



# INTEGRATED SDG INSIGHTS PAPUA NEW GUINEA

This initiative supports the articulation of national commitments to SDG transformation, towards accelerated SDG action in the second half of the 2030 Agenda.



# HOW TO READ THIS REPORT



Integrated SDG Insights provides an overview of a country's economic growth trajectory, highlighting potential conflicts between growth, environmental concerns, and societal well-being (referred to as the **SDG Moment**).



It builds from the foundation of national SDG progress through the lens of the 5Ps and uses machine learning to analyse national development ambition with an SDG lens (**SDG Trends & Priorities**).



Combined, these insights are mapped against SDG interlinkages to define policy choices that accelerate SDG progress, tailored to national context (**SDG Interlinkages**).



These policy choices are made against fiscal constraints and opportunities for stimulus to ensure choices translate to development impact and leave no one behind (**Finance & Stimulus**).

# SDG MOMENT: PAPUA NEW GUINEA

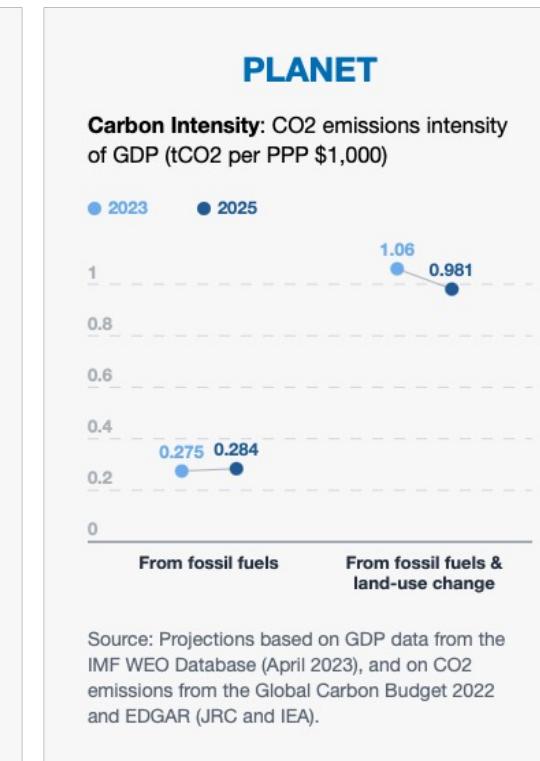
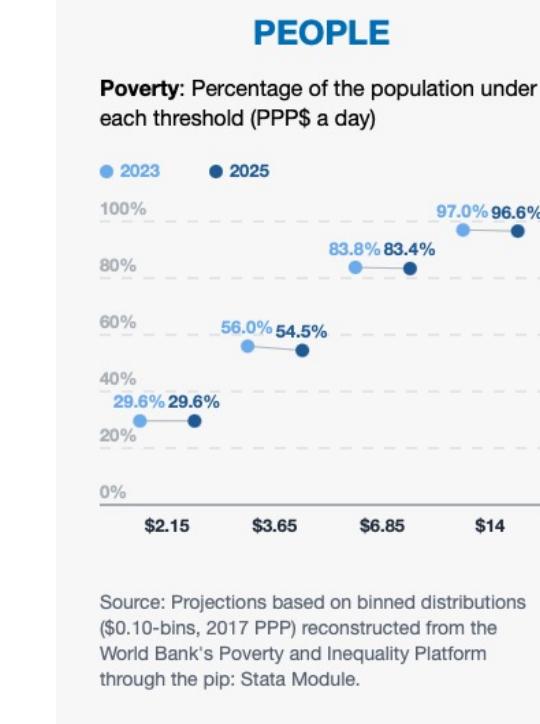
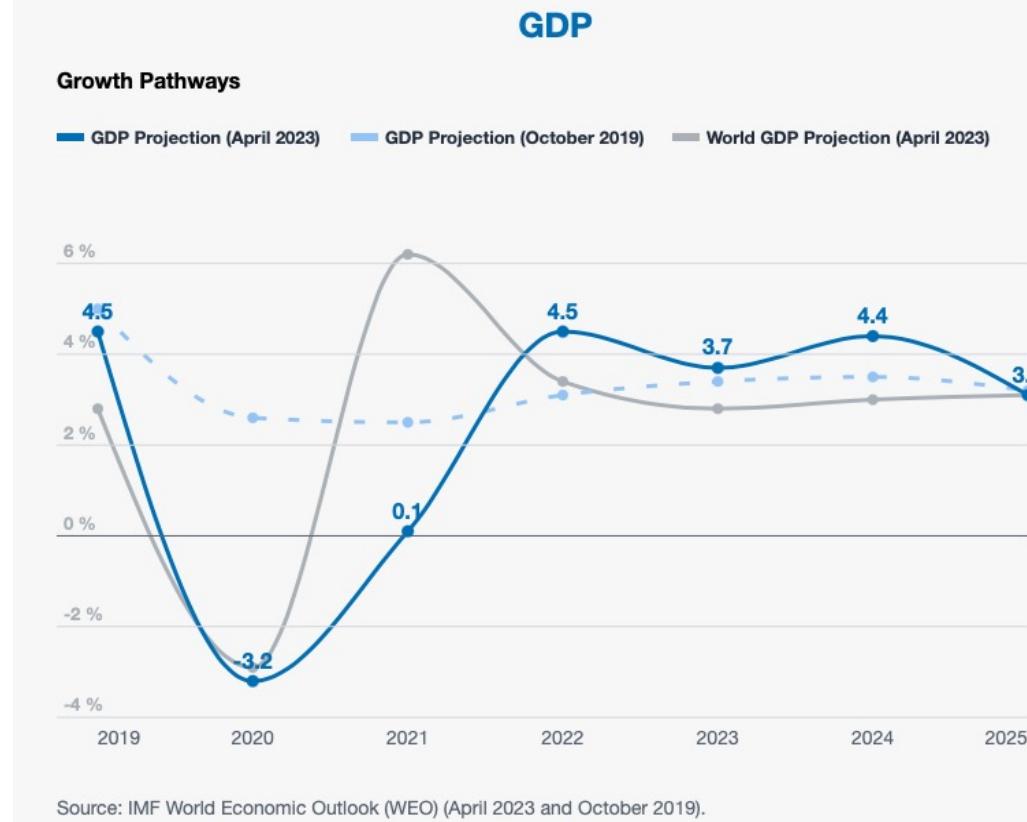
While economic growth is a key element in achieving the SDGs, many countries are intent on moving beyond growth as a yardstick for progress. In the short run, growth enables the SDGs; but in the long run, the SDGs aim to transform the pattern of growth itself.

Papua New Guinea (PNG) is a climate- and disaster-vulnerable country. Extractives account for just under 30% of GDP and over two-thirds of the country's exports. Liquified natural gas, gold and copper are the leading commodity exports. Over the past decade, several shocks have constrained economic growth. The impacts of El Niño in 2015-2016, an earthquake in 2018, and the COVID-19 pandemic in 2020. Over the 2023-2024 period the country has recorded more favourable economic growth outcomes and this is expected to continue into 2025.<sup>1</sup> This pace of growth exceeds the global projection over the 2023-2025 cycle and is above the country's pre-pandemic growth trajectory. Despite aggregate growth performance and positive economic outlook in the short-term, PNG's per capita income growth over this cycle averages only 1.6% —and almost zero over 2019-2025. Much of the economy's growth is based on extractive activities and is unequally distributed across the population.

The pace of economic growth over 2023-2025 is not expected to exert a noticeable effect on lowering the incidence of poverty, leaving it virtually unchanged in the short-term. In light of this fact, and the country's high levels of poverty and stagnating human development indicators, the potential SDG policy options include increasing human resource capacity; balancing economic growth through critical investments in infrastructure, education, and health; and diversifying and digitalizing the economy. Approximately 57% of the population is multidimensionally poor while another 25% are vulnerable to multidimensional poverty<sup>2</sup> making accelerated growth and poverty reduction an urgent development imperative.

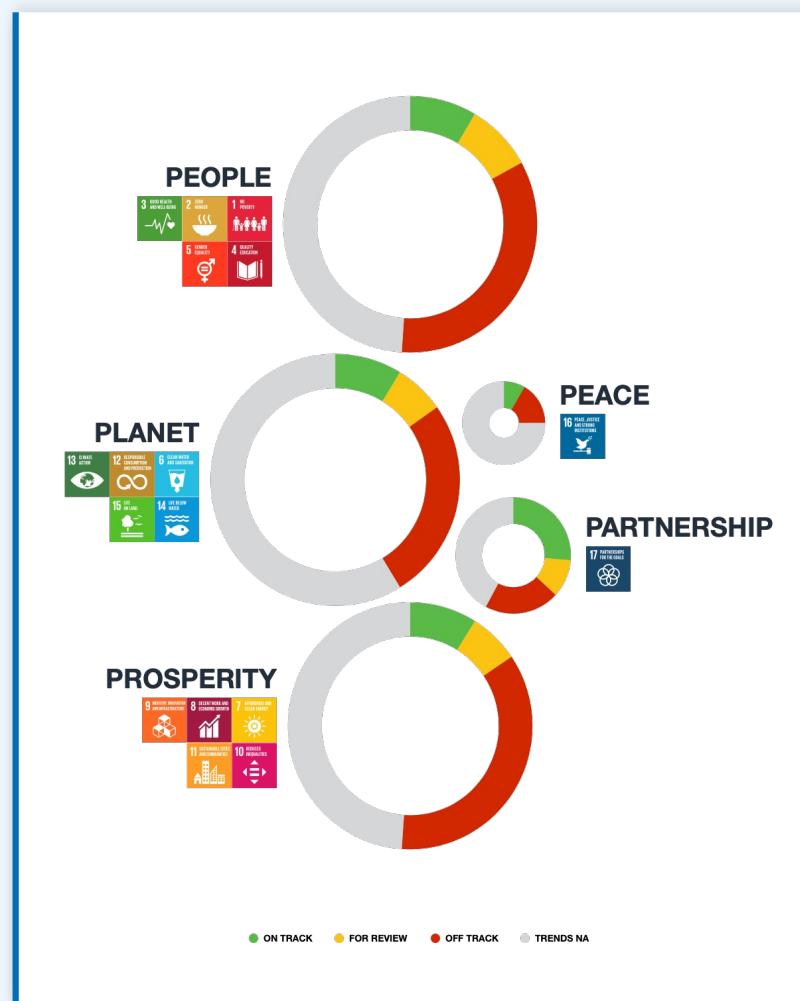
<sup>1</sup> Favorable being defined as growth rates of 3% and above.

<sup>2</sup> 2021 estimates based on 2018 data.



# SDG TRENDS

Understanding how PNG performs against SDG targets provides a starting point against which to build integrated SDG pathways. SDG progress tracking follows [UN Stats](#) standards and [methodology](#), and is aligned with country profiles.



# SDG PRIORITIES

PNG's national priorities are analysed using machine learning to reveal the most prominent SDGs referenced in national policy documents. This analysis uses a custom-built model for SDG classification. It considers 100k+ terms, including phrases and expressions.



## Key documents analysed:

1. Voluntary National Review 2020
2. Bank of Papua New Guinea Annual Report and Financial Statements 2020
3. United Nations Sustainable Development Cooperation Framework 2024-2028
4. Common Country Analysis 2022 Update
5. IMF PNG Article IV March 2023
6. Medium Term Development Plan (MTDP) IV 2023-2027
7. Public Investment Programme for (Government Departments)
8. PNG Economic Update: Unlocking the Economic Benefits of Gender Equality 2023
9. Papua New Guinea Vision 2050

# SDG INTERLINKAGES

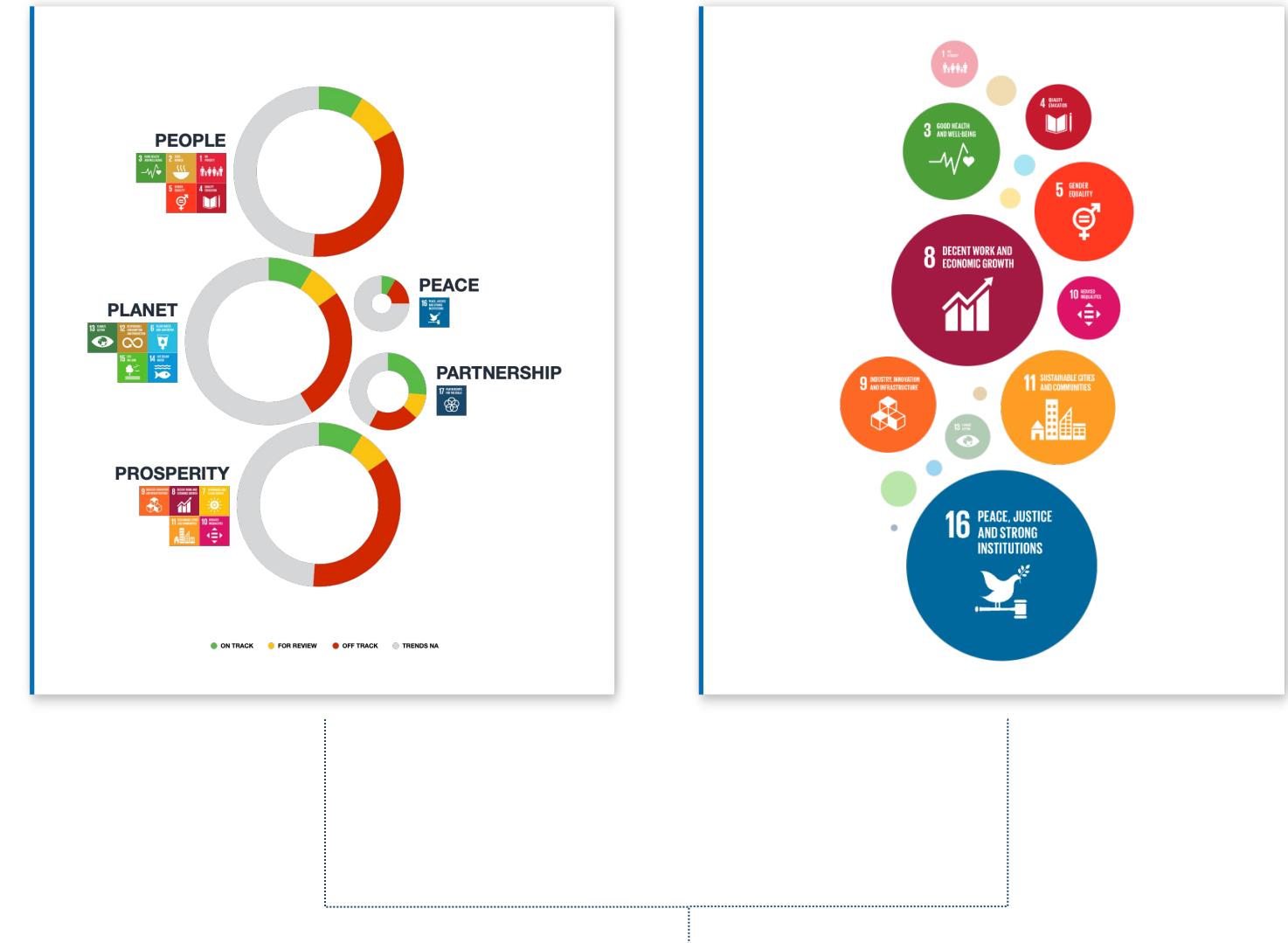
SDG interlinkages reveal how actions directed towards one SDG can impact other SDGs. Uncovering and understanding these interactions can help PNG to achieve the 2030 Agenda for Sustainable Development and to navigate trade-offs.

Based on a global framework for interlinkages, PNG's SDG progress is colour-coded at the target level.

Building from national trends and priorities, the following integrated SDG pathways reflect policy choices with the most potential to accelerate the SDGs in PNG:

- Target 2.2: End all forms of malnutrition
- Target 4.1: Free primary and secondary education
- Target 5.1: End discrimination against women and girls
- Target 8.1: Sustainable economic growth
- Target 9.1: Develop sustainable, resilient and inclusive infrastructures
- Target 16.3: Promote the rule of law and ensure equal access to justice
- Target 16.6: Develop effective, accountable and transparent institutions

These pathways will be explored in more detail in the following slides.



## ACCELERATION PATHWAYS

SYNERGIES

TRADE-OFFS

# SDG INTERLINKAGES

**Target 2.2:** By 2030, end all forms of malnutrition and poor nutrition, including achieving the internationally agreed targets on stunting and wasting in children under 5 years of age by 2025, and address the nutritional needs of adolescent girls, pregnant and lactating women and older persons.

Stunting in children correlates 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 PNG – up to an estimated 11 percent of GDP. [1]

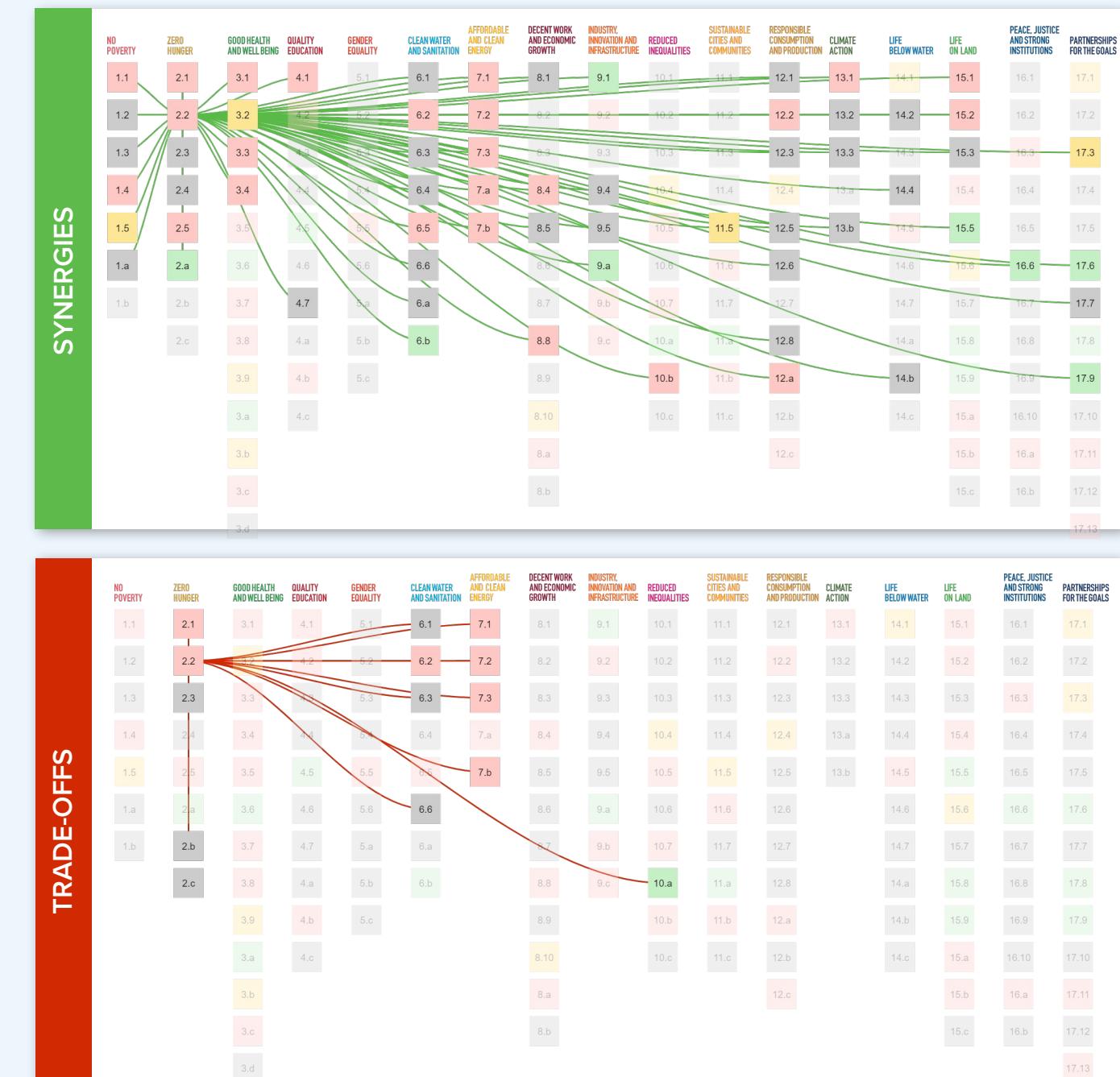
Government recognizes that good nutrition is the cornerstone for survival, health and development. In 2020, the prevalence of stunting in children under five stood at 37 percent, while the prevalence of wasting in children at the same age stood at 9.6 percent. [2] Related to stunting is the high level of food insecurity, more likely experienced by rural residents than urban residents (58 percent versus 52 percent). [3]

Through the National Nutrition Policy and National Food Security Action Plan, the government aims to promote and increase the production of staple foods, livestock breeding and to roll out inland aquaculture and apiculture (honeybees) programmes with nutritional values.

Investments that alleviate malnutrition can directly reduce deprivation by lowering poverty (SDG 1) and enhancing the health and well-being (SDG 2 and SDG 3) of Papua New Guineans. They also lay the foundation for better educational and skill acquisition outcomes (SDG 4) and, as mentioned above, this is likely to enhance adult productivity and increase labour force participation directly. This in turn will impact economic growth, employment (SDG 8), and further reduce poverty and deprivation (SDG 1).

[1]UNICEF PNG, Country Programme 2018-2022: Nutrition Programme Strategy Note, 2016.; [2] Medium-Term Development Plan (MTDP ) IV 2023-2027; [3] PNG Demographic and Health Survey 2016-2018.

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Explore the interlinkages at:

<https://data.undp.org/sdg-push-diagnostic/PNG/synergies-and-tradeoffs>

# SDG INTERLINKAGES

**Target 4.1: By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes.**

Although educational attainment at household level has increased since 2006, government expenditure on education is relatively low at 1.9 percent of GDP (2018) and 8.7 percent of total government expenditure (2018). Almost one in four women (23 percent) and 13 percent of men aged 15-49 have no formal education. The literacy rate is low, estimated at 61.6 percent in 2020. The urban-rural disparity in education is pronounced at secondary or higher levels – 19 percent of women in urban areas have completed secondary/higher education compared with only six percent of rural women [1,2].

In the medium-term, the government aims to increase the national literacy rate by 70 percent by 2027. It also aims to equip the population with professional, technical and vocational skills. The national policies include the following three elements:

- National Education Policy 2020-2029
- Higher and Technical Education Strategy Implementation Plan 2017-2038
- Technical Vocational Education and Training

Equitable education and skills development is an important part of human resource development and by itself increases human capability and opportunity and lowers immediate deprivation (SDG 1). By improving decision-making capacity and improving civic attitudes it can improve health and well-being (SDG 3) and lay the foundation for stronger institutions and social cohesion (SDG 16). The most fundamental catalytic effect is by making people more productive, improving employment opportunities and producing more output over the medium- to longer-term. Economic development is most successful when women participate equally in the labour force. Achieving this target will empower women (SDG 5) and raise both female labour force participation and economic growth (SDG 8).

[1] UN Common Country Analysis. 2022 update; [2] PNG Demographic and Health Survey 2016-18 and World Bank Development Indicators.

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# SDG INTERLINKAGES

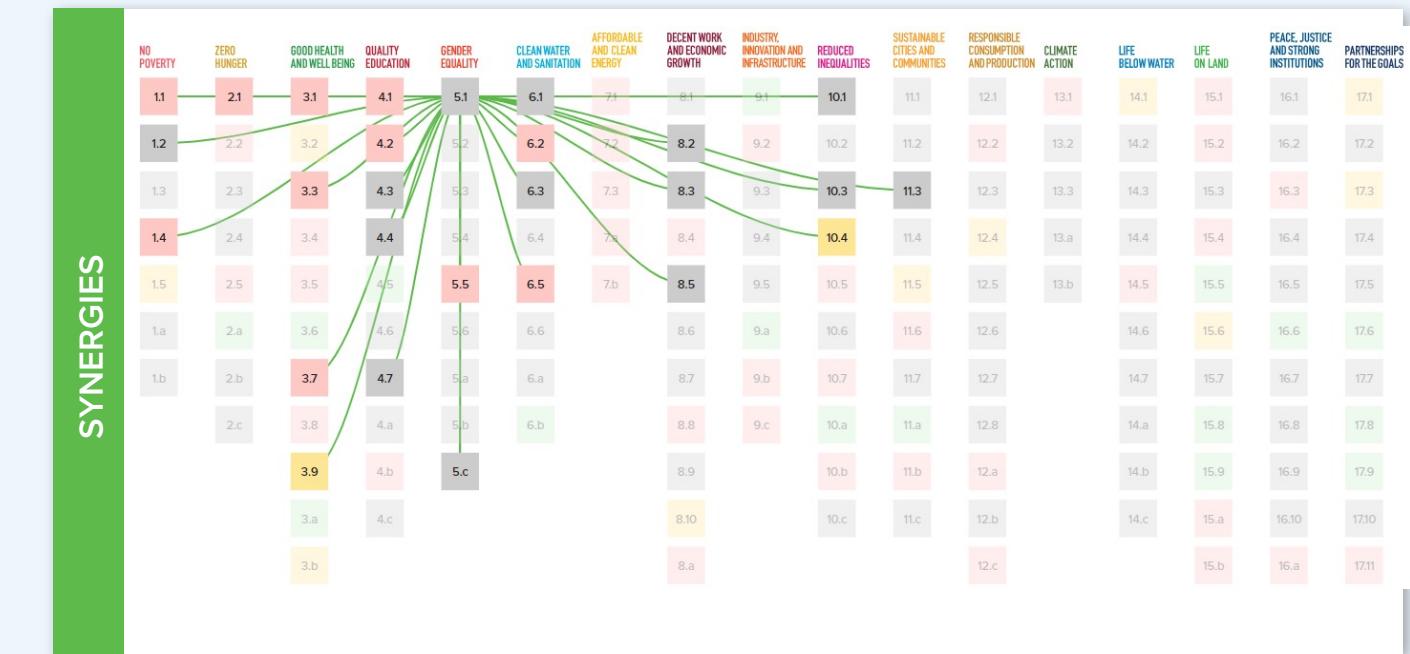
## Target 5.1: End all forms of discrimination against all women and girls everywhere

PNG has faced significant challenges in achieving gender equality and protecting the rights of women and girls. High rates of gender-based violence, limited access to education and healthcare, and unequal economic opportunities persist.

Investments in SDG Target 5.1 are critical for the country to advance gender equality, human rights, and overall development. Empowering women economically can contribute to poverty reduction, and reducing gender-based violence can lead to better physical and mental health outcomes for women and girls. Addressing gender discrimination can improve access to education for girls, supporting progress toward universal education.

However, while efforts to combat gender-based violence align with peace and justice objectives, addressing these issues may reveal institutional weaknesses or require significant legal and policy changes, which can be challenging.

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# SDG INTERLINKAGES

**Target 8.1: Sustain per capita economic growth in accordance with national circumstances and, in particular, at least 7 percent GDP growth per annum in the least developed countries.**

Sustained per capita economic growth is an urgent imperative for PNG and is what is required to meaningfully reduce multidimensional poverty. Sustained per capita income increases the likelihood that government can generate more revenue and increase its capacity to invest in human resources and physical infrastructure, thereby creating a pathways to more sustainable and equitable development.

PNG's economic growth largely depends on the extractive sector, which contributes 28 percent to GDP and 88 percent of exports, followed by agriculture which contributes 19 percent to GDP.<sup>[1]</sup> The dependence on a few sectors means the country is vulnerable to external shocks, such as commodity prices, and also signifies limited employment opportunities and limited sources of income. The unbalanced nature of growth can often imply jobless growth and the persistence of underemployment and unemployment in large segments of the economy.

Policies focused on sustaining per capita economic growth include the following:

- Diversification into new sectors and development of existing sectors
- Business climate policies, such as privatization, deregulation and free trade
- Better calibrated demand-side policies, including tax, interest rate and exchange-rate policies.

Sustained per capita income growth is likely to positively impact most SDGs (SDG 1-9, 11-12, 16-17) and, as an objective, it is perhaps the most important for enhancing the well-being of the people of Papua New Guinea. However, economic expansion at that rate should be carefully designed not to be carbon reliant – the country's carbon emissions intensity of GDP is expected to increase at an annual rate of 1.7% due to higher fossil fuel usage<sup>[2]</sup> (SDG 13, 14, 15). In the near-term rapid growth, if not properly balanced, could exacerbate income inequality (SDG 10).

[1] PNG National Statistical Office; [2] CO2 emissions intensity of GDP is computed as tonnes of CO2 per \$1,000 (2017 PPP). Excludes land use change.



Explore the interlinkages at:

<https://data.undp.org/sdg-push-diagnostic/PNG/synergies-and-tradeoffs>

# SDG INTERLINKAGES

**Target 9.1: Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all.**

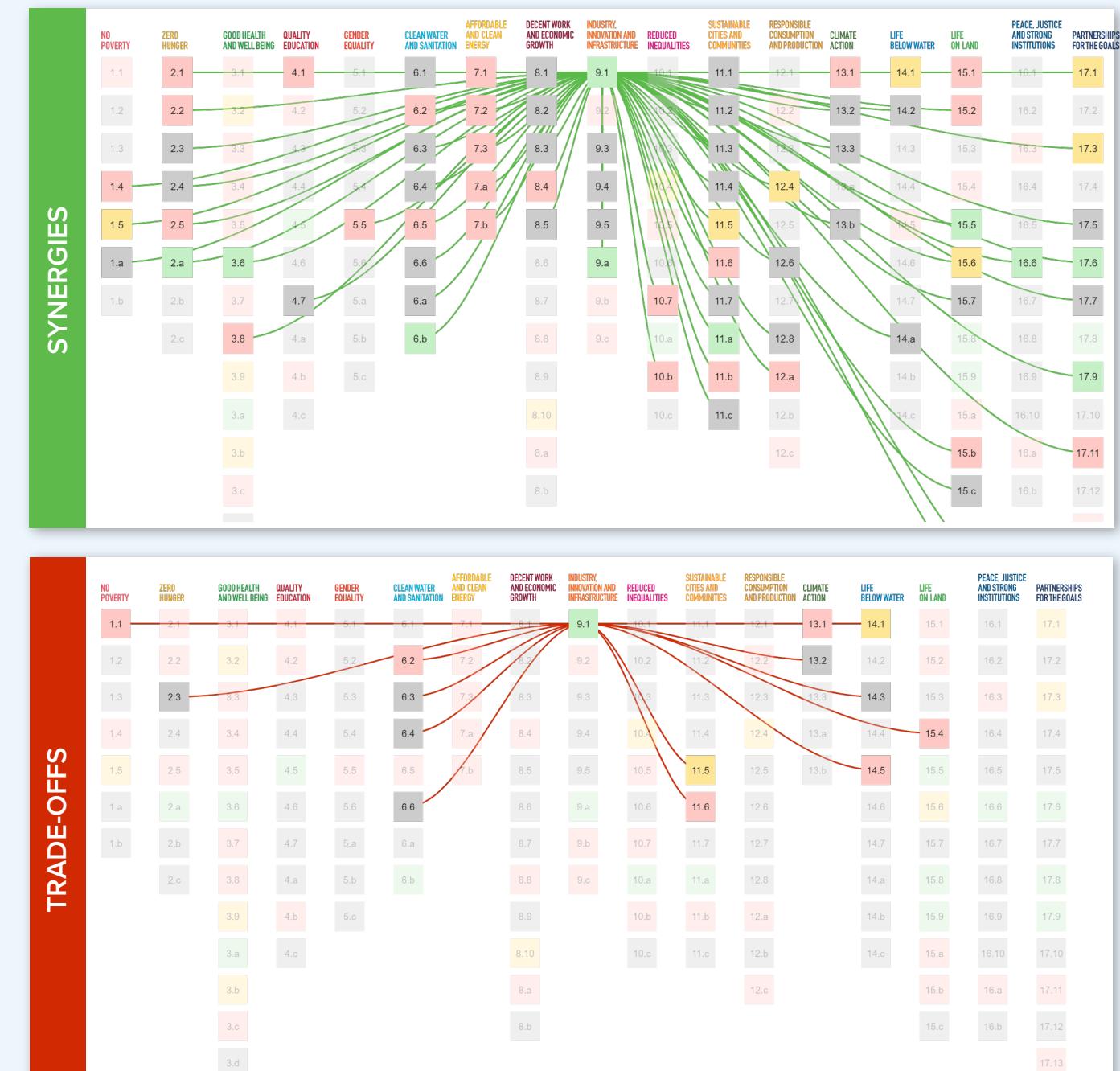
High-quality infrastructure is essential for development. Papua New Guinea is a large country with a predominantly rural and spatially unconnected/remote population. Infrastructure provisions have been inadequate to service the needs of the country and attract additional capital investments. Transport infrastructure has steadily declined, threatening economic development and limiting access to markets and social services for much of the population, resulting in high costs for business activities.

Rapid population growth outpaces investment in health, education, water, sanitation and hygiene (WASH) and waste infrastructure and services in urban, peri-urban and rural areas. The remoteness of many rural communities creates immense challenges for responding to natural disasters effectively, and a lack of local infrastructure and health services can have long-lasting impacts on communities following catastrophic events.

Infrastructure investments in energy, water, roads and hospitals among other spheres, will directly reduce poverty, improve well-being and boost economic growth in the country. Well-targeted and sustainable infrastructure investment will be catalytic because it will serve as a basic input into many types of production and will spur investment – both domestic and foreign (All SDGs). Some trade-offs may occur through deforestation(SDG 15), which can be offset by land use planning, sustainable agriculture, and sustainable consumption and production. Despite lowering the transportation costs, there is a possibility that greater connectivity in the country will increase rural to urban migration and create settlement and social cohesion issues in the short-run (SDGs 6, 10, 16).

[1] Common Country Analysis 2022 update.; [2] MTDP IV.

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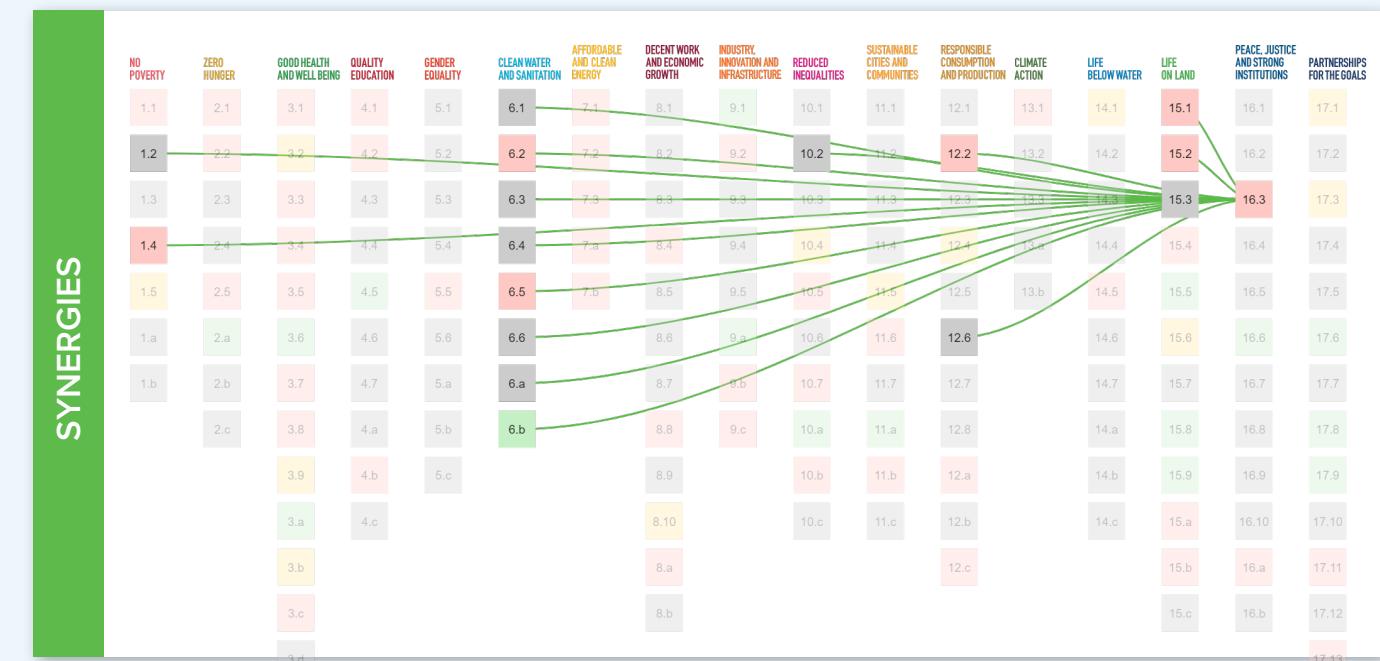
# SDG INTERLINKAGES

**Target 16.3: Promote the rule of law at the national and international levels and ensure equal access to justice for all.**

To achieve objectives related to citizens' security and the rule of law, the Government of PNG, guided by the MTDP IV, aims to increase recruitment and training of police officers, correctional services officers, rehabilitation and reintegration personnel and court officials. The government will also enhance infrastructure and engage in capacity-building for all law and justice sector agencies. Following the recommendations of the 49th Session of the Human Rights Council will also be highly beneficial to the country.

Promoting the rule of law also requires social sector investment, particularly in education. The rule of law will improve citizens' security and directly improve their lives and opportunities. It will also improve the atmosphere for decision-making, including the business climate. Law and order also reduces the cost of transacting and is likely to improve economic growth. This target will impact all SDGs positively with potentially no meaningful trade-offs.

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*Explore the interlinkages at:*

<https://data.undp.org/sdg-push-diagnostic/PNG/synergies-and-tradeoffs>

# SDG INTERLINKAGES

## Target 16.6: Develop effective, accountable and transparent institutions at all levels.

Institutional quality and good governance with accountability and transparency ensure the best possible allocation of resources to serve the best interests of the people of Papua New Guinea.

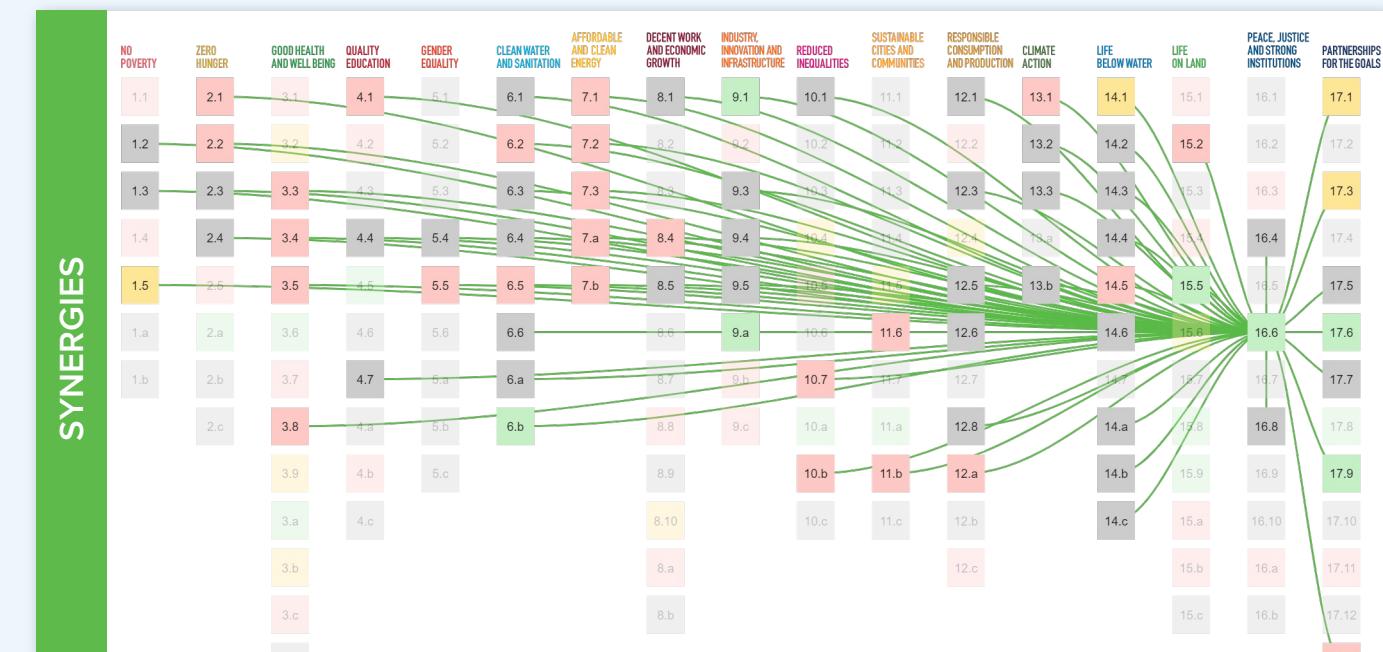
PNG ratified the United Nations Convention Against Corruption in 2007, and the UN has reviewed its implementation since 2009. The new Independent Commission Against Corruption is also now established. Additionally, Papua New Guinea has ratified six international human rights instruments. World Bank governance indicators, including Voice and Accountability and Government effectiveness, have decreased since 2015. In addition, Papua New Guinea ranks 130 out of 180 countries on Transparency International's Corruption Perceptions Index for 2022. In addition, 96 percent of respondents to the Global Corruption Barometer believe that corruption in government is a significant problem.

the Government has a stated policy to improve accountability, transparency and more effective governance. To achieve higher standards of good governance in the public service, protect the public's trust and promote accountability, the government will undertake the following two actions:

- Promote Open Government Partnership initiatives to uphold the principles of good governance
- Strengthen the role of the Independent Commission Against Corruption, the integrity of the Auditor General and the Ombudsman Commission to ensure that the rule of law is upheld, that regular financial auditing is prioritized and that relevant checks and balances are expedited.

Effective, accountable and transparent institutions lead to better decision-making, better resource allocation and is likely to improve the opportunities and capabilities of all Papua New Guineans. Improved governance is linked to accountable public financial management that will enable improvements in health(SDG3) and education outcomes(SDG 4), reduced poverty (SDG 1) and higher economic growth(SDG 8).

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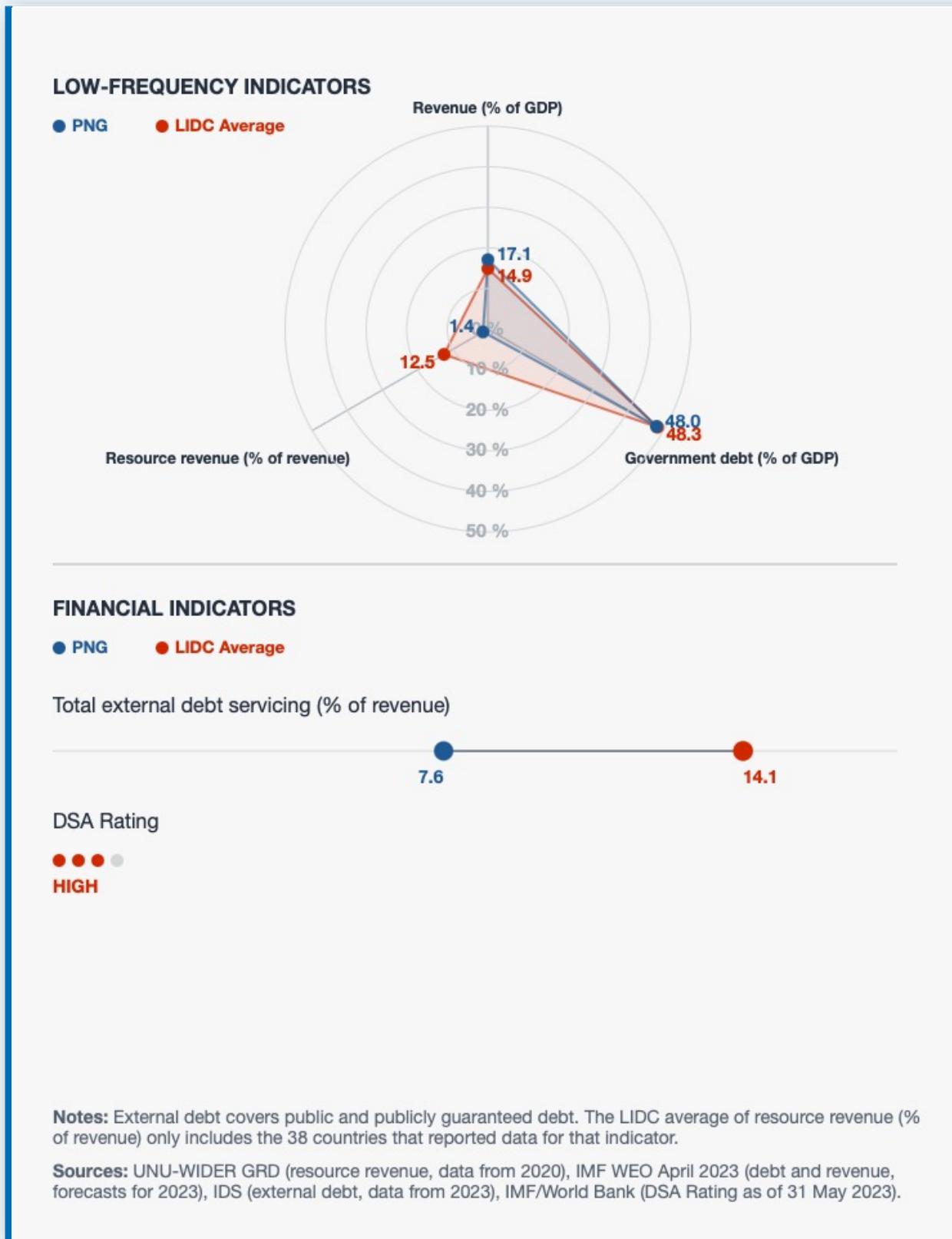
# FINANCE & STIMULUS

Many countries are facing reduced fiscal space, high debt levels, rising interest rates and downgrades on credit ratings. Fiscal and financial constraints tend to slow or even reverse SDG progress.

The radar diagram opposite shows low frequency data points linked to government revenue and debt as a proportion of GDP and the natural resource share of total revenue. The financial indicator graphs show external debt servicing relative to revenue and the country's latest Debt Sustainability Assessment (DSA) risk rating.

PNG's gross government debt, projected at 48% of GDP in 2023, is close to the low-income developing countries' (LIDC) average of 48.3%. PNG is projected to collect 17.1% of GDP in revenue this year, 2.2 percentage points more than the LIDC average of 14.9%.

PNG's external debt servicing this year is projected to be at 7.6% of revenue, nearly half the lower-middle income country average of 14.1%. Due to its weak debt-carrying capacity and susceptibility to export and to other shocks, the latest World Bank and IMF DSA from September 2022 rated the country at 'high risk of debt distress'. This is due to the structure and profile of the debt, with large balloon payments due within the next two years. In addition, the debt servicing is subject to variable interest rates and constrained by limited foreign exchange availability to pay external debts.



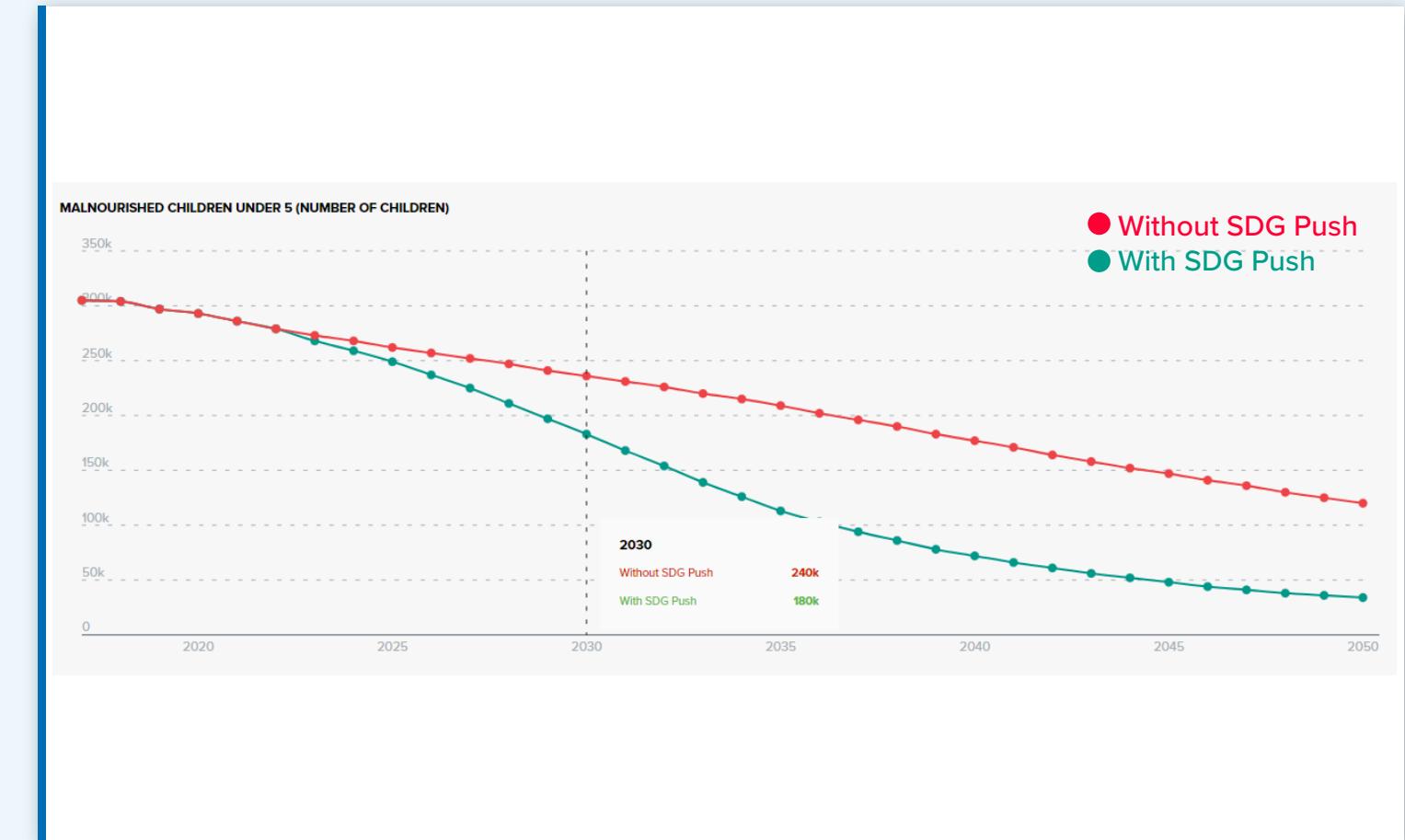
# FUTURES SCENARIOS

## Achieving the SDGs is possible

The ‘SDG Push’ is a futures scenario based on 48 integrated accelerators in the areas of Governance, Social Protection, the Green Economy and Digital Disruption. It uses national data to explore the impact on human development by 2030 and by 2050 across key SDG indicators, extrapolating the latest economic growth trends and assuming a reduction in inequalities across time.

Incorporating ‘SDG Push’ accelerators into development interventions in Papua New Guinea can reduce the absolute number of malnourished children under 5 years of age.

Malnourished children	By 2030	By 2050
Without the SDG Push	240,000	120,000
With the SDG Push	180,000	34,000



**Further details on Showing Future Scenario for PNG:**

<https://data.undp.org/sdg-push-diagnostic/PNG/future-scenarios>

# SDG STIMULUS

The [UN Secretary General's SDG Stimulus Plan](#) lays out a blueprint for action within the existing financial architecture. It includes:

- Providing liquidity to support recovery in the near term
- Enhancing debt relief for vulnerable countries
- Expanding development financing by MDBs
- Aligning financial flows with the SDGs and the Paris Agreement, according to country-level priorities and needs, for example through the roll-out of the UN Integrated National Financing Framework (INFFs).

Given the projected fiscal and financial constraints faced by PNG, possible funding options for the investments derived from the identified interlinkages are as follows:

- Tax and revenue reform
- Multilateral and bilateral finance (concessional funding, de-risking loan instruments/underwriting)
- Public-Private Partnerships (PPPs) that crowd-in blended financing to climate proof infrastructure
- SDG finance
- Accessing insurance, including disaster risk
- Remittances, philanthropy and faith-based financing

**United Nations  
Secretary-General's  
SDG Stimulus  
to Deliver  
Agenda 2030**

FEBRUARY 2023



# METHODOLOGY

Click [here](#) to view the Methodological Note for the Integrated SDG Insights



## SDG MOMENT

### Methodology

Assesses challenges and opportunities in national growth trajectories with insights on environmental sustainability and inclusiveness.

### Data Sources

Future trajectories to 2025 are based on IMF-WEO GDP projections, distributions of per capita income or consumption from the World Bank, and CO<sub>2</sub> emissions from the Global Carbon Budget 2022 and EDGAR (JRC and IEA).



## TRENDS & PRIORITIES

### Methodology

SDG trends tracks progress from 2015 to date for the 231 indicators. National priorities are analysed using machine learning to reveal the most prominent SDGs referenced in national policy documents.

### Data Source

Trends utilizes official [UN statistics](#) to assess [SDG progress](#), supplemented with national data when available. Priorities uses a custom-built model for SDG classification. The policy documents analyses are provided by Governments.



## INTERLINKAGES

### Methodology

Global target-level interlinkages are drawn from the [KnowSDGs Platform by European Commission](#). SDG interlinkages were retrieved through a structured literature review in Scopus and Google Scholar to tap both grey literature and peer-reviewed publications as a source of information.

### Data Source

The exercise globally considered a total of 454 documents published from 2015 to August 2022. ([Miola et al., 2019 updated in 2021-2022](#))



## FINANCE & STIMULUS

### Methodology

Provides insight into indicators of fiscal and financial stress with options (INFF) for stimulus and other means to accelerate progress.

### Data Source

Most recent resource data from UNU-WIDER GRD (between 2018 and 2021), debt and revenue from IMF WEO (between 2020 and forecasts for 2023), external debt from IDS (2023), yields from Haver Analytics (8 June 2023), credit ratings from S&P, Moodys and FITCH (2023), and DSA ratings from World Bank/IMF (31 May 2023).