change on critical climate-sensitive areas of Papua New Guinea' *Sains Tanah: Journal of Soil Science and Agroclimatology* 16(2): 229–253 (<http://dx.doi.org/10.20961/stjssa.v16i2.35712>).
- Michael, P.S.** (2020) 'Agriculture versus climate change – A narrow staple-based rural livelihood of Papua New Guinea is a threat to survival under climate change' *Sains Tanah: Journal of Soil Science and Agroclimatology* 17(1): 78–93 (<https://doi.org/10.20961/STJSSA.V17I1.41545>).
- Nature4Climate** (2025) *Protecting Papua's forests – youth-led approaches to climate, livelihoods and land rights*. The Nature Hub @ CWNYP2025, 23 September (<https://nature4climate.org/event/protecting-papuas-forests-youth-led-approaches-to-climate-livelihoods-and-land-rights>).
- Plan International** (2024) 'Policy Brief: SB60 Expert Dialogue on Children and Climate, and Negotiations, 4 June 2024'. London: Plan International (<https://plan-international.org/uploads/2024/06/Plan-International-Policy-Brief-SB60-Expert-Dialogue-on-Children-and-Negotiations-June-4-2024.pdf>).
- Radcliffe, C., Parissi, C. and Raman, A.** (2016) 'Valuing indigenous knowledge in the Highlands of Papua New Guinea: a model for agricultural and environmental education' *Australian Journal of Environmental Education* 32(3): 243–259 (<https://doi.org/10.1017/aee.2016.19>).
- Regan, A.J.** (2014) 'Bougainville: large-scale mining and risks of conflict recurrence' *Security Challenges* 10(2): 71–96 (www.jstor.org/stable/26467882).
- Reilly, B.** (2000) 'Democracy, ethnic fragmentation, and internal conflict: Confused theories, faulty data, and the 'crucial case' of Papua New Guinea' *International Security* 25(3): 162–185 (<https://doi.org/10.1162/016228800560552>).
- Reilly, B.** (2008) 'Ethnic conflict in Papua New Guinea' *Asia Pacific Viewpoint* 49(1): 12–22 (<https://doi.org/10.1111/j.1467-8373.2008.00357.x>).
- Sanders, A., Pascoe, S., da Silva Hyldmo, H. and Prasti, H.R.D.** (2025) 'Weaving partial stories: More-than-human entanglements and environmental governance experiments in Indonesia and Papua New Guinea' *Ethnos* 90(1): 4–31 (<https://doi.org/10.1080/00141844.2023.2206980>).
- Schram, R.** (2015) 'Notes on the sociology of wantoks in Papua New Guinea' *Anthropological Forum* 25(1): 3–20 (<https://doi.org/10.1080/00664677.2014.960795>).

- Sepoe, O.** (2024) *The Weavers Research Report*. International Women's Development Agency (<https://iwda.org.au/weavers>).
- Schipper, E.L.F.** (2020) 'Maladaptation: When adaptation to climate change goes very wrong' *One Earth* 3(4): 409–414 ([www.cell.com/one-earth/fulltext/S2590-3322\(20\)30483-8](http://www.cell.com/one-earth/fulltext/S2590-3322(20)30483-8)).
- Strouboulis, A., Yayboke, E., Rice, B. and Nzuki, C.** (2022) *Addressing fragility in Papua New Guinea*. Centre for Strategic and International Studies (CSIS) (www.csis.org/analysis/addressing-fragility-papua-new-guinea).
- Tammisto, T.** (2019) 'Life in the village is free: Socially reproductive work and alienated labour on an oil palm plantation in Pomio, Papua New Guinea' *Suomen Antropologi: Journal of the Finnish Anthropological Society* 43(4): 19–35 (<https://doi.org/10.30676/jfas.v43i4.79476>).
- Tararia, A.** (2023) *Women's influence in decision-making in New Ireland Province, Papua New Guinea*. PhD dissertation, Australian National University (<http://hdl.handle.net/1885/282695>).
- Thomas, K.A. and Warner, B.** (2019) 'Weaponising vulnerability to climate change' *Global Environmental Change* 57, Article 101928 (<https://doi.org/10.1016/j.gloenvcha.2019.101928>).
- UNDP and OPHI – United Nations Development Programme and Oxford Poverty and Human Development Initiative** (2024) *2024 Global Multidimensional Poverty Index (MPI): Poverty amid conflict*. New York: UNDP (<https://hdr.undp.org/content/2024-global-multidimensional-poverty-index-mpi>).
- Wimmer, A. and Glick Schiller, N.** (2002) 'Methodological nationalism and beyond: Nation–state building, migration and the social sciences' *Global Networks* 2(4): 301–334 (<https://doi.org/10.1111/1471-0374.00043>).
- World Bank** (2024) Papua New Guinea, Climate Change Knowledge Portal, World Bank (<https://climateknowledgeportal.worldbank.org/country/papua-new-guinea/climate-data-historical>).
- World Vision International** (2023) *Climate change adaptation and disaster risk reduction: Papua New Guinea*. August (www.wvi.org/sites/default/files/2023-08/Climate%20Change%20Adaptation%20%26%20Disaster%20Risk%20Reduction_2023%20August%20FINAL.pdf).
- YECAP – Youth Empowerment in Climate Action Platform** (2025) *Research: Youth and Climate Governance in Asia and the Pacific*. YECAP (www.yecap-ap.org/_files/ugd/5033ao_6fee4374e04d45878co7fo66b588c4fo.pdf).

Appendix 1 Institutions engaged in the consultation and/or workshop

CARE International

DFAT

District Development Authority in Telefolmin, Sandaun Province

ICRC

the Nature Conservancy

Piku Biodiversity Network

PNG Council of Churches

PNG National Research Institute (NRI)

PNG Red Cross

Tulele Peisa

U.S. Embassy to Papua New Guinea, Solomon Islands, and Vanuatu

UNDP

UNICEF

United States Institute of Peace (USIP)

University of PNG (UPNG)

US Department of State

USAID Lukautim Graun

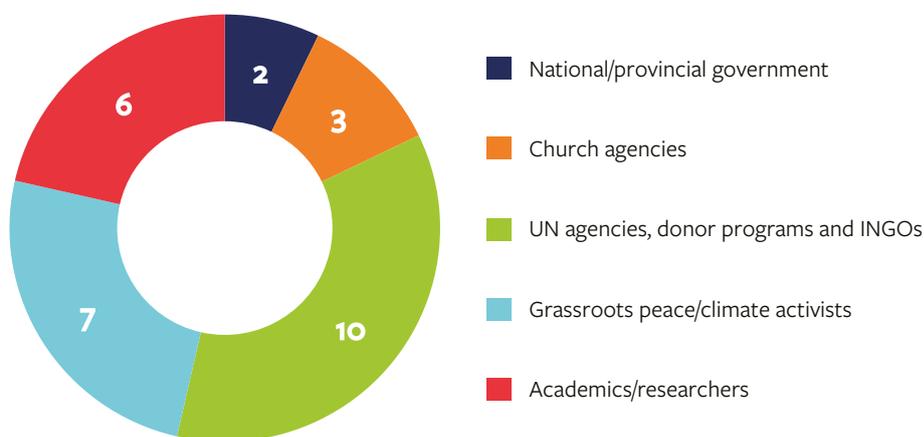
Wildlife Conservation Society

World Vision

In addition to these organisations, several individuals were consulted who were speaking from their own experience and were not representing a particular organisation. To preserve confidentiality, they have not been listed here.

Appendix 2 Stakeholder consultations design

The study team interviewed 34 representatives and individual actors from 28 organisations. Interviewees were selected on the basis that they had been identified as having relevant experience (independent of their current employer) or current responsibilities in climate change, humanitarian or peacebuilding programmes or research. Interviews can be broken down into categories of organisation/actor as shown below.



Notes: Among the 34 interviewees, 23 were Papua New Guineans and 11 were international professionals, including two with decades of experience in PNG. The group included 18 women and 16 men, with overlaps in roles – e.g., a community activist now with TotalEnergies, a former government head now in the Australian Aid Programme via a private contractor, and a church leader turned advisor to a District Development Authority.

Most interviews were conducted in Port Moresby, with remote interviews also conducted with stakeholders based in Bougainville, East New Britain, Eastern Highlands and Southern Highlands Provinces. Several individuals directly involved in programmes or research elsewhere (East Sepik, Enga, Gulf, Hela, Morobe, Sandaun, Western and Western Highlands Provinces) were available for interviews in Port Moresby, although many were normally resident elsewhere.

This interviews utilised a *tok stori* approach, a storytelling-based methodology grounded in Melanesian traditions. This approach emphasises open-ended discussions, reducing power imbalances in research by allowing participants to guide the conversation. Semi-structured interviews served as the primary data

collection method, with recordings and notes taken based on participant consent. While this method enabled rich and candid responses, the study faced limitations due to low engagement from key government agencies, including the National Disaster Centre and the Department of National Planning and Monitoring, despite multiple invitations and follow-ups.

Appendix 3 Workshop sessions design

The structure of the workshop was anchored on three main sessions:

- Session 1: Balancing immediate needs with long term change to manage future risks in PNG
- Session 2: Balancing spatial challenges and opportunities in PNG: Understanding the challenges of managing multiple risks in isolated areas
- Sessions 3: Moving forward: a pathway to a resilient future in PNG

The first day of the workshop, held on Tuesday, 5 November, began with welcoming remarks and brief introductions of the moderators. Participants were then introduced to the workshop's focus (fostering resilience to climate and security shocks by breaking down silos and exploring intersections between sectors) and goals:

1. Exploring diverse challenges and opportunities linked to climate and security risks.
2. Sharing perspectives from varied sectors and regions.
3. Strengthening cross-sector partnerships for resilience and human security.
4. Developing collaborative, context-specific approaches to PNG's challenges.

Willing participants were then invited to introduce themselves and share their affiliations and visions for a climate-resilient PNG. The day continued with a presentation on the workshop's background, including the 'Building forward better' principles, and the current policies shaping PNG's development pathways. Emphasis was placed on PNG's unique context, with a commitment to understanding its complexities rather than imposing predetermined frameworks. The background presentation ended with a summary of the preliminary findings that emerged from the interviews.

During **Session 1**, in the morning, participants voluntarily split into two groups to explore how interventions align with resilience-building across short-term (a few

weeks to 2 years), medium-term (months to ~5 years), and long-term (years to decades) horizons. The groups discussed the implications of these timeframes for their work and the need to tailor interventions to evolving conflict, climate, and weather patterns. They then reconvened to share the main takeaways from their discussions with the broader group.

During **Session 2**, in the afternoon, participants again voluntarily split into two groups to discuss the disconnections they face in climate resilience efforts. The groups discussed to what extent tackling climate and security challenges requires collective efforts at local, subnational, and national levels, while also acknowledging the physical and mindset barriers that often lead to working in isolation. Participants shared their experiences of overcoming these barriers and brainstormed ways to break down silos, focusing on building connections and fostering collaboration for a more resilient future. After their discussions, the groups reconvened to share their insights to the rest of the participants.

On the second day of the workshop, Wednesday, 6 November, participants began with a recap of the previous day, sharing their key takeaways. Following a presentation outlining the objectives of **Session 3**, participants voluntarily slip into four groups representing different regions of action: Highlands, MOMASE, New Guinea Islands, and Southern. They worked on creating posters to summarise the most urgent actions needed for building resilience in their respective regions. The groups worked with post-its and were guided through a series of questions, revealed progressively, to help them focus their thoughts and ideas:²⁰

1. If you had the resources to make a change, what would be your first step?
2. What would really help you in your role to address these challenges and make a difference?
3. What is one support or resource from others that would be most impactful?

When the groups reconvened, they shared their posters and discussed their proposed actions, ensuring the most critical issues were highlighted and a collective strategy was formed for moving forward.

²⁰ The decision to reveal the questions one at a time was intentional, aiming to allow participants to focus deeply on each issue without feeling overwhelmed by multiple considerations at once. This approach encouraged thoughtful, step-by-step reflection and helped the participants create a clearer, prioritised path forward for their regions.

Appendix 4 National and provincial level coordination agencies

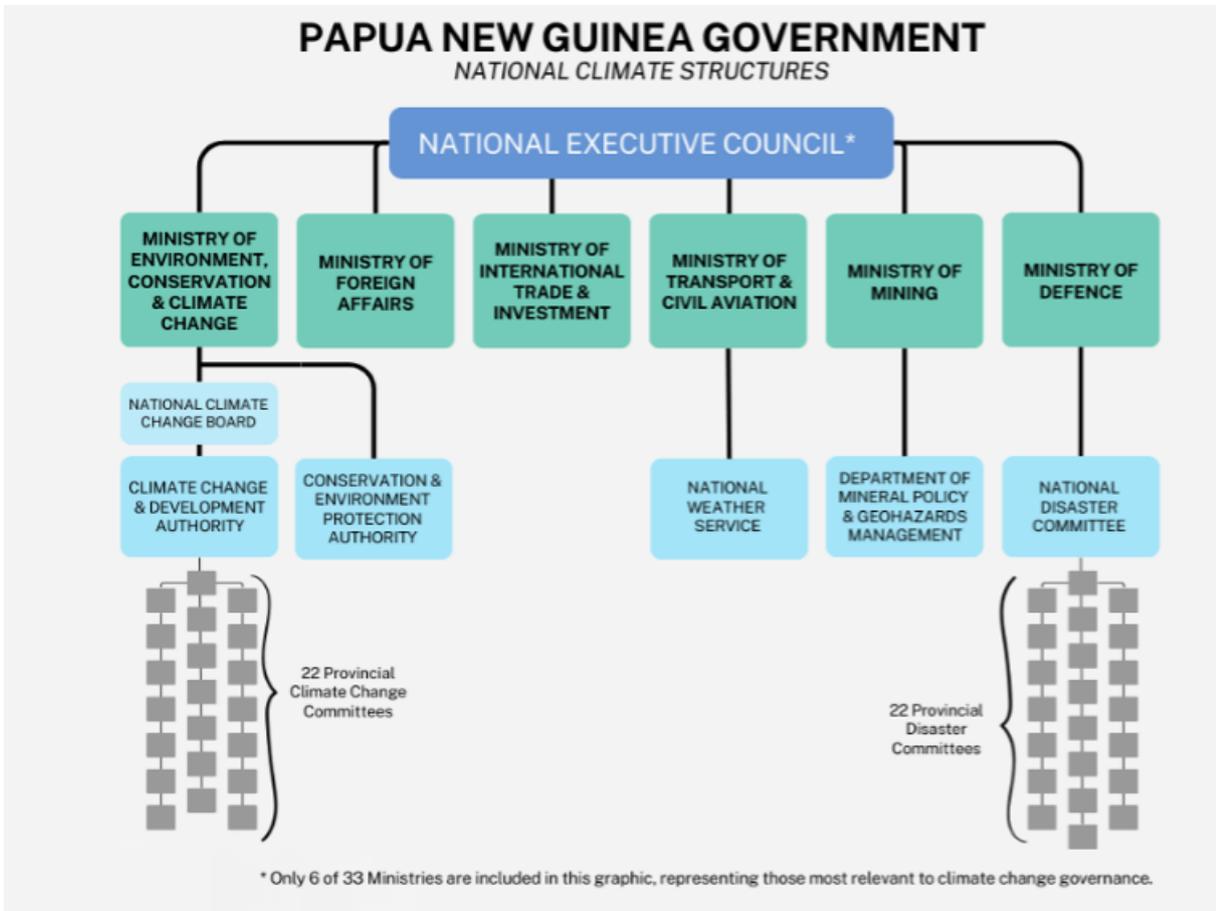
The CCDA is PNG's lead coordinating body for all climate-related policies and actions. It serves as the national focal point for climate documents and international engagement under the UNFCCC, including coordination with donors. Mandated by the Climate Change (Management) Act of 2015 (amended in 2022), the CCDA assesses provincial needs, identifies appropriate supporting agencies, and oversees the implementation of mitigation and adaptation activities. It is also responsible for managing climate-related funding and ensuring alignment with both national priorities and international commitments.

The CCDA coordinates national climate policy and manages donor funds through Provincial Climate Change Committees, which are responsible for translating national priorities into provincial plans. However, weak provincial capacities and limited oversight mean that funds are often spent based on the preferences of Members of Parliament – who also serve as governors – rather than strategic, climate-aligned needs. To address this, the CCDA increasingly relies on Memorandums of Understanding (MoUs) requiring provinces to submit and report on climate-aligned funding plans. Still, implementation gaps persist due to uneven capacity and accountability.

The NDC has formal responsibility for coordinating humanitarian response at the direction of the National Executive Council (political leadership) and the National Disaster Committee (heads of government departments with disaster responsibilities, including police, defence and health). The NDC also liaises with international agencies and provincial disaster committees.

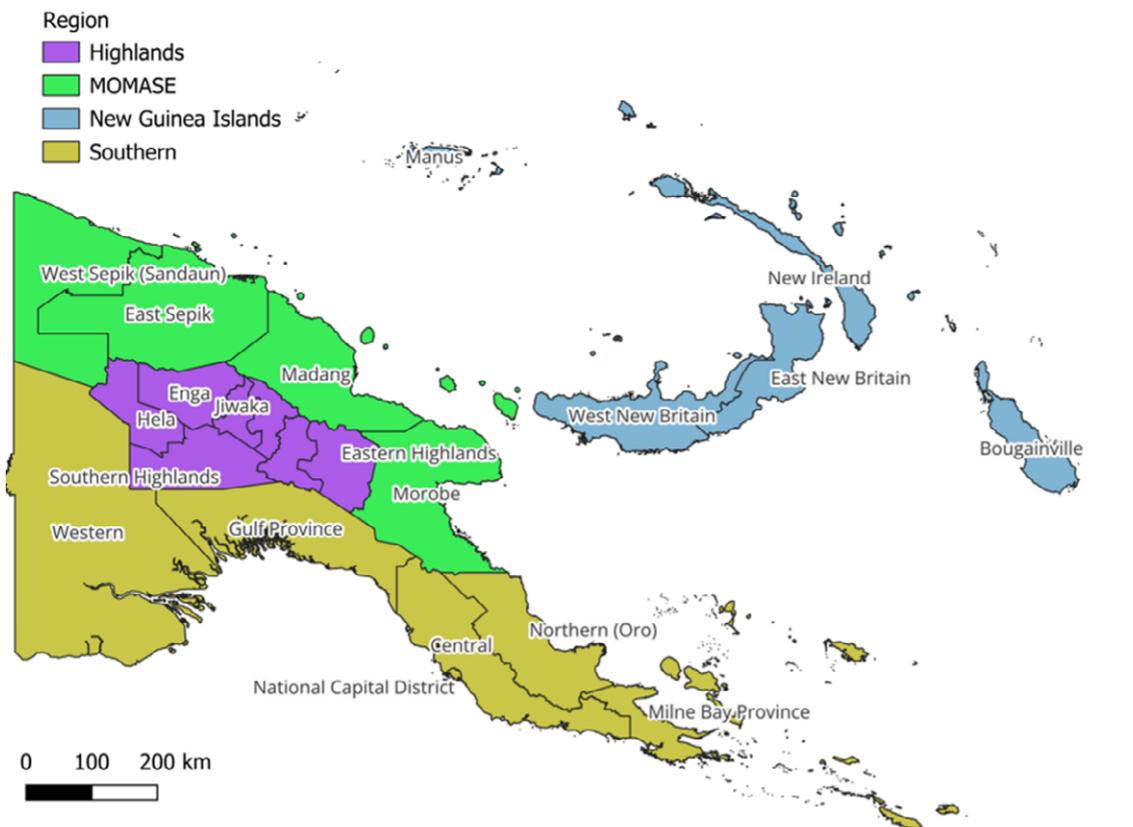
The NDC coordinates disaster preparedness and response via Provincial Disaster Committees, mandated under the 1984 Disaster Management Act. While some provinces have fully operational Provincial Disaster Centres, many have only a single disaster coordinator, limiting consistent implementation. As with CCDA, the NDC's effectiveness relies heavily on provincial leadership, which remains under-resourced and variably functional.

Organigramme of PNG national climate structures



Source: Brennan et al. (2023)

Appendix 5 Map of PNG regions and districts



Source: PNG environment data portal



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