

Promoting peace in the Pacific

National Security implications of climate change: Human Security in the South Pacific



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Submission to the Senate inquiry into Implications of climate change for Australia's national security

Submission by Peacifica

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Peacifica PO Box 73 Petersham NSW 2049 www.peacifica.org This submission has been prepared by Peacifica, a peacebuilding NGO and advisory that works to highlight threats to peace and security in the South Pacific, to propose ways in which they can be addressed and support peacebuilders in the region. Climate change represents a pressing risk to peace and security for the South Pacific and for Australia, and Peacifica is pleased to have this opportunity to make a submission.

Peacifica's submission predominantly relates to paragraph (a) - 'the threats and long-term risks posed by climate change to national security and international security, including those canvassed in the *National security implications of climate-related risks and a changing climate* report by the United States Department of Defense' and paragraph (e) - 'the role of climate mitigation policies in reducing national security risks'. Some consideration of paragraphs (b) and (d) will follow on from those main items.

Introduction

The current and potential effects of climate change are increasingly evident. Changes in temperature, sea level, weather patterns and rainfall are affecting every area of life. Security is one of these areas of impact.

These security impacts are readily apparent in the Pacific region, and especially the South Pacific, including Australia. They range from the human scale, at which household food and water security is threatened by salinity, land loss and extreme weather, to the national level, where the viability of whole states is threatened. Climate change also affects the already restricted livelihood options for young people. Pacific populations are preparing for this change. In a contemporary recasting of their migratory past, they are increasingly mobile. Young people are encouraged to migrate, temporarily or permanently, for work and education, while some countries are already buying land or seeking agreements with governments of countries at less imminent climate risk.

The pressure that climate change brings as both threat multiplier and conflict driver means that *national* security issues for Australia and our neighbours are intimately bound up with *human* security across the region. Australia is the most powerful member of the South Pacific family and cannot ignore the situations that its neighbours face. We have the largest impact on climate, the greatest resilience, and the greatest potential to help.

This submission focuses on the human security end of the security spectrum, with reference to the Pacific Island Countries (PICs) of the South Pacific. It touches in particular on food and water security and the effects of climate change on youth, and explores their wider security consequences. It suggests where there are gaps in the Australian policy landscape, especially across the foreign affairs, defence and environment portfolios and makes a number of recommendations for a regionally focused approach to addressing the security impacts of climate change, including through comprehensive domestic and regional mitigation and adaptation work.

Summary of Recommendations

- 1. The Australian government should invest in changing the perception of its role in the region to one of leadership built on mutual respect through culturally appropriate support.
- 2. Australia must do more than assume the role of the region's principal security partner. It should support coordinated localised actions in a joint human security approach to development and national security.
- 3. Australia should work with PICs on long term plans to support climate induced migration as a viable adaptive measure, including through appropriate education assistance and employment programs that meet both Australia's labour needs and the aspirations, labour rights and skills of PIC workers. With examples of current migration in the Pacific leading to positive outcomes, preemptive and considered migration strategies could be seen as a relevant adaption strategy for many remote Pacific communities.
- 4. Australia should encourage, where possible, higher reliance on sustainable domestic food production that a) is cognisant of the effects of climate change on food production, and adapted accordingly, and b) utilises social structures, such as community based resource management, to engender long-term practises that promote food security from the community level.
- 5. Australia should limit shocks to economic mainstays with more effective regulations and use of exclusive economic zones, with the aim of promoting sustainable yet productive yields in fishery zones, and ensure ongoing viability of food importation.
- 6. Australia should support existing youth programs and initiatives and/or assist in the development of youth-driven leadership programs in the South Pacific, investing in programs that are context-sensitive
 - Ensure youth participation and decision-making ability in any Australian government undertaking that affects them, and encourage organisations working in the South Pacific to take the same approach
 - b. Establish broad-based links between youth collectives and organisations in the Pacific with those in Australia and across the region
- 7. Australia should support adaptive capacity-building on multiple governance levels, with a focus on key institutions such as: education, justice systems, and infrastructure
- 8. Australia should invest in opportunities for economic diversification
 - a. Support development of private-public partnerships
 - b. Develop use of renewable technologies for job creation and energy security
- 9. The Australian government should implement fully connected domestic and international climate change mitigation and adaptation policy.

Defining national security and human security

By inviting comment on the roles of overseas development and humanitarian assistance, this inquiry implicitly recognises that there is a relationship between human security and national security. However it is not evident that the Australian government has its own clear definition of national security. The Department of Prime Minister and Cabinet suggests that "National security is all about keeping Australians safe and secure". This broad definition has resulted in overwhelming focus on border protection, terrorism and organised crime without consideration of underlying human security factors.

These are certainly pressing national security issues, but without a more comprehensive definition this focus and 'homeland security' perspective may limit the government's capacity to focus on underlying drivers like climate change. Introducing human security into the national security discussion would be an effective way to change this.

Peacifica understands *national security* to refer to the defence of Australia's sovereignty and the safety and freedom of it citizens. This is assured primarily through the operations of the defence, intelligence and border security services.²

Human security focuses on the well-being of individuals and communities, and the degree to which they are 'free from want and free from fear'. It encompasses economic, food, health, environmental, and political security, as well as assuring protection from violence. A human security approach recognises that these threats and long-term risks are mutually reinforcing and interconnected and that their impacts can spread into the wider region. Human security depends on individual and community resilience to external shocks - including the effects of climate change - and drives forces that affect national security (and vice versa). Assuring the well-being and sustainable lifestyles of all, including of our neighbours, is manifestly in the interests of Australia's national security.

Australia as a part of the South Pacific region

Australia faces the South Pacific, and has diverse historical and ethnic ties to Pacific peoples. Becoming a fully engaged member of the Pacific community is in our strategic, social and economic interests. As noted in the submission by Peacifica and partners to the Foreign Policy White paper process:

⁵ Australian Government Department of Defence (ADF), *2016 Defence White Paper*, p 74 www.defence.gov.au/whitepaper/docs/2016-defence-white-paper.pdf



¹ Department Of The Prime Minister And Cabinet, *National Security*, 2017, <u>www.pmc.gov.au/national-security</u>

² "National security is the safekeeping of the nation as a whole. Its highest order of business is the protection of the nation and its people from attack and other external dangers by maintaining armed forces and guarding state secrets...Because national security entails both national defense and the protection of a series of geopolitical, economic, and other interests, it affects not only defense policy, but foreign and other policies as well." http://index.heritage.org/military/2015/important-essays-analysis/national-security/

³ United Nations Development Programme, *Human Development Report* 1994, p 24 http://hdr.undp.org/en/content/human-development-report-1994

⁴ United Nations Trust Fund for Human Security, *Human Security in Theory and Practice: An Overview of the Human Security Concept and the United Nations Trust Fund for Human Security,* 2009, p 6-7 http://bit.ly/21SP9ub

"In today's globalised world, violence, climate change and human mobility are less restrained by borders than ever before. So too are social, economic and cultural activities... Our foreign policy, if oriented towards peace and preventive diplomacy, can ensure that economic, political, social and cultural ties are nurtured, in ways that advance Australia's interests by enhancing mutual regard and understanding. It also will contribute to regional security and to countering the spreading of violent extremism. Importantly, this consideration needs to be applied to countries with lesser economic and political power, especially those in the Pacific, as with our larger neighbours. For Pacific Island states, Australia looms large as a natural regional focal point."

However Australia's engagement in the region "has been characterised by unclear, inconsistent and competing interests and intentions that have reduced its effectiveness and undermined Australia's influence". Its approach to ensuring the stability of fragile states, security and cohesion in the region has often focused on reacting to relatively shorter term traditional security threats to governance, policing assistance and disaster relief aid of Pacific Island states.

Australia's regional influence and leadership is perceived to be declining. It has been excluded from regional institutions like the Pacific Islands Development Forum and Pacific Small Island Developing States group, and Pacific Island states are increasingly looking to establish external partner relationships with China and Russia.

Pacific Islanders recognise better than Australians that climate change blurs the lines between domestic and international. The threat constitutes a risk to everyone - those already feeling the impacts, and those who will feel them if appropriate mitigation and adaptation measures are not undertaken now. Regional leaders, including Kiribati's former President and climate statesman Anoke Tong and Fiji's Prime Minister Bainimarama have challenged Australia to 'face the reality' and suggested that it was part of a 'coalition of the selfish' due to its climate change policies. Australian support for Pacific voices in international fora (like the Paris talks) is not backed up by policy, particularly domestic climate change policies towards coal mining and reef protection. Exclusion based on differences in domestic climate change policy or perceived 'domineering' behaviour threatens Australia's long term national security through reduced capacity to implement collaborative responses, and diminishes relationships with our Pacific neighbours.

Pacific Island Countries are acting now to adapt to climate change. This is most evident in reinvigorated migration activities, with considerable movement of young people and in some cases purchase of new land in other PICs. The small population of the Pacific means that this migration in itself is not a significant direct security threat to Australia, ¹¹ but it may lead to cascading and destabilising population movements and pressures across the South Pacific region. In addition the possibility of diminished sovereignty over some territories like Kiribati and Tuvalu may result in

¹¹ See generally McAdam, J. Andrew & Renata Kaldor Centre for International Refugee Law Submission for the inquiry into the Implications of climate change for Australia's national security, 2017.



⁶ Cox, Schmeidl et al, *Applying a critical peacebuilding perspective to Australia's foreign policy Submission to the Australian Foreign Policy White Paper consultation*March 2017, p 8 http://bit.ly/dfatpeacebuilding

Wallis, J. Crowded and complex: The changing geopolitics of the South Pacific. Special Report from the Australian Strategic Policy Institute, April 2017, p 6 http://bit.ly/2vsaa3K
 Wallis, J. p 23

⁹ Sydney Morning Herald "Kiribati President's challenge to Australians: do you care?" 19 November 2015 http://www.smh.com.au/environment/kiribati-presidents-challenge-to-australians-do-you-care-20151119-gl2swk.html

¹⁰ Bainimarama, F. 'Hon PM Bainimarama Speech at the Closing of Pacific Ministers Meeting on Strengthening Climate Change Resilience' Suva, 28 October 2015. http://bit.ly/2hqyNJ1

further destabilisation as other sovereign powers take advantage. As with all movements of people, regional, collaborative approaches to managing them and welcoming those who need new homes (in Australia or elsewhere in the region) will significantly reduce the cost of those movements and risk of conflict. Initiatives like the Pacific Seasonal Worker scheme and assistance for secondary and tertiary education for Pacific Island people should be expanded, with a variety of jobs and opportunities available.

Recommendations:

- 1. The Australian government should invest in changing the perception of its role in the region to one of leadership built on mutual respect through culturally appropriate support.
- 2. Australia must do more than assume the role of the region's principal security partner. It should support coordinated localised actions in a joint human security approach to development and national security.
- 3. Australia should work with PICs on long term plans to support climate induced migration as a viable adaptive measure, including through appropriate education assistance and employment programs that meet both Australia's labour needs and the aspirations, labour rights and skills of PIC workers. With examples of current migration in the Pacific leading to positive outcomes, preemptive and considered migration strategies could be seen as a relevant adaption strategy for many remote Pacific communities. ¹²

Summary of the effects of climate change on the South Pacific

The impacts of climate change on Pacific Island states are increasingly recognised and documented. These impacts include:

- Land degradation and loss (impacting economic livelihoods, food security, cultural life)
- Higher sea levels
- Loss of freshwater through saltwater intrusion
- More frequent and stronger extreme weather events
- Spread of waterborne and vector-borne diseases, such as cholera, typhoid, malaria and dengue
- Degradation of fisheries (impacting both food security and economic well-being
- Loss of future development opportunities.¹³

These impacts, individually and collectively, affect the human security of Pacific Island peoples, and thus the security of the region overall, including Australia. Development cooperation, in combination with action in labour and economic policy can influence the conflict risks associated with these effects. Two climate impacts - on food and water, and on young people, are discussed in more detail here.

https://www.sprep.org/climate_change/PYCC/documents/pacificclimate.pdf



¹² Birk and Rasmussen, "Migration from atolls as climate change adaptation: Current practices, barriers and options in Solomon Islands' *Natural Resources Forum* 28 2014

¹³ SPREP Factsheet: Pacific Climate Change

Food and Water - see also Annex 1

Climate impacts in the Pacific are manifesting through their effects on food production, which are compromising human security in the region and have the potential to spark regional security issues. Climate change becomes a human security threat in conjunction with a range of underlying socioeconomic factors that characterise provision of food in the Pacific, and heighten existing risks to food security, including a heavy dependence upon agriculture and fisheries for food production, which is supplemented by importation of food. These methods of food provision are at risk twofold from direct and indirect impacts of climate change. First, ecological systems supporting crops and fisheries will be fundamentally undermined, reducing potential for endogenous food production if adaptive methods are not implemented. Second, the ability to supplement food supply with imports is at risk from declining national incomes from economic mainstays reliant upon functioning and profitable ecosystems.

Food insecurity also holds wider implications for the stability of the region – including its effects on health and as a push factor for conflict and migration:

- Undernutrition and overnutrition, as pre-existing risk factors in the Pacific Islands, are highly likely to be exaggerated by impacts of climate change on food security. Diarrhoeal disease has been shown to be sensitive to changes in climatic conditions, namely impacts of climate change on freshwater sources.
- High dependence upon natural resources for subsistence, livelihoods and broad-based economic stability mean environmental factors are becoming increasingly critical determinants of decisions that affect national security.¹⁴ Smaller returns from agriculture and fisheries will contribute to significant livelihood contraction, which may increase the risk that people will join armed groups.¹⁵ Food insecurity is also a push factor for environmental migration which has been linked to the outbreak of conflict.¹⁶

Recommendations:

As part of its effort to build regional partnerships founded on mutual respect and collaboration, Peacifica recommends that Australia should:

- 4. Encourage, where possible, higher reliance on sustainable domestic food production that a) is cognisant of the effects of climate change on food production, and adapted accordingly, and b) utilises social structures, such as community based resource management, to engender long-term practises that promote food security from the community level.
- Limit shocks to economic mainstays with more effective regulations and use of exclusive
 economic zones, with the aim of promoting sustainable yet productive yields in fishery zones,
 and ensure ongoing viability of food importation.

¹⁶ Reuveny, 2007 p 668



¹⁴ Reuveny, 'Climate change-induced migration and violent conflict' 2007 *Political Geography* 26(6) p 661

¹⁵ Barnett, 'Climate change, human security and violent conflict' 2007 *Political Geography* 26(6) p 644

Youth - see also Annex 2

For the 1.8 billion youth across the globe, climate induced changes will determine their future livelihoods by threatening water and food security, weakening their economic security, and by undermining their health and safety. The most vulnerable young people remain those in the Global South, the heaviest burden carried by those who produce the least impact on global temperature rise. In Solomon Islands and PNG, young people recognise that climate change is exacerbating social, economic and political tensions. In both countries intensified resource scarcity and permanent urban migration in search of work are challenging state capacity to provide opportunities and services to sustain livelihoods and maintain peace.

While the impacts of climate change on the livelihoods of young people presents significant risks of instability, the possibility to generate long-lasting positive change will be greater than ever. There is significant potential in youth as agents of change and leadership. In the South Pacific, youth have shown they are capable of leading the transition to sustainable development. If effectively harnessed, youth voices, their decision-making ability and their political participation can help minimise human security risks and contribute to the South Pacific's capacity to overcome climate change threats. Australia should consider the following recommendations as it continues its partnership with countries in the Pacific:

- 6. Support existing youth programs and initiatives and/or assist in the development of youth-driven leadership programs in the South Pacific, investing in programs that are context-sensitive
 - a. Ensure youth participation and decision-making ability in any Australian government undertaking that affects them, and encourage organisations working in the South Pacific to take the same approach
 - b. Establish broad-based links between youth collectives and organisations in the Pacific with those in Australia and across the region
- 7. Support adaptive capacity-building on multiple governance levels, with a focus on key institutions such as: education, justice systems, and infrastructure
- 8. Invest in opportunities for economic diversification
 - a. Support development of private-public partnerships.
 - b. Develop use of renewable technologies for job creation and energy security

Current Australian climate change and security policy: gaps and points of difference

Australian climate change policy is a patchwork that, under the umbrella of the Paris agreements, is only starting to be stitched together. From a security perspective, there are relevant elements of climate change policy in the Defence, Foreign Affairs and Environment portfolios. Looking across them from the perspective of national and human security in the South Pacific region, it appears that:

- 1. Australian climate change policy is, appropriately, mainly domestic in focus.
- 2. Australia does not take mitigation seriously. Australia has not been able to implement a coherent and comprehensive mitigation policy demonstrated most potently by the

continued push to open the Galilee Basin to coal mining, against all economic and environmental sense. By relinquishing the opportunity to lead in this area Australia has undermined its reputation in the region and hampered global action.¹⁷

- 3. Australian engagement climate action overseas falls into two categories:
 - a. Cooperation with other industrialised countries on implementing aspects of the Paris agreement
 - b. Implementing climate related aid projects in other countries, Pacific Island states prominent among them.
- 4. The Department of Defence's potential climate policy, as captured in the 2016 Defence White Paper, is perhaps the most nuanced from a security perspective.
- 5. There is little coherence between Australia's domestic and overseas climate action.

Perhaps the most concerning problem in Australia's climate change policies at the moment is in the separation between its domestic and international action, in both adaptation and mitigation. Prime Minister Turnbull has suggested that while mitigation can be carried out at a regional or planetary scale, "adaptation and resilience is very much a local issue." From a national security perspective this is a misreading of the situation. Building resilience to climate change effects can certainly done from a regional perspective as it entails not only local level actions but also multi-country agreements for the handling of displaced populations.

This is a problem in the South Pacific, for reasons discussed earlier in this submission. Australia's significant contribution to regional security - most notably in the RAMSI program - is well recognised, but also enjoys criticism for its inconsistency and lack of commitment to full engagement as a Pacific nation.¹⁹ The strongest Pasifika critics identify Australia as a manifestation of colonialism and characterise climate change in similar terms. This makes it difficult for Australia to be part of a Pacific-wide movement to mitigate the effects of - and adapt to - climate change.²⁰

Recommendations:

9. The Australian government should implement fully connected domestic and international climate change mitigation and adaptation policy.

²⁰ Though beyond the scope of this paper, full reconciliation between settler Australians and Australia's Aboriginal and Torres Strait Islander peoples would be an important step towards a more authentic relationship with our Pacific neighbours



¹⁷ Wesley Morgan "Pacific pariah: how Australia's love of coal has left it out in the diplomatic cold" The Conversation, 11 September 2016.

¹⁸ Turnbull, M Press conference https://www.pm.gov.au/media/2016-09-09/doorstop-pacific-island-forum

¹⁹ Wallis, J, Pacific Power? Australia's Strategy in the Pacific Islands, Melbourne University Press, July 2017

Annex 1 - Food and Water

This case study explores one dimension of how climate change is undermining human security in the South Pacific, and therefore the security of the region. It confirms the need for Australia to refocus its security approach to prioritise collaborative support for mitigation and adaption to climate change.

Climate impacts are manifesting in the Pacific through their effects on systems of food and water production, which are compromising human security in the region and have the potential to spark regional security issues. Climate change becomes a human security threat in conjunction with a range of underlying socioeconomic factors that characterise provision of food and water in the Pacific, and serve to heighten the risk these countries face to food, and therefore human, insecurity. Apart from the role food security also plays in ensuring human security, it holds wider implications for the stability of the region – including knock on effects on health, and as a push factor for migration and conflict.

The ecological impacts of climate change will have profound impacts on the ability of Pacific communities to produce food endogenously through agricultural and fishery yields. Fish consumption is a key source of protein, providing 50–90 % of dietary animal protein in rural areas.²¹ However, a range of climate-induced changes are contributing to unprecedented variation, decline and local extinction in coastal fisheries.²² A shortfall in the ability of reef fisheries to supply the protein needs for the populations of several Pacific Island countries is expected by 2030.²³

Alongside fisheries, Pacific communities conduct agriculture for subsistence, and as the sole or main source of income.²⁴ Climate change is contributing to increased extreme weather events, land degradation and increased pressure on already limited freshwater sources.²⁵ Changes to rainfall patterns will be particularly detrimental as Pacific communities rely largely on rainfed agriculture.²⁶

These changes combine with a range of socioeconomic and demographic factors in the Pacific to undermine food security. First, increasingly limited capacity to produce food will undermine capacity to meet food needs due to a heavy dependence on subsistence agriculture and fishing. For example, in Vanuatu 80% of the population relies on household food gardens and regular fishing trips play food production and food security, concentrated in rural communities.²⁷ This reliance is exacerbated by a move over recent decades away from traditional agricultural practices, ultimately decreasing

²⁷ Food and Agriculture Organisation of the United Nations, *Climate change and food security in pacific island countries* 2008 p 38



²¹ Bell, J. D., Reid, C., Batty, M. J., Lehoday, P., Rodwell, L. et al., 'Effects of climate change on oceanic fisheries in the tropical Pacific: implications for economic development and food security' 2013 2013 *Climatic Change* 119 p 211

²² Albert et al., 'Keeping Food on the Table: Human Responses and Changing Coastal Fisheries in Solomon Islands' 2015 *PloS ONE* 10(7) p 7

²³ Albert et al., 2015, p 2

²⁴ Barnett, 'Dangerous climate change in the Pacific Islands: food production and food security', 2011 *Regional Environmental Change* 11 p 231

²⁵ Barnett, 2011 p. 232; Meehl, 'Vulnerability of freshwater resources to climate change in the tropical pacific region' 1996 *Water, Air and Soil Pollution* 92(1-2) p. 204

²⁶ Barnett, 2011 p 230

crop variety and resilience to shocks.²⁸ The pressure that climate change and extreme events will put on small scale food production is a cause for concern, especially as mechanisms to account for food shortfalls are lacking.²⁹

In a context of growing populations and increasing dependence on food imports, food security in the Pacific is increasingly a function of the ability to pay for it. So, negative impacts of climate change on national incomes will be a critical cause of food insecurity. This exposes Pacific states which are economically dependent upon sectors at risk from climate change to food insecurity. For example the Marshall Islands relies on heavy importation (up to 90%) of food staples.³⁰ However, its economy depends in large part on agriculture and fisheries which are at risk from climate change (FAO, 2008: 128). Therefore, a critical share of their food stock is subject to volatile international commodity prices and relies upon at-risk sectors of the economy, creating a situation of food insecurity (FAO, 2008: 9, 126). Tourism, a major source of income for many Pacific Island states, may also be affected by climate change, further exacerbating income insecurity in the region.

A final factor expands on the idea of economies at risk from the effects of climate change on primary industries. The sale of fishing licenses in exclusive economic zones to overseas commercial fishing businesses is a significant source of national income for many Pacific Island nations, especially those such as Kiribati, Nauru and Tuvalu with little other economic leverage. Many Pacific Islands also capitalise on the fish industry with domestic fish processing operations, with over USD\$60 million having been invested in new plants in the region in recent years.³¹ However, the adverse ecological effects of climate change on fish stocks will undermine this economic benefit.³²

³² Barnett, 2011, p 235



²⁸ Campbell, 'Development, global change and traditional food security in Pacific Island countries' 2015 *Regional Environmental Change* p 15

²⁹ Food and Agriculture Organisation, 2008, p 38

³⁰ Food and Agriculture Organisation, 2008 p 128

³¹ Bell et al., 2013, p 202

Annex 2: Youth

For the world's 1.8 billion youth,³³ climate induced changes will determine their future livelihoods through their impact on water and food security, economic security and health and safety.³⁴ The most vulnerable young people are those in the Global South,³⁵ who have had the least impact on global temperature rise. In our region the youth of Solomon Islands and Papua New Guinea (PNG) continue to be heavily impacted by the (in)actions of Australia, and other high-greenhouse gas emitting countries.

In Solomon Islands and PNG, young people, who comprise 31 per cent of the total population in both countries, recognise that climate change is exacerbating social, economic and political tensions. In both countries the climate induced changes of *resource scarcity*, intensified by production decline in natural resources, food production or water availability, and *permanent urban migration* in search of work are driving factors in minimising state capacity to provide opportunities and services to sustain livelihoods and maintain peace, and contribute to human insecurity by increasing the risk of violent conflict. The contributions of these two state functions to human security are analysed in more detail below.

Assuring the human security of the young populations of these countries requires collaborative initiatives that protect their freedom of choice, right to demand representative local and national institutions, economic opportunities, and well-being. These need to be part and parcel of Australia's national security outlook. Overly securitised responses to the issues facing young people may not address the underlying climate and other social and economic drivers of conflict. Indeed they have been shown to be ineffective³⁷ and detrimental.³⁸

State capacity to provide opportunities and services to sustain livelihoods & maintain peace

Climate change impacts upon national governance structures in PICs by increasing infrastructure costs, decreasing revenues from primary industry, tourism, fisheries and logging, undermining the provision of public services, and limiting the capacity of agencies and institutions to respond and adapt to climate change itself.³⁹ In Solomon Islands and PNG, weak capacity, inadequate public service skills and corruption are pre-existing structural impediments fostering poor governance. The persistence of poor governance, combined with increased natural hazards and rapid rural-urban migration driven by climate change, will weaken these countries' ability to provide opportunities and services, especially for young people who seek education, employment and livelihood security. Government capacity to respond to resource scarcity, particularly of food and water, can affect a household's ability to purchase food items, health care or invest in education.

³⁹ Barnett, Adger, 2007, p 643; United Nations, *Climate change and its possible security implications: report of the Secretary-General*, A/64/350, 11 September 2009



³³ PRB, The World's Youth 2013 Data Sheet, 2013, http://www.prb.org/pdf13/youth-data-sheet-2013.pdf

³⁴ United Nations, World Youth Report: Youth and Climate Change, 2010, p 15

³⁵ United Nations, 2010, p 15

³⁶ Barnett, J and Adger, W.N., 'Climate change, human security and violent conflict', 2007 *Political Geography* 26

³⁷ McGovern, K and Choulai, B. Case Study of Solomon Islands Peace and Conflict-related Development Analysis, 2005, UNDP, p 3

³⁸ Barnett, 'Security and climate change', 2003 *Global Environmental Change* 13

Provision of basic services to young people, especially women and girls assists 'in ending cycles of conflict, poverty, hopelessness and frustration.'⁴⁰ Women, girls and rural populations disproportionately suffer from resource scarcity.⁴¹ Girls are often first to be removed from schools during climate-related events to assist at home, and rural populations have less access to basic services to mitigate crop and livestock loss, often resulting in forced migration. The inequitable distribution of and access to government services, including education, especially for youth, is also a determinant of political dissatisfaction and conflict. Weak institutional capacity in PNG, particularly of skilled teachers, may overwhelm the education sector and 'reinforce the trend towards declining law and order'.⁴² Such inadequate access to and the poor quality of education saw youth engagement in violence during the Solomon Islands conflict, known as 'the Tensions' that took place from 1998-2003, swell due to the growth of an uneducated and idle youth population in Honiara, capital of Solomon Islands.⁴³

A young workforce can bolster productivity if economic opportunities are present. However, decreasing revenues from loss of fisheries, decline in agricultural outputs⁴⁴ and falling demand for extractive resources is stretching the capacity of PNG and Solomon Island governments to provide sustained economic opportunities for young people. PNG is set to experience the most significant economic losses from projected climate change of all PICs.⁴⁵ It also faces a youth bulge, where, similar to Solomon Islands, young people seek economic opportunities in urban centres, partly driven out of rural areas by food and water shortages.

Governance capacity may be overextended, yet efforts to sustain livelihoods and build peace among urban and rural youth populations may be strengthened when young people are able to engage in governance, political and educational processes and have decision-making power over their livelihoods. Australian support for adaptive capacity development across governance institutions, both local and national in PICs, may make significant strides in strengthening human security for youth in the Pacific Islands.

Direct and indirect impacts of climate change on human security of youth may increase the risk of violent conflict

A history of conflict in Solomon Islands and PNG, coupled with urban migration and high youth populations, make climate change implications on human and regional security particularly alarming. The interconnection of climate change with existing social, economic and political grievances and poor governance has detrimental effects on human security, causing livelihood contraction and the risk of violent conflict. ⁴⁶ The human insecurity-conflict nexus is not new to either country and their post-conflict environments continue to challenge peacebuilding efforts.

⁴⁶ Collier, P, The Bottom Billion, 2007



⁴⁰ Cox, Schmeidl et al, p 11

⁴¹ See more at www.gender-climate.org

⁴² Hayward-Jones, J, "The future of Papua New Guinea: old challenges for new leaders", 2016 Lowy Institute, 17

⁴³ UNICEF, Solomon Islands Case Study in Education, Conflict and Social Cohesion, 2014, p 7

⁴⁴ Total employment in agriculture in PNG and Solomon Islands is at 69% and 68% respectively, making the capacity of both countries adapting to climate change limited (see Rosegrant et al, Climate change, food security, and socioeconomic livelihood in Pacific Islands, 2015)

⁴⁵ ADB, The Economics of Climate Change in the Pacific, 2013, p 74

Youth migration toward urban centres influences the risk of conflict around the world. For example, in Syria, a severe drought 2007-2010 resulted in the mass migration of 1.5 million people from rural to urban centres. Coupled with an influx of Iraqi refugees in urban centres, young men found themselves largely unemployed, unsupported from the government, in poverty and highly susceptible to recruitment by armed groups. Timilar circumstances are playing out in PNG, where as of 2014, migration due to natural disasters and conflict has resulted in the protracted displacement of 22500 people who currently reside in 'camps' with limited access to food, education and safety. Rapid urbanisation will see the population of PNG's and Solomon Island's urban centres double within the next 25 years. Subsequent high population density may contribute to political instability as it is a strong predictor of armed conflict, more so than water and land scarcity.

Growing inequalities within urban centres and between urban and rural populations will fuel grievances, especially when economic opportunities are scarce. For example, in Port Moresby, only 1 in 8 school leavers are absorbed into the labour force each year. Some youth have sought alternative income streams by joining armed groups, 'raskol gangs' and partaking in violent crime. Large concentrations of disaffected youth, some ex-combatants, also remain in Honiara, where 20 per cent of youth (15-24) are unemployed. ⁵⁰ Interspersed is the proliferation of small arms in PNG, the rise in urban petty crime and the rural-urban drift in both countries, which aggravate the likelihood of conflict and of livelihood contraction for both youth and the wider population.

While the impacts of climate change on the livelihoods of young people presents significant risks of instability, the possibility to generate long-lasting positive change will be greater than ever. There is significant potential in youth as agents of change and leadership. In the South Pacific, youth have shown they are capable of leading the transition to sustainable development. If effectively harnessed, youth voices, their decision-making ability and their political participation can help minimise human security risks and contribute to the South Pacific's capacity to overcome climate change threats.

⁵⁰ SPC, Solomon Islands Country Programme, 2017, p 8



⁴⁷ OCHA, Understanding the climate-conflict nexus from a humanitarian perspective, 2016, p 9

⁴⁸ IDMC, "Papua New Guinea: invisible and neglected protracted displacement", 2014

⁴⁹ United Nations, 2009, p 119