

# Common Country Analysis 2022 Update



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## **Acronyms**

ABG	Autonomous Bougainville Government		
ADB	Asian Development Bank		
ARoB			
BPA			
BPNG	Bank of Papua New Guinea		
CCDA	Climate Change and Development Authority		
CEPA	Conservation and Environment Protection Authority		
CSO	Civil Society Organization		
DfCDR	Department for Community Development and Religion		
DHS	Demographic and Health Survey 2018		
DMT	Disaster Management Team		
DNPM	Department of National Planning and Monitoring		
DSIP	District Services Improvement Program		
FDI	Foreign direct investments		
GBV	Gender-based violence		
GDP	Gross domestic product		
GNI	Gross national income		
На	Hectares		
HDI	Human Development Index		
IDMC	Internal Displacement Monitoring Centre		
ILO	International Labour Organization		
IMF	International Monetary Fund		
IOM	International Organization for Migration		
LGBTIQ+	Lesbian, gay, bisexual, transgender, intersex, questioning (+ related communities)		
LLG	Local-level government		
LNG	Liquefied Natural Gas		
MSME	Micro, small and medium enterprise		
MTDP III	Medium-Term Development Plan III 2018-2022		
NCD	National Capital District		
NGOs	Non-governmental organizations		
NPSP	National Policy on Social Protection		
ODA	Official Development Assistance		
PDA	Peace and Development Analysis		
PGK	Papua New Guinean Kina		
PSIP	Provincial Service Improvement Program		
PWD	People with disabilities		
RCO	Resident Coordinator's Office		
SDGs	Sustainable Development Goals		
SME	Small and medium enterprise		
SOE	State-owned enterprise		
STaRS	National Strategy for Responsible Sustainable Development 2015		
STI	Sexually Transmitted Infections		
UNDAF	UN Development Assistance Framework		
UNDP	United Nations Development Programme		
UNDRR	United Nations Office of Disaster Risk Reduction		
WaSH	Water, sanitation and hygiene		
1			

## 1. Executive Summary

The Common Country Analysis (CCA) Update provides a detailed overview of Papua New Guinea's (PNG's) development achievements and needs from social, economic, governance and environmental perspectives, incorporating information from the 2021 CCA up until June 2022. This CCA Update thoroughly examines the underlying and structural causes affecting the lives and livelihoods of Papua New Guineans and highlights the potential risks that could emerge as a result of these integrated factors.

The CCA creates the foundation for the UN Sustainable Development Cooperation Framework (Cooperation Framework), which entwines the national priorities as determined by the Government of Papua New Guinea (GoPNG) in the PNG Vision 2050 and the Medium-Term Development Plan (MTDP) III 2018-2022, and the United Nations system in PNG in support of the 2030 Agenda.

The United Nations 2022 Sustainable Development Report outlines countries' Sustainable Development Goal (SDG) achievement, showing that PNG is on track or maintaining progress in three SDGs including Decent Work and Economic Growth (SDG 8), Responsible Consumption and Production (SDG 12) and Climate Action (SDG 13); and moderately improving achievement towards Life Below Water (SDG 14), Peace, Justice, and Strong Institutions (SDG16), and Partnership for the SDGs (SDG 17). However, PNG's progress on the remaining 11 SDGs has stagnated or had non-applicable (N/A) measured progress.

While PNG took strong ownership of and remains committed to achieving the SDGs, the comprehensive analysis presented in this Update shows that more must be done to support PNG across all key areas of focus, namely its governance and institutions, economic transformation, financial landscape, economic and climate change achievements, social exclusion landscape, and in the humanitarian-development-peace nexus. For example, there needs to be a modernization of the National Disaster Management Act of 1984 to establish a national cluster system approach, address displacement, and invest in national and provincial emergency and crisis management capacities. Also, there is need for stronger environmental regulation of and good environmental governance.

PNG's key development indicators have improved since becoming an independent nation in 1975, most notably its economic development. Gross domestic product (GDP) per capita increased from US\$432 in 1975 to \$2,829 in 2019, and the vast expansion of PNG's economy has seen the introduction of several new sectors, including the production of liquified natural gas (LNG). Economic prosperity, in turn, contributed to improvements in several social indicators. Life expectancy has increased from 56.5 years in 1990 to 65.3 years in 2019. The expected years of schooling increased from 4.7 years in 1990 to 10.2 years in 2019. Infant mortality rates have declined from 89.3 deaths per 1,000 live births in 1975 to 39.8 deaths per 1,000 live births in 2020. In 2000, just under 10 percent of the population had access to electricity, which increased by more than four times to approximately 55 percent in 2017.

However, progress on these development indicators lags significantly behind other countries in the region, with PNG ranked #155 on the 2020 Human Development Index (HDI), the lowest rank of all countries in the Pacific and wider Asia-Pacific. Based on the 2022 INFORM Risk Assessment which looks at natural and human hazards, exposure, vulnerability, and coping capacity concerning disasters, PNG sits in the second highest risk class and ranks 24 out of 191 globally; it ranks first among Pacific Island countries and second

only to Myanmar among the combined Pacific and South-East Asian regions. Current health expenditure as a percentage of GDP from 2000 to 2019 was 2.41 percent, with a minimum of 1.8 percent in 2015 and a maximum of 3.3 percent in 2014. The latest value from 2019 is 2.3 percent, and government expenditure on education declined to 1.9 percent of GDP in 2018, from its highest level of 7.4 percent of GDP in 1977. While access to water and energy has improved over the years, the rural-urban divide is stark: in 2017, the access rate for essential water services in urban areas was 86 percent, but only 35 percent in rural areas.

Despite some socio-economic progress and rich natural resources, significant economic, social, governance and environmental challenges remain to PNG's achievement of its SDGs by 2030. For example, 56.6 percent of Papua New Guineans are classified as multidimensionally poor, with a further 25.8 percent classified as suffering severe multidimensional poverty. The literacy rate in 2020 was estimated at only 61.6 percent. In health, 40.1 percent of children under five years old suffered from stunting between 2015–2019. Gender inequality remains very high, with a 2019 Gender Inequality Index of 0.7 and ranking of 161 out of 162 countries. In addition, public finances have deteriorated, with tax revenue amounting to 15.1 percent of GDP in 2020 compared with 26 percent of GDP in 2010.

The decline in tax revenue led to GoPNG increasing its borrowing, with the current debt-to-GDP ratio at more than 50 percent. The exchange rate policy has affected the availability of foreign exchange and has consequently impacted investment.

PNG has ratified six United Nations Human Rights treaties, although only the Convention on the Rights of the Child and the Convention on the Elimination of All Forms of Discrimination Against Women have been fully domesticated. The National Parliament voted to repeal the death penalty in January 2022 and sentences of those on death row were commuted to life imprisonment. PNG also completed its third cycle of the Universal Periodic Review in November 2021, the UN Human Rights Council peer-review process which considers a country's human rights record and international human rights obligations.

The civic space in PNG is mixed, with some active civil society members but also, many challenges including lack of robust media and comprehensive internet access. Environmental and women human rights defenders in particular continue to face threats, intimidation, harassment, and violence, and remain unprotected by any legal measures. A human rights defender protection law is in preparation, and an access to information law is still needed, while defamation remains criminalised.

Several persons fall into the category of 'those left behind' in PNG including people with disabilities (PWD), vulnerable children, youth, women, older adults, settlers, landless people, those displaced by conflict or natural hazards, people living with HIV/AIDS, and PNG's rural and remote communities. Women and girls continue to feel the brunt of harsh social norms and lack of protection, with the 2016-2018 Demographic and Health Survey (DHS) showing they experience gender-based violence (GBV) at an alarming rate as well as having lower literacy rates, with 23 percent of women (compared to 13 percent of men) aged 15-49 having no formal education. At the 2017 national elections no women were elected, making PNG one of only four countries in the world without a woman in parliament.

Despite commitment to international agreements, including the commitment to ending forest loss by 2030, the implementation of environmental policies and strategies is inadequate (for example, the languishing 2018 Policy on Protected Areas). PNG's environmental governance remains extremely weak, ranking 146 out of 180 countries on the 2020 International Environmental Performance Index. One in five of PNG's mammals is under threat. Threats to wildlife and biodiversity include the wildlife trade, unsustainable hunting, invasive species, clearing, and habitat loss, mainly due to logging, loss of biocultural knowledge, and climate change.

Due to its geophysical location and terrain, PNG suffers from the high-level threat of natural disasters, and much of the countryside is difficult to traverse. Since 2016, global resources have had to be mobilised for at least one annual major disaster/crisis including drought and food insecurity, volcanic eruption, earthquake, polio outbreak, refugee influx and most recently, the Covid-19 pandemic, the ongoing health and economic impacts of which PNG is still contending.

PNG has made significant strides in peace and security, but significant challenges remain. In December 2019, the Autonomous Region of Bougainville (ARoB/Bougainville) saw the successful and peaceful completion of a non-binding referendum, where 97.7 percent of voters opted for independence, with an 85 percent turnout. However, Bougainville has now entered the post-referendum process and faces complex challenges in this process. In Hela and Southern Highlands Provinces, by the end of 2019, dozens of active violence situations placed substantial pressure on realising human rights, social/structural stability, and human development. The effects of these protracted conflicts have been profound and multi-dimensional, threatening and displacing entire communities.

The CCA analysis identified several gaps, challenges, and opportunities in PNG. In the economy, the government can improve public finances through progressive tax policy and reform in tax administration and reform of the country's public debt policies including by promoting financial transparency and accountability. Economic enhancement can be achieved through policies and programmes that support diversification, reform of state-owned enterprises, and sectoral policies to support critical sectors, including finance, agriculture, fishing and micro, small and medium enterprises (MSMEs). PNG can achieve social advancement through robust policies and programmes that invest in, promote the rule of law, and support the implementation of gender equality, access to quality health care and education, water sanitation and hygiene (WaSH), and waste infrastructure. However, investment in building social capital is needed. Despite progress on Climate Action (SDG 13), there remain gaps in the environmental and climate change actions. There is a need to address these gaps by strengthening wildlife and biodiversity conservation, investing in adaptation to climate change, and implementing sound environmental governance and stronger environmental regulation of industries. Several PNG environmental legislation and action plans are old and outdated, and where up-to-date policies exist, implementation is affected by lack of capacity and resources.

Improving government institutions' capacity and data availability would also enable the country to advance SDG progress. Increased transparency and accountability, reduced corruption, political stability, and the inclusion of women in the next parliament would be significant ways to ensure good governance in PNG. Further conflict prevention and management, inclusive local governance, and conflict-sensitive developmental interventions addressing the root and intermediate causes of localised tension and violence would help advance the SDGs in PNG. After a decade of commitment to the SDGs, it is time for GoPNG to raise the bar and proactively pursue its national goals to benefit all PNG people.

The CCA is the UN system's independent, impartial, and collective assessment and analysis of a country's situation for its internal use in developing the Cooperation Framework. The CCA should both reflect and support any transformational change called for in a country's own developmental agenda (ie Vision 2050, MTDP III) and offer guidance on how the UN could further that agenda, based on the country context and the national priorities. The Cooperation Framework, which replaces the UN Development Assistance Framework (UNDAF), outlines the plans for UN development activities within PNG and translates the vision of PNG into UN actions and impacts on the ground.

The CCA focuses on six areas – governance and institutional gaps, economic transformation, financial landscape, environment and climate change, social exclusion, and humanitarian-development-peace collaboration. CCA analyses describe how things are, examine progress towards the 2030 Agenda and the SDGs, and the multidimensional risks of PNG, including that no one is left behind.

Vision 2050 is PNG's long-term strategic plan and is organized around seven focus pillars: human capital development; wealth creation; institutional development; security and international relations; environmental sustainability and climate change; spiritual, cultural and community development; and strategic planning, integration, and control. The MTDP III is a five-year development plan that translates Vision 2050 into a plan for action. It is organized around eight key result areas, including economic growth; infrastructure development; sustainable social development; law, justice and national security; service delivery; improved governance; responsible, sustainable development; and sustainable population.

This CCA Update builds on the comprehensive methodology employed for the 2021 CCA which included collecting data from multiple primary and secondary sources, including the Universal Periodic Review, the National Research Institute (NRI) PNG Governance Update 2021, and multiple Global Index Scales, ie Corruption Index, Gender Inequality Index, and the INFORM Risk Index. The process involved a deeper examination of each analysis area including updated information available from integrated sources, including UN's own available data.

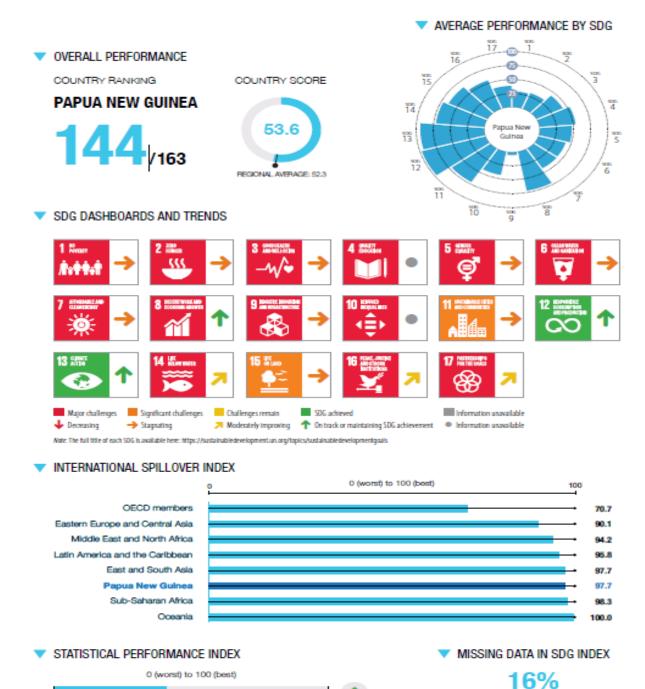
Several government agencies, development partners and non-governmental organizations (NGOs) were consulted including the Department for National Planning and Management (DNPM), Department of Health, Department for Community Development and Religion (DfCDR), Climate Change and Development Authority (CCDA), the Department of Agriculture and Livestock, and the Department of Education. Development partners, international financial institutions and international NGOs included Asian Development Bank (ADB), Care International and Child Fund. National NGOs consulted included Caritas, CDI Foundation, Community Rights and Advocacy Forum and the Digicel Foundation. The Regional Development Coordiantion office was consulted with regards to the sections to be included in the CCA Report and the Regional UN Office for Disaster Risk Reduction provided information that can be used for analysing disaster risks.

Figure 1: Provincial Map of Papua New Guinea



Source: https://ontheworldmap.com/papua-new-guinea/

## 3. Progress towards 2030 Agenda and SDGs



Sustainable Development Report 2022. OF From Crisis to Sustainable Development: the SDGs as Roadmap to 2030 and Beyond

40.8

The United Nations 2022 Sustainable Development Report shows that PNG's SDG achievement at the end of 2021 is 53.6 percent, higher than the regional average of 52.3 percent and an improvement from 51.3 percent in 2020. PNG is ranked 144 out of 163 countries in 2021 in terms of SDG achievement, an improvement from its 2020 ranking of 151 out of 165 countries, and its progress is captured as follows:

- On track or maintaining achievement SDGs 8, 12 and 13
- Moderately improving SDGs 14, 16 and 17
- Stagnated SDGs 1, 2, 3, 5, 6, 7, 9, 11 and 15
- NA SDG 4 and 10.

The UN Statistical Office SDG country profile for PNG shows that while this overall progress is heartening, significant challenges remain for PNG's achievement of most SDGs. PNG's progress was assessed using the latest available statistics on SDG indicators and the summary assessment is below, with the detailed assessment against SDG targets listed in Annex 1.

Table 1: Summary Assessment of PNG's progress toward the SDGs

1 元元· 市·中中·市	A significant proportion of PNG's population still lives in poverty. The social protection system is inadequate, and most people do not have access to basic services. Economic loss from disasters has increased.
2 HINGER	Undernourishment and stunting persist. However, plant breeds and agriculture as a share of GDP have increased. GoPNG has reduced subsidies for agriculture exports while at the same time reducing its expenditure on agriculture.
3 GOROMEATH AND WELLERING  —///	PNG health indicators are improving, as shown by the decreasing maternal and infant mortality rates and increased universal health coverage. However, rates of non-communicable diseases have increased, and government expenditure on health has declined. The number of medical doctors in the country remains low.
4 COLATION	Enrolment in primary and early education has increased. However, very few students complete secondary education, and official spending on education has declined.
5 mean page 1	While the female-to-male labour force participation rate is almost 1:1, women are not equally participating in political, business, and public service leadership. Despite the excellent policy to address discrimination against women, many women experience GBV.
6 ALEANANTER AND SANTATION	While spending on WaSH has more than doubled since 2000, most of the population does not have access to WaSH facilities.
7 MIRHAMET AND	While access to electricity has increased and energy efficiency has improved, access to renewable energy has declined.
8 DOCUMENT CONTROL AND DOCUMENT	PNG's economy continued to expand except when the country experienced the earthquake (2018) and the pandemic (2020). Unemployment remains low, but approximately one-third of young people are not in work or education. Access to banking institutions remains low.
9 MONTH MONITOR MANAGEMENT AND ADMINISTRATION OF THE PROPERTY	The Mobile network ranging from 2G to 4G is widespread in PNG. However, few people use the internet. The high-tech industry is a tiny proportion of value-added (manufacturing sector), and expenditure on

<sup>&</sup>lt;sup>1</sup> https://unstats.un.org/sdgs/dataportal/countryprofiles/

	research and development is zero. Small-scale industries received one-third of loans, and manufacturing value-added to GDP declined. Higher education and published articles receive low scores, and there are few full-time researchers.
10 WOMANIES	Labour accounts for one-third of GDP, and one-fifth of the population lives below the median income. Non-performing loans have increased. Development assistance has almost doubled, and three-quarters of imports are zero-tariff rated.
11 SCHOMBERTS	The annual mean concentration of particular matter is above the WHO max safety level.
12 DENOMBRIE DENOMBRIDE NO PRODUCTION	Domestic material consumption decreased while electronic waste generated per capita increased.
13 Remore	PNG has developed the draft REDD+ Safeguards and National REDD+ guidelines.
14 IFE SELEN WATER	PNG scored well for clean ocean waters and the amount of protected marine areas increased.
15 OPERADO	The proportion of land area covered by forest is very high despite a decrease over the past decade. Permanent deforestation is relatively low. Development assistance for biodiversity has increased significantly.
16 PALES METICS BESTITIONS SETTITIONS	Un-sentenced detainees have increased over the past decade. Corruption perception remains. Registration of children remains low – birth registrations with civil authority was only13.4% of children under the age of 5 years.
17 PATHERSHIPS	PNG's high corporate tax haven score, which means that corporate tax cannot be avoided in PNG. Foreign direct investment (FDI) has increased.

## 4. Integrated Root Cause Analysis

This section identifies the underlying causes of development challenges and non-fulfilment of rights for Papua New Guineans by analysing the factors contributing to these challenges, including patterns of discrimination and exclusion, inequalities (including gender), vulnerability and deprivation, with a focus on progress and changes made during the reporting period.

The analysis has been categorised into six areas: Governance and institutions, economic transformation, financial landscape, environment and climate change, social exclusion, and the humanitarian-development-peace nexus.

#### 4.1 Governance and institutional analysis

#### 4.1.1 Political and institutional structure

There are three levels of government in PNG: national, provincial, and local. There are 331 local-level governments (LLGs) and 6,375 wards (made up of villages), which are the smallest unit of government presence and are headed by Councillors.<sup>2</sup> In the July 2022 elections, two women parliamentarians were elected to the national assembly. The two women are the first women in parliament since 2017.

#### Formal and informal institutions

The three main takeaways from the NRI's 2021 Governance Update, focusing on an analysis of formal and informal institutions in PNG, are: that the informal rules of the game tend to 'trump' the formal rules; that politics is highly personalised and localised; and the independence of the government bureaucracy has been eroded in recent years.

Informal socio-economic networks, cultural norms and expectations, and the exercise of personal power tend to shape governance and inhibit transparency. PNG is a signatory to several major international conventions including six international human rights instruments, but the domestication of these instruments and the framework for Papua New Guineans to directly claim their rights is less clear. The PNG Constitution is thorough and provides the basis for a Westminster-style system of government. Legislation and policy frameworks are often relatively comprehensive, in areas including corruption control (although GoPNG and the United Nations have identified need for further anti-corruption law reform and effective implementation of existing anti-corruption laws is lacking).

Elections are based on the patrimonial logic of 'big man' politics. MPs and other officials are elected based on their ability to act as patrons to their core group of supporters. Once in power, most elected officials must constantly scramble for allies and use the influence and resources of their office to sustain their position. Ministers and other politicians have a great deal of discretion over how and where state resources are spent and tend to engage directly in decisions through which effective rents might be generated (for example, natural resource concessions). Constituency development funds are one example of this situation.<sup>3</sup>

PNG has seen the proliferation of 'provision pacts' based on providing political rents to elites to establish patronage and remain in power. Provision pacts encourage MPs and their entourages to personally distribute rents at the local level, a process that has been

<sup>&</sup>lt;sup>2</sup> Graham Teskey, Tara Davda, Abbas Maaroof, Prashanth Parthiban, 2021. Papua New Guinea Governance Update 2021: Steady as she goes?, The National Research Institute, Papua New Guinea, 3

<sup>&</sup>lt;sup>3</sup> Teskey and Davda, PNG Governance Update, 3-4

institutionalized in the District Services Improvement Program (DSIP), and Provincial Services Improvement Program (PSIP) grants systems. These systems give MPs wide-ranging autonomy over millions of PNG Kina (PGK), with minimal transparency in how the funds are utilised. It has created incentives to mix public money with private investments in ways that do not necessarily benefit the broader public interest and to easily divert government resources into loyal pockets – including loyalist-controlled businesses, which can act as insurance for MPs should they not be re-elected.

From an international comparative perspective, provision pacts have led to state weakness and fragility. They may also drive increasing militarization and competitive authoritarianism, including restricting democratic mechanisms, such as freedom of assembly and speech and compliance of the press. When political pacts are based on rent-based provisioning, there are strong incentives not to invest in watchdogs, anti-corruption authorities, or citizen accountability mechanisms. Instead, the benefiting parties are inclined to reduce transparency, shifting arrangements into State Owned Enterprises (SOEs) or private sector institutions, where commercial sensitivity can deny scrutiny of patronage practices.<sup>4</sup>

#### Four features of the Papua New Guinean state

#### 1. Penetration

The state and its formal administrative structures have not yet penetrated rural PNG to the degree that would enable the effective delivery of services or create a substantive and deeprooted sense of citizenship and nationhood. The ability of the state to deliver public goods and services (health care, education, and infrastructure) is weak. Most Papua New Guineans rarely engage with state representatives, and, for most, the government in Port Moresby remains a distant abstraction.

### 2. Fragmented and centrifugal politics

PNG's extraordinary ethnic diversity – approximately 850 language groups and further subgroups and clans – gives rise to a highly fragmented political landscape, exacerbating the political economy challenges that arise from resource dependency.

There are 46 registered political parties in the country, with no one dominant party. Instead, there are several one-person (all men) parties. Few are based on policies or programs. Even when there are policies, more often than not, they are overridden by 'big man politics'. This context means that, to an extent, all politics is local. MPs seldom gain and retain power by delivering on issues of broad national or regional interest. Instead, they are elected and re-elected based on their ability to deliver resources to their locality and immediate supporters. Combined with a Westminster parliamentary system that leaves governments susceptible to no-confidence votes, this has been an obstacle to political stability, policy predictability and coherence, and the delivery of public services. MPs are elected from vast fields of candidates (up to 50 in an electorate, each with local support pockets). Fewer than 50 percent are returned in the next election.

Despite political fragmentation, there are powerful centralizing forces active in PNG. The same elected member is also the influential head of the executive. Heavy centralization is also familiar with resource dependence, where resource rents flow into central levels to be allocated by political and executive agencies. This centralizing is advanced in PNG,

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<sup>&</sup>lt;sup>4</sup> World Bank, 2018. Systematic Country Diagnostic: The Independent State of Papua New Guinea, 97-105

<sup>&</sup>lt;sup>5</sup> Teskey and Davda, PNG Governance Update, 4

institutionalized in the cabinet or National Executive Council (NEC), primary expenditure vehicles such as the Public Investment Program and the Service Improvement Program, and the proliferation of statutory authorities and SOEs.<sup>6</sup>

#### 3. Institutionalisation

The institutions of government in PNG (i.e. elections, judiciary, legislature, and public service recruitment) are not robust, deeply rooted or routinised, and many are unstable and politically contested. They can be manipulated by individuals in positions of authority and tend to reflect rather than challenge the interests of the dominant coalition. Party membership is based on patronage, not ideology; the party itself is considerably less important than the individuals who constitute it. Unlike many of its neighbours, PNG has been democratically governed for five decades and has avoided military rule and dictatorship.

#### 4. Autonomy and pluralism

The government is not independent of society, and sometimes there is only a little distinction between public and private spheres of action. Again, the operations of Constituency development funds demonstrate this. The state can serve as a vehicle for the social and economic advancement of individual politicians, bureaucrats and their clients rather than the broader 'national interest'. Political mobilisation seldom results from broad-based socio-economic identities or interests. Few independent and 'horizontal' social groupings have the membership and capacity to hold the government accountable. Government policy and practice are therefore shaped in response to the demands of elites and donors, not the electorate or civil society.<sup>7</sup>

#### 4.1.2 Institutional framework for justice and human rights

The legal and institutional framework for the realisation of various human rights is comparatively strong, with a "Human Rights Track Court" and Ombudsman Commission enabling the raising of many human rights-relevant issues, including alleged discrimination by Government entities.

However, obstacles remain. While six international human rights instruments have been ratified (and only the Convention on the Rights of the Child and the Convention on the Elimination of All Forms of Discrimination Against Women domesticated), GoPNG has not ratified the Convention against Torture and Other Cruel Inhuman or Degrading Treatment or Punishment, the Convention for the Protection of All Persons from Enforced Disappearance, and the International Convention on the Protection of the Rights of All Migrant Workers and Members of Their Families. GoPNG has also not ratified the Optional Protocols to any of the instruments to which it is a state party, thereby declining to submit to the individual complaints procedures for many of the respective treaties.

The Constitution enshrines many key international human rights, including the right to life, freedom of expression and assembly, freedom of thought, conscience, and religion, liberty of the person, freedom from inhuman treatment, and right to protection of the law which includes key fair trial rights. However, certain provisions are not identical to international standards. No national human rights institution exists (despite this being one of the recommendations of the Universal Periodic Review) and the draft legislation establishing it, pending since at least 2009, has not been finalised, although efforts remain underway.

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<sup>&</sup>lt;sup>6</sup> World Bank, 2018. PNG Country Diagnostic, 97-105

<sup>&</sup>lt;sup>7</sup> Teskey and Davda, PNG Governance Update, 4

The Forty-ninth session of the Human Rights Council examined the Report of the Working Group on the Universal Periodic Review for PNG, compiled in November 2021. The report reviewed several issues including the rights of PWD, rights of women, and rights of children.<sup>8</sup> Of 161 recommendations covering a variety of areas including the rule of law and administration of justice, LGBTIQ+ rights, and access to health and education, 101 were supported by GoPNG while 60 were noted. Key recommendations included:

- establishment of a national human rights institution
- accession to/ratification of international human rights instruments including the Convention Against Torture
- improved cooperation and follow-up with treaty bodies, in particular timely reporting
- improved and non-discriminatory access to health and education
- strengthening gender equality and in particular, women's political participation
- taking more steps to prevent sexual violence, violence against women and girls, GBV
- strengthening freedom of expression and access to information
- · protecting the rights of PWD
- juvenile justice reform including raising the minimum age of criminal responsibility
- abolition of the death penalty
- decriminalisation of same-sex relations and in general strengthening legal protections for LGBTIQ+ persons
- development of a national action plan on business and human rights
- birth registration
- investigation and prosecution of police violence
- promotion and protection of the rights of asylum-seekers and refugees.

Noted recommendations, or those not "supported" by GoPNG, include (but are not limited to):

- ratification of the Convention Against Torture
- police violence
- LGBTIQ+ persons' rights
- · rights of asylum-seekers and refugees.

The recommendations on the death penalty were also "noted" by the Government, but laws providing for the death penalty were repealed in January 2022.

Justice sector institutions are in need of further strengthening. In particular, an Office of the United Nations High Commissioner for Human Rights/United Nations Development Programme (UNDP) Human Rights Assessment of the Royal Papua New Guinea Constabulary (2011) reflected the significant under-resourcing of the police force, among a variety of other issues including command and control, internal accountability, and community relations. While training has been enhanced in many areas including human rights, more is needed for some institutions, in particular uniformed personnel. In addition, provision of free legal assistance for redress in various fora including criminal cases and cases involving redress for human rights abuses, requires further strengthening.

Engagement with UN human rights mechanisms has been mixed, with a standing invitation extended to special procedures since May 2011 and active participation in the Universal Periodic Review, but delays in participation in other major mechanisms. PNG is overdue for all treaty body reports for which it is responsible, for example, the most recent report submitted for the Convention on the Elimination of all Forms of Discrimination Against Women was in 2009. Special Procedures mandate holders visited the country in 2010, 2012, and 2014, with certain requests for visits remaining pending, but COVID-19 has posed challenges for all visits since 2020.

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<sup>&</sup>lt;sup>8</sup> United Nations General Assembly, Human Rights Council, Forty-ninth session, 28 February-1 April 2022, Agenda item 6.

Civic space in PNG is mixed. Active civil society members exist but challenges include lack of strong networks, limited robust media outlets, and limited access to internet in many parts of the country. Human rights defenders, in particular environmental and women human rights defenders (including women political candidates who have frequently served as advocates for women's rights) continue to face threats, intimidation, harassment, and violence. No adequate measures, such as dedicated legislation or provisions of non-dedicated legislation, presently exist to protect human rights defenders from harm/ threats on the basis of their activities, although a human rights defender protection law is in preparation by the Department of Justice and Attorney General. Human rights defenders cite significant resource challenges as a major obstacle to their effectiveness. There is also no Access to Information Law which would enable free access to Government information for all stakeholders, although the constitution provides for this. Defamation continues to be a criminal offence.

#### **United Nations Convention Against Corruption**

PNG ratified the United Nations Convention Against Corruption in 2007 and has been working with the United Nations Office on Drugs and Crime since 2009 to review implementation of the Convention. This mechanism provides for each State party to be reviewed periodically by two other States parties. The first cycle review, completed in PNG in 2012, focused on anti-corruption criminalisation, law enforcement and international cooperation. The second review cycle is focused on prevention and asset recovery and is currently underway, with a country visit having taken place in May 2022. The reviews identify implementation gaps in each focus area and make findings and recommendations, including proposals for technical assistance needs, to enhance PNG's anti-corruption efforts in line with international standards. Executive summaries of reviews are published and full reports published at the discretion of GoPNG.<sup>9</sup>

#### **Papua New Guinea Anti-Corruption Project**

The United Nations Office on Drugs and Crime and UNDP PNG are joint-implementation partners in the Project on Preventing and Countering Corruption in Papua New Guinea, which is funded by the European Union and part of the EU-PNG Partnership for Good Governance Programme.<sup>10</sup> The project supports the development priorities of GoPNG including implementation of the United Nations Convention Against Corruption, the GoPNG National Anti-Corruption Plan of Action 2020-2025, and National Anti-Corruption Strategy 2010-2030.

Specifically, the project supports the establishment and operations of the new Independent Commission Against Corruption and the capacity of the Royal PNG Constabulary and Office of the Public Prosecutor to investigate and prosecute corruption. The project also supports the anti-corruption efforts of non-state actors, such as civil society organisations (CSOs), private sector, youth and media.

#### **Transparency International Corruption Perception Index**

The Transparency International Corruption Perception Index does not measure the actual extent of corruption; it is a ranking based on perceptions of how much corruption is occurring in the public sector of a country. Although methodological issues and usage practices

<sup>&</sup>lt;sup>9</sup> See United Nations Office on Drugs and Crime, PNG Country Page, https://www.unodc.org/unodc/en/corruption/country-profile/country-profile.html#?CountryProfileDetails=%2Funodc%2Fcorruption%2Fcountry-profile%2Fprofiles%2Fpng.html

 $<sup>^{10}</sup>$  For more information about the Papua New Guinea Anti-Corruption Project see https://www.unodc.org/roseap/en/png/anti-corruption-project.html and https://www.undp.org/papua-new-guinea/projects/preventing-and-countering-corruption-papua-new-guinea-png-anti-corruption-project

connected with the Index have been criticised by some commentators,<sup>11</sup> the Index garners public attention and can be a useful rallying point to encourage policy change or to recognise perceived progress. PNG ranked 124 out of 180 countries in 2021, an increase compared with the rank of 142 in 2020.

The Global Corruption Barometer, based on survey data collected during the first quarter (Q1) of 2021, indicates that 96 percent of survey respondents think corruption is a big problem in PNG. 12 Further, 57 percent of survey respondents were offered a bribe in exchange for their vote in the last five years. Also, 54 percent of survey respondents that used the public service in the previous 12 months paid a bribe. Most survey respondents (67 percent) think regular people can make a difference in the fight against corruption. 13

#### 4.1.3 World Bank governance indicators

World Bank Governance Indicators are ranked across six categories of governance performance ranging from -2.5 (weak) to 2.5 (strong). PNG's best performance is for Voice and Accountability, which has a positive performance. However, Voice and Accountability have declined since 2015. The ranking for Regulatory Quality, Political stability and Absence of Violence and Government Effectiveness has declined since 2015 to lower negative ratings of -0.68, -0.74, and -0.85, respectively. Improvements were seen in the Control of Corruption and the Rule of Law. However, these indicators were still negative at -0.57 and -0.72, respectively. PNG's worst performance is for Government Effectiveness which has declined significantly since 2015. <sup>14</sup>

| Control of Corruption | Control of Co

Figure 2: World Bank Governance Indicators: Voice, Corruption and Regulatory Quality

Source: World Bank Governance Indicators

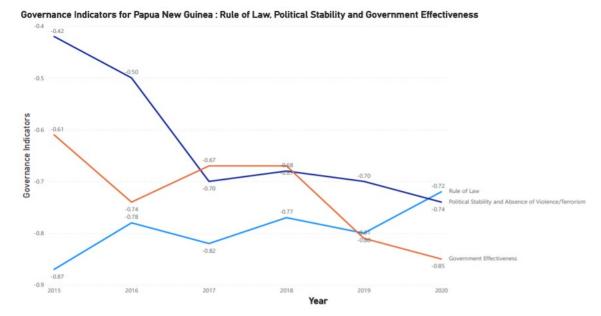
<sup>&</sup>lt;sup>11</sup> See, for example, Pornanong Budsaratragoon and Boonlert Jitmaneeroj: A critique on the Corruption Perception Index: An interdisciplinary approach. https://www.sciencedirect.com/science/article/pii/S0038012118301411#bib16

<sup>&</sup>lt;sup>12</sup> Transparency International: Global Corruption Barometer Pacific 2021. https://images.transparencycdn.org/images/2021 Report GCB-Pacific EN-WEB-reduced-size-v2.pdf

<sup>13</sup> https://www.transparency.org/en/countries/papua-new-guinea

<sup>14</sup> http://info.worldbank.org/governance/WGI/

Figure 3: World Bank Governance Indicators: Rule of Law, Political Stability and Government Effectiveness



Source: World Bank Governance Indicators

#### 4.1.4 Institutional and governance issues

PNG's score for the 2020 World Bank Country Policy and Institutional Assessment, which assesses the quality of policy and institutional frameworks in economic management, structural policies, social inclusion and equity, and public sector management, has improved. On a scale of 1 (low quality) to 6 (high quality), PNG's average score across these areas was 4.0, an improvement from 3.0 in 2016.

The World Bank notes that the socio-political environment, combined with weak enforcement of law and order, has been responsible for a proliferation of corruption and rent-seeking behaviour. Significant elements of a rentier state have emerged, with what could be characterized as attempts at state capture by various local and foreign actors and the misappropriation of public resources. <sup>15</sup> Considerable public attention has been directed at the oil, gas, and mining industries, with important questions raised about the limited transparency of projects' contractual arrangements. The attention is also focused on the adequacy of benefits that accrue to local landowners, businesses, and government; and the public sector's capability to negotiate complex agreements and monitor and enforce their provisions.

Poor governance arrangements and a lack of transparency can create opportunities for graft, misappropriation, and resource sector outcomes that do not serve the best interests of the PNG public. However, even where such challenges are overcome, most resource extraction projects still present the government with significant informational hurdles in its attempt to monitor activities and calculate the payments owed to it. The quality of resource governance is assessed based on institutional and legal settings, reporting practices, safeguards and quality controls, and the enabling environment. The Natural Resource Governance Institute's Resource Governance Index ranks PNG 39 out of 58 resource-rich countries, classifying it as 'weak' and placing it only a short distance away from 'failing'. 16

<sup>&</sup>lt;sup>15</sup> A rentier state is a state which derives all or a substantial portion of its national revenues from the rent paid by foreign individuals, concerns or governments (Wikipedia).

<sup>&</sup>lt;sup>16</sup> World Bank, 2018. PNG Country Diagnostic, 97-105

According to the World Bank, there is an absence of an overarching and consistent framework for determining economic policy in PNG. Weak governance structures, limited coordination, and shortfalls in public sector capacity make the policy-making environment somewhat opaque, which can contribute to significant divergence between legislation, policy, and implementation. Policy making in PNG is informed and driven by a medley of financial advice (of varying quality) provided to the government, the personal political strength of the senior civil servant whose department is responsible for a policy area, and the political realities in the country. The public sector's track record of varied and often-limited implementation effectiveness adds complexity, even when good policies and political appetite are well aligned.

The World Bank points out that elements of success evident across the country provide resilience to institutions and are helping to create momentum for improved service delivery. Service delivery may be fragmented, but there are functioning local hospitals, clinics and schools, alongside quality provincial, urban, district and LLG structures. There is also capable leadership in departments, the private sector, civil society, churches, and social services, and in law and justice in urban settlements. Roles of the province, district, and LLG and ward are being redefined following a 2015 review of the country's Organic Law on Provincial and Local-level Governments, and city authorities are emerging with greater capacity.

While more should be done to strengthen institutions and governance in the resource sector, PNG's ongoing participation in the Extractive Industries Transparency Initiative, which seeks to improve sector transparency and accountability, is a step in the right direction. These factors could see PNG emerge with more effective governance over time.

In the absence of fiscal and public financial management frameworks, large flows of resource revenues into public coffers can be susceptible to misappropriation and misallocation. They can also be a source of institutional weakness. Unlike taxation revenues, resource rents are rarely attached to strong political accountabilities, such as for the provision of health or education services. Rents arrive at both central and local levels in the hands of elites with high political discretion over expenditure. They are commonly channelled to the local level via development budget projects rather than recurrent spending. They travel into institutional arrangements dominated by individual leaders, enabling the return of political favours and rents (kickbacks) to officeholders and patrons. These arrangements continue unabated due to poor implementation/lack of transparency and accountability mechanisms across government and are ultimately detrimental to the quality of public expenditure.

This institutional weakness manifests in poorly conceived projects without the associated recurrent expenditure to support their ongoing staffing, operation, and maintenance. This weakness is a familiar experience among PNG's many underfunded and understaffed health centres and school classrooms. It is also reflected in the 'build-neglect-rebuild' investment pattern in local road construction. Inadequate infrastructure and, among other things, weak capacity in the government's provision of law-and-order services were identified as crucial impediments to private sector development.<sup>17</sup>

NEC and cabinet members have been expanded by dividing roles among multiple small ministries and allocating roles to coalition partners. Each role offers expandable rent-seeking opportunities but raises the difficulties in achieving executive and policy coherence. The centralizing forces of government alongside the general fragmentation of PNG's political landscape means that opposition ranks can become thin and struggle to present a clear, unified message, limiting the effectiveness of the opposition's role in providing checks and balances. Parliamentary debate and committees are sidelined, and policy consensus can become largely unnecessary: there is little opposition to the passage of NEC decisions.

<sup>&</sup>lt;sup>17</sup> World Bank, PNG Country Diagnostic, 97-105

The central government directly controls statutory authorities and SOEs, and their proliferation has increased centralized power. Statutory authorities and SOEs have tended to have appointed boards and officials with direct linkages to central government actors, raising challenges for their governance. For instance, contracting and other discretions can be expanded by this means, being less subject to official scrutiny or integration into broader policy. Furthermore, revenues (or SOE dividends) can be transferred without public scrutiny.

Some emergent examples have been positive, but centralization has yet to deliver notable coordination gains. Executive and other powers accrued by the Department of Finance have enabled them to put legislation and integrated financial management systems into place, which will improve visibility across other central and subnational agencies. Policy coordination has been somewhat enhanced through the Alotau Accords. Analytic capability and grant allocation mandates in the (recently re-established) National Economic and Fiscal Commission have rationalized function assignments and grants to the provincial government. Some agencies (i.e. education) have been better able to leverage central funds, directing them from the centre to local facilities, and have thus performed better than others (e.g. health). <sup>18</sup>

High-level support for district-focused decentralization has seen new arrangements introduced that have boosted the already-rising influence of Open MPs. Following independence, PNG's rurally-dispersed population, combined with long-running inadequacies in the provision of infrastructure and services by the central government, led to a growing call for greater decentralization of service delivery. At the same time, the fragmented political landscape and governments' vulnerability to no-confidence votes were affording Open MPs increasing political clout. In the early 2010s, this culminated in the Prime Minister and Chief Secretary overseeing the institutionalization of Open MP power in the District Development Authority (DDA). DDAs inherited the basic institutional structures of previous 'Area Authority' and Joint District Planning and Budget Priorities Committee arrangements, thereby giving Open MPs a central and influential position in the allocation of constituency development funds. Open MPs were now in control of DSIP grants, which had risen from a mere PGK (K) 10,000 in 1982 to K10 million per annum in 2018; twice the PSIP grant allocation received by Provincial MPs in their similar role in provincial-level governments. These grants are an essential facilitator of rent-based provision pacting.

However, this failing is due to the minimal accountability tied to the service delivery objectives that the grants were initially designed to achieve, as well as the generally limited capacity of subnational governments. Despite leading to some success, these relatively new arrangements have left Open MPs largely unaccountable for translating crucial scarce funds into service delivery outcomes in their districts. The arrangements funnel funds through alternative mechanisms to recurrent budgets – limiting transparency, accountability, and the capability of subnational governments. While procedures exist for reporting related expenditures, few MPs submit such acquittals, and even these submissions are typically unaudited. No one other than their electors will hold them to account for failed expenditures and projects or failure to acquit funds. Prosecution for diversion of funds is rare.

In some cases, these grants have delivered dividends, with roads and local facilities being built out in the districts where they previously would not have been. However, there is limited access to information, few incentives to perform, no contesting of plans, and poor coordination. Also, unsound investment choices are commonplace. This issue has been

<sup>18</sup> Ibid.

fundamental to the sub-par delivery of public services and infrastructure beyond PNG's urban centres. 19

#### 4.2 Economic transformation analysis

#### 4.2.1 Macroeconomic indicators

The value of total goods and services produced in the PNG economy amounted to \$25 billion in 2020, the same as 2019. PNG's GDP per capita was \$2,636 in 2020, compared with \$2,829 in 2019. The decline can be attributed to the economic contraction caused by the pandemic. The PNG economy contracted by 3.9 percent in 2020 and recovered in 2021 to experience a 1 percent growth.

**Figure 4: PNG Gross Domestic Product Gross Domestic Product** US\$ Billion 24 23 22 21 20 19 2013 2015 2016 2017 2018

Source: World Bank Development Indicators (accessed June 2022)

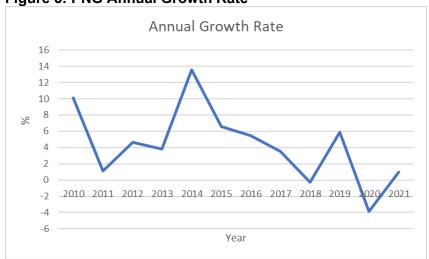


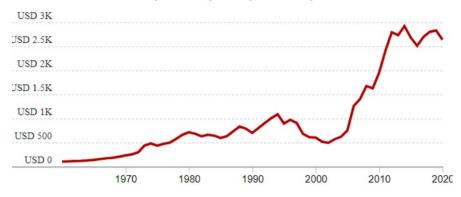
Figure 5: PNG Annual Growth Rate

Source: World Bank Development Indicators (accessed June 2022)

<sup>&</sup>lt;sup>19</sup> World Bank, PNG Country Diagnostic, 97-105

Figure 6: PNG GDP per capita

Gross domestic product per capita in Papua New Guinea



Data from datacatalog.worldbank.org via Data Commons

Based on estimates, slow growth is anticipated for 2022 due to the GDP price deflator indicated by a steep increase in the prices of goods and services in Q1, as inflation affects real GDP. Recovery was carried on the back of the non-extractive industry, mainly as PNG emerged from the global pandemic, but it is still uncertain because of Russia's invasion of Ukraine in February 2022. This invasion is affecting global oil prices, bumping retail fuel prices locally and globally, with impacts expected to cascade onto prices of consumer goods.

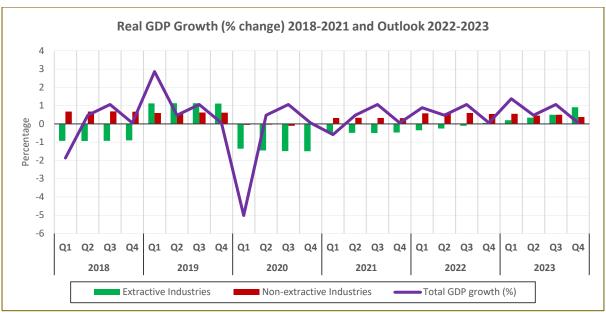
High prices are projected to last until the end of 2022 with an estimated annual GDP growth rate of 2.5 percent (although the World Bank estimates 4 percent growth). <sup>20</sup> Moreover, based on past experiences of GoPNG's slow response toward recovery efforts to natural disasters, the COVID-19 pandemic has further exacerbated hindrances to any progress made. In addition, the mounting foreign debt and import dependency are depressing the value of domestic currency (Kina) and GDP growth.

Fluctuating levels of quarterly GDP are projected for 2022 to 2023, considering recovery efforts that are expected to increase activities in the extractive sector as deals are in the pipeline with GoPNG (see Section 4.2.7 on the recently signed LNG agreement). However, the extractive industry has experienced a lower output since the Porgera gold and copper mine closure. Also, the government recently signed a \$10 billion agreement with Exxon Mobil on the P'nyang gas project, which is scheduled to commence construction in 2024, further solidifying PNG's dependency on its extractive industry to support its GDP. The construction phase for this project is estimated at eight years, with over \$20 billion to be invested by the developers and the expectation of job creation and business opportunities for the local population.

Figure 7: Real GDP Growth 2018-2021 and outlook

World Bank estimates PNG's economy to grow by 4% <a href="https://www.worldbank.org/en/news/press-release/2022/03/04/papua-new-guinea-economic-update-png-economy-navigating-a-fragile-recovery">https://www.worldbank.org/en/news/press-release/2022/03/04/papua-new-guinea-economic-update-png-economy-navigating-a-fragile-recovery</a>

<sup>&</sup>lt;sup>21</sup> More on this project agreement can be found at <a href="https://www.businessadvantagepng.com/papua-new-guineas-lng-roadmap-clearer-following-signature-of-pnyang-gas-agreement/">https://www.businessadvantagepng.com/papua-new-guineas-lng-roadmap-clearer-following-signature-of-pnyang-gas-agreement/</a>



Source: PNG National Statistics Office and UNDP PNG Country Office estimates, 2022

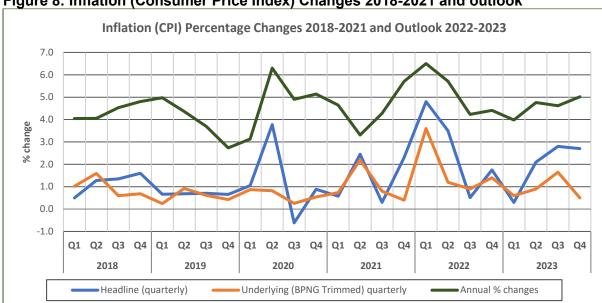


Figure 8: Inflation (Consumer Price Index) Changes 2018-2021 and outlook

Source: Bank of PNG, National Statistics Office, and UNDP PNG Country Office estimates

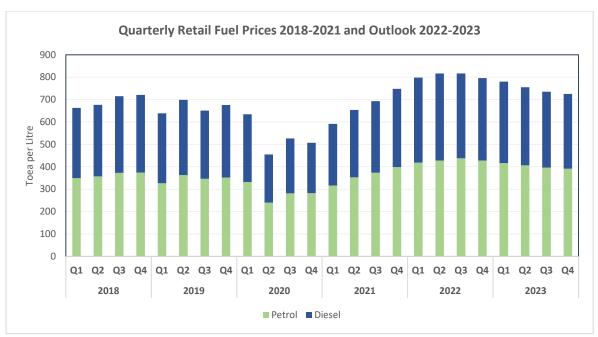
As pandemic ripple effects are still reverberating through economies, developing countries like PNG are expected to take some time to recover. In Q1-2022, headline inflation took a steep rise from Q4-2021, driven mainly by the high cost of goods and services. As a result, an annual average percentage change of almost 5 percent is envisaged for 2022.

Russia's invasion of Ukraine threatens economic recovery through the increase in oil prices resulting from economic sanctions against Russia by most developed western economies and a shortage of shipping containers in the global market. <sup>22</sup>

Figure 9: Quarterly Retail Fuel Prices 2018-2021 and outlook

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 $<sup>^{22} \</sup> Full \ article: \underline{https://www.bloomberg.com/news/features/2022-02-25/war-in-ukraine-how-the-ukraine-russia-conflict-could-impact-the-global-economy}$ 



Source: Post Courier, The National Newspaper, ICCC, and UNDP PNG Country Office estimates, 2022

Retail fuel prices are the highest in Q1-2022 compared to previous years and are expected to remain high for the rest of 2022. Petrol prices increased by 5 percent from Q4-2021 and diesel by 9 percent. The transportation sector, which was directly impacted by these increases, passed this on to commuters, and businesses have had to increase the prices of their goods and services. Papua New Guineans were already seeing drastic increases in food prices including rice, tinned fish, corned beef, packed chicken pieces and cooking oil. The head of the Independent Consumer and Competition Commission (ICCC) stated that these increases were due to the weak local currency against the primary trading currency (USD), the increase in crude oil prices, and shipping costs. 80 percent of all input materials of most PNG-made products are imported from overseas. While business houses are increasing their prices, salaries of most Papua New Guineans have remained the same throughout this period, and the minimum wage has not improved.<sup>23</sup>

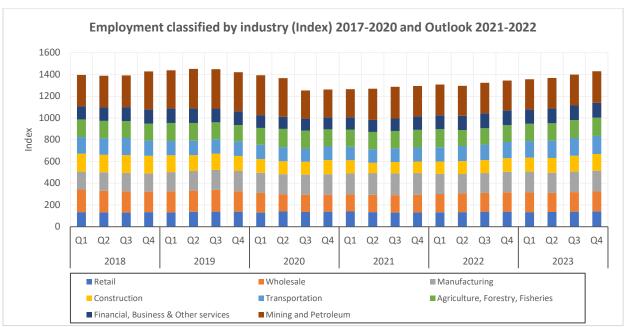
#### 4.2.2 Employment and decent work

The overall labour force participation rate (percent of the total population aged 15 and over, modelled International Labour Organization [ILO] estimate) was 69.92 percent in 2017. Its highest value over the past 27 years was 72.53 in 2004. In 2016, the female labour force participation rate was 69.6 percent, compared with 71.0 percent for men. ILO estimates indicate that a critical factor in women's labour force participation and employment rates is their engagement in agriculture and fishing for household consumption in rural areas, where some 87 percent of the population is concentrated.

As a share of total employment, employment in the agriculture sector in 2010 was 19.2 percent. The proportion employed in manufacturing was 5.6 percent, and in the services sector, 49.7 percent. However, unpaid work, unemployment, and underemployment are widespread, and formal sector employment growth has not kept pace with the growth of the labour force.

Figure 10: Employment by Industry 2017-2020 and outlook

<sup>&</sup>lt;sup>23</sup> Read more at <a href="https://postcourier.com.pg/ready-to-pay-more/">https://postcourier.com.pg/ready-to-pay-more/</a>



Source: Bank of PNG QEB Statistics and UNDP PNG Country office estimates, 2022

Employment increased throughout all sectors in mid-2021 and is envisaged to have improved in Q1-2022 as industries slowly recover from the pandemic shocks. The Bank of PNG (BPNG) statistics shows that the mining and petroleum industry employs the most significant portion of the sample size when most Papua New Guineans earn their income through the agriculture/fisheries and informal sectors.



Figure 11: Consumer Price Index and Minimum Wage Change 2018-2021 and outlook

Source: Bank of PNG QEB Statistics and UNDP PNG Country office estimates, 2022

Although the pandemic shocks have cascaded through the economy, as shown in Figure 11 above the minimum wage has remained constant at K281.60 per fortnight while prices of goods and services have increased significantly.

**Table 2: Salary Tax Rate for PNG Resident** 

Salary/Wages Tax Rate Table for Resident (Papua New Guinean)					
Taxable Income	Bracket	Tax Rate on Income in Bracket			
Greater than (PGK)	Less than or equal to (PGK)				
0	12,500	0%			
12,500	20,000	22%			
20,000	33,000	30%			
33,000	70,000	35%			
70,000	250,000	40%			
250,000	No Limit	42%			

Source: <a href="https://irc.gov.pg/">https://irc.gov.pg/</a> 2019 rates still applicable in April 2022

#### 4.2.3 Social protection

The National Policy on Social Protection (NPSP) 2015-2020 was the first such strategy for PNG. The Policy is based on an approach of progressive universality, to guide the development of comprehensive social protection that benefits all groups within the country. The initial objective was to implement social protection on programmes to address the needs of vulnerable or disadvantaged groups, especially children, youth, women, PWD, elderly persons, and people living with HIV/AIDS. The NPSP referred to lifestyle risks in the following instances:

- 1. Protecting vulnerable and disadvantaged individuals and groups from unpredictable risks in their life (one of the five core principles of the Policy)
- 2. The need to limit risks to livelihoods associated with vulnerability and provide support to disadvantaged individuals, families, and communities
- 3. That social protection addresses the support needs of individuals and families at times when unpredictable risks, such as illness, disablement or death of the breadwinner, strike in such a way as to undermine the self-supporting capacity of the individual or family, usually through their own paid or unpaid work
- 4. Disasters that pose significant risks to people and communities across PNG
- 5. The long-term ability of the traditional way of social protection the 'wantok system' of helping people of their own family to enhance people's ability to cope with risks appears bleak.<sup>24</sup>

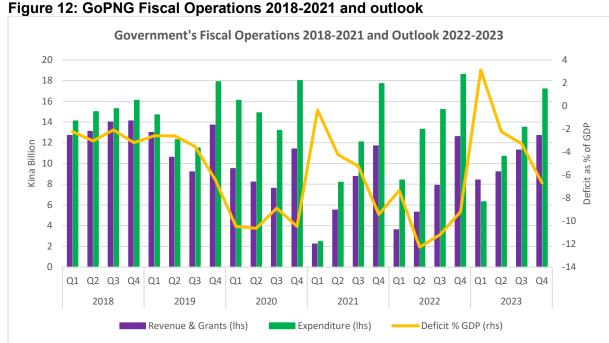
PNG has contributory Social Insurance Programs for Old Age, Work Injury, Sickness, and Maternity. Old Age benefits are for people who worked in wage and salaried employment. Work Injuries are for workers in enterprises with ten or more employees. Sickness benefits are for those in formal employment, and Maternity is for public sector qualifying permanent staff. The two significant funds for old age are the National Superannuation Fund (NASFUND) for private-sector employees and the Public Officers Superannuation Fund for public sector employees. The Comrade Trustee Fund, formerly the Defence Force Retirement Benefit Fund, is currently the largest pension scheme in the country. In 2009, the Fund made payments of K7,210,403 to 1,817 pensioners.

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<sup>&</sup>lt;sup>24</sup> Government of Papua New Guinea: Department of Community Development & Religion. 2015. National Social Protection Policy 2015-2020. Port Moresby: Government of Papua New Guinea.

Work Injury covers medical treatment and a scale of compensation payments linked to the degree of injury. In case of death, a flat-rate amount of K25,000 is payable. For sickness benefits, persons are paid sick leave for up to nine days, with the provision to accumulate unused credits for three years. Maternity benefits are paid for up to 12 weeks of maternity leave. PNG's non-contributory social protection is the National Disaster and Emergency Services. Benefits are paid to affected populations for disasters and provide temporary relief and assistance during disasters, especially natural calamities in the affected areas. In 2009, PNG's budget provided K360,000 for the resettlement of volcano victims, targeting about 10,000 people. Labour market interventions for social protection include training, volunteer and development partnership programs to address the lack of skills among rice model farmers and young Papua New Guineans.<sup>25</sup>

### 4.2.4 Fiscal policy



Source: Bank of PNG QEB Statistics and UNDP PNG Country office estimates, 2022

Taxes constitute about 87 percent of GoPNG's internal revenue, while foreign grants constitute 11 percent. Personal tax takes up a more considerable portion of tax revenues at 32 percent, and Goods and Services Tax (GST) follows with 23 percent. Government expenditure continues to exceed revenue despite its goals for more fiscal discipline and macroeconomic stability, as highlighted in the Medium-Term Fiscal Strategy 2018-2022. To counter the rise in living costs, GoPNG announced a temporary 10 percent GST cut on selected essential items for six months. <sup>26</sup> This cut was tabled in Parliament on March 23, 2022, under the Additional Company Tax and affects household items such as rice, noodles, biscuits, tea, coffee, and all fuels (petrol, diesel, kerosene). Although a timely initiative by the government, the country's salary/wages tax rates remain some of the highest compared to other economies in the Pacific region.

<sup>&</sup>lt;sup>25</sup> Papua New Guinea: Updating and Improving the Social Protection Index, Prepared by George Huenu Wrondimi, Asian Development Bank, August 2012

<sup>&</sup>lt;sup>26</sup> Read full article at <a href="https://www.thenational.com.pg/gst-cuts-to-fight-inflation/">https://www.thenational.com.pg/gst-cuts-to-fight-inflation/</a>

#### 4.2.5 Monetary policy

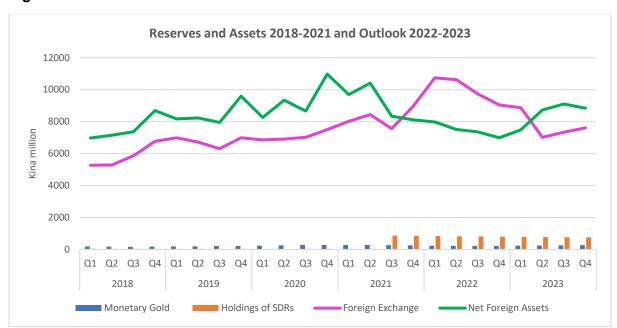


Figure 13: PNG Reserves and Assets 2018-2021 and outlook

Source: Bank of PNG QEB Statistics and UNDP PNG Country office estimates, 2022

The primary financing items for the Balance of Payments for PNG are Monetary Gold, Special Drawing Rights (SDR), and Foreign Exchange. The country has had a zero Reserve Position in the International Monetary Fund (IMF) for over 12 years. On August 23, 2021, a general SDR was allocated to IMF members in proportion to their existing quotas in the fund. Members can use that to address the long-term global need for reserves, build confidence and foster the resilience and stability of the global economy. In this regard, PNG was allocated SDR 252.3 million, equivalent to more than \$360 million (over K1.244 billion) by the IMF in 2021.

According to Prime Minister James Marape, PNG currently has over K10 billion (\$3 billion)<sup>27</sup> in foreign reserves. However, major fuel suppliers like Puma Energy had difficulty accessing supply during Q1-2022 because Russia's invasion of Ukraine continues to impact world oil prices. Puma initially wanted to ration their existing supplies but managed to secure relief from BPNG.<sup>28</sup> PNG could improve its foreign exchange by ensuring business compliance with the Foreign Exchange Control Directives of BPNG, which states that export proceeds should be repatriated back into the country within three months of shipment after shipment-settling their foreign liabilities.<sup>29</sup> Unfortunately, most PNG businesses have not complied with these regulations, especially the mineral sector.

GoPNG reformed the 2000 Central Banking Act, after a review of the Act by an independent advisory group, at the request of the treasury minister. The reform reduced the power of the central bank (BPNG) Governor, who was replaced by a former deputy governor on an interim basis. The main reforms included:

- External members appointed (non-BPNG staff) to the monetary policy committee
- Reducing the central bank Governor's term from seven to four years
- Limiting the Governor's time at the central bank to two terms.

<sup>&</sup>lt;sup>27</sup> Post-Courier, 24 March 2022 <a href="https://postcourier.com.pg/png-has-enough-foreign-reserves-marape/">https://postcourier.com.pg/png-has-enough-foreign-reserves-marape/</a>

<sup>&</sup>lt;sup>28</sup> The National, 29 March 2022 <a href="https://www.thenational.com.pg/puma-energy-in-talks-with-central-bank-over-forex-issues/">https://www.thenational.com.pg/puma-energy-in-talks-with-central-bank-over-forex-issues/</a>

<sup>&</sup>lt;sup>29</sup> Post-Courier, 31 March 2022 <a href="https://postcourier.com.pg/repatriate-export-proceeds-to-ease-fx-shortage-koim/">https://postcourier.com.pg/repatriate-export-proceeds-to-ease-fx-shortage-koim/</a>

In addition, GoPNG expanded the monetary policy objective to include employment and non-resource sector economic growth and inflation-targeting. The reform also increased the temporary advances for the government to borrow from the central bank. <sup>30</sup>

#### 4.2.6 External sector developments

Figure 14: Balance of Payments 2018-2021 and outlook

Source: Bank of PNG QEB Statistics and UNDP PNG Country office estimates

PNG's financial account balance has been in deficit since 2014, indicating that more foreign assets have been purchased, and a modest amount of foreign currency has entered the country as FDI. In contrast, the capital account has been in surplus primarily due to grants and concessional loans provided to the country before and during the pandemic. Both the capital and financial accounts are indicated in the above graph, Figure 14.

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<sup>&</sup>lt;sup>30</sup> Economic Intelligence Unit Papua New Guinea Country Report, April 2022

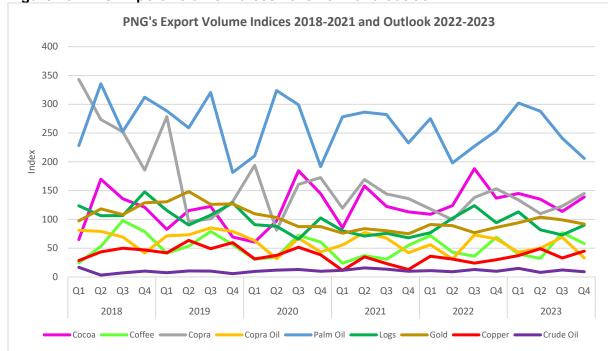


Figure 15: PNG Export Volume Indices 2018-2021 and outlook

Source: Bank of PNG QEB Statistics and UNDP PNG Country office estimates, 2022

Disruptions to the global supply chain initially stemming from the COVID-19 pandemic have been exacerbated by Russia's invasion of Ukraine, with considerable impacts on the country's commodity exports. However, as systems slowly ease into normal functions, it is estimated that export volumes of agriculture commodities are expected to increase in 2022.

Cocoa is expected to make a significant leap with support from the five-year EU-funded Support to Rural Entrepreneurship, Investment and Trade in Papua New Guinea (EU-STREIT PNG) programme currently focused on the Sepik Region. This programme is led by the Food and Agriculture Organization and implemented by four UN partner agencies: ILO, International Telecommunications Union, United Nations Capital Development Fund, and UNDP. Gold and copper export volumes have fallen slightly and are estimated to pick up once the Porgera mine resumes operations.

PNG's Major Export Contributors 20.10% Gold Copper Ore Silver Nickel 4.85% 1.74% Precious Metal Ore Petroleum Gas 36.00% Crude Petroleum Refined Petroleum Logs 7.30% Coffee Palm Oil Cocoa Copra Rubber Vanilla Others

Figure 16: PNG'S Major Export Contributors

Source: PNG National Statistical Office

PNG has an opportunity to increase its exports to Europe under the EU-Pacific Economic Partnership Agreement. The country exported over \$769.8 million (K2.7 billion) to the EU market in 2021. Apart from these primary commodities, the EU-PNG Business, Trade, and Investment Conference and EU projects also target vanilla. <sup>31</sup> Vanilla and rubber are slowly making a comeback after the pandemic losses. There are currently 60,000 rubber farmers in eight provinces (Central, Gulf, New Ireland, Manus, Northern, Western, East Sepik, and West Sepik). <sup>32</sup> Two Technically Specific Rubber (TSR 10) factories in PNG export between 300,000 to 400,000 tons of rubber every month. <sup>33</sup>

Most vanilla farmers, however, have difficulties getting their crops to markets with the high cost of freight and few active exporters. As a result, vanilla is primarily sold through the PNG-Indonesia border. Approximately 300 metric tons of vanilla are sent first to Indonesia before reaching international end-users.<sup>34</sup>

<sup>&</sup>lt;sup>31</sup> Post-Courier, 31 March 2022 <a href="https://postcourier.com.pg/png-has-advantage-for-exports-to-european-union-markets/">https://postcourier.com.pg/png-has-advantage-for-exports-to-european-union-markets/</a>

<sup>&</sup>lt;sup>32</sup> The National, 21 Dec 2021 <a href="https://www.thenational.com.pg/rubber-bounces-back-in-angoram/">https://www.thenational.com.pg/rubber-bounces-back-in-angoram/</a>

<sup>&</sup>lt;sup>33</sup> Post-Courier, 18 March 2022 <a href="https://postcourier.com.pg/rubber-itching-to-bounce-back-on-manus-island/">https://postcourier.com.pg/rubber-itching-to-bounce-back-on-manus-island/</a>

<sup>&</sup>lt;sup>34</sup> Post-Courier, 8 Dec 2021 https://postcourier.com.pg/png-vanilla-yet-to-enjoy-global-market-acceptance/

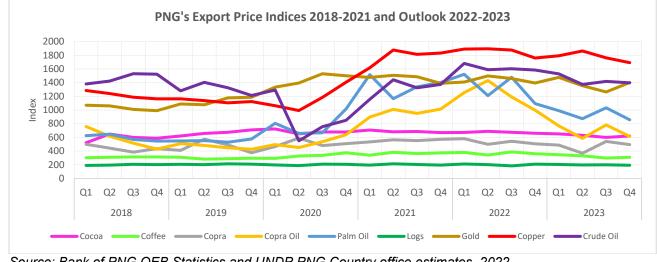


Figure 17: PNG Export Price Indices 2018-2021 and outlook

Source: Bank of PNG QEB Statistics and UNDP PNG Country office estimates, 2022

Global commodity prices increased for copper, crude oil, and selected agriculture commodities such as palm oil and copra oil as per World Bank Commodities Price Data released in March 2022.35

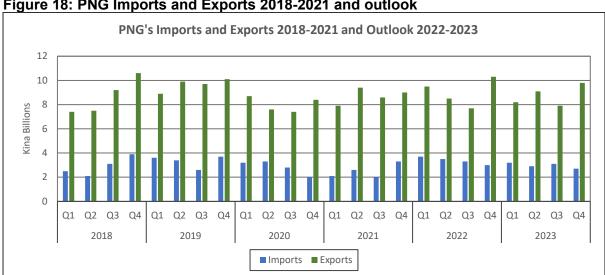


Figure 18: PNG Imports and Exports 2018-2021 and outlook

Source: Bank of PNG QEB Statistics and UNDP PNG Country office estimates, 2022

Significant contributors to PNG's imports include miscellaneous manufactured articles (30 percent) and machinery and transport equipment (19 percent). PNG imports most processed goods, clothing, and footwear, and most inputs to industry and commerce sectors. Minerals (mining and hydrocarbons) constitute a significant portion of the export commodities. GoPNG has already implemented policies to develop a robust domestic production base to ease dependency on the non-renewable resource industries.<sup>36</sup>

<sup>&</sup>lt;sup>35</sup> Copra (Malayalam: Koppara) refers to the dried coconut kernels from which coconut oil is expelled.

<sup>&</sup>lt;sup>36</sup> Investment Promotion Authority (IPA) <a href="https://www.ipa.gov.pg/agriculture/manufacturing/">https://www.ipa.gov.pg/agriculture/manufacturing/</a>

#### 4.2.7 Key sectors

The agricultural sector provides a livelihood for 85 percent of PNG's rural population and accounts for approximately a quarter of GDP. Most agriculture involves subsistence farming for basic needs. The country's main agricultural exports include cocoa, coffee, copra, palm oil, rubber, and tea. However, this sector contributes only 17 percent of total exports.

PNG has fertile soils and a favourable climate which permits the cultivation of a wide variety of cash crops, particularly in the highlands, coastal, and island regions. Production of cash crops usually centres on plantations, but significant smallholder production among rural communities also exists. Small-scale farmers sell their produce to the plantations or the numerous community boards, centralized buyers and sellers to stabilise prices and improve bargaining power. The contribution of agriculture to food security through domestic cultivation for home consumption comes to an estimated K5.0 billion annually. In contrast, its contribution to the export trade economy was estimated at K2.9 billion in 2011.

The informal economy in PNG has been estimated at K12 billion annually, approximately 20 percent of GDP. Based on the findings of the National Audit of the Informal Economy (2018-19), co-funded by UN Women and GoPNG, around 75 percent of informal economy workers are likely women. If we exclude the mining sector, the informal economy is approximately 30 percent of GDP. If we add subsistence farming, the informal economy is about 60 percent of non-resource GDP. Over 80 percent of the labour force is employed in this sector, which is of vital importance to local communities as it provides affordable and accessible goods and services and is critical for their food security.

Informal sector economic activities include producing and selling agricultural produce, informal moneylending at an interest rate of 40-50 percent per fortnight, and reselling goods from producers or wholesalers. More than half of men and women in the sector were over 35, with young people (under 25) making up around 15 percent. The proportion of workers in the informal sector with no education was less than 25 percent. The proportion of workers with post-primary education (beyond Grade 6) was more than 30 percent. Male workers appear to have received slightly more education than women in most survey locations.

The SME Master Plan 2016-2030 positions the SME sector as a significant contributor towards PNG becoming a middle-income country by 2030 and a high-income country by 2050. The Plan aims to support and facilitate SME growth, increasing from 49,500 SMEs in 2016 to 500,000 in 2030. The role of GoPNG for the first five years of the plan is to provide financial support, provide SME protection through enabling legislation, create a conducive environment for SMEs to develop, create linkages with all stakeholders, provide infrastructural development and facilitate the catalytic projects in each province. In addition, the ADB and the World Bank are implementing projects to develop MSMEs in PNG. The World Bank project aims to facilitate access to sustainable credit for SMEs, increase the number of formal sector SMEs, and increase total employment and revenue generated by SMEs. The proposed ADB project aims to facilitate financial inclusion and entrepreneurship by strengthening lenders' and borrowers' capacities.

The transport sector in PNG splits into three subsectors: roads, maritime, and aviation. Unfortunately, infrastructure in all three subsectors has fallen steadily into disrepair over the past two decades. The condition threatens economic development and limits access to markets and social services from much of the population, resulting in high costs for business activities. The decline in transport infrastructure can be explained by:

- 1. PNG's challenging topography and climatic conditions
- 2. extended periods of funding constraints to support maintenance requirements
- 3. weak institutional and management capacity

4. the limited number of able local and international private contractors.

Road transport is the dominant passenger travel mode, but inadequate land connections between several mainland provinces and the island nature of PNG highlight the essential roles of domestic aviation and coastal shipping.

Mining gold, nickel, silver, cobalt, petroleum, and gas sectors are vital for PNG's economic portfolios. Extractive industries contribute 29 percent to GDP, 89 percent to exports, and 10.1 percent to government revenue. PNG has exported crude oil since the early 1990s and launched a commercial LNG operation in 2014. The LNG project started with an initial \$19 billion investment, but its capacity exceeded expectations, reaching eight million tonnes per annum. A re-certification and upgrading of natural gas reserves should enable the project to sustain these higher production rates.

PNG is one of the world's top ten gold producers, with its largest gold mines being Lihir, Ok Tedi, and Porgera. A portion of gold and silver production is refined in-country and exported in dore bars to refineries in Australia and Japan, whilst copper is exported as concentrate to Japan, Germany, and Australia.

GoPNG signed a deal on 22 February 2022 with US-based energy giant ExxonMobil and its partners to develop the P'nyang gas field in Western Province. This project becomes PNG's third major LNG project supporting the long-term outlook for investment and exports, following PNG LNG (operational since 2014) and the planned Papua LNG, expected to begin construction in 2024 and production in 2028. After three years of negotiations, the signing of the P'nyang agreement is expected to lift investor confidence in PNG. For Exxon and its partners – Santos (Australia) and NOEX (Japan) – the development of P'nyang strengthens its ability to meet Asian LNG demand as the region's clean energy transition accelerates. Construction, including building a gas export pipeline, begins in 2028 with production expected to start in 2032. The final investment decision on the P'nyang project is anticipated closer to the construction date in 2028.

The terms of the P'nyang agreement include an equity stake of 34.5 percent for PNG (the highest rate of the three PNG LNG projects); a production levy of 3 percent compared with 2 percent for Papua LNG; 5 percent gas for domestic use at a lower price than Papua LNG; and a more generous calculation of royalty and development levies for landowners and regional governments.<sup>37</sup>

An analysis of PNG's financial institutions from 2013 to 2015 shows that the ratio of private credit by deposit money banks to GDP is 25 percent. Bank lending-deposit spread, the lending rate minus deposit rate, is 9.1 percent. Also, the Bank Z-score which approximates the probability that an economy's banking system defaults, is 6.4 percent. The financial services market includes commercial banks, finance companies, micro-banks, savings, loans societies, a mobile network operator(s), superannuation funds, investment managers, superannuation fund administrators, life insurance companies, general insurance companies and one development bank. The IMF found that 70 percent of people borrow money, mainly from *wantoks* (41 percent), followed by moneylenders (24 percent) and formal institutions (5 percent). Informal moneylenders are generally risky and expensive and charge very high-interest rates of approximately 40-50 percent per fortnight.

<sup>&</sup>lt;sup>37</sup> Economic Intelligence Unit Papua New Guinea Country Report, April 2022

#### 4.3 Financial landscape analysis

#### 4.3.1 Tax revenue

PNG's tax revenue as a percentage of GDP declined significantly between 2000-2020. IMF data indicates that Total Tax revenue to GDP declined over this 20-year period, from a high of 26 percent of GDP in 2010 to a estimated 15.1 in 2020. The most significant declines were in resource revenues, from a high of 7.5 percent of GDP in 2005 to 0.9 percent of GDP in 2017. Estimates for 2020 put this indicator at 1.3 percent of GDP, well below the levels achieved from 2000 to 2010. Non-resource revenue averages 16.2 percent over the period 2000 to 2020. In the last five years, 2016 to 2020, non-resource revenue was lower on average than the previous years, at 14.8 percent of GDP. The IMF attributed the tax revenue to the subdued economy in 2018 and lower commodity prices in recent years.

There is a high reliance on income taxes in PNG. In 2018, for example, 43.4 percent of total revenue came from income taxes. Economists estimate that over 90 percent of personal income tax was contributed by salary and wage taxes paid by just 400,000 people in the formal workforce, i.e., 4.8 percent of the national population. Discretionary incentives have narrowed the tax base.

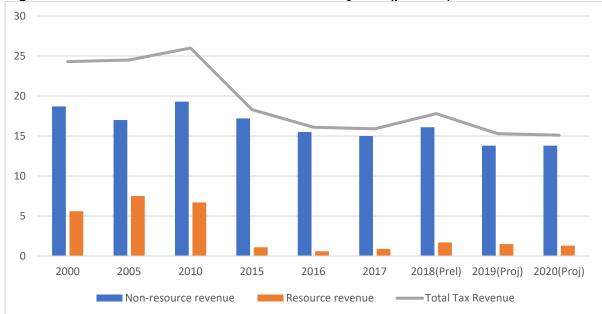


Figure 19: PNG Tax Revenue 2000-2020 selected years (percent)

Source: International Monetary Fund

#### 4.3.2 Domestic and external public sector borrowing

The Medium-Term Debt Strategy 2018-22 is guided by the legal framework for government borrowing, including the authority to borrow and issue new debt, invest, and undertake transactions on the government's behalf. The overall objective of the Strategy is to "raise the required amount of budget financing and manage the debt portfolio to achieve prudent risk and cost minimisation objectives and develop and maintain an efficient market for government securities and diversification of funding sources". Major strategies to support the debt management objective include:

- maintaining debt at sustainable levels
- maintaining financial risk at prudent levels

- developing and efficiently managing the domestic debt market, which involves broadening and deepening the market in domestic securities and improving the market infrastructure
- developing and managing the offshore commercial market, including the inaugural sovereign bond issuance that will diversify funding sources.

GoPNG borrows in the domestic market through treasury bills and inscribed stock (i.e. bonds) denominated in Kina. The IMF and World Bank data show that Zero-coupon T-bills are issued roughly weekly, with tenors typically six and 12 months. Inscribed stock is currently being issued at fixed rates with maturities of two, 10, and 17 years. These instruments are issued on market terms; there is no captive placement with public or quasi-public investors. Hence, no instruments specifically suit retail investors, although retail investors may acquire T-bills and inscribed stock directly or through commercial banks under the Central Banking Act. As shown in Figure 20 (below), net ODA percent of GNI has been declining over the past 20 years. After peaking at 8.3 percent of GNI in 2000, ODA declined to reach a low of 2.4 percent of GNI in 2017 and increased to 3.4 percent of GNI in 2018.

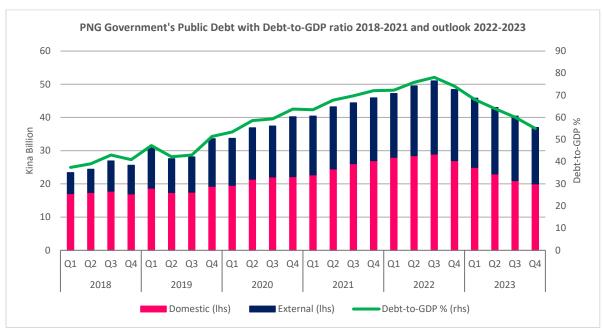


Figure 20: GoPNG's Public Debt 2018-2021 and outlook

Source: Bank of PNG QEB Statistics and UNDP PNG Country office estimates, 2022

Loans accumulated since Q4-2021 include AU\$650 million<sup>38</sup> (K1.736 billion) from the Government of Australia and US\$325 million (K1.141 billion) from the ADB.<sup>39</sup> Australia's support contributes to refinancing an existing AU\$410 million (K1.95 billion) loan to assist PNG in delivering core government services, with a combined commitment of AU\$600 million (K1.602 billion) during the pandemic period of 2020-21.<sup>40</sup> China also signed a US\$1.6 billion (K5.616 billion) loan to support the creation of a 'Special Economic Zone' in Kikori, located in the Gulf of PNG.

<sup>&</sup>lt;sup>38</sup> More information about this loan can be found at https://treasury.gov.au/publication/p2022-247810

<sup>&</sup>lt;sup>39</sup> ADB news article, 15 October 2021 <a href="https://www.adb.org/news/adb-png-sign-325-million-loan-better-connect-remote-communities-markets-and-services">https://www.adb.org/news/adb-png-sign-325-million-loan-better-connect-remote-communities-markets-and-services</a>

<sup>&</sup>lt;sup>40</sup> World Report 2022: Papua New Guinea Human Rights Watch <a href="https://www.hrw.org/world-report/2022/country-chapters/papua-new-guinea">https://www.hrw.org/world-report/2022/country-chapters/papua-new-guinea</a>

With that, the debt-to-GDP ratio, as seen in the above graph, was high in 2021 and is estimated to continue to rise in 2022, with support expected to escalate for the 2022 National General Elections. Porgera reopening and the P'nyang deal, among others in the pipeline, are envisaged to offset these loans towards the future and bring the debt-to-gDP ratio down to reasonable levels. The annual debt-to-GDP ratio for 2022 is estimated at 75 percent, while in 2021 it was 68 percent. According to Treasury's Medium Term Fiscal Strategy 2018-2022, GoPNG had planned to reduce the debt-to-GDP ratio to 30 percent by 2022 and ensure the debt profile's sustainability, including a shift towards external financing.<sup>41</sup> This task has proven difficult, given the COVID-19 shocks of 2020 and 2021.

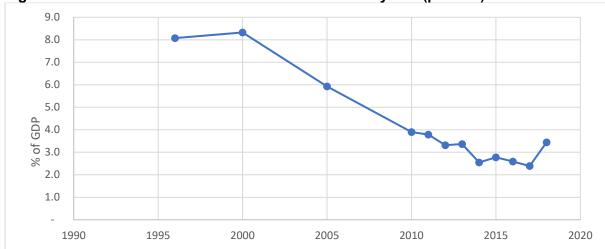


Figure 21: PNG Net ODA received 1990-2020 selected years (percent)

Source: World Bank World Development Indicators

The authority to issue guarantees on behalf of the state is set out in the Public Finances (Management) Act which requires the Minister to table the documents associated with the guarantee at the next sitting of Parliament. Ministerial approval also guarantees medium- or long-term loans (i.e., longer than six months of maturity) contracted by provincial governments or LLGs. While the Act gives the minister the authority to charge a fee for a guarantee, no such fee is required nor linked to the level of risk associated with the guarantee. The authority to extend loans to public bodies on behalf of the State is set out in the Public Finances (Management) Act.

## 4.3.3 Domestic private sector financing

Founded in 1999, the PNG Stock Exchange has only 13 listed companies, with limited options for investors resulting in a low market capitalisation of K94.7 billion. Its rules come under license from the Australian Stock Exchange, on which some PNG Stock Exchange-listed companies are also present. The companies listed include aviation, banking, finance, manufacturing, mining, oil, and gas. Portfolio investments are unregulated and limited to the availability of stocks. Credit is allocated on market terms, and foreign investors can get credit on the local market, provided that foreign investors have a good credit history. However, credit instruments limit leasing and bank finance.

CSOs and churches are crucial to PNG's development because of their predominance in operating schools, hospitals, and various community services. Also, traditional social structures such as the *wantok* system provide support for families: churches and traditional

 $\underline{\text{https://www.treasury.gov.pg/html/national\_budget/files/2013/budget\_documents/Related\%20Budget\%20Documents/MEDI\_UM\%20TERM\%20FISCAL\%20STRATEGY\%20PAPER\%20\%202018\%20-\%202022.pdf}$ 

<sup>&</sup>lt;sup>41</sup> Medium Term Revenue Strategy at

social structures influence CSOs in PNG. Clans, the earliest form of civil society in PNG, organize village life around a hierarchy and a set of rules. The clans are egalitarian, with no chief or single leader who can speak for all. Leadership and power come under those who can obtain and share wealth.

The Associations Incorporation Act 1966 is the principal legislation that applies to CSOs in PNG. Under this Act, a CSO can become an incorporated association if it fulfils specific criteria, such as promoting an objective that is "useful to the community" and being non-profit. The Registrar of Companies, under the Investment Promotion Authority, is responsible for registering incorporated associations. GoPNG and the Christian Church Association/ Council of Churches co-signed the Partnership Policy Framework for Service Delivery in 2010. The Consultative Implementation and Monitoring Council is an independent body that brings together government, civil society, and the private sector. The Community Justice Liaison Unit, National Council of Women (along with the provincial councils of women), National Advisory Council on Disability, National Youth Commission, and the provincial AIDS councils are government entities coordinating engagement with civil society.

# 4.3.4 External private sector financing

GoPNG fosters an enabling environment for businesses to grow and attract FDI. FDI in mining and the petroleum/gas sector amounted to \$40 million in 2016 (inflow). The mining, oil, and gas sectors attract most FDIs, with FDI stock reaching \$4.2 billion in 2016 (stock).

PNG has no specific policy or law promoting discrimination against foreign investors. However, the Foreign Investment Regulatory Authority Bill 2018 prompted severe business concerns, that disadvantaged foreign investments. In response to these concerns, GoPNG suspended the bill for further review and broader consultation.

An act of parliament established the Investment Promotion Authority in 1992 to promote and facilitate investment in PNG and regulate business. GoPNG screens FDI through the IPA. When reviewing an FDI proposal, the Investment Promotion Authority may consider several factors, including the potential for the positive development of human and natural resources and the investor's record in PNG and elsewhere. There is no specific investment level. As shown in Figure 22 (below), net inflows of FDI were 1.3 percent of GDP in 2019, compared with 4.8 percent of GDP in 2018 and 2.7 percent of GDP in 2000.

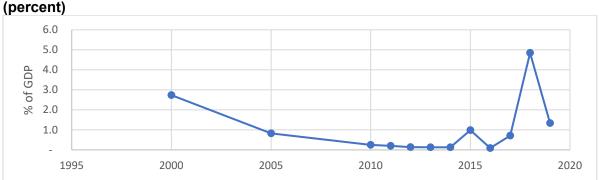


Figure 22: PNG Foreign Direct Investment net inflows, 2000-2019, selected years (percent)

Source: World Bank World Development Indicators

Bilateral remittance estimates show that for 2018 the leading countries for sending remittances to and receiving from PNG were Australia, China, India, Indonesia, Japan, New Zealand, Philippines, Solomon Islands, South Korea, Sri Lanka, United Kingdom, and the United States. Personal remittance outflows from PNG were \$92 million for 2018, a decline of 66 percent from the previous year's \$268 million and the lowest outflow in 14 years.

Remittance inflows into PNG amounted to \$3 million in 2019, \$1 million less than in 2018. Except for 2011 to 2014, remittance inflows to PNG have been less than \$10 million per year. As shown in Figure 23 below, the inflows of migrant remittances have been declining since 2005. Remittance inflows amounted to \$7 million in 2005 (0.14 percent of GDP), compared with \$2 million in 2020 (0.01 percent of GDP).

0.16 0.14 0.12 0.08 0.08 0.06 0.04 0.02 2005

2010

2015

2016

2017

Figure 23: PNG Migrant remittance inflows, 2005-2020, selected years (percent)

Source: World Bank World Development Indicators

# 4.4 Environment and climate change analysis

PNG has tremendous natural wealth, an exceptional diversity of wildlife and a growing population, most of whom live subsistence lifestyles and depend directly on the environment to provide for their daily needs. However, PNG's natural resources are depleting rapidly, impacting both biodiversity and people's well-being.

PNG lies in the southwestern Pacific Ocean and comprises the eastern half of the island of New Guinea, the Bismarck Archipelago (New Britain, New Ireland, the Admiralty Islands, and several others), Bougainville Island (part of the Solomon Islands chain), and small offshore islands and atolls. It is one of the most disaster-prone countries in the world due to geophysical conditions. Prevalent hazards include earthquakes, cyclones, storms, volcanic eruptions, riverine and coastal flooding, coastal erosion, epidemics, and droughts.<sup>42</sup>

<sup>42</sup> United Nations Office of Disaster Risk Reduction [UNDRR], 2019a



Figure 24: Papua New Guinea's provinces, major cities and mountain ranges

PNG's geography is defined by a high central cordillera (over 1500m), with several subsidiary coastal ranges comprising montane landscapes. Many of PNG's islands are active or recently active volcanoes. The high equatorial ranges and warm tropical seas generate high rainfall, feeding thousands of streams and rivers that have broken the landscape into many isolated and hard-to-reach plains, plateaux and valleys. PNG's coastline is over 17,000 km long. The implications of its remote geography include:

- evolution of very diverse flora and fauna, including many endemic species (found nowhere else in the world)
- development of diverse cultures, with over 850 recognised languages
- poor accessibility, lack of infrastructure and services and high transport costs in many areas
- some extremely wet areas with high disease potential and low productivity
- very high vulnerability to volcanic eruptions, earthquakes and other natural disasters.

#### 4.4.1 Legislation, policies, agreements, and tools

Both PNG's Constitution and its strategic Vision 2050 include, as significant pillars, the conservation of the environment and culture for the benefit of future generations. In addition to its commitment to the SDGs, the country is a signatory to international agreements including the Convention on Biological Diversity, the United Nations Framework Convention on Climate Change, and the Paris Agreement.

Some components of PNG's environmental legislation and policy are substantial, including the National Oceans Policy, Policy on Protected Areas, National Strategy for Responsible Sustainable Development (STaRS) 2015, and the Climate-compatible Development Policy. However, implementation of these has been lacking and much legislation is old, requiring review and updating (for example, biodiversity and wildlife conservation, forestry management, sustainable land use, chemical and waste disposal, and mining).

PNG's environmental governance remains weak. It scores poorly on the international Environmental Performance Index, ranking 146 out of 180 countries. While legislation appears to protect the rights of landowners and the community, the laws and agreements are not consistently enforced in practice. This frequently leads to dissatisfaction and sometimes conflict. Weak law enforcement and systemic corruption problems are recognised by GoPNG and the United Nations as significant barriers to development in the country: the government has committed to action on these issues under the auspices of the United Nations Convention Against Corruption and the PNG Anti-Corruption Project funded by the European Union and implemented by the United Nations Office on Drugs and Crime and the UNDP PNG.

The impact of extractives without proper management has reportedly led to consequences such as, but not limited to:

- environmental damage
- health issues for the surrounding communities
- issues of physical safety, freedom of movement, and access to services
- lack of access to clean water
- flooding and destruction of agricultural land and sacred sites
- landslides
- food insecurity.

Broadly, a lack of availability of high-quality and disaggregated data hinders progress towards sound environmental decision-making across PNG. Whilst data often exists at the project level, no comprehensive database or system exists with which to store, manage, share and use this data over the long term.

To assist community-level engagement in environmental management and conservation, several tools and mechanisms have been developed by the UN and development partners. These include the:

- free, open-source *Lukim Gather* mobile data collection application to assist protected area communities in mapping and monitoring their environment (www.lukimgather.org)
- PNG Biodiversity library of resources for establishing and monitoring protected areas (www.pngbiodiversity.org)
- National Forest Monitoring System for REDD+ and forest monitoring projects (http://png-nfms.org/portal/)
- Biodiversity and Climate Fund which will assist communities, NGOs and communitybased organizations in funding projects related to the preservation of environmental resources across PNG (www.pngbcf.org).

## 4.4.2 Biodiversity conservation

PNG has outstanding biodiversity values. It is located on the most floristically diverse island in the world, with a high degree of endemism and many undescribed species.<sup>44</sup> The diversity of vertebrate animals is among the highest on the planet, with at least 1,786 species of amphibians, reptiles, birds and mammals, between five and nine percent of the world's total. The number of species is likely to increase as research finds new and undescribed plants and animals. PNG is among the world's top ten countries where conserving its natural environment

<sup>&</sup>lt;sup>43</sup> Environmental Performance Index 2020, Yale Center for Environmental Law and Policy, Yale University 44 Cámara-Leret, R., et al, 'New Guinea has the world's richest island flora', Nature.com, 2020. https://doi.org/10.1038/s41586-020-2549-5

can contribute to saving biodiversity.<sup>45</sup> Despite this, PNG's biodiversity loss continues to accelerate, and there is a risk of losing species before they are identified and catalogued.

There has been little recent work at the national level on policy or programs for wildlife and biodiversity conservation. According to the International Union for Conservation of Nature (2022), two-thirds of animal species and a fifth of plant species in PNG are listed as decreasing, with the population trend of most of the rest unknown. One in five of PNG's mammals is threatened.

Threats to wildlife and biodiversity include wildlife trade, unsustainable hunting and resource use, invasive species, clearing and habitat loss (for example, rough extractive industries including agriculture, logging, mining, oil and gas extraction), invasive species, loss of biocultural knowledge, climate change, and pollution and sedimentation. Sustainable use of wildlife is a pillar of survival for many rural people in PNG as a source of food, medicine, firewood, and building materials. Wildlife is also an integral part of cultural and traditional life. Sustainability has become more challenging to ensure due to increasing human populations placing pressure on habitats for wildlife populations. The loss and destruction of biodiversity often result in few long-term benefits for local landholders or the PNG community. The people who suffer most from biodiversity decline are the poorest, reliant on hunting and fishing for survival, and women and children.

PNG has outstanding variety in its common food crops and is the centre of diversity for crops, including bananas and sweet potatoes. PNG is currently considering the ratification of the Nagoya Protocol on Access and Benefit Sharing. In the past, PNG's genetic resources have been exploited without any benefit for landowners or the country or the protection of landowners' intellectual property. GoPNG is concerned about the community and national rights to genetic material.

The UN and development partners support several programs to improve biodiversity outcomes through strengthening management effectiveness, establishing a network for community collaboration and partnerships, advocacy initiatives to create a forum for conservation stakeholders, piloting demonstration initiatives and sustainable financing. The Secretariat of the Pacific Regional Environment Programme (SPREP) also provides a useful mechanism for South-South cooperation.

#### 4.4.3 Protected areas

Protected areas in PNG are managed under several pieces of legislation that will be aligned when the Protected Areas Bill is finalised and enacted. The Policy on Protected Areas was approved in 2015.

In 2022, there were 61 formally gazetted protected areas in PNG, totalling just over 2.2 million hectares (ha) (4.8 percent of the land area), well below the agreed 17 percent for terrestrial protected areas as stated in the CBD Aichi targets and PNG's Policy on Protected Areas. Since 2010, four protected areas have been gazetted, and one has been substantially expanded. Representation of ecosystems and species falls well short of the agreed targets. Priority areas for future reservations have been identified, 46 but the time required to create new protected areas is significant. Free, prior and informed consent of landowners is essential for any proposals to progress.

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<sup>&</sup>lt;sup>45</sup> Dinerstein, E. et al., 'A "Global Safety Net" to reverse biodiversity loss and stabilize Earth's climate'. Sci. Adv. 6, eabb2824, 2020. https://doi.org/10.1126/sciadv.abb2824

<sup>46</sup> Adams, V.M., Land-sea conservation assessment for Papua New Guinea, University of Queensland, Australia, 2017.

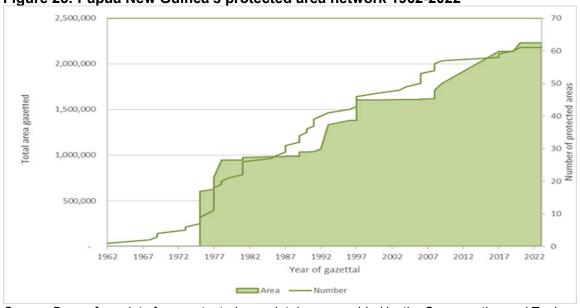


Figure 25: Papua New Guinea's protected area network 1962-2022

Source: Drawn from data from protected area database, provided by the Conservation and Environment Protection Authority (CEPA), Government of PNG

The management effectiveness of most protected areas is very low, with more than 90 percent having no or minimal funding or staffing, <sup>47</sup> resulting in limited active management and monitoring of biodiversity outcomes. The exceptions are protected areas with consistent external support, usually coupling biodiversity conservation with community development. Recent projects supported by the Global Environment Facility (GEF) and UNDP have assisted in increasing capacity, especially at the national level, and developing preliminary management plans for most protected areas. However, staffing and funding of protected areas across the board are inadequate, especially considering the vital importance of biodiversity in PNG. As most protected areas will be managed at the provincial level, partnerships with provincial administrations and capacity building at LLG and community levels are critical.

Protected and conserved areas offer opportunities for PNG communities, as they can be a focus for funding that integrates conservation objectives with social and economic progress and the continuance of diverse cultures. However, a long-term, sustained effort must continue at many levels – national, provincial and local across the country, including in remote locations. The current GEF-funded project on sustainable financing of protected areas aims to reduce the funding gap for protected areas and improve their management effectiveness and the livelihoods of customary landowners. With the support of UNDP, it aims to establish a national Biodiversity and Climate Fund as a legally independent institution. This fund aims to support the financial sustainability of protected area management in PNG and the coordination of fundraising efforts on behalf of protected areas.

## 4.4.4 Forests

The PNG Forest Authority has classified 78 percent of PNG land as forest (2019). These forests are globally significant in terms of ecosystem structure and function, carbon storage, and biodiversity. Most forest land is owned by customary landowners who rely on forest resources for subsistence and income. About 76 percent of forests have had no significant human disturbance. Nearly 11 percent are logged, and around 13 percent are disturbed by other activities, namely subsistence gardening, fire and small-scale logging, such as wokabaut

<sup>&</sup>lt;sup>47</sup> Leverington, F. et al, 'Papua New Guinea Management Effectiveness Evaluation of Protected Areas'. SPREP/CEPA/UNDP, Samoa, 2017.

(mobile) sawmills. Logging activities mainly occur in low altitude (less than 500m) forests on plains, fans, and uplands.<sup>48</sup>

Changes to forest cover distinguish between forest degradation (for example, as a result of commercial logging) and forest deforestation, where a forest is replaced by other land cover types (e.g. cropping, urban expansion).<sup>49</sup> Between 2000 and 2019, just over 350,000 ha of forest was cleared and converted to other uses.<sup>50</sup> The average annual area of deforestation between 2011 and 2015 (30,700 ha) was significantly more than between 2001 and 2005. This annual rate slowed to under 20,000 ha by 2019 due to government policies and the cancellation of some Special Agricultural Business Leases (see Figure 26 below).<sup>51</sup>

Almost all deforestation (99 percent) was due to land-use conversion from forest land to crop land. Subsistence agriculture is reported to be the most significant driver of deforestation (responsible for about two-thirds), followed by oil palm plantation development (30 percent).<sup>52</sup>

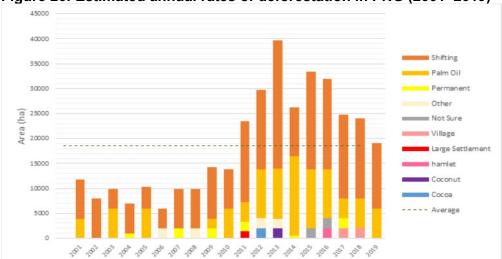


Figure 26: Estimated annual rates of deforestation in PNG (2001–2019)

Source: Global Green Growth Institute and CCDA, 2021 from draft LULUCF Assessment 2016–2019

Nearly three million ha of forest was mapped as becoming "degraded" between 2000 and 2019. This represents about 10 percent of PNG's forests and is primarily due to logging. The annual area of forest degradation more than doubled from 2001 (87,600 ha) to its peak in 2011 (200,050 ha). Since its peak, the rate slowed to 100,000ha in 2019 (Figure 27).

<sup>&</sup>lt;sup>48</sup> PNG Forest Authority, 2019. Forest and Land Use Change in Papua New Guinea 2000-2015, PNG, 2022. 'Latest 2021 log export data revealed'. PNGi Central, http://pngicentral.org/reports/latest-2021-log-export-data-revealed/ (accessed 4.5.22)

<sup>&</sup>lt;sup>49</sup> Babon, A., Gowae, G.Y., 'The context of REDD+ in Papua New Guinea: Drivers, agents and institutions'. (Occasional Paper No. 89). CIFOR, Bogor, Indonesia, 2013.

<sup>&</sup>lt;sup>50</sup> Op cit.

<sup>&</sup>lt;sup>51</sup> Global Green Growth Institute, CCDA, Papua New Guinea NDC Implementation Roadmap for Agriculture, Forestry, and Other Land Use (AFOLU) sector. GGGI and CCDA, Port Moresby, Papua New Guinea, 2021.

<sup>&</sup>lt;sup>52</sup> Op cit.

225,000

175,000

150,000

100,000

25,000

25,000

Other

Mining

Portable Sawmitl

Infrast ructure

Fire

Gardening

Logging

Average

Figure 27: Annual rate of forest degradation 2001-2019 (area in ha)

Source: Global Green Growth Institute and CCDA, 2021

Key areas of concern related to forestry include the impact of timber harvesting activities, including sustainable and illegal logging cycles; third parties' rights; transport and trade; and poor governance, including lack of suitable engagement with customary landowners.

PNG is the world's largest exporter of tropical round logs, exporting 84 percent of these logs to China. GoPNG has committed to phasing this out by 2025, with two supporting policies: an end to new timber permits and permits renewals, and an end to new log export licenses for foreign-owned logging companies. Given that round log exports are still high (Figure 27 & 28) and that many agreements and licences are not due to expire for many years, this phasing out will require concerted action. Section 1.

<sup>53</sup> PNG Forest Authority, 2019. Forest and Land Use Change in Papua New Guinea 2000-2015, PNG, 2022. 'Latest 2021 log export data revealed'. PNGi Central, http://pngicentral.org/reports/latest-2021-log-export-data-revealed/ (accessed 4.5.22)

<sup>&</sup>lt;sup>54</sup> Act Now! for a better PNG, Maximizing Value: Can Papua New Guinea finally end the export of unprocessed tropical logs? Research paper, 2022.

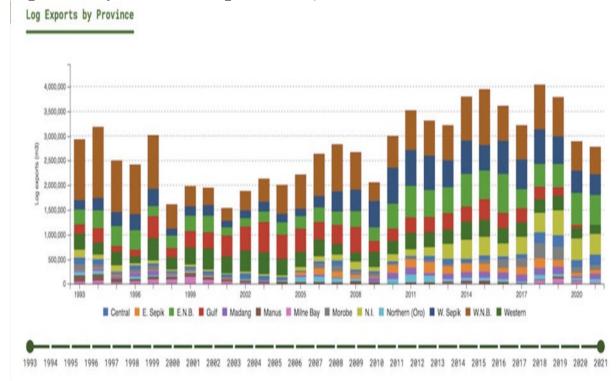


Figure 28: Exports of round logs from PNG, 1993 to 2021

Source: PNGi 2022

There have been allegations of inadequate monitoring and poor enforcement within the forestry sector for several years from multiple sources. These mainly applied to logging within Special Agricultural Business Leases, and allegations were confirmed by a government inquiry, thick led to the cancellation of some of the licenses. As well as environmental impacts, social impacts can include greater violence and hardship for women, and issues of use of force by uniformed forces. These mainly applied to logging within Special Agricultural Business Leases, and allegations were confirmed by a government inquiry, the social impacts can include greater violence and hardship for women, and issues of use of force by uniformed forces.

Reducing Emissions from Deforestation and Forest Degradation (REDD+) aims to support countries to reduce or stop deforestation, primarily as a climate change mitigation measure. Development of the National REDD+ Strategy has been supported by legal, policy and technical advances, including the National Forest Monitoring System, to achieve a consistent and repeatable approach to monitoring changes in forest cover. GoPNG has committed to ending forest loss by 2030.

#### 4.4.5 Marine conservation

PNG's marine environment is vast and diverse, globally significant in terms of its ecosystem structure, function and biodiversity, and locally significant for the many thousands of PNG residents who rely on its resources for subsistence and income. Most of PNG's threatened and highly biodiverse marine and coastal ecosystems and species are not well protected, leaving them potentially vulnerable to conflicting resource use and over-exploitation.

<sup>&</sup>lt;sup>55</sup> Davidson, 2021; Gabriel & Wood, 2015; Laurance et al., 2012; Lawson, 2014; Mousseau, 2017 (see References for full titles)

<sup>56</sup> Numapo, J., 'Commission of Inquiry into Special Agriculture and Business Leases (SABL)', Government of PNG, 2013.

<sup>&</sup>lt;sup>57</sup> Cannon, J., 'Gender-based violence shakes communities in the wake of forest loss'. Mongabay Environment News, 2020.

In about 4,000 rural coastal communities throughout 14 maritime provinces, most people survive on artisanal fishing, hunting and gardening, with few opportunities to earn money for essential services. Coastal populations are expanding rapidly, placing pressure on coastal and marine resources. Pressures on marine and coastal areas include:

- 1. changing and intensifying weather patterns and other effects of climate change
- 2. impacts from land-based activities, including a loss of foraging and breeding grounds for many species of fish
- 3. invasive marine and coastal species
- 4. subsistence and artisanal over-fishing, and destructive fishing practices in some areas
- 5. illegal, unreported and unregulated fishing
- 6. pollution and sedimentation impacts from forest clearing, agriculture, mining, oil spills and industrial activities.

Locally managed marine areas are an essential mechanism for sustainable management of in-shore areas and will be more formally recognised in the protected area legislation when passed. In addition, there is a commitment to creating more prominent offshore marine sanctuaries. Any plans to effectively manage marine resources must include viable pathways for the health and well-being of coastal communities, including alternative incomes and employment through tourism and improved access to essential human services.

Additional conservation areas are required to meet SDG 14 (Life Below Water) and Aichi Target 11 (17 percent of terrestrial and inland water areas and 10 percent of coastal and marine areas, to be effectively and equitably managed), including a need to protect and manage deep water habitats and reefs and to adequately protect commercial fish stock spawning aggregations, marine turtles, seabirds and cetaceans.

Expanding marine protected areas in PNG presents an opportunity for strengthened management and pursuit of economic activities that positively contribute to biodiversity. PNG's Ocean Policy endorsement has highlighted the importance and potential for the blue economy. Early initiatives include the UN joint programme to establish a Blue Economy Incubation Facility to provide early-stage financial and technical support to women-led blue businesses, funded through the Global Fund for Coral Reefs and Joint SDG Fund.

## 4.4.6 Managing water, waste, and pollution

Management of waste of all kinds in PNG is limited. The report from the February 2020 SPREP meeting of the Pacific Waste programme (PACWASTE) recorded that PNG had:

- outdated legislation governing waste and chemical management
- limited sustainable financing mechanisms
- limited institutional and human resource capacity at national/ municipality levels
- a lack of national policies or strategies on waste management.

Wastewater and sewage are primarily released with stormwater drainage, even in larger cities where sewerage treatment plants may exist. Wastewater from commercial premises contains high concentrations of pollutants.

Rapid population growth is outpacing investment in WaSH and waste infrastructure and services in urban, peri-urban and rural areas. Improvements are required to reduce the exposure of vulnerable populations to health risks from poor quality WaSH, and impacts on the environment from unmanaged or poorly managed waste disposal. There is significant multilateral (World Bank, EU, ADB) and bilateral (Japan, Australia) investment in improving

WaSH and waste management in PNG. These investments are guided by multilateral, national and institutional frameworks and strategies and are accompanied by technical guidance, project monitoring and evaluation, and capacity building. PNG has embraced eco-industrial development, aiming to create a node of industrial sustainability and is currently developing its first National Waste and Chemical Management Policy.<sup>58</sup>

# 4.4.7 Managing mining and gas production

PNG is highly prospective for minerals, including gold, copper, silver, nickel and cobalt, and hydrocarbon resources in the form of oil and gas. Foreign investment in large mines and oil and gas extraction is encouraged in PNG, and the sector dominates the economy. There is also small-scale alluvial gold mining (a reserved activity for Papua New Guineans only), sand mining and limestone mining. In addition, pressure for deep-sea mining is growing with the rising demand for rare minerals to support the expanding technology sector.

Mining, oil and gas extraction in PNG has had weak environmental regulation, environmental degradation, adverse social impacts and limited community gains. Environmental and social impacts of mining, oil and gas extraction include:<sup>59</sup>

- · gendered inequality and inequity
- fraudulent consent
- displacement
- social breakdown
- land alienation
- pollution (from tailings runoff, including increases in heavy metals, sedimentation, and lowered water quality)
- biodiversity loss and changes
- greenhouse gas emissions (for example, gas flaring)
- poor health
- social conflict.

An important issue is the disposal of mine tailings, which constitute up to 99 percent of the volume of material mined. Tailing dams are prone to failure in areas of high seismic activity and extreme rainfall events. Three mines in PNG and one in Indonesia are the only places in the world where mine tailing is licensed to be discharged into rivers, <sup>60</sup> and this has had severe consequences for places such as the Fly River. <sup>61</sup> In March 2020, the NEC recommended banning all riverine tailings disposal for all future mines. The ban is not retrospective, and changes to legislation have yet to be introduced. Deep-sea disposal is an alternative practised in 16 mines in six countries. It is now banned in most of the world due to its environmental impacts, but it may be a viable alternative in a few countries, including parts of PNG where deep water is close to the shore, provided strict conditions are followed. <sup>62</sup> <sup>63</sup>

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<sup>&</sup>lt;sup>58</sup> Department of National Planning and Monitoring, PNG's Voluntary National Review 2020: Progress of implementing the SDGs, Port Moresby.

<sup>&</sup>lt;sup>59</sup> Mudd, G.M. et al, Mining in Papua New Guinea: A complex story of trends, impacts and governance', Science of the Total Environment 741, 140375, 2020. https://doi.org/10.1016/j.scitotenv.2020.140375

<sup>&</sup>lt;sup>60</sup> Kwong, Y.T.J. et al, 'Comparison of Environmental Impacts of Deep-sea Tailings Placement Versus On-land Disposal'. Water. Air. Soil Pollut. 230, 287, 2019. https://doi.org/10.1007/s11270-019-4336-1

<sup>&</sup>lt;sup>61</sup> Busilacchi, S. et al, Chapter 8, Ok Tedi Mine, in: M. Moran & J. Curth-Bibb (Eds). Too Close to Ignore: Australia's Borderland with PNG and Indonesia, Melbourne University Press, Melbourne, Australia, 2020.

<sup>62</sup> GESAMP, 2016. 'Proceedings of the GESAMP International Workshop on the Impacts of Mine Tailings in the Marine Environment'. International Maritime Organisation, London, 2016.

<sup>63</sup> Kwong et al, 2019

The Mining Project Rehabilitation and Closure Guidelines recognise that mine closure and reclamation need to be planned early in the mining process to maximise the beneficial outcomes following mine closure.<sup>64</sup> However, due to the uneven distribution of benefits from this sector and the breakdown of traditional culture associated with mining, many mines and oil and gas sites are witnessing opposition from associated landowning communities.

Given that the PNG economy relies heavily on the extractive resource industry, interventions need to address how to improve the industry's economic, environmental and social performance.

## 4.4.8 Climate change and green energy

The impacts of global climate change are driving vulnerabilities associated with more extreme weather events, sea-level rise, and potential changes to biodiversity, including loss of livelihoods. Over 80 percent of the country's population is susceptible to climatic extremes due to their direct dependence on natural resources and subsistence agriculture and their limited capacity to adapt, and according to the United Nations Office for Disaster Risk Reduction (UNDRR, 2019b) over half a million people live in coastal villages exposed to sea-level rise, coastal degradation and storm surges. These diverse risks have implications for human rights as the negative impact on lives and livelihoods may fuel social unrest and increase vulnerability for marginalized populations.

Global climate model projections by the Australian Bureau of Meteorology indicate that for PNG in the coming century:

- El Niño and La Niña events will continue to occur in the future (very high confidence), but there is little consensus on whether these events will change in intensity or frequency
- annual mean temperatures and extremely high daily temperatures will continue to rise (very high confidence)
- average rainfall is projected to increase in most areas (medium confidence), along with more extreme rain events (high confidence), and droughts are projected to decline in frequency (medium confidence)
- ocean acidification is expected to continue (very high confidence)
- the risk of coral bleaching will increase (very high confidence)
- sea level will continue to rise (very high confidence).

PNG has been a world leader in pressing for action against climate change. In 2016 PNG adopted the Paris Agreement and, in 2021, supported the Glasgow Climate Pact and the Glasgow Leaders' Declaration on Forests and Land Use, which commits to halting and reversing forest loss by 2030. The vast natural forests of PNG play an essential role in regulating climate, and PNG was traditionally a carbon sink. However, by 2015, PNG had become a net carbon source due to accelerated land clearing and land-use change and increases in emissions from the energy sector. Net emissions returned to below zero in 2017 as the forest clearing and logging rate decreased. However, emissions from energy sources have continued to increase (Figure 29).

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<sup>&</sup>lt;sup>64</sup> Mineral Resources Authority of PNG, International Forum on Mining, Minerals, Metals and Sustainable Development, Mining Project Rehabilitation and Closure Guidelines Papua New Guinea, 2019.

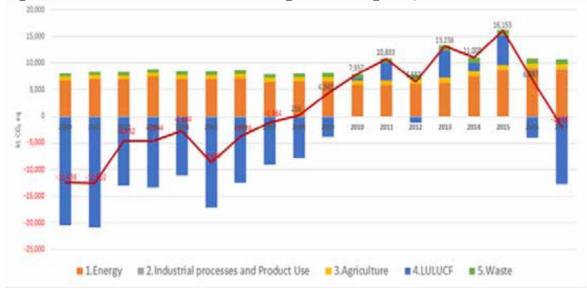


Figure 29: Total estimated emissions of greenhouse gases, 2001-2017

Source: Government of Papua New Guinea, 2022

Mitigation efforts have centred on the REDD+ initiatives (see Section 4.4.4 Forests) and the transition to renewable energy. PNG has a high potential for renewable energy from hydropower, solar, wind, biomass, and geothermal sources. However, barriers must be overcome to enable the widespread adoption of renewable energy. These barriers include the lack of an enabling policy environment (for example, a fixed national electricity tariff, which is subsidised and does not cover the total cost of generation and distribution). Also, the lack of readiness from the private sector and financial services concerning renewable energy, lack of reliable data about demand (and supply), and vandalism and infrastructure theft.

Adaptation and building resilience are also focus areas for GoPNG, as impacts from climate change increase. A National Adaptation Plan, supported by UNDP, began preparation in 2020, as well as sectoral plans, and also adaptation plans for provinces. PNG's Enhanced Nationally Determined Contributions were launched/submitted to the UNFCCC Secretariat in 2020. However, as highlighted in the Nationally Determined Contributions, significant gaps remain in disaggregated data availability, funding, capacity, and technical support to assist PNG on the road to inclusive adaptation policy and practice.

UNDP has been supporting the implementation of an ADB-funded pilot project to strengthen resilience and adaptation to climate change in 21 islands and atolls in Morobe, Manus, East New Britain and Milne Bay provinces as well as Bougainville. This work encompasses comprehensive climate change vulnerability assessments as a basis for small grant investments decided upon by communities to enhance the communities' adaptation to climate change. It also encompasses food security and fisheries (including establishment of locally managed marine areas), and preparing gender responsive disaster management strategies and emergency response plans for each island. Mainstreaming and aligning these approaches and results throughout and across local (Ward and LLG), provincial and national levels are sought. The upscaling of this approach would be a valuable avenue to address community resilience throughout the country.

PNG has clear targets and policies for managing climate change. A key challenge is resourcing implementation. Financial resources, expert and technical advice, government systems and community capacity are all needed. Development partners have contributed to

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<sup>65</sup> Global Green Growth Institute, 'Green Growth Potential Assessment Papua New Guinea Country Report', 2019.

at least 26 projects supporting PNG's climate change initiatives, and there are clearly defined needs for future support.<sup>66</sup>

# 4.4.9 Sustainable land use planning

In PNG, up to 97 percent of the land is in customary ownership. The land is central to an individual's, and group's, sense of social identity and belonging and this knowledge is passed on verbally from one generation to the next. The PNG Constitution recognises customary land tenure; hence, exclusive individual land ownership and inheritance of land are limited.

Progress in land use planning in PNG has been slow and disjointed. The National Strategy for Land Use Planning is awaiting government approval. There is no widespread spatial planning across the country or within provinces or LLGs, capacity and systems to deliver the required outcomes for biodiversity and communities are limited, and there is a lack of integrated sectoral responses to land use.

The focus on land formalisation and registration of land titles can leave customary landowners behind, especially if this process diminishes or eradicates the rights attached to their land. In addition, this impacts women, who have limited land ownership and unequal access to resources and decision-making concerning land.

At the national level, priority zones of nationally important biodiversity should be identified as areas of constraint to broadscale land clearing. Biodiversity matters should be mainstreamed into all land use planning and marine planning.

In addition, local land use plans are needed to identify what communities value, which areas are constrained, and which areas offer the potential for a range of land uses (for example agriculture, settlement, conservation, industry). This matter is a crucial way to minimise land use conflicts, protect people's rights (including women), ensure sound management of resources, and preserve cultural values. This planning effort needs to be coupled with effective dispute resolution processes. The GEF-funded UNDP project (2021-27) aims to establish sustainable integrated land use planning systems across New Britain, including scaling up land use planning processes from the community to the national level. Similarly, the UNDP project to strengthen integrated sustainable landscape management in Enga Province (2021-25) aims to integrate approaches from the local to provincial level and will include mapping of conservation areas, monitoring of target areas and developing base maps and spatial information for effective land use planning.

Future approaches in land use planning need to focus on respect for customary landowners' rights by:

- recognising the 'bundle of rights' that attach to land
- building on and accommodate informal and semi-formal arrangements for land reform (for example by identifying all existing tenure rights and rights holders and include all these people in the consultation processes)
- strengthening women's land rights (i.e., equitable engagement of women in law-making concerning inheritance, land titling and registration, equitable benefit sharing, and better sex-disaggregate data)
- developing 'fit for purpose' systems of land registration, administration of land tenure and land use planning
- addressing corruption in land dealings

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<sup>&</sup>lt;sup>66</sup> GoPNG, Papua New Guinea's Second Biennial Update Report to the United Nations Framework Convention on Climate Change, 2022.

- addressing informal land and the need for expanded settlement areas (due to increasing population growth, in-migration and displacement)
- updating legislation, policy and plans
- improving data storage and usage systems
- enhancing capacity at all levels.

# 4.4.10 Money laundering and environmental crimes

PNG carried out its first Money Laundering and Financing of Terrorism National Risk Assessment (NRA) in 2017 which identified strong indicators of large-scale corruption and illegal logging in the country's forest sector. In line with the findings of the NRA, the 2017-2022 National Anti-Money Laundering and Counter Terrorist Financing Strategic Plan requires the PNG Forest Authority to conduct a sectoral risk assessment. The NRA identified that environment crime covers a wide range of offences and does not limit it to mining-related crimes and waste trafficking.

The NRA also found the occurrence of illegal mining such as alluvial gold mining; failures to comply with various conditions relating to mining and production activities that are designed to protect PNG's environment; and breaches of environmental conditions with waste dumping.67

# 4.5 Social exclusion analysis

Demographic projections for PNG, based on intercensal population growth trends and survey data on fertility, mortality, and migration, estimate a population of as low as 9.6 million and as high as 10.1 million.<sup>68</sup> Despite a high fertility rate of 3.52 births per woman aged 15 to 49, because of low life expectancy rates and high out-migration to other countries, the annual population growth rate has been declining from 2.2 (2010) to 1.9 (2022). Based on United Nations population projections (2015-2030) from the 2011 Census, PNG remains demographically young: 43 percent are children, (under age 18); 14 percent are in the 0 to 4 age group; 13 percent are ages 5 to 9; and 17 percent are 10 to 17 years. Children in the second decade of life (ages 10-19 years) comprise 21 percent of the total population in 2022, a percentage higher than the global average for that age range of only 16 percent.

# 4.5.1 Poverty and inequality

About 87 percent of PNG's population live in peri-urban, rural and remote settlements, and 80 percent rely on artisanal fishing, hunting, gathering and gardening. <sup>69</sup> There is little cash flow and limited access to health care, education, sanitation and clean water. 70

PNG's HDI value for 2019 is 0.555, putting the country in the medium human development category by positioning it at 155 out of 189 countries and territories. Between 1990 and 2019, PNG's HDI value increased 46.1 percent from 0.380 to 0.555. Between 1990 and 2019, PNG's life expectancy at birth increased by 8.0 years; mean years of schooling

<sup>&</sup>lt;sup>67</sup> Financial Action Task Force (FATF) Report - Money Laundering from Environmental Crime, FATF-OECD, July 2021

<sup>&</sup>lt;sup>68</sup> The United Nations Department of Economic and Social Affairs, Population Division estimated a population of 9.3 million as of July 2021, and 10.1 million as of July 2022, growing at an annual rate of 1.94 per cent per year. https://worldpopulationreview.com/countries/papua-new-guinea-population

<sup>&</sup>lt;sup>69</sup> Bourke, M., 'COVID-19 and food systems in Papua New Guinea', in Robins L, et al., COVID-19 and Food Systems in the Indo-Pacific: An Assessment of Vulnerabilities, Impacts and Opportunities for Action, ACIAR Technical Report 96, 2020.

<sup>70</sup> Department of National Planning and Monitoring, Papua New Guinea's Voluntary National Review 2020: Progress of implementing the SDGs, Port Moresby.

increased by 2.3 years, and expected years of schooling increased by 5.5 years. PNG's GNI per capita increased by about 87.9 percent between 1990 and 2019.

The 2019 HDI of 0.555 is below the average of 0.631 for countries in the medium human development group and below 0.747 for East Asia and the Pacific. When this HDI value of 0.555 discounts for inequality, the HDI falls to 0.390, a loss of 29.7 percent due to inequality in the distribution of the HDI dimension indices.

The most recent survey data publicly available for PNG's Multidimensional Poverty Index estimation is 2016/2018, which shows that 56.6 percent of the population (4.9 million people) are multidimensionally poor. At the same time, an additional 25.3 percent are classified as vulnerable to multidimensional poverty (2.2 million people), and 25.8 percent of the population are in severe multidimensional poverty. The breadth of deprivation (intensity) in PNG, the average deprivation score experienced by people in multidimensional poverty, is 46.5 percent. The Multidimensional Poverty Index shows that the share of the multidimensionally poor population, adjusted by the intensity of the deprivations, is 0.263. The contribution to multidimensional poverty comes from deprivations in the standard of living (65.8 percent), deprivations in education (30.1 percent) and health (4.6 percent).

Consequences of multidimensional poverty include reduced access to key basic necessities of life, reduced resilience to various forms of shocks such as natural disaster, civil unrest, or armed conflict, and reduced access to justice and higher potential inequalities in participation.

## 4.5.2 Health and well-being

Current health expenditure as a percent of GDP from 2000 to 2019 was 2.41 percent, with a minimum of 1.8 percent in 2015 and a maximum of 3.3 percent in 2014. The latest value from 2019 is 2.3 percent. For comparison, the world average in 2019 based on 181 countries is 6.5 percent. The per capita health expenditure has increased since 2015 to reach \$65 in 2019. The highest expenditure per capita per year was \$96 in 2014.

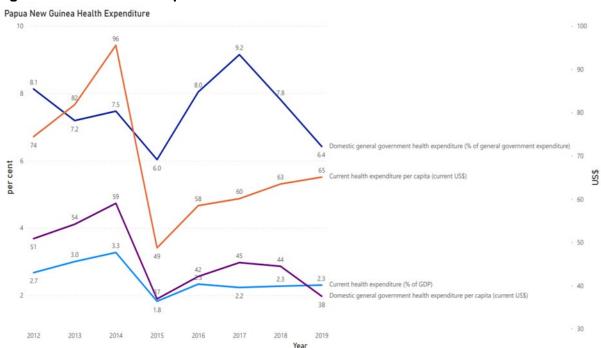


Figure 30: PNG Health Expenditure

Despite substantial needs, there is a considerable lack of services and support for people in PNG with mental health conditions, and limited access to supports to prevent poor mental health and programs to promote psychosocial well-being. Personnel with mental health training and skills are extremely limited across all sectors, which places a major barrier on implementation. Services that are responsive to the needs of children and adolescents are very limited, particularly at the primary health care level, and over-reliance on tertiary and institutional-based care also contributes to high unmet needs and delays in access to services. Insufficient budget for mental health and psychosocial support-related programs and budgeting processes that don't support agenda-based and cross-sectoral budget planning are also key challenges. There are no large-scale programs to support healthy peer relationships and address peer victimisation in schools, communities, and online spaces.

The national strategy for addressing mental health literacy, stigma and harmful norms is limited in scope and implementation, and critical cross-cutting challenges impact on the implementation of mental health and psychosocial support. There is currently limited national-level commitment to, and leadership of, mental health and limited mechanisms to support multi-sectoral planning and coordination. While mental health and well-being are integrated to some degree in the sectoral plans of education, social welfare and justice, these generally focus narrowly on specific actions (such as provision of school counsellors) rather than encompassing a more holistic vision for mental health and well-being and clear articulation of the sector's role and response. At a sub-national level, the lack of clear plans, guidance and structures to support implementation and multi-sectoral collaboration have contributed to limited coordination.

Under-5 mortality decreased from 75 deaths per 1,000 births for the five years before the 2006 DHS to 49 deaths per 1,000 births in the period measured by the 2016-2018 DHS. **This statistic means nearly 1 in 20 children in PNG dies before age 5.** Two-thirds of these deaths occur during the first year of life. Infant mortality (deaths of children under one year of age) declined from 57 to 33 deaths per 1,000 births between 2006 and 2016-18. World Bank indicators show that between 2015-2019, the neonatal and infant mortality rates were on average 23.98, and 40.25 per 1,000 live births respectively. The neonatal mortality rate for rural infants is seven points higher than urban infants.

Under-5 mortality rates remain higher in rural areas (49) than in urban areas (41), reflecting the ongoing health and well-being imbalance between rural and urban PNG. Overall, childhood mortality is higher in the Highlands region than in other regions. It is also higher among births occurring less than two years after a prior birth and births of order seven or above. Childhood mortality generally decreases with an increasing mother's education and household wealth. By 2016, among children with known birth weights, 14 percent weighed less than 2.5 kg at birth and only 35 percent of children aged 12-23 months had received all essential vaccinations.

Three-quarters (76 percent) of women in PNG who gave birth in the five year period before 2016 received antenatal care from a skilled provider. Just under half of the women had at least four antenatal care visits during their last pregnancy; however, only 17 percent had an antenatal care visit during their first trimester. Almost nine out of ten pregnant women (87 percent) who received antenatal care had their blood pressure measured, eight out of ten (78 percent) had a blood sample, and 46 percent had a urine sample taken. Seven in ten women took iron supplements during pregnancy. Only 38 percent of women's most recent births were protected against neonatal tetanus.

Over half (55 percent) of births in PNG are delivered in a health facility. Skilled providers assist fifty-six percent of births. Only three percent of births are delivered via caesarean section. 46 percent of women and 45 percent of newborns received a postnatal check within the first two days of birth. The main problems women face in accessing health care for themselves are getting money for treatment, and distance to a health facility.<sup>71</sup>

The 2016-2018 DHS shows that 23 percent of women and 27 percent of men have comprehensive knowledge about HIV. Further, 52 percent of women and 54 percent of men know that HIV can be transmitted during pregnancy, 54 percent of women and 56 percent of men know that HIV can be transmitted during labour, and 53 percent of women and 48 percent of men know that HIV can be transmitted during breastfeeding. Regarding HIV testing, 58 percent of women and 63 percent of men know where to get an HIV test, and 25 percent of women and 19 percent of men have ever been tested and received the results.

While estimates vary, the most recent national survey report for maternal mortality was 171 per 100,000 live births. These deaths are largely the result of preventable or treatable conditions, such as haemorrhages, infections and pre-eclampsia or eclampsia. A Task Force on Maternal Mortality reported in 2019 that women opt for the risks of an unattended birth at home because many health facilities often did not have staff or only had male staff. Many facilities lack basics such as running water and electricity needed to ensure a safe and sanitary environment for giving birth, and many facilities do not have refrigerators for vaccines or adequate stock of essential drugs and supplies to treat common conditions. Cost is a significant issue for many women, including the cost of transport and payments for services and supplies that should be free.

According to a 2019 study, 72 41 percent of male and 49 percent of female deaths in PNG are due to infectious diseases, maternal, neonatal and/or nutritional causes, while 45 percent of male and 42 percent of female deaths arise from non-communicable diseases. Provinces with the highest estimated mortality due to endemic infectious, maternal, neonatal and nutritional causes are geographically isolated, while deaths from heart disease and strokes are higher among those with comparatively high socioeconomic status. 73

The 2016-2018 DHS shows that 23 percent of women and 27 percent of men have comprehensive knowledge about HIV. Further, 52 percent of women and 54 percent of men know that HIV can be transmitted during pregnancy, 54 percent of women and 56 percent of men know that HIV can be transmitted during labour, and 53 percent of women and 48 percent of men know that HIV can be transmitted during breastfeeding. Regarding HIV testing, 58 percent of women and 63 percent of men know where to get an HIV test, and 25 percent of women and 19 percent of men have ever been tested and received the results.

In the past decade, contraceptive use among married women increased from 32 percent in 2006 to 37 percent in 2016-18. Modern methods have increased over the same period, from 24 percent to 31 percent. Almost nine out of ten users of modern contraceptive methods obtained their method from a public (government) source; only five percent obtained it from private medical sector sources. In 2011, only 16 percent of all new contraceptive users discontinued use of their method within 12 months; four percent switched to another method. One-quarter of currently married women (26 percent) have an unmet need for family planning.

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<sup>&</sup>lt;sup>71</sup> PNG Demographic and Health Survey 2016-2018

<sup>&</sup>lt;sup>72</sup> Kitur, U., Adair, T., Riley, I. et al. Estimating the pattern of causes of death in Papua New Guinea. BMC Public Health 19, 1322 (2019). < https://doi.org/10.1186/s12889-019-7620-5 >.

<sup>73</sup> https://healthynewbornnetwork.org/country/papua-new-guinea

Over half (59 percent) of currently married women have satisfied their demand for family planning.<sup>74</sup>

#### 4.5.3 Nutrition

Stunting in children is correlated with lower measured cognitive abilities, fewer years of completed schooling, and lower earnings as an adult. The loss of adult productivity related to early childhood stunting has been linked with economic losses for the country – up to an estimated 11 percent of GDP.<sup>75</sup> Over the last decade the national prevalence of chronic malnutrition (stunting) for children under five has exceeded 30 percent, the threshold considered "very high" in terms of public health significance, and unfortunately the trend is continuing upwards. Stunting was 43.9 percent in 2005-2007, and 49.5 percent in 2010-2014, and 40.1 percent between 2015–2019.<sup>76</sup> The ADB reported a prevalence of 48.4 percent for 2020.

To understand differences and causes of malnutrition in PNG, a new national nutrition survey is needed. We know that in 2010, stunting was higher in boys (50.9 percent) than girls (47.9 percent) and higher in children aged 48-59 months (55.2 percent) than those aged 0-23 months (44.5 percent). Stunting was higher for children living in rural areas (51.2 percent) compared to those in urban areas (36.4 percent). The worst affected are children living in households in the bottom 40 percent of wealth distribution, whose mothers have either no education or secondary education. Among that group, 56 percent are stunted (compared to 30 percent in the wealthiest households). East Sepik, West Sepik and Gulf provinces reported the highest prevalence of stunting in 2019 with Chimbu and NCD reporting the lowest.

If untreated, severe acute malnutrition can lead to a risk of death of up to 12 times more than non-malnourished children. Child wasting (acute malnutrition) was 8.1 percent in 2004 -2008, 14.1 percent in 2010 -2014, and 6.1 percent in 2015-2019. The worst affected are children living in households in the bottom 40 percent of wealth distribution and with more than two children in the households under the age of five years. Thirteen percent among that group suffer from wasting (compared to five percent in the wealthiest population group). Wasting differed very little between girls and boys, with only 0.7 percentage points difference. It was however higher in children aged 0-23 months (18.3 percent) compared to children aged 24-59 months (below 12.5 percent). Fourteen percent of the children admitted to health facilities in PNG were there because of severe acute malnutrition, and 27 percent of all registered children's deaths in 2015 were related to severe acute malnutrition.

The PNG Dental and Medical Catalogue 2010 states that therapeutic food supplements required to treat the condition of severe acute malnutrition should be available in all major health facilities throughout PNG. Since then, and supported by training of health

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<sup>&</sup>lt;sup>74</sup> National Statistical Office (NSO) [Papua New Guinea] and ICF. 2019. Papua New Guinea Demographic and Health Survey 2016-18. Port Moresby, Papua New Guinea, and Rockville, Maryland, USA: NSO and ICF.

<sup>75</sup> UNICEF Papua New Guinea, Country Programme 2018-2022: Nutrition Programme Strategy Note, 2016.

<sup>76</sup> Asian Development Bank, Key indicators for Asia and the Pacific in 2021.

<sup>77</sup> Global Nutrition Report (2021): < https://globalnutritionreport.org/resources/nutrition-profiles/oceania/melanesia/papuanew-guinea/ >

<sup>&</sup>lt;sup>78</sup> Olofin, I, et al., Associations of suboptimal growth with all-cause and cause-specific mortality in children under five years: a pooled analysis of ten prospective studies. PLOS One 8(5), 2013.

<sup>&</sup>lt;sup>79</sup> Concern International, Global Hunger Index: Linking Health and Sustainable Food Systems, 2020.

<sup>80</sup> Government of Papua New Guinea, National Nutrition Policy, 2016-2026.

care workers, the country case-fatality rates for children under the age of five have shown a steady decline, signalling that acute malnutrition can be controlled and managed.

PNG is approaching a situation of double burden malnutrition, as obesity in some population groups is increasing while at the same time stunting prevalence is also shas not progressed towards achieving its target for obesity. The prevalence of obesity among children and adolescents aged 5-10 years has increased from 7.1 percent to 10.1 percent for girls within 5 years, in comparison to boys which increased from 6.0 percent to 9.3 percent within the same period. The percentage of overweight children under five years was 3.4 in 2005, 7.7 in 2010 and 8.9 percent in 2020 and 13.7 in 2010.<sup>81</sup> Interventions aiming to prevent both obesity and underweight at an early stage are needed to avoid health-related co-morbidities.

The nutritional status of women affects the intrauterine developmental process and cannot be separated with the birth weight of their children and consequently, to child survival. In PNG, about eight percent of babies born each year have low birth weight, associated with maternal undernutrition and anaemia among other causes. This is attributed to traditional beliefs and practices, as well as inadequate access to nutritional information and adolescent-friendly services.

Breastfeeding is one of the most cost-effective practices to improve child health, nutrition and development outcomes. In PNG, the rate of exclusive breastfeeding increased from 56.1 percent in 2006 to 59.7 percent in 2018. Exclusive breastfeeding rates decline the higher a mother's education and the higher the household wealth. Among the lowest wealth quintile, 56 percent of children were exclusively breastfed compared to 45 percent among those in the highest quintile. Breastfeeding was more frequent among children delivered with assistance from health personnel (52 percent) than among those assisted by a traditional birth attendant (47 percent).

The prevalence of anaemia among women of child-bearing age (15-49 years) was estimated to be 36.6 percent in 2016 up from 34.2 percent in 2011, while the prevalence of anaemia among children under 5 was 48.4 percent as of 2016 and 47.90 in 2011. As of 2016, among pregnant women, the prevalence value was 44.8 percent compared to 36 percent among non-pregnant women. To prevent anaemia, pregnant women take iron folate supplements and/or eat iron-rich foods. As per the 2016-18 DHS, 28 percent of women aged 15-49 who gave birth in the five years before the survey did not take any iron tablets during their most recent pregnancy and only eight percent of women took iron tablets for 90 days or more during their most recent pregnancy.

Micronutrient deficiency contributes to childhood morbidity and mortality and the prevalence of these deficiencies is high among children and women. The 2016-2018 DHS shows that 86 percent of children aged 6-23 months consumed foods rich in vitamin A in the 24 hours preceding the survey while 41 percent consumed foods rich in iron. Seven percent of children aged 6-59 months had been given iron supplements in the past seven days while 31 percent were given vitamin A supplements in the past six months. Children in urban areas (11 percent) were twice as likely to receive iron supplements as those in rural areas (six percent). Provision of vitamin A supplements was also higher in urban areas (44 percent) than in rural areas (29 percent). Vitamin A deficiency affects children's sight and general immune

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<sup>&</sup>lt;sup>81</sup> Asian Development Bank, Key indicators for Asia and the Pacific in 2021.

 $<sup>82\</sup> Index\ Mundi, "Papua\ New\ Guinea-Prevalence\ of\ anemia", < https://www.indexmundi.com/facts/papua-new-guinea/prevalence-of-anemia>$ 

system. The percentage of children consuming vitamin A-rich and iron-rich foods increases with the mother's education and household wealth.

Bottlenecks and barriers to strengthening public health and nutrition service delivery include:

- insufficient budget allocations for public health system strengthening
- low investment in nutrition governance and services
- inadequate resources for scaling up proven models
- a lack of costed plans at the provincial level for specific interventions critical to quality primary health care.

Barriers to equitably delivered, quality health and nutrition services impact rural areas the most, where needs are the greatest. Increasing needs can be found in urban slums as well. Constrained access to services, poor infrastructure and quality affect care, as do extremely limited availability and accessibility of community-based child- and adolescent-friendly, family-centred, and multi-disciplinary care for physical and mental health and malnutrition conditions.

Bottlenecks and barriers to behaviour change, as well as knowledge and use of health and nutrition services are created by social norms, traditional beliefs and gender inequalities. PNG has a high percentage of zero dose children, whose parents refuse to have them vaccinated due to misinformation or mistrust. Low reproductive, maternal, newborn, child and adolescent health (RMNCAH) knowledge compromises healthcare decision making, as do poverty and low educational attainment. There is low awareness on the importance of nutrition among the general population and key decision makers. GoPNG currently lacks both strategy and assets for social behaviour change communication for nutrition.

## 4.5.4 Food insecurity

Components of the right to food including adequacy, accessibility, and availability are yet to be fully realised. In addition, the progress towards the realisation of the right remains dependent upon wealth to a degree. Rural residents are more likely to experience moderate to severe food insecurity than urban residents (58 percent versus 52 percent). The population experiencing moderate to severe food insecurity ranges from a high of 73 percent in Western Province to a low of 35 percent in Madang Province. The proportion of the population experiencing moderate to severe food insecurity decreases as household wealth increases. For instance, 68 percent of the population in the lowest wealth quintile experienced moderate to severe food insecurity compared with only 42 percent of the population in the highest wealth quintile.<sup>83</sup>

Government expenditure on education as a percentage of GDP has declined significantly over the years. In 2018, expenditure was 1.9 percent of GDP compared with 7.4 percent of GDP in 1977, the highest level since independence. Expenditure on education as a percentage of

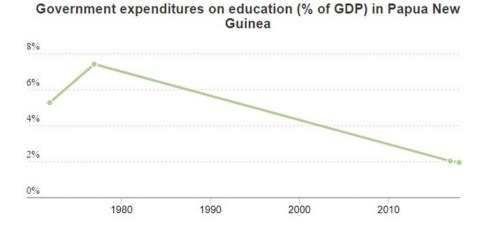
total expenditure has also declined, from 10.7 percent in 2017 to 8.7 percent in 2018.

## 4.5.5 Quality education

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<sup>&</sup>lt;sup>83</sup> PNG Demographic and Health Survey 2016-2018

Figure 31: GoPNG expenditure on education



Data from datacatalog.worldbank.org via Data Commons

Educational attainment at the household level has increased since 2006. The percentage of women and men with no education has declined in almost all age groups. Overall, it fell from 35 percent to 24 percent for men and 45 percent to 32 percent for women between 2006 and 2018. The percentage of the school-age population that attends primary or secondary school was higher in urban areas than in rural areas in 2018. Not all the students who should be attending school are attending. In 2018, these figures were 94 percent, 80 percent, and 37 percent for elementary, primary, and secondary school, respectively.

Education is an essential factor influencing an individual's attitudes and opportunities. Almost one in four women (23 percent) and 13 percent of men aged 15-49 have no formal education. Many respondents (35 percent of women and men) have attended but not completed some primary school. Men have generally attained higher levels of education than women; only eight percent of women aged 15-49 have completed secondary school or attained a higher level of education compared with 11 percent of men. Residents of urban areas generally have more education than rural residents.

The urban-rural difference is pronounced at the secondary or higher levels of education. For example, 19 percent of women in urban areas have completed secondary or higher education compared with only six percent of rural women. Similarly, 26 percent of urban men completed a secondary or higher level of education, compared with 10 percent of rural men. Educational attainment also varies by wealth quintile. For example, less than one percent of women in the lowest wealth quintile have completed secondary or higher education, compared with 25 percent of women in the highest quintile.

Similarly, only one percent of men in the lowest wealth quintile have completed a secondary or higher level of education, compared with 33 percent of those in the highest quintile. Two-thirds of women and 80 percent of men aged 15-49 are literate, meaning they can at least read a simple sentence. Literacy levels are higher among younger and urban respondents and increase with wealth.<sup>84</sup>

About 30 percent of girls and boys aged 6-14 years have not attended school but among older children there was marked gender disparity: nine percent of boys aged 15-24 years have not attended school compared to 13 percent of girls. Among those who do attend school, retention loss starts very early: 84 percent of boys and 81 percent of girls transition

<sup>&</sup>lt;sup>84</sup> PNG Demographic and Health Survey 2016-18

from Elementary 2 to primary school (Grade 3).<sup>85</sup> For girls and boys, the major loss in transition from one year to the next occurs from Grade 8 to 9 (primary to lower secondary), as only 63.1 percent of boys and 55.1 percent of girls transition to lower secondary.

Forty-four percent of the population attended primary or secondary with 46.3 percent net admission rate (NAR) in the elementary level, 50.3 percent NAR in primary school and 20.6 percent NAR in secondary school. All three NARs (elementary, primary and secondary school) were higher in urban areas than in rural areas with both the primary and secondary school NAR being higher at higher levels of household wealth. Gender parity indices at different levels of schooling and over time show that by 2016 there was gender parity – with a slightly higher percentage of girls than boys enrolled in primary and secondary. Boys are much more likely to be in vocational training, while girls are more likely to marry early.

Table 3: Gender Parity Index 2009–2016 for children and adolescents enrolled in school or training

	2009	2010	2011	2012	2013	2016
Elementary	0.86	0.9	0.9	0.91	0.9	0.99
Primary	0.78	0.83	0.84	0.83	0.81	1.04
Secondary	0.64	0.75	0.75	0.75	0.71	1.06
Vocational	-	0.42	0.36	0.37	0.4	-

NB: A gender parity index lower than 1.00 indicates a gender disparity in favour of males, with a higher proportion of males than females attending that level of schooling.

Source: https://www.educationpng.gov.pg/Staff/Devinfo%20Dashboard/dashboard.html

Non-enrolment and low transition rates to higher levels is caused by several factors. Public education is underfunded, especially in rural areas. Despite the official policy, subsidies have not always been paid in full or disbursed on time, forcing parents to cover fees or keep children at home. Additionally, not all students in rural areas can access schools easily as they have to trek long distances to get to their schools, or else pay boarding fees. Many schools lack access to clean water, functional and gender segregated toilets, and even classroom space. Often, their teachers lack appropriate training and teaching materials. In 2016, there was a shortage of 10,000 teachers in schools, most of which were in rural areas.<sup>86</sup>

Children with disabilities continue to face issues with access to quality, inclusive education. Complete and accurate national figures on the number of children with disabilities in PNG and in or out of school are not readily available. According to civil society submissions to PNG's Universal Periodic Review in 2021, five of 24 provinces are engaged in disability learning.<sup>87</sup> Existing services supporting children with disability operate through only 19 inclusive education resource centres, where outreach and direct services capacity to schools is limited.<sup>88</sup> The exclusion could be attributed to:

<sup>85</sup> http://education.gov.pg/documents/PNG-COVID-19-Education-Response-and-Recovery-Plan-(Final-Draft-04-05-2020).

<sup>86</sup> https://www.rnz.co.nz/international/pacific-news/302786/teacher-shortage-in-png-hurting-rural-students

<sup>&</sup>lt;sup>87</sup> Magna Carta Inc submission to PNG Universal Periodic Review, 2021, available in <a href="https://www.upr-info.org/sites/default/files/documents/2021-10/2.png">https://www.upr-info.org/sites/default/files/documents/2021-10/2.png</a> magna carta inc.pdf

<sup>88</sup> http://education.gov.pg/documents/PNG-COVID-19-Education-Response-and-Recovery-Plan-(Final-Draft-04-05-2020).

- lack of awareness of the rights of children with disabilities
- inadequate budget allocation to put the Special Education policy into operation
- lack of competent teachers with disability-inclusive education training
- difficulties with retention and transition in various educational settings from early childhood to post- secondary
- inaccessible infrastructure and materials in educational settings
- limited appropriate disability services
- lack of inclusive education curriculum and assessment practices.

## 4.5.6 Gender equality and women's empowerment

Men are more likely to be employed than women in PNG. Sixty-four percent of currently married men were employed in the past 12 months (2016-2018), compared with only 36 percent of currently married women. Forty-six percent of currently married women with cash earnings decide independently on how their earnings are used. About half of women and men report making joint decisions regarding husbands' cash earnings. DHS results show that more men than women own a house (60 percent versus 49 percent) and land (65 percent versus 44 percent). More than eight in 10 currently married women participate in decision-making, either by themselves or jointly with their husbands, regarding their health care. At the same time, 70 percent decide alone or jointly to make major household purchases and 79 percent decide alone or jointly to visit their family or relatives. Sixty-two percent participate in all three decisions, while 10 percent do not participate in any of the decisions.

The use of contraceptives is higher among women who participate in one or more household decisions. In most cases, women's participation in decision-making is positively associated with reproductive health-seeking behaviour related to antenatal care, delivery from a skilled provider, and postnatal checks.

Alarmingly, 70 percent of women and 72 percent of men believe that a husband is justified in beating his wife in at least one of five specified situations. The 2016-2018 DHS results show that 56 percent of women aged 15-49 in PNG have experienced physical violence since age 15, and 28 percent have experienced sexual violence. Eighteen percent of women who have ever been pregnant have experienced violence during pregnancy. Regarding spousal violence, 63 percent of ever-married women have experienced spousal physical, sexual, or emotional violence. The most common type of spousal violence is physical violence (54 percent), followed by emotional violence (51 percent). Twenty-nine percent of women have experienced spousal sexual violence.

Regarding injuries due to spousal violence, 57 percent of women who have experienced spousal physical or sexual violence have sustained injuries. Cuts, bruises, or aches are the most common injuries reported. Regarding seeking help, 35 percent of women who have ever experienced physical or sexual violence have sought help, while 13 percent have never sought help but have told someone about the violence. Thirty-nine percent of women who have experienced physical or sexual violence have not sought help or told anyone

about the violence.89 Women with disabilities often experience greater negative consequences from GBV than women without disabilities.90

About eight percent of girls are married before the age of 15 and 27.3 percent are married before 18.

The Department of Justice and Attorney General is working towards a Women's Health Protection Bill, which would give greater legal rights to GBV and sexual and reproductive health services. The Department is also working with the Constitutional Law Reform Commission to develop a Human Rights Defenders Bill.

# 4.5.7 Water, sanitation and hygiene

PNG suffers from issues related to water quality and safety, physical accessibility, affordability, and sufficiency – issues that reflect the wealth divide with the wealthier having greater enjoyment to rights to water along with sanitation and hygiene. The 2019 Joint Monitoring Programme reported that less than half of PNG households (41 percent) in 2017 had access to at least a basic improved drinking water source, and only 35 percent in rural areas. Nationally, 51 percent rely on surface water, which increased from 38 percent in 2000. In the wealth quintile, 90.4 percent of people have at least basic, safe drinking water compared to only 11 percent of people in the lowest quintile. 91

There are considerable differences in access to drinking water sources across the country. For example, the proportion of households with an improved source of drinking water ranges from only 19 percent in Southern Highlands to 99 percent in the NCD. Overall, 10 percent of households use an appropriate method to make their drinking water safer, including boiling, adding bleach/chlorine, filtering, and solar disinfecting. Urban households are much more likely to use an appropriate water treatment method than rural households (26 percent and 9 percent, respectively).

The 2019 Joint Monitoring Programme reported that 13 percent of people in 2017 accessed at least a basic toilet, while most people (70 percent) were using an unimproved toilet, usually a pit latrine. Fourteen percent were still defecating in the open, with only a one percentage point change since 2000. Rural people were most likely to openly defecate (17 percent) or use an unimproved facility (74 percent). In the 2016-2018 DHS, the Islands region had by far the highest percentage of people practicing open defecation. Households in the NCD are far more likely to have an improved sanitation facility (86 percent) than those in other provinces, especially Hela (10 percent).<sup>92</sup>

Less than half of provinces in 2018 had achieved fifty percent coverage of basic water and sanitation in schools with the northern and Highland provinces having the lowest coverage. Basic hygiene coverage in schools is below 25 percent in all provinces, except for East New Britain and Chimbu. A 2015 baseline survey assessing WaSH in schools, led by the National Department of Education and UNICEF found that 41 percent and 51 percent of

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<sup>&</sup>lt;sup>89</sup> PNG Demographic and Health Survey 2016-2018

<sup>&</sup>lt;sup>90</sup>Summary of Stakeholders' submissions on Papua New Guinea, A/HRC/WG.6/39/PNG/3 (17 August 2021), available in <a href="https://documents-dds-ny.un.org/doc/UNDOC/GEN/G21/226/01/PDF/G2122601.pdf?OpenElement">https://documents-dds-ny.un.org/doc/UNDOC/GEN/G21/226/01/PDF/G2122601.pdf?OpenElement</a>, at para. 53.

<sup>&</sup>lt;sup>91</sup> Op cit.

<sup>92</sup> PNG Demographic and Health Survey 2016-2018

primary schools surveyed respectively had only one operational toilet for girls and boys. An analysis of 2016 Education Management Information System data on WaSH in schools showed that only 10 percent of schools had soap and 28 percent had clean, operational and separate toilets for girls and boys, with the toilets beside each other.

Menstrual hygiene is affected by the absence of washing facilities, absence of privacy, and unavailability of clean absorbent materials, either due to limited availability or prohibitive costs. The baseline survey showed that only eight percent of primary schools promoted menstrual health management for adolescent girls with almost 20 percent (one in five) of the girls indicating that they did not attend school during menstruation. This led to reduction in girls attending school by 10-15 percent.

According to the Joint Monitoring Programme report, 30 percent of health care facilities did not have basic water services, meaning water was not available from an improved source on the premises. 32 percent had no toilets. WaSH in health care facilities is essential to curb infection and spread of diseases and to provide privacy and dignity to both staff and patients. Unhygienic birth deliveries leading to infections such as sepsis remains a frequent cause of neonatal and maternal mortality in PNG.

Overall, WASH responsibilities are fragmented and uncoordinated across PNG. The largest urban areas are fairly well served by the SOEs, but the rural areas tend to be underserved by their LLGs. The PNG Water, Sanitation and Hygiene Policy 2015-2030 focuses on improved service delivery of water, sanitation and environmental hygiene, as well as increased access. The Policy is aligned with the government's Sustainable Development Goal target of 70 percent of the population accessing clean water supply and safe sanitation by 2030. The Policy also aims for 100 percent of public schools and health facilities to have water and proper sanitation facilities.

The 2016 Water Supply and Sanitation Act aimed to strengthen coordination of water supply and sanitation services throughout the country. It provides for planning, design, construction and management of systems, including proper disposal of wastewater and sewage. Legislation has been proposed and long-pending to create a National Water, Sanitation and Hygiene Authority, with subnational offices, to manage WaSH as a high priority development target for PNG. The WaSH Programme Management Unit under DNPM acts as the interim body that coordinates and implements the WASH Policy.93

There exists a set place for hand washing for 57 percent of households surveyed. Soap and water, the essential hand washing agents, were available to 33 percent of people. The availability of a place to wash hands that has soap and water varies widely, being highest among the population in Manus (83 percent) and in NCD (73 percent), as well as among people in the highest wealth quintile (73 percent).

Access to water, in particular regarding physical accessibility and quality/safety, is also impacted by pollution/waste management and management of extractive industries. These have been understood to contribute to issues with quality/safety of easily accessible water sources and are subject to inadequate regulation/enforcement of existing legal and regulatory

<sup>93</sup> https://www.adb.org/sites/default/files/publication/664926/making-urban-sanitation-more-inclusive-png.pdf

frameworks, as described in other sections. These issues have a disproportionate impact on women, indigenous groups, individuals in rural areas, and many others without the ability to physically access alternative water sources.

## 4.5.8 Vulnerability to environmental shocks

PNG's rural and remote communities are vulnerable to shocks from extractive industries (including mining, oil, gas, commercial fishing, and logging), primarily where people mainly depend on the local environment for their livelihoods. Environmental shocks include:

- land clearing, loss of farmlands and forests
- pollution of rivers, streams and marine areas, and land and soils
- entry of toxins including heavy metals into the environment and food chain, causing health impacts
- decline in fish catch and loss of marine food sources
- siltation with resultant loss of farmlands and healthy aquatic systems, blocking of waterways and changes in water flows
- flow-on effects relating to increased mobility and migration where people are displaced and have to venture further afield to seek livelihoods.

The remoteness of many of PNG's rural communities can create immense challenges for responding to disasters effectively, and a lack of local infrastructure and health services can have long-lasting impacts on communities following catastrophic events.94 Climate change is already affecting the most disadvantaged and will result in many more people being 'left behind' unless actions are taken. Women and children suffer most adversely, and it was reported that "women...(are) often most vocal about dimensions of vulnerability (for example, population growth) and their links to social issues (i.e., alcoholism, domestic violence and petty crime) that they viewed as likely to be heightened through ecosystem decline".95

## 4.6 Humanitarian-development-peace nexus

# 4.6.1 Humanitarian needs and risk analysis<sup>96</sup>

Consistent, comprehensive, and accurate historical data is lacking on people in PNG affected or displaced by humanitarian emergencies or crises and their needs, including annual new displacements, 97 particularly in violent contexts. The International Organization for Migration (IOM) has occasionally published event-specific Displacement Tracking Matrix reports on PNG since 2016,98 and the Internal Displacement Monitoring Centre (IDMC) publishes annual displacement figures for both natural disasters and conflict events. 99 However, information on conflict-related displacement in the provinces of Enga, Hela, and Southern Highlands shared by the International Committee of the Red Cross to the Disaster Management Team (DMT) indicates much higher numbers of displacement due to conflict and violence than is captured

<sup>94</sup> UNDRR, Disaster Risk Reduction in Papua New Guinea: Status Report 2019. Bangkok, Thailand, United Nations Office for Disaster Risk Reduction (UNDRR), Regional Office for Asia and the Pacific, 2019.

<sup>95</sup> McKenna, K.et al, 'Community responses to the effects of climate change in PNG'. Devpolicy Blog Dev. Policy Central, 2019, <a href="https://devpolicy.org/community-responses-to-the-effects-of-climate-change-in-png-20190703/">https://devpolicy.org/community-responses-to-the-effects-of-climate-change-in-png-20190703/</a>

<sup>&</sup>lt;sup>96</sup> The information on conflict, violence and humanitarian issues came from research done by UNDP, IOM, RCO and UNHCR

<sup>&</sup>lt;sup>97</sup> New displacement refers to the number of new cases or incidents of displacement recorded over the specified year, rather than the number of people displaced. This is done because people may be displaced more than once.

<sup>98</sup> https://dtm.iom.int/papua-new-guinea

<sup>99</sup> https://www.internal-displacement.org/countries/papua-new-guinea

in either IOM's or IDMC's reporting. 100 We can assume considerable underreporting due to lack of access, reliable sources, or other reasons. At the same time, there is little information currently available on the duration of displacements, whether these are new, repeated, or cyclical displacements, or what the humanitarian needs are, if any, of those displaced by violence.

There are some existing resources from which we can draw a general risk profile for humanitarian needs. The UNDRR and the World Bank have recently produced excellent summaries of the climate and natural hazard risks and vulnerabilities in PNG. <sup>101102</sup> There is also a database of publicly reported historical damages and losses from natural disasters that was compiled by the UNDP in 2018 and has been lightly updated by UNDRR in 2020. However, it has significant gaps in sex and age disaggregated data on humanitarian impacts, including deaths, injuries, missing, and impacts on livelihoods, infrastructure, crops, and social services.

We use the data published in the 2022 INFORM Risk Assessment for this risk profile. The assessment looks at the three categories of natural and human hazards and exposure, vulnerability, and coping capacity concerning disasters. PNG, a lower-middle-income country, has a risk class of "high," the second highest risk class, and ranks 24 out of 191 globally; it ranks first among Pacific island countries and second only to Myanmar among the combined Pacific and South-East Asian regions. It ranks 18 globally for natural hazard risks and 65 for human-induced risks. The country also ranks 27 regarding socio-economic vulnerability and 77 for vulnerable groups. Finally, the country's lack of coping capacity mainly affects its overall ranking: 24 out of 191 countries lack institutional capacity and 11 lack infrastructural capacity. PNG ranks 36 out of 191 countries on the INFORM Risk Index for epidemic risk. It again ranks first among countries in the Pacific region.

Notably, the INFORM natural hazard risk assessment excludes volcanoes. According to the Rabaul Volcanological Observatory, there are 15 active volcanoes in PNG, <sup>109</sup> five of which erupted in 2021 and two others within the last decade. <sup>110</sup> Its most active volcanoes include Bagana, Kadovar, Langila, Manam, and Ulawun. More than a million people – 17 percent of the population – live within 30 km of an active volcano. <sup>111</sup> It also does not consider

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<sup>&</sup>lt;sup>100</sup> March 2022 DMT meeting: reported that an estimated 16,000 to 17,000 people (2,800 families) were currently displaced by 15 fights being monitored in Enga province, with another 4,900 people displaced by fights in neighbouring Hela province.

<sup>&</sup>lt;sup>101</sup> UNDRR, Disaster Risk Reduction in Papua New Guinea: Status Report 2019. Bangkok, Thailand, United Nations Office for Disaster Risk Reduction (UNDRR), Regional Office for Asia and the Pacific, 2019

 $<sup>\</sup>underline{https://www.preventionweb.net/publication/disaster-risk-reduction-papua-new-guinea}$ 

 <sup>102</sup> Climate Risk Profile: Papua New Guinea (2021): The World Bank Group
 https://climateknowledgeportal.worldbank.org/sites/default/files/country-profiles/15871 WB Papua%20New%20Guinea%20Country%20Profile-WEB.pdf

<sup>&</sup>lt;sup>103</sup>https://drmkc.jrc.ec.europa.eu/inform-index/INFORM-Risk/Country-Profile/moduleId/1767/id/386/controller/Admin/action/Country-Profile

<sup>104</sup>https://drmkc.jrc.ec.europa.eu/inform-index/INFORM-Risk/Results-and-data/moduleId/1782/id/386/controller/Admin/action/Results#inline-nav-4

<sup>&</sup>lt;sup>105</sup> Hazard/exposure observes the probability of physical exposure associated with specific natural (earthquake; tsunami; flood; tropical cyclone; drought, and epidemics) and human-induced (conflict intensity/projected conflict intensity) hazards.

<sup>&</sup>lt;sup>106</sup> Vulnerability looks at socio-economic vulnerability (development/deprivation; inequality, and aid dependency) and vulnerable groups (uprooted people; people with health conditions; children under 5; recent shocks, and food insecurity).

<sup>&</sup>lt;sup>107</sup> Coping capacity looks at governmental institutions (disaster risk reduction/governance) and infrastructure (communications; physical infrastructure, and health care systems).

<sup>108</sup> https://drmkc.jrc.ec.europa.eu/inform-index/INFORM-Risk/Results-and data/moduleId/1782/id/386/controller/Admin/action/Results#inline-nav-4

<sup>109</sup> https://www.preventionweb.net/files/workspace/37131 candidateinformation%5B8%5D.pdf

<sup>110</sup> https://volcano.si.edu/volcanolist\_countries.cfm?country=Papua%20New%20Guinea

<sup>&</sup>lt;sup>111</sup> Op cit UNDRR (2019)

sorcery and low-intensity, recurrent tribal conflicts, which have significant humanitarian impacts in PNG.

Since 2013, PNG's global ranking in all three categories has remained relatively constant, with an overall gradual improving trend in coping capacity and worsening for vulnerable groups, while social-economic vulnerability has oscillated. Overall, hazards and exposure have remained unchanged.

# 4.6.2 Vulnerability to natural and environmental disasters and associated humanitarian issues

PNG is among the most disaster-prone countries in the world. Prevalent hazards include earthquakes, cyclones, storms, volcanic eruptions, riverine and coastal flooding, coastal erosion, tsunamis, epidemics, and droughts. In addition, climate-related hazards are expected to become increasingly severe due to climate change (i.e., droughts, sea-level rise). The INFORM Risk Index (2022) ranked PNG as the 22nd most vulnerable of 189 countries concerning hazards and exposure, vulnerability, and lack of coping capacity.

Climate change and environmental degradation impact on a wide range of human rights including the right to life, health, food, adequate housing, safe drinking water, preservation of culture, and more. Natural and environmental disasters disproportionately negatively impact the most vulnerable in the community, including children, women, older persons, PWD, and the rural poor.

The health, livelihoods, and food security of PNG's majority rural population are particularly vulnerable to the impact of disasters. 112 Rural communities who are dependent on natural resources including subsistence farming are often left without shelter or any form of livelihoods, and are highly exposed to disease and hunger. Vulnerability is further increased by the distribution and socio-economic circumstances of the population, and the lack of capability for governments and communities at all levels to plan and respond for events. In addition to the implications of natural disasters for access to livelihoods, education, health, water and sanitation, among others, significant issues related to physical safety, security, and dignity, in particular GBV, after disasters are a very common concern.

According to UNDRR's damages and losses database, 113 historically, earthquakes (33 percent), volcanic activity (20 percent), and tsunamis (17 percent) are the most significant causes of disaster-related deaths, followed by tropical storms (9 percent), landslides, flooding, and epidemics (3 percent each) in PNG. However, displacement for the same period indicates that more people were displaced by flooding (55 percent), storm surges (24 percent), and earthquakes (11 percent). If we look at the total number of people affected, historically, drought and frost affected the most people – nearly 3.7 million people – followed by all floods and earthquakes captured in UNDRR's database.

The financial cost of insufficient attention to resilience-building and disaster risk reduction is high. If we look at total absolute losses caused by the various natural hazards that most affect PNG, in 2015 – the most recent data available from UNDRR – average annual losses by flooding ranked highest: 114

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<sup>112</sup> UNDRR (2019).

 $<sup>\</sup>frac{113}{https://www.desinventar.net/DesInventar/profiletab.jsp?bookmark=1\&countrycode=pac\&maxhits=100\&lang=EN\&logic=AND\&sortby=0\&\ level0=PNG$ 

<sup>&</sup>lt;sup>114</sup> UNISDR (GAR) (https://www.preventionweb.net/english/hyogo/gar/2015/en/home/).

Hazard	Absolute (US\$ million)
Multi-Hazard	169.84
Flood	94.23
Earthquake	73.59
Volcano	13.70
Wind	0.87
Tsunami	0.59
Storm Surge	0.56

Probable maximum losses (US\$ million) for the mean return period (in years) are as follows:

Hazard	20 yrs	50 yrs
Earthquake	212	380
Wind	6	15
Storm Surge	2	13
Tsunami	1	3

Figure 32: Hazards that require adaptive measures

Hazard	Risk Exposure
Coastal	<ul> <li>Climate change will exacerbate the issue due to rising sea levels and occurence of coastal storms</li> <li>Damages infrastructure</li> <li>Affects ~6,000 and displaces ~400, several deaths on an annual basis</li> </ul>
Inland Flooding	<ul> <li>Occurs multiple times per year</li> <li>Damages buildings and infrastructure</li> <li>Affects ~26,000 annually, including the displacement of ~8,000 people and several deaths.</li> </ul>
Land Slides	<ul> <li>Affects 500-600 and kills several people in remote, mountainous areas</li> <li>Damages infrastructure, particularly roads, causing transport issues</li> </ul>
Malaria	<ul> <li>Already affects half of the population, with climate change impacting ~200k more in the Highlands as conditions become more tolerable for the disease</li> <li>Highlands cases are becoming more severe</li> </ul>
Agricultural yield loss	3 million people depend on climate-sensitive crops     Climate change may reduce yields: adaptation measures are needed
Coral reef decay	<ul> <li>70,000 people earn a living from reefs</li> <li>Bleaching events and decay will reduce the livelihood and subsistence opportunities</li> </ul>

Source: Dartmouth Flooding Database; EM-DAT; Reliefweb.int; press clippings; academic journals; Reefbase; WHO; PNAS; World Bank; FAO; IMF; WRI; TEEB; ANU; Internet research; interviews; Adaptation technical working group.

Recurrent food insecurity and lack of access to clean water across most of PNG results in malnutrition and increased risk of diseases. They also exacerbate high violence rates against women and girls, reducing their access to support. Coupled with inconsistent and weak investment in disaster management and disaster risk reduction, national and provincial governments are poorly positioned to adequately respond to a national emergency.

The humanitarian consequences of natural disasters and human-caused crises in PNG are exacerbated by pre-existing development-related conditions that increase the impact of even minor events and have protracted effects, including displacement, for individuals,

households, and communities already struggling to meet basic needs, with limited access to nutritious food sources, clean water, primary education, health and social services, safety and security.

Women, children, the elderly, PWD and other vulnerable persons are more at risk as a consequence of more limited coping capacity, stemming from social marginalisation, lack of access, lower education, less likelihood of stable income, and many other factors leading to the erosion of resilience to recover from crises. Local populations affected by any crisis in PNG would first look to their family, relatives, neighbours, and the diaspora for immediate assistance, followed by political leaders and the local church they are affiliated with, or which provides social and economic support services in their community.

The immediate needs of the displaced population will likely be food, health, protection, shelter, and WaSH. These needs would be higher in urban centres and peri-urban communities, where populations are concentrated and where displacement in evacuation sites is likely to be higher. With a prolonged displacement, education, nutrition, livelihoods, and food security will also become issues. Over time, people living in unaffected rural areas may move to evacuation sites in urban areas in search of relief goods and services.

Land and property rights, and access to the resources on them, remain among the most common reasons for outbreaks of violence in PNG. As discussed in previous sections, due to inequities and issues with consultation in resources management and governance, among other issues, violence has resulted and annually led to thousands of affected and displaced persons with humanitarian needs.

Investment in disaster planning, response and recovery is primarily funded by external development assistance. UNDP and other development partners continue to fund activities to strengthen disaster prevention, response and recovery, including expanding early warning systems and local area preparedness, response and recovery. The investment is coordinated through the National Disaster Centre, which requires additional capacity and capability building. The critical issue is the lack of capacity for sustained implementation at the national, provincial and local levels and greater status and authority across government.

## Identified priorities include:

- Expanding early warning systems
- Systematic data collection, analysis, and management (including appropriately disaggregated data), required for risk analyses, situational assessments, projection of future scenarios and planning for effective disaster risk reduction and response measures
- Further localisation to increase the capacity of local actors and operators in disaster preparedness and recovery
- Improving the ability of local communities to effectively manage and lead response and recovery through resilience and capacity building
- Improving and reinforcing disaster finance including investment in increasing community resilience, poverty reduction and environmental protection, responding to mechanisms for alleviating loss of livelihoods, and addressing shelter and access to safe water/sanitation in the aftermath of disaster events.

# 4.6.3 Health and socio-economic indicators

PNG has a weak health system and is currently facing an ageing, health-challenged workforce. The country suffers from a critical shortage of human resources for health. Recent

estimates of health worker densities reflect 0.5 physicians per 10,000 population and 5.3 nurses per 10,000 population. These problems are prominent in the provinces and remote areas because of rugged terrain and risky conditions. The health workforce also lacks midwives and community health workers.

Less than half of households (46 percent) have access to an improved source of drinking water, with significant differences between households in urban (83 percent) and rural (42 percent) areas. In addition, just 29 percent of the households have improved access to safe sanitation; reportedly, 33 percent of people wash their hands with soap. 116

#### 4.6.4 Conflict/violence

The Highland provinces are most at risk for violence that would result in displaced and affected populations with humanitarian needs. Hela, Southern Highlands, and Enga provinces are considered very high risk based on historical precedence. The remaining Highlands provinces – Eastern Highlands, Western Highlands, Chimbu, and Jiwaka – are considered high risk. Outside of the Highlands region, parts of East Sepik, Madang, and Morobe provinces in the Momase region, the urban centres of Oro and Milne Bay in the Southern region, and West New Britain in the New Guinea Islands region are also considered at risk for violence.

The emergence and re-emergence of violence is largely unpredictable, can occur with little warning, and rapidly escalate. The security landscape over the last two years has been shaped by crime in urban centres and clashes among tribes and clans, particularly in the Highlands region. There has also been an increasing influx of high-powered small arms originating from numerous sources including the security forces circulating amongst fragile, combative communities in the Highlands and other regions which has sparked widespread instability. Item 119

In most provinces, inter-communal violence is driven by a practice of retribution which, for women and girls, often manifests as sexual violence. There is a high correlation between alcohol misuse and intimate partner violence. The interruption of livelihoods from protracted events such as the COVID-19 pandemic, conflict and violence further increases pressure on families and thus, the risk of intimate partner violence for women and girls inside the home, along with other negative coping strategies. The interruption of education will likely increase girls' risk of early pregnancy and linked to this, child, early and/or forced marriage. Some customary conflict resolution practices involve child, early, and forced marriage which is of concern, especially in the Highlands. As elsewhere, crisis and displacement will likely increase the risk of trafficking and sexual exploitation and abuse, especially for women and girls.

In response to concerns about gun violence, in the May parliamentary sitting Prime Minister Marape tabled the Firearms Amendment Bill 2022, which was unanimously supported by all MPs. Under the new legislation, those found to be in unlawful possession or manufacturing firearms now face a maximum penalty of life imprisonment. However, it is uncertain how much of a difference this Act will make, mainly when, reportedly, political leaders can influence the nation's security forces and direct them. Legislation passed in 2018 introducing penalties for illegal or misuse of legal weapons arguably did little to curb gun

<sup>&</sup>lt;sup>115</sup> Information from PNG WHO health emergency officer, 2019

<sup>&</sup>lt;sup>116</sup> Information provided by World Vision WASH cluster coordinator, 2020

<sup>&</sup>lt;sup>117</sup> UNDSS reports

<sup>&</sup>lt;sup>118</sup> Defined as revolvers and self-loading pistols, rifles and carbines, assault rifles, sub-machine guns, and light machine guns.

<sup>&</sup>lt;sup>119</sup> Alpers, P., Gun-Running In Papua New Guinea: From Arrows to Assault Weapons in the Southern Highlands, 2005

violence. It is believed that there are over 50,000 illegal firearms in PNG, either manufactured, smuggled, or traded by gangs or tribal groups. 120

#### 4.6.5 Cross-border issues

In the past three decades, the country has seen violence progress from using sticks, stones, arrows, spears, and knives to munitions, including automated weapons. The illicit trade of marijuana and other drugs for weapons has increased along the porous border with Indonesia, in particular.

There have been reports of Malaysian and Chinese logging companies and foreign business-people arranging for foreign women – from countries such as China, Indonesia, the Philippines, Malaysia and Thailand – to voluntarily enter PNG with fraudulent business or tourist visas. Following their arrival, many of these women are turned over to traffickers for transport to fisheries, entertainment sites and mining and logging camps, where they are exploited and forced into domestic servitude and sex work which, evidently, is associated with considerable health and safety concerns. In addition, Chinese, Malaysian, and local men are reportedly subjected to forced labour at logging camps and commercial mines, with some coerced into working for indefinite periods due to debt bondage schemes. <sup>121</sup>

PNG ministers and authorities have commented on the high incidence of criminal activities occurring across the land border between PNG and Indonesia. The Solomon Islands' unmonitored border with Bougainville also enables relatively free movement of goods and people by small vessels, making it susceptible to trafficking of illegal commodities and facilitating the development and maintenance of illicit markets There has been significant reporting of small arms trade between Bougainville and Solomon Islands. Criminal cases in recent years indicates that large concealments of methamphetamine have been shipped from PNG into Australia.

# 4.6.6 Asylum seekers and refugees

Since the 1960s, due to heightened tensions between the Indonesian authorities and the West Papuan separatist movement, West Papuans have been forced to flee, with a major influx of 15,000 refugees into PNG in the 1980s. GoPNG established a refugee settlement site known as Iowara (or East Arwin Relocation Camp) in Western Province, which is the largest and least developed province in PNG. Significant hardships are confronted by some 2,500 West Papuan refugees who reside at Iowara, including tensions with local landowners, road access issues, WaSH concerns, limited livelihood opportunities, challenges with accessing justice mechanisms and food security concerns. 122 Despite these challenges, West Papuan refugees are required to relocate to Iowara if they wish to obtain Government assistance.

In terms of recent developments, since 2018 Indonesian forces have been reinforced in Papua and West Papua provinces of Indonesia, as West Papuan separatist groups have become more coordinated and targeted in their attacks. In late 2019, 197 asylum-seekers arrived in Western Province, who were then relocated in January 2020 to a temporary site.

<sup>120</sup> https://devpolicy.org/too-little-too-late-securing-pngs-2022-national-election-20220513/?utm\_source=rss&utm\_medium=rss&utm\_campaign=too-little-too-late-securing-pngs-2022-national-election-20220513

<sup>&</sup>lt;sup>121</sup> United Nations Office for Drugs and Crime and Pacific Island Forum Secretariat (2016)- Transnational Organised Crime in the Pacific: A Threat Assessment, UNODC, September 2016 2016.09.16\_TOCTA\_Pacific\_web.pdf (un.org)

<sup>&</sup>lt;sup>122</sup> Other challenges include road access issues, seasonal drought, flooding, food insecurity, inadequate access to clean water, lack of education and economic opportunities, poor living standards, malnutrition, and health concerns relating to waterborne diseases, drug resistant tuberculosis and malaria.

After delays, gaps in the provision of food rations and denial of freedom of movement, the asylum-seekers were relocated to lowara in July 2020.

In 2021, as the conflict in Indonesia intensified further, <sup>123</sup> mass displacement (mainly internal) occurred for West Papuans caught in the middle of the conflict. On 13 October 2021, 106 West Papuans arrived at the Star Mountains, Sandaun Province, where they remain to date in a dire humanitarian situation without government support. There were reports that around 1,000 West Papuan civilians were hiding in the bush along the PNG side of the border to evade being targeted by the Indonesian authorities. In November 2021, 27 asylum seekers arrived near Vanimo, Sandaun Province. The significant proportion of humanitarian assistance has been provided by the host communities, faith-based organizations and the UN, with limited coordination or response from the GoPNG.

In the coming years, the likelihood of displacement movements into PNG from Indonesia is expected (in the hundreds to thousands), with an ongoing challenge being the need for enhanced coordination, as well as a reliable humanitarian response despite the small numbers dispersed along the border. This is particularly important with regard to the remote border locations such as the Star Mountains, where there are significant logistical and security challenges. This means that access and the provision of core relief items, as well as the ability to relocate asylum seekers away from the border, are difficult to secure.

Figure 33: PNG Disaster Management Team (DMT)

PNG Disaster Management Team and Inter-Cluster
Coordination Group organigrams





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After separatists assassinated the head of Indonesia's intelligence agency on 25 April 2021, the Indonesian government designated West Papuan separatists as "terrorists", deploying thousands of troops to remote parts of Papua and West Papua provinces. See Richard C. Paddock and Muktita Suhartono "Indonesian General Is Killed in Rebel Ambush, Sparking Fears of Retaliation" New York Times, 27 April 2021 <a href="https://www.nytimes.com/2021/04/27/world/asia/indonesia-general-papua.html">https://www.nytimes.com/2021/04/27/world/asia/indonesia-general-papua.html</a> (paywall).

Nearly every year since 2016, in response to requests from the national government, the DMT has mobilized global resources for at least one disaster or crisis. This mobilization of global resources began with 2016's El Niño-related drought and food insecurity and has since continued for mobilization for the Kadovar volcanic eruption, the Highlands earthquake displacement and polio outbreak in 2018; early action planning for El Niño-related drought; Ulawun volcanic eruption displacement and a small refugee emergency in 2019; COVID-19 in 2020 (ongoing); and king tide storm surges in 2021.

In 2021, the DMT monitored at least 36 other small-scale emergencies including La Niña, African Swine Fever, Fall Army Worm infestation, movement of West Papuan asylum seekers, local flooding, king tide and storm surges, landslides, earthquakes, minor volcanic eruptions, and conflict-related displacement.

# 4.6.7 Bougainville conflict analysis

Over the past twelve months, the situation in Bougainville has been incredibly dynamic, with the start of the post-referendum consultation process between the National Government and the Autonomous Bougainville Government (ABG) on the future political status of the ARoB.

In December 2019, the successful and peaceful completion of the referendum saw 97.7 percent of voters opting for independence, with an 85 percent voter turnout. Like the referendum, one of the three pillars of the Bougainville Peace Agreement (BPA) was non-binding. The future status of Bougainville will be determined through consultation between the two governments, with the outcome of such consultation to be ratified by the National Parliament, which has the final decision-making authority.

The two governments met formally on three occasions in 2021 (May, July and December). The United Nations Resident Coordinator is the chairperson of the post-referendum consultation, and former Prime Minister of Ireland Bertie Ahern, who had been supporting the process remotely, was appointed by the two parties as international moderator.

The ABG has, in the meantime, progressed internal consultations concerning the development of a constitution for an independent state. As a result, a Bougainville Constitutional Planning Commission has been appointed by the Bougainville Executive Council, its members have been inducted, and it is expected that commissioners will start convening public consultations across Bougainville soon.

During the past 12 months, Bougainville progressed its economic empowerment agenda, with the ultimate goal of achieving fiscal self-reliance. Ishmael Toroama, who replaced John Momis as President of the ARoB in September 2020 after the fourth presidential and parliamentary elections in the region, is leading the process of engaging the landowners of Panguna Mine, one of the largest copper and gold open-pit mines in the world, to sustain Bougainville's aspirations to economic independence. It has been assessed that mine issues/resource management was contributing to the armed conflict. Also, women were largely excluded from that management pre-conflict, however, women have recently become more involved. 124

With the vote for independence and the start of the post-referendum consultation process, Bougainville is an environment where complex challenges generally remain and may contribute to additional risks to sustaining peace. The post-referendum period will ultimately

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 $<sup>\</sup>frac{124}{https://www.ndi.org/sites/default/files/Women\%27s\%20Inclusion\%20in\%20the\%20Post-Referendum\%20Consultations\%20between\%20the\%20National\%20Government\%20of\%20Papua\%20New%20Guinea\%20and\%20the\%20Autonomous\%20Bougainville%20Government.pdf}$ 

determine Bougainville's political future, which will require an aware and engaged population capable of making well-informed decisions.

The UN's Conflict Analysis and the Lessons Learned report broadly identified the following key risks to peace going forward, which are very much in line with the trends identified by PaCSIA and the Perception survey: 125

- 1. **Post-Referendum Process:** that is, the legitimacy of the consulting group by the population; the management of information; awareness of the process/progress; and the importance of inclusion, with a broad spectrum of meaningful participation across Bougainville's society.
- 2. **Outlier groups:** two large outlier groups remain in Kon'nou and Tonu (South Bougainville) and both are crucial issues preventing Bougainville from moving forward in a united manner. Although this seems to not be a priority for ABG, it will require accompaniment and support from the international community.
- 3. Influence of resource extraction and sustainable livelihoods for families: in the absence of livelihood opportunities for most people to engage in, Bougainville will remain constrained. The 2018 PDA review workshop also identified this. That is, there remains strong demand for investment in the non-mining sector, where most Bougainvilleans get their livelihood, to develop the region's weak economic base.
- 4. Loss of institutional memory: turnover rates of sitting MPs in PNG elections are high, above 50 percent. The 2022 General Elections are not expected to break this trend. Turnover could lead to a loss of knowledge and momentum during the post-referendum periods, leading to a build-up in community frustration. The BPA and the post-referendum consultation process can help to contribute to this memory loss.
- 5. Communal violence and social cohesion: the lack of awareness and understanding of the BPA/post-referendum process due to illiteracy is a significant driver of negative mentalities and feelings of disconnection. The two Governments have made efforts to reach populations without formal education and fully sensitise them on the issues. Protection and human rights monitoring during the post-referendum process is essential to maintaining social stability.

Table 4: Risk Analysis for Bougainville

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Main Risks	Likelihood of occurrence (high, medium, low)	The severity of risk impact (high, medium, low)	Mitigating Strategy
Lack of will to progress BPA and the post-referendum process because of shifting government priorities, and high turnover of MPs in the National Parliament	Medium	High	A regular risk assessment conducted by the UN (PDA, LO) and engagement with both governments on critical activities that require progression; Use the UNDP Parliamentary Support Project to raise awareness.

<sup>&</sup>lt;sup>125</sup> This report was informed by the Peace and Development Analysis (PDA) 2014, with various inter-governmental fora (such as the UN-facilitated review workshop of the PDA 2018) and a UN-facilitated workshop on implementing the Peacebuilding Fund Project, 'Sustaining Peace in Bougainville' (2020), helping this analysis' findings. This desk review also benefited from findings of the 2021 Progress Dialogues conducted by Peace and Conflict Studies Australia (PaCSIA) and the "Perception Survey of the Bougainvillean Population Under Post-Referendum Support and Sustaining Peace and in Bougainville in Papua New Guinea", commissioned by the UNDP.

Lack of trust between	Medium	High	Hold regular meetings with heads
GoPNG and ABG at			of administration (Secretary,
political, administrative, and			Department of Prime Minister and
financial levels may affect			NEC, and ABG Chief Secretary) to
project outcomes.			share risk analysis on bottlenecks
1			to project implementation.
Limited access to quality information/informed	Medium	High	Strengthened engagement
1			throughout PNG, including
discourse at the community level			Bougainville; Reinforced dialogues at the community level through
levei			PaCSIA's network of facilitators.
UN faces allegations of	Medium	Medium	Conduct regular political analysis
partiality or blamed for	Wicalam	Wicdiam	by Peace and Development
delays in implementing the			Adviser/Liaison Officer, engaging
post-referendum process.			with both governments to manage
			public expectations over the UN's
			role.
Due to entrenched, unequal	Medium	High	A specific programme to enhance
social norms and a lack of			women and youth engagement is to
substantive engagement			be designed.
with women and young			
people			
Increase incidents of	Medium	High	Use existing early warning/early
violence during the			response systems to detect and
implementation of the project.			mitigate violence.
Capacity limitation of	Medium	Medium	Capacity assessment and
partners to engage,	Wicaram	Wodiam	reinforcement of implementing
including the various ABG			
including the various ABG departments that may affect			partners to support projects.
departments that may affect programme implementation			
departments that may affect			partners to support projects. Inclusion and engagement of partners in project activities to build their capacity.
departments that may affect programme implementation  Projects are not able to	Medium	High	partners to support projects. Inclusion and engagement of partners in project activities to build their capacity. Consider detailed assignments/
departments that may affect programme implementation  Projects are not able to attract and retain qualified	Medium	High	partners to support projects. Inclusion and engagement of partners in project activities to build their capacity.  Consider detailed assignments/ consultancies, including expediting
departments that may affect programme implementation  Projects are not able to	Medium	High	partners to support projects. Inclusion and engagement of partners in project activities to build their capacity.  Consider detailed assignments/ consultancies, including expediting salary scale surveys for national
departments that may affect programme implementation  Projects are not able to attract and retain qualified staff.			partners to support projects. Inclusion and engagement of partners in project activities to build their capacity.  Consider detailed assignments/ consultancies, including expediting salary scale surveys for national staff.
departments that may affect programme implementation  Projects are not able to attract and retain qualified staff.  Lack of will and institutional	Medium High	High High	partners to support projects. Inclusion and engagement of partners in project activities to build their capacity.  Consider detailed assignments/ consultancies, including expediting salary scale surveys for national staff.  Being flexible and responsive to
departments that may affect programme implementation  Projects are not able to attract and retain qualified staff.  Lack of will and institutional memory to progress BPA,			partners to support projects. Inclusion and engagement of partners in project activities to build their capacity.  Consider detailed assignments/ consultancies, including expediting salary scale surveys for national staff.  Being flexible and responsive to these changes and quick to build
departments that may affect programme implementation  Projects are not able to attract and retain qualified staff.  Lack of will and institutional memory to progress BPA, including the post-			partners to support projects. Inclusion and engagement of partners in project activities to build their capacity.  Consider detailed assignments/ consultancies, including expediting salary scale surveys for national staff.  Being flexible and responsive to these changes and quick to build relationships and provide briefings
departments that may affect programme implementation  Projects are not able to attract and retain qualified staff.  Lack of will and institutional memory to progress BPA, including the post-referendum process due to			partners to support projects. Inclusion and engagement of partners in project activities to build their capacity.  Consider detailed assignments/ consultancies, including expediting salary scale surveys for national staff.  Being flexible and responsive to these changes and quick to build
departments that may affect programme implementation  Projects are not able to attract and retain qualified staff.  Lack of will and institutional memory to progress BPA, including the post-referendum process due to change in leadership (both			partners to support projects. Inclusion and engagement of partners in project activities to build their capacity.  Consider detailed assignments/ consultancies, including expediting salary scale surveys for national staff.  Being flexible and responsive to these changes and quick to build relationships and provide briefings
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departments that may affect programme implementation  Projects are not able to attract and retain qualified staff.  Lack of will and institutional memory to progress BPA, including the post-referendum process due to change in leadership (both political and bureaucratic levels).  Safety of all project staff,	High	High	partners to support projects. Inclusion and engagement of partners in project activities to build their capacity.  Consider detailed assignments/ consultancies, including expediting salary scale surveys for national staff.  Being flexible and responsive to these changes and quick to build relationships and provide briefings with new leaders.  Build internal security measures,
departments that may affect programme implementation  Projects are not able to attract and retain qualified staff.  Lack of will and institutional memory to progress BPA, including the post-referendum process due to change in leadership (both political and bureaucratic levels).  Safety of all project staff, including	High	High	partners to support projects. Inclusion and engagement of partners in project activities to build their capacity.  Consider detailed assignments/ consultancies, including expediting salary scale surveys for national staff.  Being flexible and responsive to these changes and quick to build relationships and provide briefings with new leaders.  Build internal security measures, then orient staff on these
departments that may affect programme implementation  Projects are not able to attract and retain qualified staff.  Lack of will and institutional memory to progress BPA, including the post-referendum process due to change in leadership (both political and bureaucratic levels).  Safety of all project staff, including non-Bougainvilleans.	High	High	partners to support projects. Inclusion and engagement of partners in project activities to build their capacity.  Consider detailed assignments/ consultancies, including expediting salary scale surveys for national staff.  Being flexible and responsive to these changes and quick to build relationships and provide briefings with new leaders.  Build internal security measures, then orient staff on these measures.  COVID-19 presents an external threat to the post-referendum
departments that may affect programme implementation  Projects are not able to attract and retain qualified staff.  Lack of will and institutional memory to progress BPA, including the post-referendum process due to change in leadership (both political and bureaucratic levels).  Safety of all project staff, including non-Bougainvilleans.	High	High	partners to support projects. Inclusion and engagement of partners in project activities to build their capacity.  Consider detailed assignments/ consultancies, including expediting salary scale surveys for national staff.  Being flexible and responsive to these changes and quick to build relationships and provide briefings with new leaders.  Build internal security measures, then orient staff on these measures.  COVID-19 presents an external threat to the post-referendum consultation process and the
departments that may affect programme implementation  Projects are not able to attract and retain qualified staff.  Lack of will and institutional memory to progress BPA, including the post-referendum process due to change in leadership (both political and bureaucratic levels).  Safety of all project staff, including non-Bougainvilleans.	High	High	partners to support projects. Inclusion and engagement of partners in project activities to build their capacity.  Consider detailed assignments/ consultancies, including expediting salary scale surveys for national staff.  Being flexible and responsive to these changes and quick to build relationships and provide briefings with new leaders.  Build internal security measures, then orient staff on these measures.  COVID-19 presents an external threat to the post-referendum consultation process and the implementation of UN programmes.
departments that may affect programme implementation  Projects are not able to attract and retain qualified staff.  Lack of will and institutional memory to progress BPA, including the post-referendum process due to change in leadership (both political and bureaucratic levels).  Safety of all project staff, including non-Bougainvilleans.	High	High	partners to support projects. Inclusion and engagement of partners in project activities to build their capacity.  Consider detailed assignments/ consultancies, including expediting salary scale surveys for national staff.  Being flexible and responsive to these changes and quick to build relationships and provide briefings with new leaders.  Build internal security measures, then orient staff on these measures.  COVID-19 presents an external threat to the post-referendum consultation process and the

# 4.6.8 Conflict analysis for the Highlands

Both Hela and Southern Highlands Provinces experience violent internecine conflicts of varying scale. These conflicts are underpinned by similar causal factors ranging from intense demographic pressures to lack of economic opportunities, rent-seeking behaviour, widespread proliferation of firearms and lack of access to an effective formal justice system. While issues of service availability and weak public institutions on the one hand can fuel grievances, these issues also permit violence to continue within an authority vacuum.

The observed trends suggest that these conflicts can manifest themselves differently in each province. For instance, inter-group conflict in Southern Highlands often can be attributed to the competition for power, i.e. the goal of political influence and provincial power. Yet in Hela, inter-group conflicts are often crudely characterized as "tribal" conflicts, linked to intensified resource competition also connected with women and pigs.

Since 2014, where the PNG LNG project has been operational (primarily in Hela and also where the pipeline to the Papua Gulf traverses Southern Highlands), incidents of violent conflict have arisen along the project impact areas. This is owed to the perceived lack of/unequal distribution of benefits from the gas project (such as royalties, equity, development grants) or disputed land ownership of project-impacted locations. However, conflicts directly attributable to benefits distribution/sharing remain predominantly localized in project impact areas. They do not account for conflicts beyond these locations, triggered by other conflict factors. Nevertheless, it is worth considering the implications (if any) of the close association between extractive companies and agents of the PNG state, operating against a backdrop of the persistent challenge of widespread instability and communal divisiveness observed in both provinces. The complex relationship between root and intermediate causal factors (as well as the triggers of conflicts in the Highlands) are summarised below.

Figure 34: Summary of Conflict Triggers and Causes: Context Analysis of the Provinces of Southern Highlands and Hela

TRIGGERS

Gender-Based Violence

Loss of Elections

Crisis/Conflict

Accidental Injury/death
Polygamy

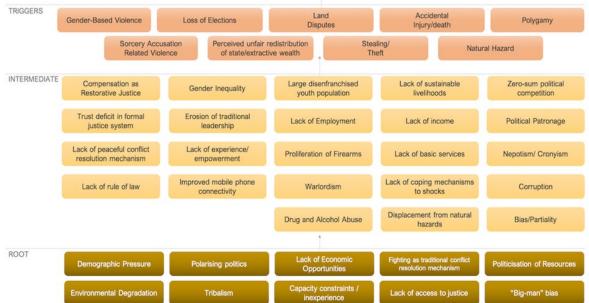
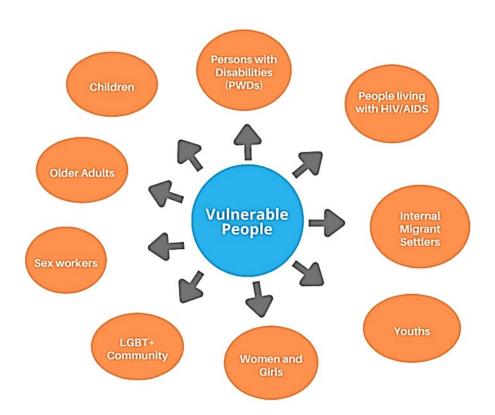


Table 5: Risk Analysis for the Highlands

Main Risks	Likelihood of occurrence (high, medium, low)	The severity of risk impact (high, medium, low)	Mitigating Strategy
Occurrence of significant man-made or natural hazards affecting either/both provinces leads to negative humanitarian impact; increase in accusations of sorcery/witchcraft and associated violence, including delay in implementing planned PBF activities.	High	High	Seek the support of donors to re-programme or review implementation timeline of activities; Reprogramming of planned activities to respond to immediate humanitarian needs; Proactive community engagement campaign to explain causes of hazard and impacts.
Increase in violence due to unresolved local political tensions or escalation in unresolved issues around extractive royalties.	Medium	High	Interventions to have built-in capability to pivot, reprogramme, or absorb delays; Comprehensive pre-crisis safety and security plan to be developed, exercised, and maintained; Establishment of local early warning networks; Close coordination with local security forces.
Loss of national and sub- national government support due to evolving priorities or change in government	Low	High	Establish and actively maintain broad-base support from political stakeholders; Formalizing government support through integration into UN's joint annual workplan; Encourage government cofinancing of complementary activities.
Loss of community trust and community access	High	High	Implement planned community engagement activities, drawing broad-base support from influential stakeholders.
Neutrality and impartiality perceived to be compromised	High	High	Deliberate programme to initiate all UN personnel deployed in the Highlands on UN's values expected appropriate behaviour; All UN personnel to individually sign code of conduct.

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Attempts by local stakeholders to inappropriately influence programme implementation	Medium	High	Maintain appropriate checks and balances in programme implementation; Communicate that the UN operates in a strictly principled, neutral and impartial manner (in accordance with mutually agreed criteria based on evidence).
Activities implemented to urgently demonstrate results not adequately carried out, leaving the most vulnerable groups in beneficiary targeting.	Medium	High	Project design, beneficiary selection and implementation principles to guide work planning; Monitor risk and oversight by the programme steering committee.
Reinforcement of clientelism practised by local implementing partners	Medium	Medium	Careful selection of potential implementing partners; Capacity building of local implementing partners, in particular, the socialization of UN's values and operating mode, expected appropriate behaviour; Design and structure activities to mitigate the opportunity for potential clientelism; Closely monitor activities.
Women and youth experience backlash (e.g. violence, community exclusion) from men and the community at large due to involvement in empowerment activities	Medium	Medium	Empowerment activities to be implemented in an inclusive, well-paced manner and sensitive to community acceptance; Communicate to communities that empowerment is not a zero-sum but a positive-sum exercise.
Expectations for cash compensation from participants implementing project activities (e.g. community mobilizers due to past experiences during the humanitarian response phase)	Medium	Medium	Awareness activities to ensure a better understanding of the terms of participation in the project's activities to manage expectations.

# 5. Human Rights and Populations Furthest Behind in Development Progress



# 5.1 Persons living with disabilities

After PNG ratified the Convention on the Rights of Persons with Disabilities in 2013, the National Policy on Disability 2015-2025 was established. The overall aim of the Policy was to improve the welfare of PWD, realize their rights, remove barriers, and implement the Convention at the national level. Notable developments in PNG in addressing the needs of PWD include designing accessible infrastructure and facilities, including ramps for wheelchair access, dedicated toilet facilities, designated parking spots and accessible banking facilities. PNG is also finalizing a draft Disability Authority Bill and working towards its adoption in 2022, which aims to ensure the full and equal enjoyment of human rights by all PWD. A Disability Authority Office has been established with the mandate to implement the provisions of both the Policy on disability and the Convention.

Sign language was made the official, fourth language of PNG in 2015, used in conferences and televised news programmes. It is also taught in some private schools and by the PNG Red Cross for children with special needs. Other support for PWD include hearing aid services provided by Callan Services and disability prevention through health care and rehabilitation, inclusive education, and social support services for persons with special needs provided by Cheshire Disability Services. 126

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<sup>126</sup> UN 49th session of the Human Rights Council

Despite the establishment of the Disability Policy, many issues remain in its implementation. As highlighted by civil society during the Universal Periodic Review process, at present there is no national disability data management system, leading to a lack of comprehensive data on the situation of and issues faced by PWD in the country. In addition, the draft National Disability Authority Bill, in preparation for several years, still had not been finalised or enacted at the time of the dissolution of the 10<sup>th</sup> Parliament in April 2022. Significant barriers to accessing services remain for many PWD in PNG, including quality and inclusive education. In addition, impunity for violence against PWD remains high, with PWD more vulnerable to the impacts of practices including family violence, a situation compounded by the increased prevalence of such violence during the COVID-19 pandemic. PWD are also likely to be disproportionately impacted by issues surrounding access to the voting process for the National General Elections, given access challenges faced overall.

# 5.2 People living with HIV/AIDS

This group often faces stigmatisation from the community where they live, making them unwilling to disclose their status and as such, making it difficult for them to access health care and other resources that people with HIV/AIDS need to survive. This difficulty has contributed to the spread of the virus in some communities. The 2016-2018 DHS shows that 44 percent of women and 43 percent of men expressed discriminatory attitudes towards people living with HIV. Stigma is further increased due to a perceived overlap between LGBTIQ+ communities and those who are HIV+.

# 5.3 Internal displacement and migration

As the entity primarily responsible for the promotion and protection of the rights of those in PNG, the Government needs to do more to prevent and avoid conditions that lead to internal displacement. Displacement in PNG occurs largely because of natural hazards, tribal fights, violence over land, and the economic situation of families. Tribal fights over land are common and driven by complexity of tenure relationships, overlapping land rights, migration due to economic or environmental factors and cultural differences. Land and resource rights management, conflict prevention, mitigation, and peacebuilding, law and order provision in line with international human rights standards, along with addressing the root causes of conflict and violence and ensuring accountability for human rights violations and abuses, are all areas that need strengthening and which potentially drive displacement in some instances.

Displacement appears to be protracted, with households often in temporary living situations for more than a year. These populations are more vulnerable to development challenges as they have less access to basic services, which increases the risk of human trafficking and people smuggling as well as psychosocial impacts of their displacement. Women and girls are especially susceptible to violence and abuse during displacement, from both within their communities and outside.

In PNG, internal displacement has also ignited conflicts. In a context with no policy or legislation addressing the needs of Internally Displaced Persons, host communities react violently to displaced populations competing for resources and land. The under-resourced and overstretched nature of the institutions providing for justice and the rule of law contributes to impunity, which can fuel further violence.

The IOM's Displacement Tracking Matrix (2021) identified 44,547 Internally Displaced Persons (51 percent females and 49 percent males) in PNG, of which the highest percentage were in the Highlands region (43 percent). The Matrix found that 32,125 individuals (72 percent) were displaced by natural hazards such as flooding and volcanic activity, and 12,423 individuals (28 percent) due to the effects of human-induced hazards such as tribal and ethnic clashes. This number is estimated to be higher (approximately 75,000) due to the limited

coverage of assessments because of inadequate resources and accessibility challenges to remote locations

More also needs to be done to ensure an adequate standard of living for migrants. The rapidly rising proportion of those living in urban centres has aggravated the proliferation of unplanned squatter settlements where some of the most vulnerable and disadvantaged landless urban citizens live. 127 Because of the inflow of rural poor, the chronic and severe shortage of affordable rental housing in PNG's major cities exacerbates the vulnerability of the landless people to being left behind in development. Squatter and informal settlements on vacant state, private and/or customary land are deemed illegal and unwanted. 128

As a result, the settler communities with poor households with no certainty of land security, housing, clean water or sanitation live a precarious existence vulnerable to demolitions, evictions and removals, which can further exacerbate vulnerability, legal marginalisation, and lack of access to basic essentials and government services. According to DNPM (2010, 2020), GoPNG is committed to catering for urbanisation and socioeconomic progress to deliver the quality of life of urban dwellers, including those living in the settlement areas. Public spending on settlement improvement on a modest scale to extend infrastructure (electricity, water and sewerage) is one of the major initiatives to upgrade settlement areas. Nevertheless, as ADB suggested, allowing squatters to regularise their dwellings with a commitment to end evictions while also introducing some form of settlement housing finance would go a long way in ensuring that no one is left behind in development.

#### 5.4 Youths

The burgeoning youth cohort, who have limited employment opportunities and who may consequently engage in criminal activities and substance abuse, is a significant risk to inclusive growth and poverty reduction. PNG youth find themselves at a crossroads, increasingly frustrated with traditional decision-making processes that exclude them and also, unable to take full advantage of the opportunities a growing economy offers. Relationships between the generations have historically been rigid, with decision-making power consolidated with the clan elders. New opportunities to circumvent traditional processes and move up the social ladder more quickly are generated by the influx of natural resource projects and increased mobility that allows youth to migrate to urban areas.

However, such opportunities are in short supply. Growth in recent decades has not been sufficiently inclusive in providing decent jobs for the number of young new entrants to the labour force. Opportunities for youth are severely limited. The youth unemployment rate is higher than that of the overall population, and there is stigmatization and exclusion of youth from urban formal labour markets. Economically active youth are largely engaged within the informal economy, where their activities can be subject to intense competition and violence.

That this large, dynamic, education-hungry demographic cohort might not have the opportunity to live up to its enormous potential would be an extraordinary waste of PNG's human capital. At the same time, this creates a large pool of disaffected and available youth, for whom political action in support of patrons may seem among the few options available for improvements in their circumstances. Political disappointment often seems inevitable and, as seen in recent elections, can erupt into local violence. 129

120 MBB, 2012, Chang & Tula, 2000

<sup>129</sup> World Bank, PNG Country Diagnostic, 91-92

<sup>127</sup> DNPM, 2010; DfCDR, no date 128 ADB, 2012; Chand & Yala, 2006

Limited opportunity for youth in the rural economy has driven large flows of rural-urban migration, increasing their social and economic vulnerability. The social capital that young people have in their ties with family, village and tribe is an often overlooked yet important asset that can be eroded during this migration. Subsequent generations born and raised in these urban centres must also confront related challenges: they may be unfamiliar with their mother tongue and tribal affiliations, may not know the extended family in the rural areas, and may consequently have no means of accessing customary land and associated resources. On the other hand, while community dynamics governing urban settlements differ from those in the village, familiar kin and groups provide some dimension of support, especially in times of sickness, financial, or law and justice difficulty. Affiliation patterns in urban contexts are especially flexible, with Tok Pisin, school, church and sporting activities providing new forms of association. <sup>130</sup>

Participation in criminal activities can present a potentially attractive avenue for income generation for many young, economically inactive males living in urban settlements. The youth are routinely depicted as being at the root of PNG's violence and social order issues. Anecdotal and some limited survey evidence suggest that most of the relatively serious criminal offences in Port Moresby are committed by young males between the ages of 15 and 20 years old. Violent and armed youth gangs that have in the past gained notoriety throughout urban centres in modern PNG constitute influential organizing entities for engaging in such activities. They may also provide an essential sense of group identity to disenfranchised urban youth who have been disconnected from their cultural roots and traditional communities.

Prominent-though-contentious views hold that in societies with very young populations, when youth are denied the opportunity for meaningful economic and social advancement, this can become a source of broader instability and civil unrest. At the same time, urban youth make considerable contributions to family economies in PNG, especially through informal marketing. Moreover, there is evidence that urban youth gangs have failed to institutionalize and may have entered decline.<sup>131</sup>

#### 5.5 Women and Girls

The full realisation of women and girls' rights requires significant additional investment and efforts by PNG.

Rights of PNG women and girls were boosted by the establishment of a bipartisan Coalition of Parliamentarians Against GBV following the high-level meeting on combating GBV, held in August 2020. The coalition includes 20 of the 111 (all male) members of parliament and has been active on social media and in declaring their commitment to support change. The inaugural GBV Summit was held in November 2020, and a special parliamentary committee to inquire into related issues was subsequently established. The committee comprised seven members of parliament and opened its inquiry in May 2021, with a call for written submissions and two days of public hearings at APEC Haus in Port Moresby. It held judicial hearings from April to June 2021 on combating GBV in the country. The committee presented a report to parliament on 12 August 2021, containing more than 70 recommendations for immediate action by the Government. One of the recommendations was the implementation of a guota of five seats reserved for women in parliament.

An ongoing major challenge relates to empowering and promoting the inclusive and equal participation of women in the political arena at parliamentary level. The quota of five reserve seats recommended by the special parliamentary committee is expected to enable one woman representative for each of the four national geographical regions and the NCD.

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<sup>&</sup>lt;sup>130</sup> World Bank, PNG Country Diagnostic, 91-92

<sup>&</sup>lt;sup>131</sup> Ibid.

While this arrangement was discussed as being passed for the National General Elections 2022, it was not agreed in time.

The number of women standing for election at all levels of political representation is increasing. Several women had been elected as ward councillors at the local level and are currently serving a three-year term. Of the 18,480 village court officials, 1,500 are women, reported to be very effective in their roles and as advocates for social order, human rights and peace within their communities. <sup>132</sup>

In terms of bureaucratic leadership, in the Public Service Commission's Gender Equity and Social Inclusion Policy, a framework had been set out to promote gender equity and socially inclusive practices across the Commission. The policy had been developed to address several issues regarding individuals who were directly or indirectly being disadvantaged or discriminated against, including PWD and HIV/AIDS, and discrimination based on nationality, race, ethnicity, gender or other personal attributes.

Few women owned established businesses; most were operating in the informal sector. In 2018, 200 village women were trained by the DfCDR in processing coconuts into marketable products such as virgin oil. A further 500 women from across PNG were invited to showcase their products at the regional exposition organized to build their capacity in product development, improvement and marketing. In September 2021, at the national dialogue held in the lead-up to the United Nations Food Systems Summit, more women from the informal sector shared their experiences and success stories in agriculture and food security entrepreneurship.

# 5.5.1 GBV and sorcery accusation-related violence

GBV remains at endemic levels in PNG. The special parliamentary committed established by GoPNG was the first government-level act devoted to providing a clear avenue of legal recourse for female victims of rape within marriage, and other types of GBV, through stricter enforcement of the Family Protection Act, the Family Protection Regulations, and the Amended Criminal Code Act, resulting in increased reporting of cases and severe penalties for offenders. Despite this, impunity for GBV including rape and intimate partner violence remains high. There is a continued need to ensure institutional strengthening, including the justice sector, in the investigation and prosecution of cases, women's economic empowerment, and many other measures realistically required to combat GBV.

The challenges of family and sexual violence and all forms of domestic violence are primarily addressed through the Child Protection Act, in close liaison with the above legislation, under which substantial penalties apply for sexual offences and crimes against children and women. The National Strategy to Prevent and Respond to GBV 2016–2025 was aimed at strengthening and institutionalizing all initiatives to achieve a zero tolerance policy of GBV. The National GBV Secretariat was established in 2016 as the central implementation, coordination, and monitoring point for activities by stakeholders, including development partners at all levels. Activities included services for various referral pathways, counselling and capacity-building for survivors and perpetrators, and establishing safe houses nationwide. 133

Sorcery accusation-related violence (SARV) killings is a continuing, rising area of concern. Belief in sorcery (*sanguma*) or witchcraft is widely held in different forms across PNG, not only in remote or rural areas. Both the number of SARV incidents and the brutality of the

<sup>&</sup>lt;sup>132</sup> UN 49<sup>th</sup> session of the Human Rights Council

<sup>133</sup> UN 49th session of the Human Rights Council

violence has increased in recent years and many victims of reported cases are women. Cases are understood to be significantly underreported. Available services for survivors remains significantly low and challenges are faced in the administration of justice in relation to alleged perpetrators, including in the investigation and prosecution of cases. As a positive development, however, in early 2022 the national parliament amended the Criminal Code Act to prescribe specific legal penalties for individuals acting in the role of "glasman" or "glasmeri," who are individuals who purport to be able to identify alleged sorcerers and charge a fee for doing so.

Research conducted in two provinces between January 2016 and October 2017 found that one-third of almost 150 recorded cases of accusations of sorcery or witchcraft resulted in violence, and of these, almost three quarters involved torture of people accused of sorcery or witchcraft. Increasingly, SARV appears to be targeting older women, but individuals of any age and gender can be targeted and young children including girls have been targeted in some cases. In some cases SARV has been linked to intimate partner violence/domestic violence.

Individuals accused of sorcery or witchcraft are subject to interrogation, physical torture or murder in 'payback' for harm they are thought to have perpetrated. Triggers are often related to an unexplained illness (including HIV/AIDS and COVID-19), death, or land grabbing. Violent methods include beating, breaking bones, burning with hot metal, rape, hanging over fire, cutting body parts slowly including genitalia, amputation, and are often conducted in public. If death does not result from the torture process, the victim may be killed. More than one in ten victims were killed and over one-third permanently injured. Research indicates that women are six times more likely to experience sorcery accusations and violent retribution than men. <sup>134</sup>

Survivors of SARV are often not able to return to their villages and require extensive medical attention or lengthy legal proceedings before they can be relocated with their children to another village. Several NGOs including Oxfam, the Tribal Foundation, and the Meri Seif Haus, along with grassroots women's human rights defenders such as the Kafe Uarban Women's Settlers Association, KUP Women for Peace, Voices for Change, Southern Highlands Women Demand for Change, and Mama Helpim Mama, provide life-saving services for survivors of SARV, including shelter, medical and legal services, rehabilitation and relocation. In Southern Highlands Province, the Catholic Church is operating a temporary shelter for SARV survivors with a holistic support programme.

To address the problem of SARV, GoPNG with partners developed the SARV National Action Plan in 2015 with a focus on services (through counselling, health sector and child protection); prevention through advocacy and communications; legal protection and prosecution; and research.

Since 2016, the GBV Secretariat has advocated for and conducted awareness-raising on issues relating to GBV, organized men's forums to highlight men's role in addressing GBV, and established GBV secretariats and committees at the provincial level. Pilot programmes have been rolled out in four provinces (Morobe, Milne Bay, NCD and East New Britain), but the initiative has not resulted in further programmes.

The Department of Health, in conjunction with the Family Sexual Violence Action Committee, also established Family Support Centres in major hospitals and health centres throughout the country. These Centres respond to the medical and psychological needs of survivors by offering free essential services including medical first aid, psychological first aid, and the provision of advice by paralegals, as well as supporting the prevention of HIV and

<sup>134</sup> PNG UNICEF research into social inclusion, 2020

other sexually transmitted infections (STIs), the prevention of unwanted or unintended pregnancy, and the prevention of hepatitis B and tetanus or other life-threatening medical conditions. Currently, there are 28 safe houses and a men's hub for victims of GBV in 17 provinces, and 14 Family Support Centres in 13 provinces.

In 2016 and 2017, 33 human rights defenders in three NCD electorates were trained on standard operating procedures and GBV data collection. They were also equipped with response tools, such as phones, identification cards, uniforms, and manuals, to carry out their duties effectively. In addition, the Royal PNG Constabulary transformed its Family Sexual Violence Unit into a fully-fledged directorate within the Crimes Division. Its expanded role included addressing victims of domestic violence. The Unit had 33 established desks in 17 provinces, with 88 policemen and policewomen engaged in that work. <sup>135</sup> Unfortunately, many Family and Sexual Violence Units remained under resourced.

# 5.6 LGBTIQ+ Community

Significant violence and discrimination is faced by the LGBTIQ+ community in PNG. Same-sex sexual relations remain a crime, although it is understood that the law is not rigorously enforced. Most communities in PNG are intolerant toward LGBTIQ+ members of the community and individuals can face challenge, hostility, and attack for revealing their sexual/gender identity. Due to widespread discrimination and stigma, potential impunity for such attacks is high, and also results in low access to services such as health care for the LGBTIQ+ community.

#### 5.7 Sex Workers

Sex workers in PNG face sexual violence, discrimination, and stigma and are at risk of not accessing essential services such as health care. Sex workers encountering violence committed by law enforcement agents are reported to have difficulty seeking redress due to the stigmatised nature of their work and the criminal legal provisions relating to sex work, although prostitution itself is not directly criminalised. In addition to difficulties accessing health care, many sex workers struggle to access legal protections and support services due to fear of disclosing their identity, facing criminal charges, and the perceptions that they are responsible for the spread of STIs. Thus, sex workers tend to be one of the groups most left behind in the achievement of a range of SDGs.

#### 5.8 Older Persons

The Constitution does not include age as a basis on which discrimination is prohibited. According to the NPSP 2015-2020, approximately 4.6 percent of the population are over 60 years old. However, there is no standard definition of "older persons" used in PNG. <sup>137</sup> The DfCDR is the office responsible for Government policy on older persons. In 2017, at least one survey was reportedly conducted on the rights of older persons, covering one area of Central province, reportedly with a view toward the development of a National Policy on Elderly. <sup>138</sup> However, the progress or status of this policy is not clear.

<sup>135</sup> UN 49th session of the Human Rights Council

<sup>&</sup>lt;sup>136</sup> Amnesty International, Outlawed and Abused, Criminalising Sex Work in Papua New Guinea, Executive Summary, available in <a href="https://www.amnesty.org/en/wp-content/uploads/2021/05/ASA3441292016ENGLISH.pdf">https://www.amnesty.org/en/wp-content/uploads/2021/05/ASA3441292016ENGLISH.pdf</a> (2016)

<sup>&</sup>lt;sup>137</sup> Papua New Guinea National Policy on Social Protection 2015-2020, available in https://www.dfcd.gov.pg/images/pdf files/Social-Protection-Policy.pdf, at page 14.

<sup>&</sup>lt;sup>138</sup> Press Release, "First Ever Elderly Data Survey Conducted in Central Province," Department of Community, 27 April 2017, available in <a href="https://www.dfcd.gov.pg/images/pdf\_files/Press-Release---First-Ever-Elderly-Survey-Conducted-in-Central-Province.pdf">https://www.dfcd.gov.pg/images/pdf\_files/Press-Release---First-Ever-Elderly-Survey-Conducted-in-Central-Province.pdf</a>, at 1.

Based on this, comprehensive data on the situation of older persons in PNG is not readily available. Older people often rely on an extended family system of support for their care and this can result in their being left behind, especially in economic downturns when household resources might have increased constraints. The National Social Protection Policy indicates that there is an unspecified but likely increasing number of vulnerable older persons in the country.

Youth unemployment and general constraints on household incomes would also impact disproportionately on older persons relying on their younger family members for survival. Based on a 2015 World Bank analysis of the 2010 Household Income and Expenditure Survey, older persons of 55 years and above are the most vulnerable to illness, but the least likely to seek treatment. This also illustrates the vulnerability of older persons. Older persons and particularly women and certain categories of widows have been reported to be groups among the most targeted for SARV, although this can vary.

# 5.9 Children

The child protection system in PNG suffers from limited financial and human resource capacity. Over the last five years, PNG has made significant progress strengthening the foundation for a national child protection system by improving the legal and policy framework.

The DfCDR is the lead national agency and anchor for family and children's well-being. It received a funding allocation for the National GBV Secretariat for the first time in the 2022 national budget. The Royal Papua New Guinea Constabulary, including their Family and Sexual Violence Units, are also a part of the child protection referral system. Together, these government entities access a Primero joint database system for case management; in 2022 this was still in early stages of use.

Although institutional mechanisms at sub-national level remain very limited, the national Office of Child and Family Services established the first provincial Council in Enga in 2021, in line with the provisions of the *Lukautim Pikinini* Act of 2015 to protect and promote the rights of children regardless of race, nationality, religion, sex, ability or disability. 140

The Juvenile Justice Act and its regulations, the *Lukautim Pikinini* Act, and its regulations, together with other enabling legislation, and the National Juvenile Justice Plan 2018-2022/2023 and Child Protection Policy 2017-2027, provide the framework for promoting the rights and well-being of children in the justice system of PNG, as well as the protection of children in general. The Juvenile Justice Act 2014 states that the age of criminal responsibility begins at 10 years of age. This determination falls below the international standard of 14 years. However, during the recent Universal Periodic Review, GoPNG indicated its willingness to amend the law and policy to raise the age of criminal responsibility to 14 years. In 2019, the Committee on the Rights of the Child issued a General Comment on Children's Rights in the Justice System that, among other things, promotes key strategies for reducing the especially harmful effects to children of contact with the criminal justice system.

<sup>&</sup>lt;sup>139</sup> World Bank Group, HNPGP Knowledge Brief, A Snapshot of Health Equity in Papua New Guinea: An Analysis of the 2010 Household Income and Expenditure Survey, available in

 $https://openknowledge.worldbank.org/bitstream/handle/10986/23497/A0snapshot0of00d0expenditure0survey.pdf?sequence = 1 \& is Allowed=y \ , at page 2.$ 

<sup>140</sup> UNDP, UNFPA, UN Women and UNICEF Papua New Guinea, 2021. Spotlight Initiative Report

Right to identity is enshrined in the Convention on the Rights of the Child. The PNG Civil and Identity Registry<sup>141</sup> is mandated and empowered by the Civil Registration Act 1963, Amended 2014 to record, and maintain registers of births, civil marriages, adoptions, civil divorces, legitimation, and deaths. There is no obligation on the Provincial Registrars to ensure that all births are registered, except in compulsory registration areas' or 'prescribed premises'. There is no explicit requirement to birth registration for non-nationals.

The Adoption Law is outdated (1968) and there are many gaps. There is no designated competent authority to oversee the adoption system and processes. There are no detailed standards of care for different forms of care such as guardianship, foster care and adoption.

In PNG, detailed guidance and tools for the inspection of alternative care providers does not currently exist. In addition, there is no mechanism for legal complaints regarding children in care, and no system for the assessment of prospective adopters.

PNG has ratified the ILO Minimum Age Convention, 1973 (No. 138), and the Worst Forms of Child Labour Convention, 1999 (No. 182), which provided the framework of action to abolish the worst forms of child labour and ensure that special programmes were introduced for children who were at a heightened risk of exploitation. However, gaps in the framework exist. Laws and regulations that meet international standards include Article 103 of the *Employment Act*, which stipulates the minimum age (16) for work; Articles 23 and 43 of the Constitution of the Independent State of Papua New Guinea and Section 208 of the *Criminal Code* that prohibit forced labour; and Section 30 of the *Defence Act* that establishes a minimum age for voluntary state military recruitment.

GoPNG also established the National Action Plan to Eliminate Child Labour 2017–2020, and the Decent Work Country Programme 2018–2022, to commit to protecting human dignity and working conditions. However, due to the lack of substantive data, the measure of progress in implementing those policies remains unclear. A review of the Employment Act and the Informal Sector Control Management Act is currently underway to explicitly address all forms of child labour.<sup>142</sup>

Children in PNG are vulnerable to some of the worst forms of child labour, including dangerous tasks in mining. Some children from rural areas live with relatives or "host" families in cities where they are coerced to carry out domestic work to pay off family debts.

PNG is also one Pacific Island nation where local and foreign women and children are subjected to trafficking for sexual exploitation. In the context of indications of child sex work increasing in PNG, the U.S. Department of State recently reported that around 19% of the country's labour market is comprised of child workers, including some who are subjected to child sex work and forced labour. PNG is on Tier 2 Watchlist on the US TIP (Trafficking in Persons) report, which states that approximately 30 percent of Papua New Guinean sex trafficking victims are children under the age of 18, with some as young as 10 years old. An ILO study found that 34 percent of children involved in sex work in Port Moresby began at 15 years, and approximately 41 percent began sex work before the age of 15 years. Around

<sup>143</sup> United Nations Office for Drugs and Crime and Pacific Island Forum Secretariat (2016)

<sup>&</sup>lt;sup>141</sup> PNG Civil and Identity Registry, Vital Events Booklet (2019)

<sup>&</sup>lt;sup>142</sup> UN 49<sup>th</sup> session of the Human Rights Council

<sup>&</sup>lt;sup>144</sup> ILO, Child Labour in Papua New Guinea: A report on the rapid assessment in Port Moresby on commercial sexual exploitation of children and children working on the streets (2011). https://www.ilo.org/suva/publications/WCMS\_178379/lang--en/index.htm

61 percent of the children involved in commercial sex exploitation were living with immediate or extended family members.

PNG's ban on dangerous work is not compliant with the international standards necessitating protection of all children under the age of 18 to be safeguarded from jobs that jeopardize their health and safety, as well as from securing or advancing illicit activities including production and trafficking of drugs.

Additional government policies related to child labour include the PNG Trafficking in Persons National Action Plan (2015–2020), Universal Basic Education Plan (2010–2019), National Child Protection Policy (2017–2027) and Tuition Fee-Free Policy.

The intersection between violence against women (VAW) and violence against children is borne out in the PNG context. According to the 2016-2018 DHS, approximately 60 percent of women with one or two children have experienced physical violence in contrast to 41 percent of women not living with any children, showing an increased risk of VAW for women with children. Available data also suggests that violence against women and children in the home often co-occurs. For instance, around 60 percent of children who went to a women's shelter in Port Moresby had been abused.145

In PNG, children face elevated levels of violence with devastating consequences for their health, well-being, and development. Although the country lacks systematic data, the rates of violence against women and children are estimated as among the highest in the world, with the 2016-2018 DHS showing that 56 percent of women aged 15-19 years have experienced physical violence since the age of 15, and 28 percent in the same age group have experienced sexual violence.

There is a well-studied relation between childhood experiences of violence and violent and other criminal behaviours displayed by children. In PNG, a 2015 UNICEF study estimates that children who come into contact with the law – as victims, witnesses or offenders – rarely enjoy the benefits of child-focused justice, including diversion and alternatives to detention. Moreover, little is known regarding the extent to which children with mental and/or physical disabilities have equitable access to justice in PNG. In addition, humanitarian disasters have potential to disrupt development gains and render women and children further at risk of violence due to scarce resources. The COVID-19 pandemic has represented a threat to not only the physical health of children in PNG, but also to their protection.

GoPNG launched the National Youth Development Policy 2020–2030, to address gaps identified in legislative environment and programming for young people. The rights of the child, enshrined in the Constitution as human rights of citizens, were also protected through the enforcement of the Family Protection Act. Having noted that a lack of knowledge and information on human rights legislation often marred effective implementation, awareness-raising programmes in the referral pathways were conducted in 2017 for child welfare service providers.

Between 2018 and 2019, awareness-raising was explicitly focused on village court officials, including magistrates, clerks, and peace officers, to inform them of the additional powers under the Family Protection Act and the Family Protection Regulations to issue

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<sup>&</sup>lt;sup>145</sup> Kirsten Anderson and Bruce Grant, Coram International (2022). Analysis of frameworks for addressing VAW and VAC in PNG at the national and provincial levels: Discussion paper for UN agencies.

interim protection orders. The regulations criminalized all forms of violence within the family unit, recognizing domestic violence as a crime punishable by law with a fine of up to K10,000 (\$2,900) or six months' imprisonment. That created a regime for issuing family protection orders to deter and prevent violence at all levels of society. As a result, statistics from the Family Sexual Violence Action Committee alone indicated a total number of 414 cases reported in 2017, of which 318 involved female adults, 48 were adult cases and 47 involved children. Actual recorded cases for the same year totalled 600. However, unreported incidents might push the records higher.

Under the Family Protection Act awareness-raising programme, 360 village court officials in the Southern Highlands, Morobe and Oro Provinces and Bougainville received basic training. In 2020, refresher training was conducted, ensuring that village court officials were familiar with appropriate documentation in addressing domestic violence complaints. In addition, the Department of Justice and Attorney General developed information, education, and communication materials on the provisions of the Family Protection Act for partner agencies and the public, using simple English.<sup>146</sup>

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<sup>&</sup>lt;sup>146</sup> UN 49th session of the Human Rights Council

# 6. Multidimensional SDG Risk Analysis

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The significant risk factors for PNG as identified through CCA analysis are outlined below.

Table 6: PNG SDG Risk Analysis

CDC	Diels Avec	DNO Dielefestere
SDGs 10 PEAGE JUSTICE 17 PARTNESSHIPS	Risk Area	PNG Risk factors
16 AFFACE AUSTRICE 17 PRINTED AUSTRICE 17 PRIN	Democratic space	<ul> <li>Lack of gender diversity in Parliament since no women were elected</li> <li>Political stability</li> <li>Limited participation and representation for CSOs/ NGOs</li> </ul>
16 AFRECAUSTICE 17 PARTHESONIES PER THE GALLS PER THE GALL	Displacement and migration	<ul> <li>Settlers and landless people experience a lack of services and employment opportunities that contributes to the migration of people from rural areas. As a result, they become landless after living where they have settled for several years.</li> <li>Displaced persons experience a lack of durable solutions and are marginalised/lack access to government and other services and as a result are in a situation of protracted displacement.</li> </ul>
8 BERNINGEROWINI 17 PARTICUSURES FOR THE GOLDS  WHITE  THE COLOR	Economic stability	<ul> <li>Weak public finance management</li> <li>Dependence on loans and international aid to finance revenue gaps</li> <li>Foreign exchange shortages</li> <li>Dependence on the extractive industries</li> <li>Some SOEs require reform</li> <li>Reduced fiscal space for social service expenditures</li> <li>Mineral revenue management</li> <li>Resource allocation to human development</li> <li>COVID-19 contributed to shrinking fiscal space for development</li> <li>Budget allocation alignment to SDGs/development policies</li> </ul>
12 passwerth 13 callule 14 passwerth 15 passwerth 16 passwerth 16 passwerth 16 passwerth 17 passwerth 20 passwerth 17 passwerth 20 pass	Environment and Climate	<ul> <li>Clearing and habitat loss</li> <li>Biodiversity loss</li> <li>Climate change (loss of carbon sink)</li> <li>Clean water (loss of protected catchments, sedimentation)</li> <li>Food security (soil erosion, loss of forest resources, fish catch)</li> <li>Disasters (increased likelihood of landslides, floods, famine, fires)</li> <li>Increased conflict and women most affected Unsustainable extractive industries</li> <li>Pollution</li> <li>Greater inequality due to loss of land and basic sustenance</li> <li>Unsustainable resource use and Wildlife trade</li> <li>Biodiversity loss</li> </ul>

		Food security (decline in available hunting and fish catch)
		Invasive species
		Biodiversity (competition, predation)
		Food security (loss of crops and native fish)
		Loss of biocultural knowledge
		Biodiversity (loss of knowledge and traditional
		sustainability measures)
		Loss of cultural identity and language
		Pollution from mining, waste disposal, plantations and
		<u>industry</u>
		Loss of clean water (loss of protected catchments, sedimentation)
		Climate change (emissions)
		Food security (loss of farming lands and fish catch)
		Climate change
		Biodiversity
		Climate change
		Food security (loss of cultivable land, fish catch)
		Disasters (increased likelihood of landslides, floods,
		famine, fires)
		Displacement, increased conflict and women most
		affected
2 7ERO 17 PARTNERSHIPS FOR THE GOALS	Food	PNG faces significant challenges in ending hunger,
<b>**</b>	security,	achieving food security, improving nutrition, and
	agriculture,	promoting sustainable agriculture
	and land	Poverty
16 PEAGE, JUSTICE AND STRONG PORTHE GOALS INSTITUTIONS	Internal	Protracted inter-group conflicts in the Highlands have
<b>*</b>	security	intersected with already weakened social systems; low
		levels of service delivery; eroded social structures/civic
		trust; a hyper-polarised political environment has
		weakened the legitimacy of/public confidence in
		governmental institutions, especially the rule of law
		institutions; reinforced by a culture of violence; disrupted
		social norms/social orders; threatened livelihoods, and
		displacement of entire communities resulting in highly
		fragile environment
4 COULTY 6 CLEAN WATER AND SANITATION	Infrastructure	Inequitable and inaccessible access based on
	and access to	urban/rural location, income/wealth, education
7 AFFORDABLE AND 9 NEUSTRY INDIVIDURE	social	attainment and sex or gender; Persons living in rural
	services	areas are more likely to have problems accessing health
11 SUSTANUBLECTIES 17 PARTNERSHIPS		care than their urban counterparts. For example, 66.9
AND DOMOGUNITIES		percent of women in rural areas stated that getting
		money for treatment hinders access to health care
		compared to only 40 percent in urban areas.
		23 percent of women and 13 percent of men aged 15-49
		have no formal education.
		In 2017, the access rate for essential water services was
		86 percent in urban areas and 35 percent in rural areas
		The rural population's access rate to electricity was 55.4
		percent in 2018. In 2017, the access rate to electricity for
		the rural population was 50.4 percent, and 80.8 percent
		for the urban population.

16 AFRAC AUSTROIC  SCHIPTIONS  FOR PROCESSING	Justice and the rule of law	<ul> <li>Gender inequality</li> <li>In the absence of the rule of law in some parts of the country, it is difficult for human rights defenders to advocate, protest or speak publicly about abuses, and some of them have been arrested and detained for speaking out</li> <li>Resources and capacity of institutions remain weak/limited in many areas</li> <li>The impact of insufficient capacity or engagement in some areas has led to a lack of public confidence in the rule of law institutions, further negatively impacting their effectiveness (and vice versa)</li> </ul>
16 PRIAS AUTHOR 17 PAPAREOUS METHORIOUS METHORIOUS	Political stability	<ul> <li>PNG's poor formal governance scoreboard.</li> <li>Need for stronger institutional response to corruption as assessed under the United Nations Convention Against Corruption Implementation Review Mechanism and the PNG Anti-Corruption Project.</li> </ul>
3 GOOD HEALTH TO PARTNESSHIPS FOR THE COLUMN	Public health	<ul> <li>49.5 percent of the total population of children under five suffered from stunting: amount of underweight children under five; tuberculosis prevalence.</li> <li>For epidemic risk, PNG ranks 31 of 190 countries, remaining first among countries in South-East Asia and Pacific region</li> <li>The under-five mortality rate was 49 deaths per 1000 live births in rural areas in the five years preceding the 2016-2018 DHS. In urban areas, the rate is 41 per 1000 live births.</li> <li>COVID-19 health risks</li> <li>Uneven access to health services based on gender and location and the multidimensional risks associated with vulnerabilities (disability, age, gender)</li> <li>Lack of adequate investment in health infrastructure</li> <li>Highest levels of HIV/Aids drug resistance and rising levels of STIs</li> <li>Harmful practises due to insufficient knowledge/access to services</li> </ul>
16 PART AUTICE NORTHWISE SITURIOR STREET	Regional and global influences	The global economic slowdown as a result of COVID-19
1 Movement 5 General Figurity	Social cohesion, equality and non-discrimination	<ul> <li>Gender inequality (ranked 3 of 190 countries globally)</li> <li>Gender-based discrimination against girls in which a male child is given preference to a female child when parents are deciding on who gets sent to school</li> <li>Domestic violence rampant in both rural and urban areas of PNG, which is an emergency.</li> </ul>

In consideration of the comprehensive analysis provided in the previous sections, below are recommendations to support the advance and achievement of SDGs in PNG.

#### Governance and institutions

PNG needs better governance and institutions to make significant progress towards sustainable development, including better-aligned incentives, performance, accountability, and policy commitments and establishing improved governance arrangements. This improvement will help ensure that PNG's endowments are exploited responsibly, that the returns are shared equitably, and that benefits accrue for future generations.

- Establish the right long-run incentives that deter rent-seeking and encourage government, individuals and firms to invest in physical and human assets.
- Implementing more effective institutional arrangements (particularly public financial management) within the public sector can boost service delivery outcomes. If designed appropriately, it can also raise transparency and accountability to the general public and elevate pressure on the political class for better outcomes.
- Ensure suitable checks and balances, transparent allocation of responsibilities, and accountability for how resources are used so that decentralization and the empowerment of provincial and LLG level are not squandered, and significant gaps in service delivery are prevented.
- Implement the recommendations from the Universal Periodic Review, along with those from previous cycles not yet implemented, with the support of the UN and other stakeholders as needed.

# **Economic transformation**

- Diversification of the economy, a priority action to enable GoPNG to increase its tax revenue and current account surplus and also increase employment opportunities.
- Ensuring the availability of good economic data. Several economic indicators are unavailable, estimates or projections. The availability of good economic data will contribute to evidence-based economic policymaking.
- Addressing SOEs issues through sound financial management, public-private partnerships, management contracts, and loss-making enterprises sales. If GoPNG takes action, there would be a reduced burden on government budget and better service delivery to the public.
- Sectoral policies. Policies that enhance the performance of agriculture, fishing, extractives, MSMEs, and the financial sectors are required to increase these sectors' contribution to the economy, including increased tax revenue and employment.
- Foreign exchange. Policies can be put in place to move PNG towards a marketdetermined exchange rate to reduce the foreign exchange shortages the country currently experiences.
- A thorough review of trade policies will ensure that PNG benefits from its membership in the World Trade Organization and the four regional trade agreements.

# **Financial landscape**

- Improve tax laws to tax all economic activity in the country adequately. PNG could improve its tax administration to make it easier for both individuals and businesses to pay their taxes.
- Rethink domestic debt strategy, to enable the domestic private sector to access credit, ensuring that public enterprises have revenue streams that can finance the operations of all enterprises.

- Update the debt strategy, ensuring that GoPNG identifies new sources of concessional financing, enabling effective debt management and sustainability.
- Promote the increase in use of the stock market to raise funds for domestic companies.
- Implement a permanent long-term framework to improve lending to the private sector.
- Pursue more targeted investment policies that seek investors in value-added sectors. Currently, most investments are in the natural resources sector.
- Encourage more PNG citizens to work abroad. PNG has the lowest volume of remittance inflows in the Pacific, i.e. 0.01 percent of GDP in 2017. Efforts to increase international remittances can be made through labour mobility programs in Australia and New Zealand.

# **Environment and climate change**

Recommendations for improving environmental management and governance can be grouped into seven headings (as below). Most of the proposed recommendations require government agencies to take the lead. UN agencies can support and assist, where relevant, and further promote policies and actions toward achieving the SDGs.

# 1. Good environmental governance

- Review and replace the Fauna (Protection and Control) Act 1966.
- Finalise and implement the National Biodiversity Strategy and Action Plan.
- Formalise participation in the Nagoya protocol, and finalise legislation and policies addressing genetic property rights and access benefit sharing agreements.
- Include biodiversity values in national and subnational accounting to reduce the perverse incentives currently applying to development.
- Finalise and implement the Protected Areas Bill.
- Finalise the review of the Forestry Act 1992 to harmonise with the National REDD+ Strategy 2017-2027.
- Improve governance of the forestry industry to strengthen forest legality and effective participation of stakeholders. Ensure the register of critical activities is maintained and available for public review.
- Integrate and support provincial and local government planning and implementation for WaSH and waste management.
- Integrate local disaster resilience planning with climate change adaptation and other well-being programs.
- Ensure all mining company annual environmental reports are made publicly available
  in a format that allows them to be readily assessed. Regulatory agencies or
  independent bodies should oversee regulation, enforcement, and accountability rather
  than industry self-regulation.
- Complete and apply the National Adaptation Plan for climate change adaptation.
- Finalise and implement the draft biodiversity offsets policy, emphasising avoidance and mitigation of damage wherever possible, followed by appropriate offsets.

# 2. Stronger environmental regulation of the industry and enforcement of conditions

- Require the mineral, oil and gas industry to reduce and/or offset their greenhouse gas emissions, including fugitive emissions.
- Require tailings and other mining waste to be contained and managed rather than dispersed to the environment for all new mines and extensions of existing mines.
- Monitor and enforce environmental conditions in existing mining approvals.
- Develop and apply (including retrospectively) a system for mine closure and site remediation, including setting standards and calculating costs for setting bonds.
- Require industry to take responsibility for future settlements (including new developments) for people attracted to or displaced by their activities.

- Support implementation of the ban on exports of unprocessed 'round log' timber, including an exit strategy for existing permits and agreements.
- Improve monitoring and surveillance of logging practices.
- Implement mitigation action for the transport sector as identified in the National Climate Compatible Development Management Policy.
- Reduce agricultural sector emissions through improved agricultural practices and protect valuable agricultural land from conversion for urban and suburban use.
- Create a node of industrial sustainability that minimises waste, reduces emissions in the industrial process, product use, and waste sectors, and enhances inter-industry cooperation, effectively utilising local resources.
- Reduce emissions from the LULUCF (Land Use, Land-Use Change and Forestry) sector by effectively implementing the national REDD+ Strategy 2017-2027 and reducing the impacts of commercial logging, subsistence agriculture and oil palm plantations.
- Secure funding to transition to 78 percent power generation from renewable sources by 2030
- Accelerate implementation of reliable and safe energy efficiency initiatives, including off-grid mechanisms.
- Ensure those left behind are not subject to further environmental harm through any development activity.

# 3. Wise allocation of land and water

- Complete and implement the National Sustainable Land Use Policy.
- Allocate areas where development is not permitted due to high biodiversity, cultural values, or climate vulnerability.
- Require better environmental impact studies for all developments. Apply to avoid/ mitigate/ offset hierarchy.
- Expand the protected area network according to the Policy on Protected Areas. Provide regular updates of maps and statistics, including ecological representation.
- Establish and manage marine protected areas, including locally managed marine areas.
- Plan for new urban areas and semi-rural settlements to cater for internal migrants.
- Implement local planning frameworks to balance forest production with other uses.
- Protect priority forests through appropriate conservation measures.
- Support local-level ownership dispute resolution and land use planning

# 4. Actual capacity where it is needed

- Employ and support environment staff at national and provincial levels. Ensure a high degree of transparency, accountability and anti-corruption measures for jobs related to environmental approvals, forest operations and wildlife trade.
- Support environmental research, especially PNG-based organizations and researchers, including a formal system to mentor and support environmental scientists.
- Resource CEPA and provincial governments to enhance protected area management.
- Support PNG's national NGOs/CBOs working for environmental and social benefits.
- Build capacity for on-ground (and water) management through support for local management committees.
- Develop a network of community and protected area rangers to undertake a range of tasks in rural areas: enforcement of protected area and biodiversity laws; invasive species control; maintenance of community and tourist facilities; environmental education and monitoring; and maintaining clean water and waste systems.
- Fund and provide ongoing capacity to support the National Forest Monitoring System and National Forest Inventory.

- Build capacity in waste management and recycling.
- Ensure CEPA undertakes monitoring and compliance activities independent of mining companies.
- Consider a third-party 'assessor' empowered to report on the environmental activities of mining companies and government and follow through on commitments to communities and customary landowners.
- Assist communities to have a complete understanding of the implications of development proposals and their likely expansion in order to provide or deny informed consent. Ensure women and vulnerable groups are equally represented in the process.
- Strengthen PNG's greenhouse measurement, reporting and verification system, including the capacity to report on emissions and land clearing rates more regularly.
- Develop teams of capable responders at a local level.

# 5. Compensation, incentives and innovation for environmental management

- Implement benefit-sharing agreements and livelihood support for conservation-related initiatives, including payment for ecosystem services, incorporating ecosystem services into national and subnational accounting, livelihood projects, ecotourism and research payments and benefit-sharing agreements.
- Explore and support blue carbon options and the sustainable blue economy.
- Support marine and coastal tourism.
- Find new models for providing partially or fully subsidized clean water and waste services.
- Enforce compensation payments with fair distribution to those affected.
- Plan for future migration and increased mobility into rural and urban areas, likely from mining, oil and gas exploration and extraction, forest operations, other industry, natural disasters and climate-change-related issues such as sea-level rise.
- Strengthen, resource and expand programs that address 'those left behind' and environmental matters.

# 6. Responsive and thoughtful actions

- Address invasive species in PNG, including environmental pests.
- Manage species sustainably and develop species management plans where needed.
- Reduce emissions from the LULUCF sector by effectively implementing the national REDD+ Strategy 2017-2027 and reducing the impacts of commercial logging, subsistence agriculture and oil palm plantations.
- Continue to support and expand programs that contribute to environmental protection and well-being.

# 7. Partnerships, awareness, and cooperation

- Support tradition, tambu systems and local practices for sustainable management.
- Increase wildlife conservation awareness programs.
- Improve partnerships in protected area management.
- Develop partnerships to support sustainable fisheries.

#### **Social Exclusion**

- Focus on the most critical SDGs that can enhance the country's ability to achieve other SDGs.
- Focus also on the SDGs that have been given little or no attention by NGOs (and development partners) in the recent past, i.e. SDGs 2, 8, and 12.
- As the UN in PNG may not have capacity to assist PNG in achieving all the SDGs, foster strong collaboration between NGOs and development partners.

- Assist PNG in strengthening its public institutions to support environmental and other necessary NGOs, allowing development partners to operate effectively and efficiently.
- Access to quality and disaggregated data to make informed decisions and assess progress in PNG is challenging. UNPNG should consider supporting PNG to collect quality nationwide data on variables associated with the social sector and social exclusion with appropriate disaggregation including age, gender, and disability, etc. Support can be provided by training and upskilling government agencies (i.e. National Statistic Office, Departments of Education, Health, and Agriculture and Livestock). There is a need for strong collaboration in data sharing between government agencies and international partners to ensure SDG progress can be tracked and areas for improvement are identified.
- The UN in PNG to consider assisting PNG with the most critical SDGs, i.e. SDGs 5, 3, 4, 6, 7, 10, and 16 which are of high priority to NGOs and development partners. Assistance could include expanding the geographical coverage of the social services associated with these SDGs, to improve service accessibility by PNG people across the regions.
- Use Universal Periodic Review recommendations and those from international human rights mechanisms to guide a rights-based approach to support SDG achievement.
- Poor implementation and monitoring of policies and projects related to social protection, social services, and areas relevant to the promotion and protection of human rights has been a long-standing issue, resulting in ineffectiveness and inefficiency in providing social services and poor planning. The UN in PNG could assist PNG in strengthening the capacity and accountability of relevant institutions, i.e. by training officials from relevant government agencies such as DNPM.
- Urban residents have benefited significantly more than rural residents from PNG's steady economic growth through more access to social services and revenue distribution. Given most of PNG's population live in rural areas, UN in PNG should consider funding programmes for improving rural populations' access to social services including WaSH and electricity, among other inequalities existing between rural and urban areas.
- Adequately distribute revenue from the mining and petroleum sectors to finance the social sector and minimise social exclusion, i.e. the UN should support projects/ programmes that promote revenue from non-renewable resources to develop renewable resources (e.g. agriculture and forestry) and address social sector issues in the next Cooperation Framework cycle.
- UN in PNG to focus on supporting PNG in all areas linked to poor governance, focusing
  on corruption, mismanagement of resources, and accountability, which are the most
  significant contributors to social exclusion in PNG.
- GoPNG has not managed external support to achieve SDGs effectively and efficiently and has often failed to honour its promises. Support from government agencies is often delayed, which inhibits NGOs and development partners from conducting their activities on time. GoPNG must improve its services to development partners and NGOs. This can be achieved by assessing the quality of its service delivery systems and process and addressing the areas that are not working well. This should be done in collaboration with and under the positive influence of NGOs and development partners.
- Some NGOs want to assist PNG in achieving SDGs that are more acceptable to beneficiary communities. However, in some cases, funding agencies dictate the SDG's focus to the NGOs. To implement relevant projects, NGOs, beneficiary communities, and the funding agency should plan and execute the projects in collaboration. This strategy can make the project more acceptable to the communities and help promote the sustainability of the interventions.
- While some development partners would be interested in supporting infrastructure development, they are often discouraged due to poor maintenance. The UN in PNG

- should consider assisting PNG in developing effective mechanisms for both the development and maintenance of social infrastructure.
- The UN in PNG should continue supporting GoPNG in making the COVID-19 vaccine available to all the population, and importantly, awareness raising of the importance of vaccinating (as well as managing post-COVID-19 shocks).

# **Humanitarian-Development-Peace**

- Review and modernize the National Disaster Management Act of 1984 to establish a national cluster system approach, address displacement, and invest in national and provincial emergency and crisis management capacities
- Support for continued political dialogue between the national Government and the ABG and the two Parliaments, ensuring decisions around BPA implementation and post-referendum are progressed.
- Continued dialogue and awareness on the BPA and post-referendum issues; ensuring that the population in and outside of Bougainville is informed and feels included in the process, with a specific programme dedicated to women.
- Address causal factors for conflict in the Highlands through an integrated multi-sectoral approach (Pathways for Peace) focusing on creating conditions for sustaining peace, including enhancing community resilience, strengthening local peacebuilding capacities, supporting community-level post-conflict recovery, and facilitating conflict mediation.
- Supporting the development of national peacebuilding strategies and mainstreaming of conflict-sensitive local development approaches.
- Strengthen community resilience for peace through sustainable livelihood options for women, youth and communities.
- The rule of law and accountability for human rights violations and abuses, along with avoiding impunity, needs to be strengthened this is a critical component of the humanitarian/development/peace nexus. This should be undertaken through some legal reforms, sufficient resources for security institutions and the justice sector, public awareness-raising, and other major areas. The establishment of a well-resourced, national human rights institution could be a starting point as well as a national policy for reporting and following-up on recommendations from international mechanisms including the Universal Periodic Review.

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Annex 1: Detailed Assessment of PNG progress against SDG Targets<sup>147</sup>



Target	Current PNG Status
for all people everywhere, currently measured as people living on less than \$1.25 a day  1.2: By 2030, reduce at least by half the proportion of men, women and children of all ages living in poverty in all its dimensions according to national definitions	The proportion of the population living below the extreme poverty line was 51.0% in 1996 compared with 56.6% of the population being multidimensionally poor in 2018.  • The proportion of the population living below \$1.90/day – 29.8% in 2022  • The proportion of the population living below \$3.20/day – 53.2%in 2022
1.3: Implement nationally appropriate social protection systems and measures for all, including floors, and by 2030 achieve substantial coverage of the poor and the vulnerable	<ul> <li>Proportion of employed population covered in the event of work injury – 6.4% in 2019.</li> <li>Proportion of population covered by at least one social protection benefit – 0.2% in 2018</li> <li>Proportion of population above statutory pensionable age receiving a pension increased from 1.0% in 2000 to 4.9% in 2019.</li> </ul>
1.4: By 2030, ensure that all men and women, in particular the poor and the vulnerable, have equal rights to economic resources, as well as access to basic services, ownership and control over land and other forms of property, inheritance, natural resources, appropriate new technology and financial services, including microfinance	<ul> <li>The population using basic drinking water services increased from 34.0% in 2000 to 41.3% in 2017</li> <li>The population using essential sanitation services declined from 20.9% in 2000 to 12.9% in 2017</li> </ul>
1.5: By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social, and environmental shocks and disasters	The direct economic loss in the housing sector attributed to disasters increased from \$1.3 million in 2006 to \$1.7 million in 2013
<b>1.a:</b> Ensure significant mobilization of resources from a variety of sources, including through enhanced development cooperation, in order to provide adequate	Government expenditures do not directly target poverty reduction programmes

 $<sup>^{147}\</sup> https://unstats.un.org/sdgs/dataportal/countryprofiles/$ 

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and predictable means for developing countries, in particular, least developed countries, to implement programmes and policies to end poverty in all its dimensions	
<b>1.b:</b> Create sound policy frameworks at the national, regional and international levels, based on pro-poor and gendersensitive development strategies, to support accelerated investment in poverty eradication actions	NA



Target	Current PNG Status
<b>2.1:</b> By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round	24.6% of the population is considered undernourished (2019)
2.2: By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons	<ul> <li>In 2010, 49.5% of children under 5 years of age had stunted growth</li> <li>Proportion of children under 5 who were moderately or severely wasted increased from 4.4% in 2005 to 14.1% in 2010</li> <li>Proportion of overweight children under 5 increased from 3.4% in 2005 to 13.7% in 2010</li> <li>In 2016, 21.3% of the adult population was obese (BMI &gt;30)</li> </ul>
2.3: By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment	NA
2.4: By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding, and	In 2018, cereal yield (tonnes per hectare of harvested land) was 4.7  In 2015, Sustainable nitrogen management index (best =0 and worst =1.41) was 0.9

other disasters and that progressively improve land and soil quality	
2.5: By 2020, maintain the genetic diversity of seeds, cultivated plants and farmed and domesticated animals and their related wild species, including through soundly managed and diversified seed and plant banks at the national, regional and international levels, and promote access to and fair and equitable sharing of benefits arising from the utilization of genetic resources and associated traditional knowledge, as internationally agreed	In 2019, there were 1567.0 plant breeds with sufficient genetic resources stored compared with 1,376 in 2010.
2.a: Increase investment, including through enhanced international cooperation, in rural infrastructure, agricultural research and extension services, technology development and plant and livestock gene banks in order to enhance agricultural productive capacity in developing countries, in particular, least developed countries	<ul> <li>The share of agriculture value-added in total GDP increased from 22.4% in 2001 to 17% in 2019</li> <li>Agriculture as a share of total government expenditure declined from 2.3% in 2001 to 1.7% in 2002</li> </ul>
2.b: Correct and prevent trade restrictions and distortions in world agricultural markets, including through the parallel elimination of all forms of agricultural export subsidies and all export measures with equivalent effect, in accordance with the mandate of the Doha Development Round	Agricultural export subsidies declined from \$60.1 million (at constant prices in 2018) in 2000 to \$44.6 million in 2018.
<b>2.c:</b> Adopt measures to ensure the proper functioning of food commodity markets and their derivatives and facilitate timely access to market information, including on food reserves, in order to help limit extreme food price volatility	NA



Target	Current PNG Status
<b>3.1:</b> By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births	The maternal mortality ratio decreased from 249.0 per 100,000 live births in 2000 to 145.0 per 100,000 live births in 2017.
<b>3.2:</b> By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000	The mortality rate of children under 5 fell from 72.4 deaths per 1,000 live births in 2000 to 47.8 deaths per 1,000 live births in 2018

live births and under-5 mortality to at least as low as 25 per 1,000 live births	<ul> <li>The infant mortality rate fell from 54.4 deaths per 1,000 live births in 2000 to 38.0 deaths per 1,000 live births in 2018</li> <li>The neonatal mortality rate fell from 28.7 deaths per 1,000 live births in 2000 to 22.1 deaths per 1,000 live births in 2018</li> </ul>
<b>3.3:</b> By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases	<ul> <li>In 2020, about 0.4 people in every 100,000 uninfected populations will become newly infected with HIV</li> <li>In 2020, the incidence of tuberculosis was 441.0 per 100,000 population</li> <li>The prevalence of hepatitis B surface antigen (HBsAg) was 2.2% in 2015</li> </ul>
<b>3.4:</b> By 2030, reduce by one-third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being	<ul> <li>The risk of dying between ages 30 and 70 from one of four main non-communicable diseases (cardiovascular disease, cancer, diabetes or chronic respiratory disease) increased from 28.2 percent in 2010 to 36.0 percent in 2019</li> <li>The suicide mortality rate fell from 7.1 deaths per 1,000 population in 2000 to 6.0 deaths per 1,000 population in 2016</li> </ul>
<b>3.5:</b> Strengthen the prevention and treatment of substance abuse, including narcotic drug abuse and harmful use of alcohol	<ul> <li>The 12-month prevalence of alcohol use disorders was 5.3% in 2016</li> <li>Alcohol consumption per capita among the population aged 15 years and older fell from 1.8 litres of pure alcohol in 2000 to 1.4 litres of pure alcohol in 2018</li> </ul>
<b>3.6:</b> By 2020, halve the number of global deaths and injuries from road traffic accidents	The death rate due to road traffic injuries fell from 17.8 per 100,000 population in 2000 to 12.6 per 100,000 population in 2019
<b>3.7:</b> By 2030, ensure universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes	<ul> <li>The proportion of women of reproductive age who need family planning satisfied with modern methods increased from 40.6% in 2007 to 49.2% in 2018</li> <li>The adolescent birth rate was 68.0 per 1,000 women aged 15-19 years in 2016</li> </ul>
<b>3.8:</b> Achieve universal health coverage, including financial risk protection, access to quality essential healthcare services and access to safe, effective, quality and affordable essential medicines and vaccines for all	The universal health coverage service coverage index (100% best) increased from 29.0% in 2000 to 33% in 2019
<b>3.9:</b> By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination	<ul> <li>The mortality rate attributed to unsafe water, sanitation, and lack of hygiene was 16.3 deaths per 1,000 in 2016</li> <li>The age-standardized mortality rate attributed to household air pollution was 125.0 deaths per 100,000 population in 2016</li> </ul>
	The age-standardized mortality rate attributed to ambient air pollution was 152.0 deaths per 1,000 population in 2016

3.a: Strengthen the implementation of the World Health Organization Framework Convention on Tobacco Control in all countries, as appropriate	The mortality rate attributed to unintentional poisonings fell from 2.2 deaths per 1,000 population in 2000 to 1.7 deaths per 1,000 population in 2016  NA
3.b: Support the research and development of vaccines and medicines for the communicable and non-communicable diseases that primarily affect developing countries, provide access to affordable essential medicines and vaccines, in accordance with the Doha Declaration on the TRIPS Agreement and Public Health, which affirms the right of developing countries to use to the full the provisions in the Agreement on Trade-Related Aspects of Intellectual Property Rights regarding flexibilities to protect public health, and, in particular, provide access to medicines for all.	<ul> <li>The target population with access to 3 doses of diphtheria-tetanus-pertussis (DTP3) was 61.0% in 2018</li> <li>The proportion of the target population with access to pneumococcal conjugate third dose (PCV3) was 43.0% in 2018</li> </ul>
3.c: Substantially increase health financing and the recruitment, development, training, and retention of the health workforce in developing countries, especially in least developed countries and small island developing States	<ul> <li>Gross disbursements of total ODA received for medical research and primary health sectors decreased from \$122.3 million in 2000 to \$52.4 million in 2018</li> <li>Net disbursement of total official development assistance received for medical research and primary health sectors was \$51.0 million in 2018</li> </ul>
<b>3.d</b> Strengthen the capacity of all countries, in particular developing countries, for early warning, risk reduction and management of national and global health risks	<ul> <li>In 2018, there were about 0.7 medical doctors for every 10,000 persons in the population</li> <li>Births attended by skilled health personnel 56.4 percent in 2018</li> </ul>



Target	Current PNG Status
<b>4.1:</b> By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes	in primary education

<b>4.2:</b> By 2030, ensure that all girls and boys have access to quality early childhood development, care, and pre-primary education so that they are ready for primary education	In 2018, 71.4% of children aged between 4 to 6 years of age participated in pre-primary organized learning
<b>4.3:</b> By 2030, ensure equal access for all women and men to affordable and quality technical, vocational, and tertiary education, including university	In 2019, the ratio of female-to-male mean years of education received was 75.5%
<b>4.4:</b> By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship	NA
<b>4.5:</b> By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations	NA
<b>4.6:</b> By 2030, ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy	NA
4.7: By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development	NA
<b>4.a:</b> Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all	NA
4.b: By 2020, substantially expand globally the number of scholarships available to developing countries, in particular least developed countries, small island developing States and African countries, for enrolment in higher education, including vocational training and information and communications technology, technical, engineering and scientific programmes, in developed countries and other developing countries	Total official flows received for scholarships declined from \$20.3 million (constant 2018 prices) in 2006 to \$14.5 million (constant 2018 prices) in 2018
<b>4.c:</b> By 2030, substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and small island developing States	NA



Target	Current PNG Status
<b>5.1:</b> End all forms of discrimination against	2013 Public Service Gender Equality and
all women and girls everywhere	Social Inclusion Policy
<b>5.2:</b> Eliminate all forms of violence against all women and girls in the public and private spheres, including trafficking and sexual and other types of exploitation	<ul> <li>National Strategy on GBV 2016-2025</li> <li>In 2020, more than 50% of women aged 15-49 years had experienced domestic violence since age 15, and 28% have experienced sexual violence</li> </ul>
<b>5.3:</b> Eliminate all harmful practices, such as child, early and forced marriage and female genital mutilation	<ul> <li>The proportion of women aged 20-24 who were married or in a union before age 18 was 27.3% in 2018</li> <li>The proportion of women aged 20-24 who were married or in a union before age 15 was 8.0% in 2018</li> </ul>
<b>5.4:</b> Recognize and value unpaid care and domestic work through the provision of public services, infrastructure and social protection policies and the promotion of shared responsibility within the household and the family as nationally appropriate	NA
<b>5.5:</b> Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life	<ul> <li>The proportion of seats held by women in single or lower houses of parliament was 0.0% in 2020</li> <li>In 2010, 18.1% of managerial positions were held by women</li> <li>In 2010, 19.3% of senior and middle managerial positions were held by women</li> <li>In 2020, the ratio of female-to-male labour force participation rate was 96.6%</li> </ul>
<b>5.6:</b> Ensure universal access to sexual and reproductive health and reproductive rights as agreed in accordance with the Programme of Action of the International Conference on Population and Development and the Beijing Platform for Action and the outcome documents of their review conferences	The proportion of women of reproductive age who need family planning satisfied with modern methods increased from 40.6 % in 2007 to 49.2% in 2018
<b>5.a:</b> Undertake reforms to give women equal rights to economic resources, as well as access to ownership and control over land and other forms of property, financial services, inheritance, and natural resources, in accordance with national laws	NA

<b>5.b:</b> Enhance the use of enabling	NA
technology, in particular information and	
communications technology, to promote the	
empowerment of women	
<b>5.c:</b> Adopt and strengthen sound policies	NA
and enforceable legislation for the promotion	
of gender equality and the empowerment of	
all women and girls at all levels	

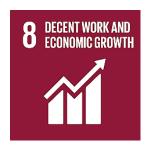


Target	Current PNG status
<b>6.1:</b> By 2030, achieve universal and equitable access to safe and affordable drinking water for all	In 2020 45.3% of the population used at least essential drinking water services
<b>6.2:</b> By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations	<ul> <li>In 2020, 19.2% of the population used at least basic sanitation services</li> <li>In 2017, 14.5% of the population practised open defecation</li> </ul>
<b>6.3:</b> By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally	In 2018 there was no anthropogenic wastewater that received treatment
<b>6.4:</b> By 2030, substantially increase wateruse efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity	In 2018, the level of water stress – freshwater withdrawal as a proportion of available freshwater resources – stood at 0.1%.
<b>6.5:</b> By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate	<ul> <li>In 2018, 864.4 m3 H2O eq/capita scarce water consumption was embodied in imports</li> <li>The degree of integrated water resources management implementation was 25.0% in 2018</li> </ul>
<b>6.6:</b> By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes	The permanent water body extent stood at 1.1% of the total land area in 2018
<b>6.a:</b> By 2030, expand international cooperation and capacity-building support to developing countries in water- and sanitation-related activities and	Total gross disbursements of ODA received for water supply and sanitation increased from \$12.7 million (constant 2018 prices) in

programmes, including water harvesting,	2000 to \$33.9 million (constant 2018 prices)
desalination, water efficiency, wastewater	in 2018
treatment, recycling, and reuse technologies	
<b>6.b:</b> Support and strengthen the participation	NA
of local communities in improving water and	
sanitation management	



Target	Current PNG status
<b>7.1:</b> By 2030, ensure universal access to affordable, reliable, and modern energy services	The proportion of the population with access to electricity increased from 11.0% in 1996 to 54.4% in 2017
<b>7.2:</b> By 2030, increase substantially the share of renewable energy in the global energy mix	In 2018, 8.0% of the population relied primarily on clean fuels and technology. The share of renewable energy in the total final energy consumption declined from 66.4% in 2000 to 49.7% in 2017.
<b>7.3:</b> By 2030, double the global rate of improvement in energy efficiency	The level of primary energy intensity declined from 6.5 megajoules per dollar of GDP (in constant 2011 PPP) in 2000 to 5.1 megajoules per dollar of GDP (in constant 2011 PPP) in 2017.
7.a: By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology	International financial flows supporting clean energy research and development and renewable energy production, including hybrid systems, were nil in 2004 to \$260.9 million (constant 2017 dollars) in 2017.
7.b: By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing States and landlocked developing countries, in accordance with their respective programmes of support	NA



Target	Current PNG status
8.1: Sustain per capita economic growth in	The annual growth rate of real GDP per
accordance with national circumstances	capita was -2.0% in 2018
and, in particular, at least 7% GDP growth	Capita was -2.070 iii 2010
per annum in the least developed countries	
<b>8.2:</b> Achieve higher levels of economic	The annual growth rate of real GDP per
productivity through diversification,	employed person increased from -5.5% in
technological upgrading and innovation,	2000 to 3.0% in 2019.\
including through a focus on high-value	2000 to 0.070 iii 2010.1
added and labour-intensive sectors	
8.3: Promote development-oriented policies	NA
that support productive activities, decent job	
creation, entrepreneurship, creativity and	
innovation, and encourage the formalization	
and growth of micro-, small- and medium-	
sized enterprises, including through access	
to financial services	
<b>8.4:</b> Improve progressively, through 2030,	NA
global resource efficiency in consumption	
and production and endeavour to decouple	
economic growth from environmental	
degradation, in accordance with the 10-Year	
Framework of Programmes on Sustainable	
Consumption and Production, with	
developed countries taking the lead	
<b>8.5:</b> By 2030, achieve full and productive	The total unemployment rate was 2.6% in
employment and decent work for all women	2022
and men, including for young people and	
persons with disabilities, and equal pay for	
work of equal value	
<b>8.6:</b> By 2020, substantially reduce the	The proportion of youth not in education,
proportion of youth not in employment,	employment or training was 27.7% in 2010
education or training	
<b>8.7:</b> Take immediate and effective measures	NA
to eradicate forced labour, end modern	
slavery and human trafficking and secure the	
prohibition and elimination of the worst forms	
of child labour, including recruitment and use	
of child soldiers, and by 2025 end child	
labour in all its forms	
<b>8.8:</b> Protect labour rights and promote safe	• In 2017, the level of national compliance
and secure working environments for all	with labour rights (freedom of association
workers, including migrant workers, in	and collective bargaining) based on ILO
particular women migrants, and those in	textual sources and national legislation
precarious employment	stood at 1.5

	<ul> <li>In 2018 victims of modern slavery were 10.3 per 1,000 population</li> <li>In 2015, fatal work-related accidents embodied in imports was 0.1 per 100,000 population</li> </ul>
<b>8.9:</b> By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products	NA
<b>8.10:</b> Strengthen the capacity of domestic financial institutions to encourage and expand access to banking, insurance and financial services for all	<ul> <li>In 2018, there were 8.2 ATMs per 100,000 adults</li> <li>In 2018, there were 1.5 commercial bank branches per 100,000 adults</li> </ul>
<b>8.a:</b> Increase Aid for Trade support for developing countries, in particular least developed countries, including through the Enhanced Integrated Framework for Traderelated Technical Assistance to Least	Total official disbursements received in Aid for Trade increased from \$56.4 million (constant 2018 dollars) in 2006 to \$232.0 million (constant 2018 dollars) in 2018
Developed Countries	Total official commitments pledged by donors in Aid for Trade increased from \$123.0 million (constant 2018 dollars) in 2005 to \$224.8 million (constant 2018 dollars) in 2018.
<b>8.b:</b> By 2020, develop and operationalize a global strategy for youth employment and implement the Global Jobs Pact of the ILO	NA



Target	Current PNG status
9.1: Develop quality, reliable, sustainable and resilient infrastructure, including regional and trans-border infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all	<ul> <li>In 2018, Logistics Performance Index: Quality of trade and transport-related infrastructure (worst 1–5 best) was 2.0</li> <li>In 2018, freight volume by road transport was 4.1 billion tonne-kilometres</li> <li>In 2018, passenger volume by air transport was 1.5 billion passenger-kilometres</li> <li>In 2018, container port traffic (maritime transport) reached 0.3 million TEUs (twenty-foot equivalent units)</li> </ul>
<b>9.2:</b> Promote inclusive and sustainable industrialization and, by 2030, significantly raise industry's share of employment and GDP, in line with national circumstances, and double its share in least developed countries	<ul> <li>Manufacturing value added per capita (constant 2015 prices) increased from \$52.1 in 2000 to \$60.9 in 2019.</li> <li>Manufacturing value added as a proportion of GDP declined from 2.6% in 2000 to 2.3% in 2019</li> </ul>

	Manufacturing employment as a proportion of total employment increased from 1.1% in 2000 to 1.8% in 2010
<b>9.3:</b> Increase the access of small-scale industrial and other enterprises, in particular in developing countries, to financial services, including affordable credit, and their integration into value chains and markets	In 2015, the share of small-scale industries with a loan or line of credit was 30.9%
<b>9.4:</b> By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities	NA
9.5: Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending	<ul> <li>In 2022, The Times Higher Education Universities Ranking: Average score of the top 3 universities (worst 0–100 best) was 0.0</li> <li>In 2020, articles published in academic journals (per 1,000 population) was 0.0</li> <li>In 2016, expenditure on research and development (% of GDP) was 0.0</li> <li>In 2016, density of full-time researchers per million inhabitants was 35.5</li> </ul>
<b>9.a:</b> Facilitate sustainable and resilient infrastructure development in developing countries through enhanced financial, technological and technical support to African countries, least developed countries, landlocked developing countries and small island developing States	Total official flows received for infrastructure increased from \$219.1 million (constant 2018 dollars) in 2000 to \$301.3 million (constant 2018 dollars) in 2018.
<b>9.b:</b> Support domestic technology development, research and innovation in developing countries, including by ensuring a conducive policy environment for, inter alia, industrial diversification and value addition to commodities	In 2017, the share of medium and high-tech industry in total value added was 12.6%
<b>9.c:</b> Significantly increase access to information and communications technology and strive to provide universal and affordable access to the Internet in least developed countries by 2020	<ul> <li>In 2017, population using the internet was 11.2%</li> <li>In 2019, mobile broadband subscriptions were 11.8 per 100 population</li> <li>In 2017, 89.0% of the population was covered by at least a 2G mobile network</li> <li>In 2017, 64.4% of the population was covered by at least a 3G mobile network</li> <li>In 2017, 50.0% of the population was covered by at least a 4G mobile network</li> </ul>



Target	Current PNG status
10.1: By 2030, progressively achieve and	In 2017, 30.7% of GDP was from labour,
sustain income growth of the bottom 40 percent of the population at a rate higher	comprising wages and social protection transfers
than the national average	แสเรเยเร
<b>10.2:</b> By 2030, empower and promote the	NA
social, economic and political inclusion of all,	
irrespective of age, sex, disability, race,	
ethnicity, origin, religion or economic or other status	
<b>10.3:</b> Ensure equal opportunity and reduce	NA
inequalities of outcome, including by	
eliminating discriminatory laws, policies and	
practices and promoting appropriate	
legislation, policies and action in this regard	1, 0000, 000/, f II
<b>10.4:</b> Adopt policies, especially fiscal, wage and social protection policies, and	In 2009, 20% of the population was living below half of the median income
progressively achieve greater equality	below fiall of the median income
<b>10.5:</b> Improve the regulation and monitoring	The share of non-performing loans in total
of global financial markets and institutions	gross loans increased from 1.8% in 2008
and strengthen the implementation of such	to 3.7% in 2018
regulations	The return on assets declined from 6.4% in 2008 to 3.8% in 2018
	<ul> <li>The ratio of regulatory capital to assets increased from 11.7% in 2008 to 14.5% in 2018</li> </ul>
	<ul> <li>The ratio of non-performing loans (net of provisions) to capital increased from 2.8% in 2008 to 5.6% in 2018.</li> </ul>
	The ratio of liquid assets to short-term
	liabilities increased from 18.7% in 2008 to
<b>10.6:</b> Ensure enhanced representation and	21.5% in 2018. NA
voice for developing countries in decision-	147
making in global international economic and	
financial institutions in order to deliver more	
effective, credible, accountable and	
legitimate institutions  10.7: Facilitate orderly, safe, regular and	NA
responsible migration and mobility of people,	1473
including through the implementation of	
planned and well-managed migration	
policies	

<b>10.a:</b> Implement the principle of special and differential treatment for developing countries, in particular least developed countries, in accordance with World Trade Organization agreements	The proportion of tariff lines applied to imports with zero tariff increased from 66.7 % in 2005 to 74.2% in 2018
10.b: Encourage official development assistance and financial flows, including FDI, to States where the need is greatest, in particular least developed countries, African countries, small island developing States and landlocked developing countries, in accordance with their national plans and programmes	The total amount received in assistance for development increased from \$333.1 million in 2000 to \$657 million in 2018
<b>10.c</b> : By 2030, reduce to less than 3 percent the transaction costs of migrant remittances and eliminate remittance corridors with costs higher than 5 percent	Remittance costs were 16.9% of the amount remitted in 2011



Target	Current PNG status
<b>11.1:</b> By 2030, ensure access for all to adequate, safe and affordable housing and	NA
basic services and upgrade slums	
11.2: By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons	NA
11.3: By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries	NA
<b>11.4:</b> Strengthen efforts to protect and safeguard the world's cultural and natural heritage	NA
11.5: By 2030, significantly reduce the number of deaths and the number of people affected and substantially decrease the direct economic losses relative to global GDP caused by disasters, including water-related disasters, with a focus on protecting the poor and people in vulnerable situations	NA

11 6: By 2020 radius the adverse per	In 2019, the annual mean concentration of
<b>11.6:</b> By 2030, reduce the adverse per capita environmental impact of cities,	particulate matter of fewer than 2.5 microns
including by paying special attention to air	in diameter (PM2.5) was 11.0 micrograms
quality and municipal and other waste	per cubic metre (above the WHO max safety
management	level of 10 µg/m³)
11.7: By 2030, provide universal access to	NA
safe, inclusive and accessible, green and	
public spaces, in particular for women and	
children, older persons and persons with	
disabilities	
<b>11.a:</b> Support positive economic, social and	NA
environmental links between urban, peri-	
urban and rural areas by strengthening	
national and regional development planning	NA .
<b>11.b:</b> By 2020, substantially increase the number of cities and human settlements	NA
adopting and implementing integrated	
policies and plans towards inclusion,	
resource efficiency, mitigation and	
adaptation to climate change, resilience to	
disasters, and develop and implement, in	
line with the Sendai Framework for Disaster	
Risk Reduction 2015-2030, holistic disaster	
risk management at all levels	
11.c: Support least developed countries,	NA
including through financial and technical	
assistance, in building sustainable and	
resilient buildings utilizing local materials	



Target	Current PNG status
<b>12.1:</b> Implement the 10-Year Framework of	NA
Programmes on Sustainable Consumption	
and Production Patterns, all countries taking	
action, with developed countries taking the	
lead, taking into account the development	
and capabilities of developing countries	
<b>12.2:</b> By 2030, achieve the sustainable management and efficient use of natural resources	<ul> <li>In 2017, the material footprint (amount of primary materials used) stood at 4.6 kg per unit of GDP</li> </ul>
	Domestic material consumption
	decreased from 13.8 metric tons per
	capita in 2000 to 10.2 metric tons per capita in 2017

<ul> <li>12.3: By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses</li> <li>12.4: By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment</li> <li>12.5: By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse</li> </ul>	<ul> <li>Production-based SO2 emissions (kg/capita) 3.4 2018</li> <li>SO2 emissions embodied in imports (kg/capita) 0.6 2018</li> <li>Production-based nitrogen emissions (kg/capita) 1.7 2015</li> <li>Nitrogen emissions embodied in imports (kg/capita) 0.4 2015</li> <li>Municipal solid waste (kg/capita/day) 0.3 in 2014</li> <li>Electronic waste generated per capita increased from 0.4 kg in 2000 to 1.1 kg in 2019</li> </ul>
<b>12.6:</b> Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle	NA
<b>12.7:</b> Promote public procurement practices that are sustainable, in accordance with national policies and priorities	NA
<b>12.8:</b> By 2030, ensure that people everywhere have the relevant information and awareness for sustainable development and lifestyles in harmony with nature	NA
<b>12.a:</b> Support developing countries to strengthen their scientific and technological capacity to move towards more sustainable patterns of consumption and production	NA
<b>12.b:</b> Develop and implement tools to monitor sustainable development impacts for sustainable tourism that creates jobs and promotes local culture and products	NA
12.c: Rationalize inefficient fossil-fuel subsidies that encourage wasteful consumption by removing market distortions, in accordance with national circumstances, including by restructuring taxation and phasing out those harmful subsidies, where they exist, to reflect their environmental impacts, taking fully into account the specific needs and conditions of developing countries and minimizing the possible adverse impacts on their development in a manner that protects the poor and the affected communities	NA



Target	Current PNG status
13.1: Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries	<ul> <li>In 2015, there were 0.4 deaths and missing persons attributed to disasters per 100,000 population</li> <li>In 2015, there were 30.0 deaths due to disasters</li> <li>In 2013, there were 358.0 people with destroyed dwellings due to disasters</li> <li>In 2013, there were 4.6 people affected by disasters per 100,000 population</li> <li>In 2016, the DMT and Cluster coordination were established to address natural disasters</li> </ul>
<b>13.2:</b> Integrate climate change measures into national policies, strategies, and planning	In 2020, 0.7 (tCO2/capita) CO2 emissions from fossil fuel combustion and cement production In 2018, 0.2 (tCO2/capita) CO2 emissions embodied in imports
<b>13.3:</b> Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning	NA
13.a: Implement the commitment undertaken by developed-country parties to the United Nations Framework Convention on Climate Change to a goal of mobilizing jointly \$100 billion annually by 2020 from all sources to address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation and fully operationalize the Green Climate Fund through its capitalization as soon as possible	In 2021, Nationally Determined Contribution enhancements, including capacity strengthening, ensure transparency in implementing NDC in the Agriculture, Forestry, and Other Land Use (AFOLU) sector
13.b: Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and small island developing States, including focusing on women, youth and local and marginalized communities	In 2021, the draft PNG REDD+ Safeguards and National REDD+ Guidelines and an options paper on carbon ownership and national level administration of carbon were developed



Target	Current PNG status
<b>14.1:</b> By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution	In 2020, Ocean Health Index: Clean Waters score (worst 0–100 best) was 65.2
<b>14.2:</b> By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in order to achieve healthy and productive oceans	<ul> <li>The extension of the protected marine area was 4.4 thousand square km in 2018</li> <li>In 2018, 0.2% of the marine environment under national jurisdiction (up to 200 nautical miles from shore) was under protection</li> </ul>
<b>14.3:</b> Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels	NA
14.4: By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics	<ul> <li>In 2018, fish caught by trawling or dredging 0.0%</li> <li>In 2018, fish caught from overexploited, or collapsed stocks was 5.0% of total catch</li> <li>In 2018, fish caught that are then discarded was 2.6%</li> <li>In 2018, marine biodiversity threats embodied in imports (per million population) 0.0</li> </ul>
<b>14.5:</b> By 2020, conserve at least 10 percent of coastal and marine areas, consistent with national and international law and based on the best available scientific information	<ul> <li>The average proportion of Marine Key Biodiversity Areas covered by protected areas increased from 1.3% in 2000 to 1.6% in 2019.</li> <li>In 2020, mean area protected in marine sites important to biodiversity was 1.9%</li> </ul>
14.6: By 2020, prohibit certain forms of fisheries subsidies which contribute to overcapacity and overfishing, eliminate subsidies that contribute to illegal, unreported and unregulated fishing and refrain from introducing new such subsidies, recognizing that appropriate and effective special and differential treatment for developing and least developed countries should be an integral part of the World Trade Organization fisheries subsidies negotiation	NA
<b>14.7:</b> By 2030, increase the economic benefits to small island developing States and least developed countries from the sustainable use of marine resources,	NA

including through sustainable management of fisheries, aquaculture and tourism	
14.a: Increase scientific knowledge, develop research capacity and transfer marine technology, taking into account the Intergovernmental Oceanographic Commission Criteria and Guidelines on the Transfer of Marine Technology, in order to improve ocean health and to enhance the contribution of marine biodiversity to the development of developing countries, in particular small island developing States and least developed countries	NA
<b>14.b:</b> Provide access for small-scale artisanal fishers to marine resources and markets	NA
14.c: Enhance the conservation and sustainable use of oceans and their resources by implementing international law as reflected in the United Nations Convention on the Law of the Sea, which provides the legal framework for the conservation and sustainable use of oceans and their resources, as recalled in paragraph 158 of "The future we want"	NA



Target	Current PNG status
<b>15.1:</b> By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements	<ul> <li>In 2020, the mean area that is protected in terrestrial sites important to biodiversity was 7.3%</li> <li>In 2018, terrestrial and freshwater biodiversity threats embodied in imports (per million population) 0.0</li> <li>The proportion of land area covered by forest was 80.1% in 2000 compared with 79.2% in 2020.</li> <li>The average proportion of terrestrial key biodiversity areas covered by protected areas was 6.9% in 2019, compared with 6.8% in 2000</li> </ul>
<b>15.2:</b> By 2020, promote the implementation of sustainable management of all types of forests, halt deforestation, restore degraded	In 2020, permanent deforestation (% of forest area, 5-year average) was 0.1%

forests and substantially increase afforestation and reforestation globally	<ul> <li>Above-ground biomass stock in the forest was 176.0 tonnes per hectare in 2020</li> <li>Forest area under an independently verified forest management certification scheme increased from 4.3 thousand ha in 2000 to 36.7 thousand ha in 2019</li> <li>The annual net change rate of forest area reached -0.1% in 2020</li> <li>Proportion of forest area under a long-term management plan was 14.0% in 2020</li> <li>Proportion of forest area within legally established protected areas was 3.8% in 2020</li> </ul>
<b>15.3:</b> By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world	The proportion of land that is degraded over the total land area was 21.0% in 2015
<b>15.4:</b> By 2030, ensure the conservation of mountain ecosystems, including their biodiversity, in order to enhance their capacity to provide benefits that are essential for sustainable development	<ul> <li>The average proportion of Mountain Key Biodiversity Areas covered by protected areas was 6.7% in 2019</li> <li>The Mountain Green Cover Index was 98.3 in 2017</li> </ul>
<b>15.5:</b> Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species	Red List Index of species survival (worst 0–1 best) declined from 0.9 in 1993 to 0.8 in 2021
<b>15.6:</b> Promote fair and equitable sharing of the benefits arising from the utilization of genetic resources and promote appropriate access to such resources, as internationally agreed	The total number of Standard Material Transfer Agreements transferring plant genetic resources for food and agriculture to the country increased from 4.0 in 2012 to 16.0 in 2019
<b>15.7:</b> Take urgent action to end poaching and trafficking of protected species of flora and fauna and address both demand and supply of illegal wildlife products	NA
<b>15.8:</b> By 2020, introduce measures to prevent the introduction and significantly reduce the impact of invasive alien species on land and water ecosystems and control or eradicate the priority species	NA
<b>15.9:</b> By 2020, integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts	NA  The total amount received in assistance for
<b>15.a:</b> Mobilize and significantly increase financial resources from all sources to conserve and sustainably use biodiversity and ecosystems	biodiversity increased from \$0.3 million in 2002 to \$191.4 million in 2018.
<b>15.b:</b> Mobilize significant resources from all sources and at all levels to finance sustainable forest management and provide	The total amount received in assistance for biodiversity increased from \$0.3 million in 2002 to 191.4 million in 2018

adequate incentives to developing countries	
to advance such management, including for	
conservation and reforestation	
<b>15.c:</b> Enhance global support for efforts to	NA
combat poaching and trafficking of protected	
species, including by increasing the capacity	
of local communities to pursue sustainable	
livelihood opportunities	



Target	Current PNG status
<b>16.1:</b> Significantly reduce all forms of	In 2010, 9.8 homicides per 100,000
violence and related death rates everywhere	population
<b>16.2:</b> End abuse, exploitation, trafficking and	NA
all forms of violence against and torture of	
children	
<b>16.3:</b> Promote the rule of law at the national	Un-sentenced detainees (% of prison
and international levels and ensure equal	population) 37.8% in 2018 compared with
access to justice for all	31.3% in 2005
<b>16.4:</b> By 2030, significantly reduce illicit	In 2020, exports of major conventional
financial and arms flows, strengthen the	weapons 0.0 TIV constant million USD per
recovery and return of stolen assets and	100,000 population
combat all forms of organized crime	Not a marky to the LINI Compandian Amainst
	Not a party to the UN Convention Against
	Transnational Organized Crime and its
	protocols (Protocol to Prevent, Suppress and Punish Trafficking in Persons,
	Especially Women and Children; the
	Protocol against the Smuggling of Migrants
	by Land, Sea and Air; and the Protocol
	against the Illicit Manufacturing of and
	Trafficking in Firearms, their Parts and
	Components and Ammunition)
16.5: Substantially reduce corruption and	Gaps in implementation of the United
bribery in all their forms	Nations Convention Against Corruption
	• In 2021, 54% of respondents paid a bribe
	to get a service in public sector the past 12
	months <sup>148</sup>
	In 2015, proportion of firms experiencing
	at least one bribe payment request was
	26.4% <sup>149</sup>

 $^{148}\ https://www.transparency.org/en/news/gcb-pacific-2021-survey-people-voices-corruption-bribery$ 

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 $<sup>^{149}\</sup> https://data.worldbank.org/indicator/IC.FRM.BRIB.ZS?locations = PG$ 

<b>16.6:</b> Develop effective, accountable and transparent institutions at all level	Primary government expenditures as a proportion of the original approved budget reached 96.0% in 2013
<b>16.7:</b> Ensure responsive, inclusive, participatory, and representative decision-making at all levels	NA
<b>16.8:</b> Broaden and strengthen the participation of developing countries in the institutions of global governance	NA
<b>16.9:</b> By 2030, provide legal identity for all, including birth registration	In 2020, birth registrations with civil authority were for only 13.4% of children under the age of five years
<b>16.10:</b> Ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreements	Press Freedom Index is 75.2 for 2021 and 66.6 for 2022 (best 0 – 100 worst)
<b>16.a:</b> Strengthen relevant national institutions, including through international cooperation, for building capacity at all levels, in particular in developing countries, to prevent violence and combat terrorism and crime	NA
<b>16.b:</b> Promote and enforce non-discriminatory laws and policies for sustainable development	NA



Target	Current PNG status
Finance 17.1: Strengthen domestic resource mobilization, including through international support to developing countries, to improve domestic capacity for tax and other revenue collection	<ul> <li>Government spending on health and education (% of GDP) 3.2 in 2019</li> <li>Government revenue excluding grants (% of GDP) 14.2 in 2019</li> <li>Corporate Tax Haven Score (best 0–100 worst) 0.0 in 2019</li> <li>Total government revenue as a proportion of GDP increased from 18.9% in 2000 to 19.9% in 2018.</li> <li>Relative to GDP, the domestic budget funded by domestic taxes was 64.3% in 2018 compared with 62.7% in 2000</li> </ul>
17.2: Developed countries to implement fully their ODA commitments, including the commitment by many developed countries to achieve the target of 0.7 percent of GNI	NA

(ODA/GNI) to developing countries and 0.15 to 0.20 percent of ODA/GNI to least developed countries; ODA providers are encouraged to consider setting a target to provide at least 0.20 percent of ODA/GNI to least developed countries  17.3: Mobilize additional financial resources	EDI in are good from \$455.4 million in 1000
for developing countries from multiple sources	<ul> <li>FDI increased from \$155.4 million in 1990 to \$335.2 million in 2018</li> <li>In 2018, the inflow of personal remittances was 0.0 1% of GDP compared with 0.03% in 2010</li> </ul>
17.4: Assist developing countries in attaining long-term debt sustainability through coordinated policies aimed at fostering debt financing, debt relief and debt restructuring, as appropriate, and address the external debt of highly indebted poor countries to reduce debt distress	Debt service as a proportion of exports of goods and services was 1.7% in 2018 compared with 1.4% in 2010
<b>17.5:</b> Adopt and implement investment promotion regimes for least developed countries	NA
Technology 17.6: Enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge-sharing on mutually agreed terms, including through improved coordination among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism	Fixed-broadband internet penetration reached 0.0 per 100 inhabitants in 2008 to 0.2 per 100 in 2017
17.7: Promote the development, transfer, dissemination and diffusion of environmentally sound technologies to developing countries on favourable terms, including on concessional and preferential terms, as mutually agreed	NA
17.8: Fully operationalize the technology bank and science, technology and innovation capacity-building mechanism for least developed countries by 2017 and enhance the use of enabling technology, in particular information and communications technology	The number of Internet users per 100 inhabitants increased from 0.8 in 2000 to 11.2 in 2017
Capacity-building 17.9: Enhance international support for implementing effective and targeted capacity-building in developing countries to support national plans to implement all the SDGs, including through North-South, South-South and triangular cooperation	The total gross disbursement of ODA for technical cooperation at constant prices in 2018 increased from \$187.4 million in 2000 to \$278.8 million in 2018
Trade	<ul> <li>The worldwide weighted tariff average for countries with most-favoured-nation</li> </ul>

<b>17.10:</b> Promote a universal, rules-based, open, non-discriminatory and equitable multilateral trading system under the World Trade Organization, including through the conclusion of negotiations under its Doha Development Agenda	status increased from 2.0% in 2005 to 3.5% in 2015  • The worldwide weighted tariff average for countries with preferential status increased from 2.0% in 2005 to 3.5% in 2015
<b>17.11:</b> Significantly increase the exports of developing countries, in particular with a view to doubling the least developed countries' share of global exports by 2020	NA
17.12: Realize timely implementation of duty-free and quota-free market access on a lasting basis for all least developed countries, consistent with World Trade Organization decisions, including by ensuring that preferential rules of origin applicable to imports from least developed countries are transparent and simple, and contribute to facilitating market access	<ul> <li>The average most-favoured-nation status tariff applied by developed countries was 0.9% in 2018</li> <li>Developed countries' average preferential status tariff declined from 0.3% in 2000 to 0.2% in 2018</li> </ul>
Systemic issues	NA
Policy and institutional coherence	
<b>17.13:</b> Enhance global macroeconomic	
stability, including through policy	
coordination and policy coherence	
<b>17.14:</b> Enhance policy coherence for sustainable development	NA
<b>17.15:</b> Respect each country's policy space and leadership to establish and implement policies for poverty eradication and sustainable development	NA
Multi-stakeholder partnerships	NA
17.16: Enhance the Global Partnership for Sustainable Development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the SDGs in all countries, in particular developing countries	
<b>17.17:</b> Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships	NA
Data, monitoring and accountability 17.18: By 2020, enhance capacity-building support to developing countries, including for least developed countries and small island developing States, to increase significantly the availability of high-quality, timely and reliable data disaggregated by income, gender, age, race, ethnicity, migratory status, disability, geographic location and other characteristics relevant in national contexts	Statistical Performance Index (worst 0 – 100 best) 40.8 in 2019

**17.19:** By 2030, build on existing initiatives to develop measurements of progress on sustainable development that complement GDP, and support statistical capacity-building in developing countries

The value of all available resources to strengthen statistical capacity in developing countries was \$921,400 in 2017.

## **Annex 2: List of Stakeholders**

Below is a list of stakeholders consulted in the development of this report.

- 1. Asian Development Bank
- 2. Government of Australia
- Care International
- Caritas
- 5. CDI Foundation
- 6. Centre for Environmental Law and Community Rights (CELCOR)
- 7. Child Fund
- 8. Christensen Fund Melanesian Program
- 9. Climate Change Development Authority
- 10. Commonwealth Scientific and Industrial Research Organisation (CSIRO)
- 11. Community Rights and Advocacy Forum
- 12. Conservation and Environment Protection Authority (CEPA)
- 13. Department of Agriculture and Livestock
- 14. Department of Community Development and Religion
- 15. Department of Education
- 16. Department of Foreign Affairs and Trade
- 17. Department of Health
- 18. Department of Implementation and Rural Development
- 19. Department of Justice and Attorney General
- 20. Department of Lands and Physical Planning
- 21. Department of National Planning and Monitoring
- 22. Department of Provincial Affairs and Local Level Government
- 23. Department of Treasury
- 24. Digicel Foundation
- 25. Eco custodians
- 26. Equal Playing Field
- 27. European Union Commission
- 28. FHI 360
- 29. International Committee of Red Cross
- 30. International Labour Organisation
- 31. International Union for Conservation of Nature (IUCN) Oceania
- 32. James Cook University
- 33. Japan International Cooperation Agency
- 34. Kokoda Track Foundation
- 35. Leitana Nehen Women's Development Agency
- 36. Meri Toksave
- 37. Museum, Hawaii
- 38. National Capital District Commission
- 39. National Quarantine Inspection Authority
- 40. National Statistical Office
- 41. National Youth Development Authority
- 42. New Zealand Agency for International Development
- 43. Oil Search Foundation
- 44. PIKU Biodiversity network
- 45. PNG Forest Authority
- 46. PNG National Disaster Centre
- 47. PNG Stock Exchange

- 48. Principal lawyer, CELCOR
- 49. Reef and Rainforest Research Centre
- 50. Royal Melbourne Institute of Technology (RMIT)
- 51. Save the Children Fund
- 52. Secretariat of the Pacific Regional Environment Programme
- 53. The Nature Conservancy
- 54. The Voice Inc
- 55. United States Agency for International Development (USAID)
- 56. University of New South Wales/ Australian Centre for International Agricultural Research (UNSW/ACIAR)
- 57. WaterAid Global
- 58. Wildlife Conservation Society PNG
- 59. World Bank
- 60. World Vision
- 61. Worldwide Fund for Nature (WWF)
- 62. Young Women's Christian Association.