

# A BUMPY ROAD: SOCIETAL TRENDS IN PAPUA NEW GUINEA

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## INTRODUCTION

On many indicators, Papua New Guinea's rapid population growth is outpacing development progress. Service delivery across the country is in decline. Growing urbanisation is increasing the burden on service providers as people who move from rural areas generally lose access to their customary land and become less self-sufficient. More than 40 per cent of the population is under the age of 14.

The resulting youth bulge is outstripping very limited formal sector employment opportunities. The needs of the private sector are evolving, and skills development is critical. New immigrant groups are moving in to Papua New Guinea and taking over small and medium businesses that have typically been run by locals, adding further societal and employment pressures.

This paper will chart these trends in Papua New Guinea, and the impact they will have on political stability, policymaking and development. It will look at trends in service delivery, employment, and skills development. It will look at the role of new immigrants in Papua New Guinea and future workforce capacity, and assess the government's capacity to deal with these challenges.

## SNAPSHOT OF PAPUA NEW GUINEA

Table 1: Papua New Guinea at a glance

Land area	461,937 km <sup>2</sup>
Marine jurisdiction	3.1 million km <sup>2</sup>
Population	8.251 million (est) <sup>1</sup>
Population growth rate	3.1% (2015)
Human Development Index	0.516 (2015), ranked 154 out of 188 countries <sup>2</sup>
GDP	US\$ 21.2 billion (2015) <sup>3</sup>
GDP growth rate	2.5% (2017) <sup>4</sup>
GDP per capita	US\$ 2,745 (2015) <sup>5</sup>
Structure of economy (top 5)	Extractive industry: 24%; Agriculture, Forestry and Fishing: 18%; Retail trade: 10%; Construction: 8%; Administrative and Support services: 7% (2016) <sup>6</sup>
Composition of exports (top 5)	LNG: 33%; Gold: 27%; Agricultural, marine and other non-mineral: 12%; Oil/petroleum: 8%; Nickel/copper/cobalt: 8% (2016) <sup>7</sup>
Poverty (Basic Needs Poverty)	39.9% (2009) <sup>8</sup>
Employment	61.6% (2009) <sup>9</sup>
Infant Mortality Rate	58/1,000 (2009) <sup>10</sup>
Maternal Mortality Rate	733/100,000 (2009) <sup>11</sup>
HIV/AIDS Prevalence Rate	0.8% (2015) <sup>12</sup>
Gender Inequality Index	0.595 (2015), ranked 143 out of 157 countries <sup>13</sup>
Women in Parliament	0 (2017, decreased from 3 in 2012 elections)
Primary enrolment rate	50.9% (net 2009) <sup>14</sup>
Secondary enrolment rate	28.1% (net 2009) <sup>15</sup>
Access to potable water	25.8% (2009) <sup>16</sup>

On a wide range of social indicators Papua New Guinea remains one of the world's most underdeveloped nations. More than a decade of strong economic growth has not improved the welfare of most Papua New Guineans. GDP per capita is little different from that at independence 42 years ago. Incomes are also growing increasingly unequal, meaning that some are likely to be significantly worse off. Papua New Guinea will need decades more high and inclusive growth to offset its rapidly growing population. There will need to be better implementation of progressive social policies to translate inconsistent benefits of natural resource wealth to an improved standard of living for all people.

Improving Papua New Guinean welfare is not easy. It is a very young country made up of a patchwork of thousands of different cultures, its people largely living in rural areas, many of which are relatively inaccessible. The tension between traditional society, which still underpins the welfare system for most of the population, and the 'modern' world makes economic, social, environmental, and cultural development in Papua New Guinea complex. Papua New Guinean identity remains tenuous, with most citizens retaining a stronger allegiance to, and trust in, sub-national groupings, notably clans or *wantoks*, than at a national level.

In an effort to address these challenges, Papua New Guinea has developed a complex and decentralised system of government, with three tiers of government (national, provincial, and local), and four levels of administration (national, provincial, district, and Local Level Government (LLG)). In recent years District Development Authorities, chaired by the local MP and including the council presidents, have emerged as another prominent tier of government, often better resourced than other decentralised levels. In total the country is divided into four regions, 21 provinces (plus the National Capital District), 89 districts and 319 LLGs. The national government also maintains 33 ministries and over 140 departments and agencies, some with seemingly overlapping responsibilities and unclear or ambiguous lines of reporting. This has created significant confusion about who is responsible for what, making it difficult for communities to hold leadership to account:

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**“Today the PNG nation-state functions in a dysfunctional manner... because many of our politicians and bureaucrats are still learning how to manage public institutions independently of personal benefit and kingship loyalties.”**

Dr Joseph Ketan<sup>17</sup>

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Altogether the Auditor General is expected to audit nearly 1000 public institutions each year, including state-owned enterprises. Despite this proliferation of agencies, the public service is not much larger than at independence, while the population has nearly tripled, with some functions, such as police capacity, particularly lagging on a per capita basis.

Papua New Guinea is also a pluralistic nation. Its urban centres do not reflect the lifestyles, employment practices, and incomes of the 88 per cent of the population that live in rural areas. The United Nations Development Programme estimates Papua New Guinea to have the second-highest rural–urban population balance in the world after Burundi.<sup>18</sup> PNG’s Director of the Office of Urbanisation notes that this partly reflects the outdated delineation of urban boundaries as towns and cities have grown, with urban populations having expanded significantly over recent years.<sup>19</sup>

According to best available evidence, the proportion of the population living below the basic needs poverty line rose from 34 per cent in 1996 to 36.2 per cent in 2009/10, meaning approximately 2.43 million people are living in hardship.<sup>20</sup> The majority of the population live in areas of poor infrastructure and often rugged terrain, which gives them little or no access to basic services, such as health, education, sanitation, and safe drinking water.

Poverty remains a contested concept in Papua New Guinea. The abject poverty seen in many parts of the world is largely absent from Papua New Guinea, or at least hidden by subsistence food production which also masks the high levels of malnutrition and stunting prevalent in rural Papua New Guinea.<sup>21</sup> The poverty experienced by more than 2.4 million people in Papua New Guinea is rather one of opportunity and income. Papua New Guinea has yet to meet any of the Millennium Development Goals.

## SERVICE DELIVERY

Services are delivered in Papua New Guinea through a patchwork of government agencies, non-government organisations and, critically, church and faith-based organisations. The country benefits from a very strong network of churches that, with government funding, run about half of the country's health and education systems, particularly in rural areas.<sup>22</sup> Services across many parts of the country are perceived to have diminished over the past two decades. Progressive cash shortages, a weakening of institutional capabilities, the marginalisation of government departments, growing prevalence of corrupt practices (including in public procurement) and lack of clarity with poor coordination of responsibilities present enormous challenges. These combine with inadequate investment in education and skills development from the mid-1990s and decline in recruitment and mentoring of successor staff, leading to an erosion of skills in the service delivery workforce, and the decline of infrastructure and materials. All these factors contribute to the shrinking role of the state.

The PNG Government's *Vision 2050* report notes that "PNG's global Human Development Indicators (HDI) ranking dropped from 128 out of 175 countries in 1994 to 145 out of 179 countries in 2005. This reflects our worsening social indicators and marked improvements in other countries' socioeconomic indicators."<sup>23</sup> Papua New Guinea's HDI ranking puts it higher than only Timor-Leste and Afghanistan in the Asia-Pacific region.

A recent National Research Institute–Australian National University survey of schools and health clinics around Papua New Guinea, in both rural and urban areas, found a more nuanced and mixed progress in 2012 compared to 2002.<sup>24</sup> Schools were on average in better condition and had more students and teachers. Health clinics on the other hand showed no growth at all in the number of patients using them, despite population growth of about 30 per cent over the decade. The O'Neill government's commitments to free health and education for all PNG citizens have yet to translate into tangible improvements.

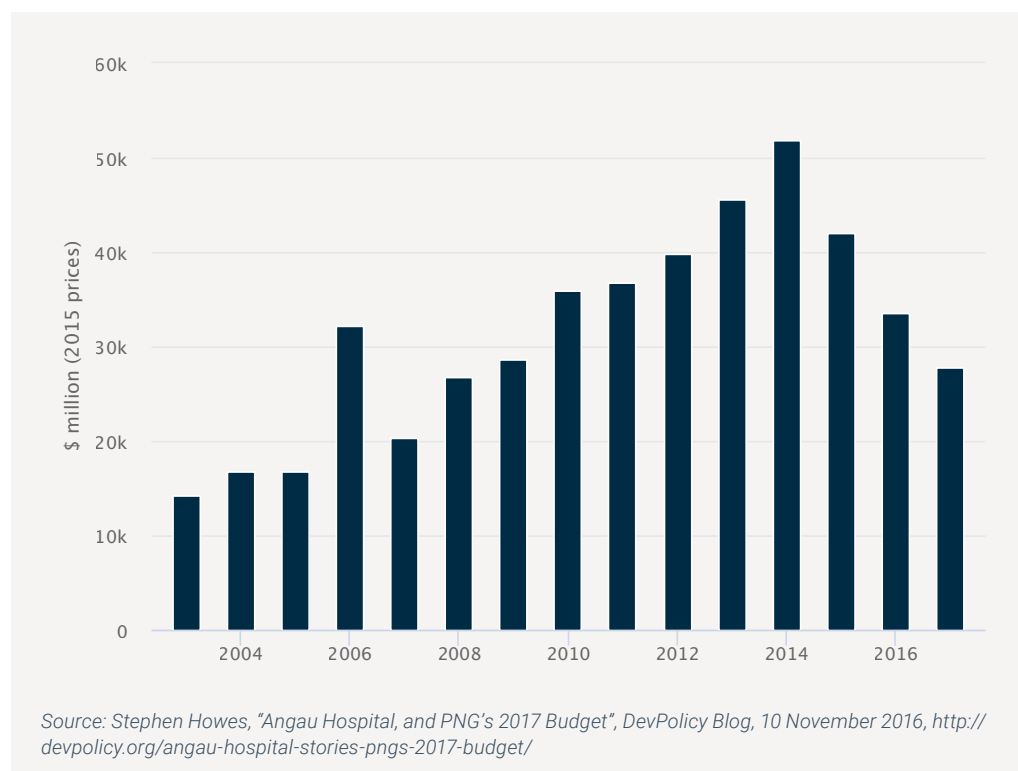
Expenditure in critical services, as well as vital infrastructure that supports service delivery, has also been slashed in recent years as the government battles considerable fiscal challenges and cash shortages and seems unduly focused on urban 'status' projects (notably the Pacific Games and APEC 2018).

## HEALTH

Papua New Guinea's human capital development and labour productivity are hindered by deficiencies in basic nutrition, health, and education. The overall state of citizen health in Papua New Guinea is poor, and has declined since 1975. Papua New Guinea has the lowest level of health care expenditure in the region, equivalent to about 3.5 per cent of GDP in 2014.<sup>25</sup> Clinic capacity is significantly impaired – 30 per cent of staff are not paid on time, 43 per cent of clinics need significant maintenance, 60 per cent do not have electricity or refrigeration, 73 per cent conduct no patrols in the local community.<sup>26</sup> Urban health infrastructure is also not faring well, with marginal investment despite growing urban populations. The Asian Development Bank has forecast that per capita spending on health in 2005 was half what it had been in 1975.<sup>27</sup>

With strong support from development partners, non-government organisations and the private sector, some progress has been achieved in restraining the country's burgeoning HIV/AIDS infection rate, malaria incidence, and by making anti-retroviral drugs available. Tuberculosis, where Papua New Guinea exhibits some of the highest rates in the world with an increasing prevalence of multi-drug resistant strains, and other diseases strain the poor health infrastructure. Life expectancy is increasing, but is still the lowest in the region. Although statistics are unreliable, Papua New Guinea does appear to have achieved a steady decline in under-five mortality rates during the last two decades, but the rate of reduction is much lower than in other Asian countries. If health indicators are not improved soon there is considerable risk that more than 50 per cent of the population in the future will suffer from some effect of stunting.

**Figure 1: An illustration of funding constraints: Angau hospital (Lae) allocated budget**



There is, as in education, a variation in performance between provinces, with better innovation and coordination of effort and utilisation of resources in some, which could act as potential role models for others. The introduction of Provincial Health Authorities has enabled better coordination between provincial hospitals and rural health services, but coordination of responsibilities with the new District Development Authorities will be critical if they are not to impose a further stumbling block or overlap of duties.

## EDUCATION

One of the key determinants of a household's welfare level in Papua New Guinea, in addition to women's education and empowerment, is the education level of the household head.<sup>28</sup> However, the consensus from progressive reviews is that the quality of Papua New Guinea's education and technical training facilities has been deteriorating for at least 20 years.<sup>29</sup> This has resulted in a decline in the quality of the workforce and dramatically increased the cost of internal business training.<sup>30</sup> Although the elite schools in a few main urban centres, often church run, have relatively high standards, the majority of PNG's citizens are not educated beyond Grade 10, and those achieving Grade 12 from many provincial schools fail to achieve satisfactory standards, even in some core subjects. While intake and retention rates have risen, students are becoming progressively less equipped to meet the changing and higher skills-based requirements of PNG's workforce. A survey of financial literacy in Papua New Guinea undertaken with the Bank of Papua New Guinea (albeit with a relatively small sample) found that although younger people were more competent at using formal and IT-based financial services, older respondents were more competent at most aspects of managing money, and more likely to have had financial literacy training. Competency in the use of English language was a major factor, if not determinant, in financial literacy and access to financial services, with women and especially rural women having markedly lower levels of English and financial literacy and access to financial services.<sup>31</sup>

Despite these poor educational outcomes, public expenditure on education is not low by international standards and compares relatively well against other countries in the region,<sup>32</sup> averaging around 5 per cent of GDP and 15 per cent of the national budget. Distribution of these resources remains a critical issue, as does the proportion absorbed by wages and administration. Technical and vocational education and training (TVET) have also been badly under-resourced for decades, even though many students, particularly males, seek greater emphasis on practical work skills during school years.<sup>33</sup>

There has been some improvement since the implementation of Tuition Fee-Free education. Student entry and retention have increased, but limited infrastructure, a lack of trained teachers (especially at elementary level), overfilled classes, deficiencies in curriculum, inspection, and support capacity have eroded standards and the perceived utility of education.

A recent review of aspects of education policy has prompted some positive reforms, including to the much-derided elementary education, which will now require properly trained teachers for younger children in their critical learning years. Other positive initiatives include upgrading qualifications of primary school teachers to three-year degrees, removing older students from lower primary grades, and providing greater support for separate adult and distance learning education. These measures will be resource-intensive, however, and vulnerable to budget pressures.

## DEMOGRAPHICS

Service delivery challenges in Papua New Guinea are exacerbated by rapid population growth. Papua New Guinea has one of the fastest-growing populations in the world. With an average annual growth rate of 3.1 per cent at the 2011 Census, PNG's population increased by more than two million people between 2000 and 2011, and more than doubled from independence in 1975 to 2011. If current growth rates continue, the population will more than double again by 2040.

Compounding these demographic challenges is the changing breakdown of the population. Papua New Guinea is a very young country. Its median age is 21.7, half that of high-income countries and two-thirds that of middle-income countries. More than 40 per cent of its population are under the age of 15. However, population growth shows signs of slowing, with the number under 5 years old falling from 16 per cent in 1980 to 12 per cent in 2011. Counterbalancing this trend, the population over 65 is also rising, albeit at a slower rate.

Despite the pressures this population growth places on services and infrastructure, the PNG Government has paid little attention to population policy and planning. While a new National Population Policy for 2015–2024 made some constructive recommendations, it requires resources, coordination and commitment to implementation, all of which remain elusive.

**Figure 2: Papua New Guinea's population 2000–2040**

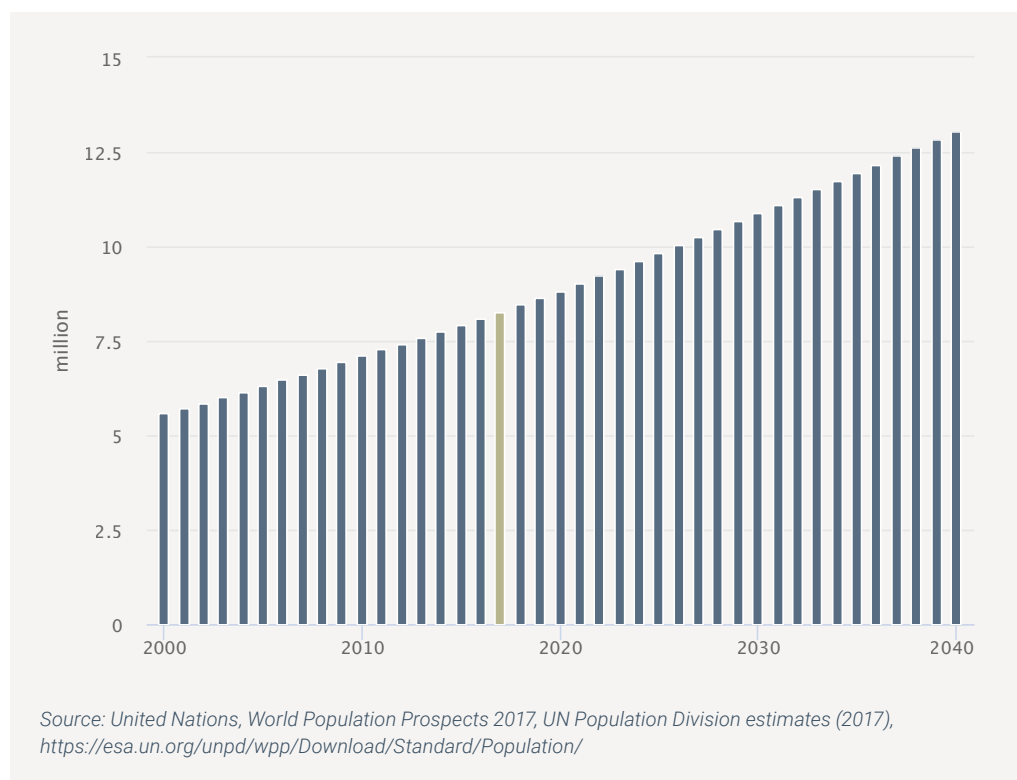
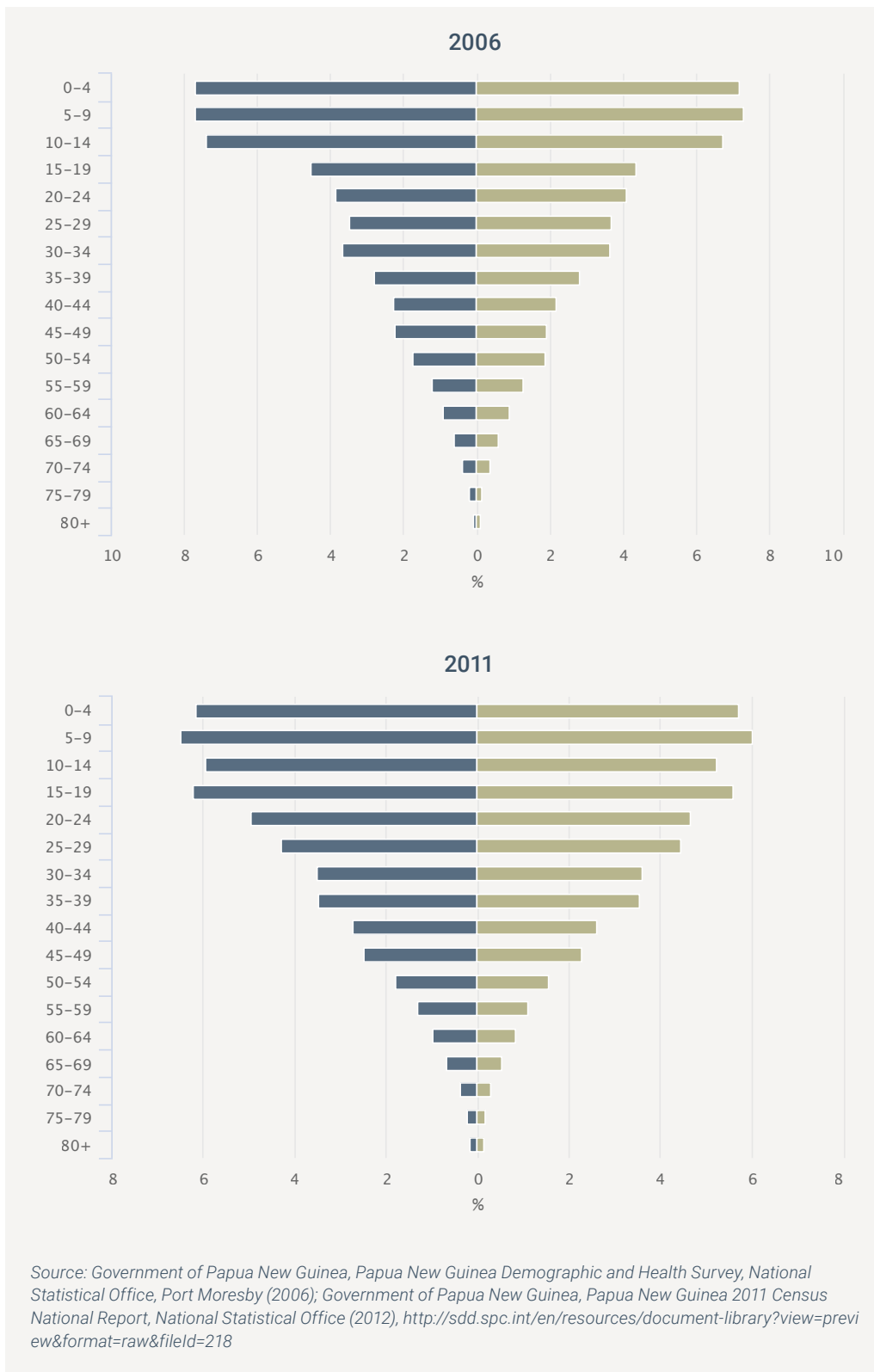


Figure 3: Moving up – PNG population pyramid 2006 and 2011





## URBANISATION

According to 2011 Census data, 40 per cent of the population in urban areas were not born there, indicating a major shift to urban centres, even though these centres are modest compared with peer developing countries.<sup>34</sup> Urban boundary definitions make it difficult to quantify the rate of urbanisation in Papua New Guinea, however, and the real shift may be substantially greater when those living in the growing hinterlands of the cities are included.

This urbanisation has placed pressure on employment. The urban rate of unemployment is relatively high at 16.2 per cent, while the rural rate (including informal employment) is only 5.2 per cent.<sup>35</sup> The labour force participation rate in urban areas is more than 22 per cent lower than the national average, due primarily to the low participation rate in the National Capital District.<sup>36</sup>

This lack of opportunity experienced by many migrating to urban areas in search of formal waged employment is a likely contributor to the ongoing security dynamics in Papua New Guinea's urban centres.

## GENDER

Gender inequality in Papua New Guinea is perhaps its single largest development challenge. Violence against women is extremely high, while PNG's systems of family and community relationships often exclude women from leadership and decision-making roles. Papua New Guinea is now one of only five countries in the world with no female members of parliament, despite a record number competing in the 2017 elections.

Men are twice as likely as women to hold a job in the formal sector, while women in that sector earn on average less than half that reported by men.<sup>37</sup> With such a large number of PNG's potential workforce disadvantaged and disenfranchised, the country's development potential is impaired. The government urgently needs to prioritise gender inclusivity, starting with parliamentary representation.

## EMPLOYMENT TRENDS IN PAPUA NEW GUINEA

Official PNG data indicate a very high level of employment. However, because they include subsistence employment, they mask the very low level of formal wage employment, which is less than 6 per cent of the total population, and extremely low for people below the age of 20.<sup>38</sup> Best estimates put the size of the formal employment market in PNG at 465 000 in 2014<sup>39</sup> meaning that only about 10 per cent of household heads are engaged in wage employment,<sup>40</sup> with 15 per cent of the country's working-age population employed in the formal sector.<sup>41</sup>

**Table 2: Estimate of the 2014 labour force**

	Measured 15–64 years	%
<b>Projected total in-scope population</b>	4,584,341	
<b>Labour force</b>	3,071,509	67%
<b>Employed [economically active]</b>	2,979,363	97%
<b>Formal wage employment</b>	465,000	15%
<b>Informal employment [incl. subsistence employment]</b>	2,514,363	82%
<b>Wage unemployed [actively seeking wage employment]</b>	92,145	3%

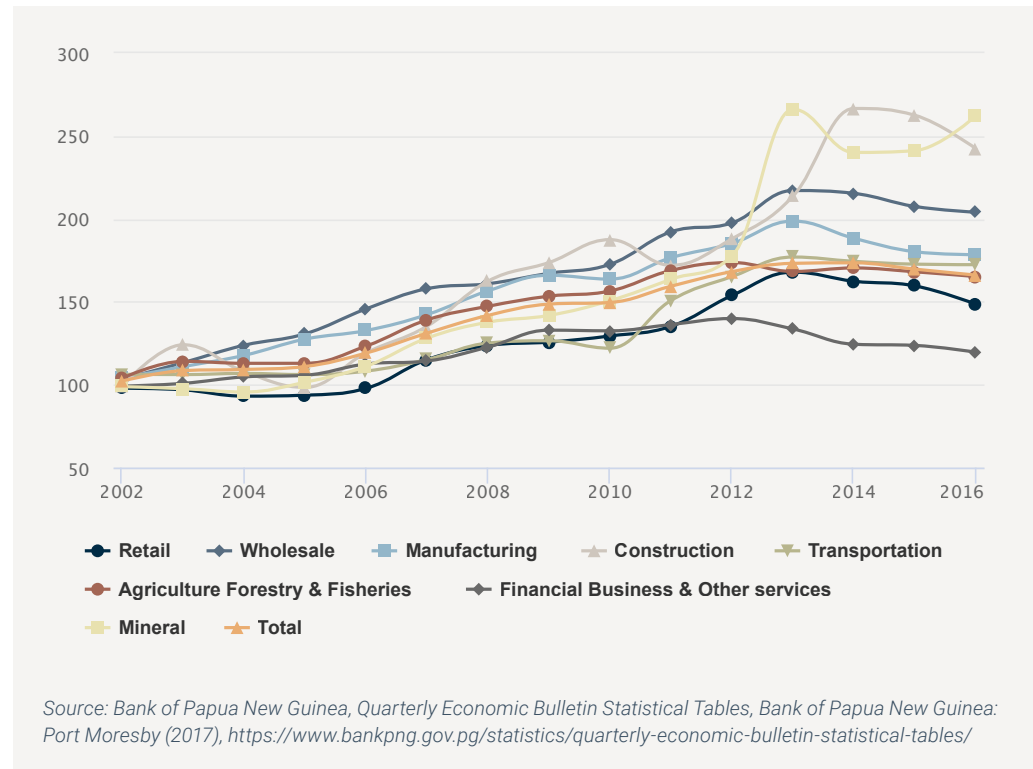
Source: Luke Jones and Paul McGavin, "Grappling Afresh with Labour Resource Challenges in Papua New Guinea: A Framework for Moving Forward", Institute of National Affairs Discussion Paper 96, June 2015

The majority of employment opportunities are limited to just four industrial sectors: education (15 per cent (13 per cent) and construction (11 per cent). These sectors account for 52 per cent of all formal wage employees. The mining and quarrying sector (including hydrocarbons) provides just 2 per cent of formal wage employment but supports a significant amount of wage employment in other sectors of the economy.<sup>42</sup>

While very low, formal employment growth grew by 66 per cent between 2002 and 2016 (compared with population growth of 42 per cent). PNG's nominal GDP (both mining and non-mining) has tripled over the same period. However, employment levels have diminished since 2014 as economic growth continues to slow.

This employment growth masks difficult realities for PNG's young population. The ADB estimates that over 50 000 youths enter the labour market each year, while only a few thousand formal jobs are being created.<sup>43</sup> The figure of 50 000 has been routinely quoted since the 1990s, and is in need of revision. The Department of Education reports that 23 692 students completed Grade 12 in 2016,<sup>44</sup> competing for roughly 5000 places in tertiary institutions.<sup>45</sup> Considering the majority of Papua New Guineans do not make it to Grade 12, the estimate of 50 000 youths entering the labour market each year is likely an underestimate.

**Figure 4: Employment growth in PNG**



There is no information available on labour force productivity, and limited information on other key labour force statistics. The most comprehensive data available is from a 2014 labour market survey. Table 3 and Table 4 show the distribution of salary in the PNG workforce from that survey.

**Table 3: Estimated annual average salary by sector July 2014 (nominal kina)**

	Mean	Min	Max
<b>All sectors</b>	21,330	208	4,133,100
<b>Government</b>	22,106	4,379	320,941
<b>Private</b>	19,459	286	4,133,100
<b>Private – Informal</b>	32,523.34	208	675,844
<b>Private – Unregulated employee</b>	5,942.91	2,330	13,104

Note: Data from these tables is not drawn from a random sample and, therefore, cannot be used to estimate national wage and income levels. A total of 135 610 (including employers) did respond to this survey, making it the most robust source of information available.

Source: Luke Jones and Paul McGavin, "Grappling Afresh with Labour Resource Challenges in Papua New Guinea: A Framework for Moving Forward", Institute of National Affairs Discussion Paper 96, June 2015

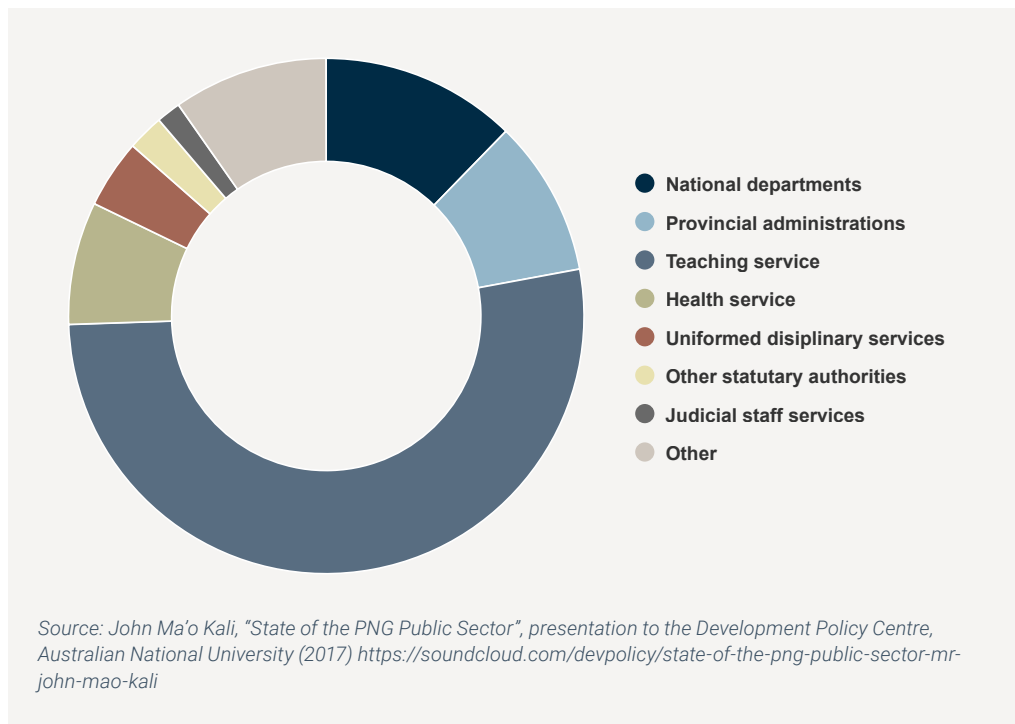
**Table 4: Average gross fortnightly salary by occupation July 2014 (nominal kina)**

	Mean	Min	Max
Armed forces occupations	983	229	2,512
Managers	3,511	133	1,617
Professionals	825	168	59,053
Technical and associate professionals	1,123	132	13,902
Clerical support workers	715	41	5,424
Services and sales workers	665	35	12,653
Skilled agricultural, forestry and fisheries workers	431	19	167
Craft and related trade workers	772	90	3,779
Plant and machine operators and assemblers	667	19	4,146
Elementary occupations	337	8	15,026
Other	903	18	17,331

*Note: Data from these tables is not drawn from a random sample and, therefore, cannot be used to estimate national wage and income levels. A total of 135 610 did respond to this survey, making it the most robust source of information available. (Note: the perhaps surprising low average salary for professionals is largely because teachers comprise the majority of this category, with a large portion on relatively modest salaries).*

*Source: Luke Jones and Paul McGavin, "Grappling Afresh with Labour Resource Challenges in Papua New Guinea: A Framework for Moving Forward", Institute of National Affairs Discussion Paper 96, June 2015*

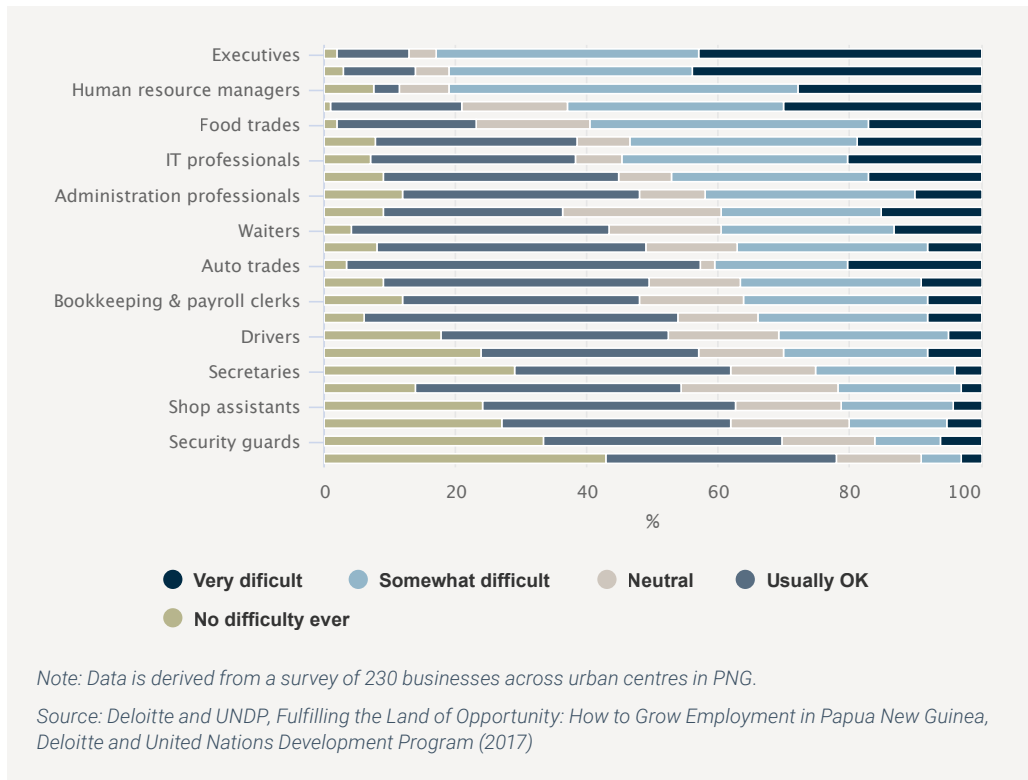
At 105 000 strong, the public service makes up just under a quarter of Papua New Guinea's formal waged employment opportunities and is by far the largest employer in the country. Despite its importance to formal sector employment, its overall numbers have not kept pace with population growth. The total number of public servants in the central government at independence was 25 951, more than present day. In addition, there were 4034 government-funded teachers (in 1971–72) and 6137 health workers (1972–73). The increase to over 100 000 can almost wholly be accounted for by the increase in the number of teachers.<sup>46</sup>

**Figure 5: Size and composition of the public service**

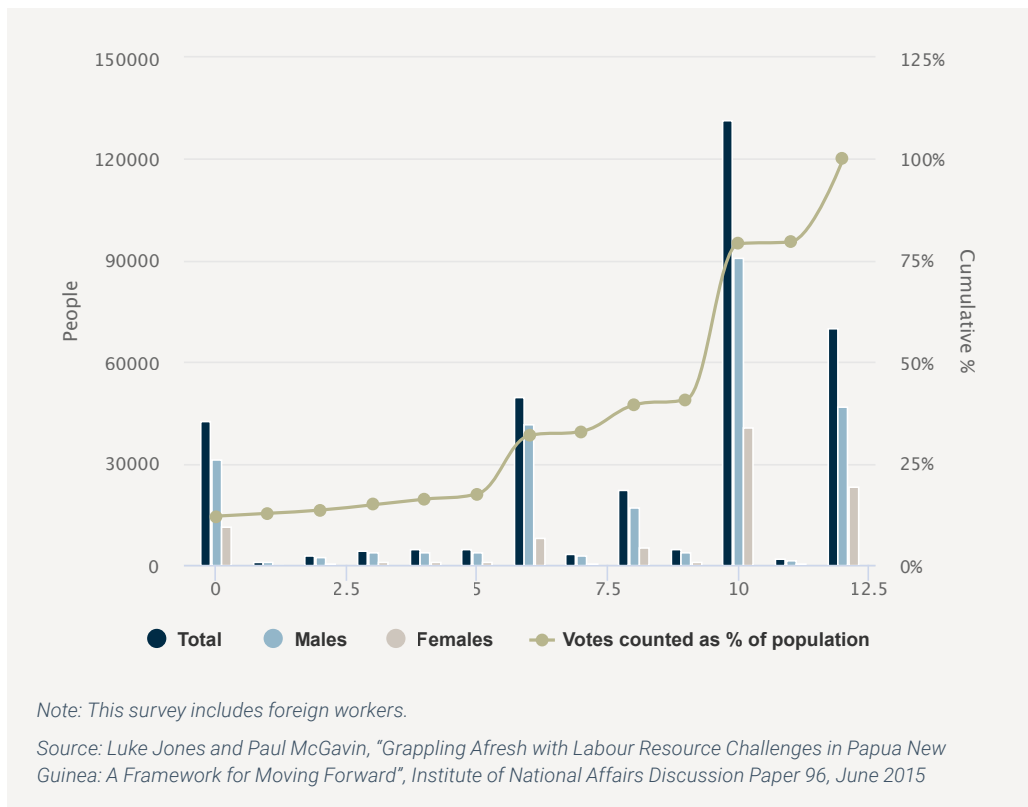
While investment and formal business activity would provide further employment opportunities in Papua New Guinea, numerous business surveys have found that they face myriad constraints:<sup>47</sup> law and order, corruption, poor transport infrastructure, poor telecommunications and electricity infrastructure, availability of skilled labour, political uncertainty and stability of rules. In 2017, access to foreign exchange has become a leading constraint, and skills shortages are cited by most businesses as a key issue.<sup>4849</sup>

Any labour market gains have been small, and concentrated in Port Moresby.<sup>50</sup> In addition, the indigenous Papua New Guinean workforce has not fully benefitted from the country's recent economic growth and private sector expansion due to skills shortages in the workforce. The low rate of tertiary graduates, combined with limited technical and vocational opportunities in the country have resulted in a deficient domestic availability of skilled labour. Papua New Guinean engineers, qualified accountants, executives, and other skilled technicians are scarce.<sup>51</sup>

**Figure 6: Recruitment difficulties across occupations**



**Figure 7: Highest grade of schooling completed by formal wage employees**



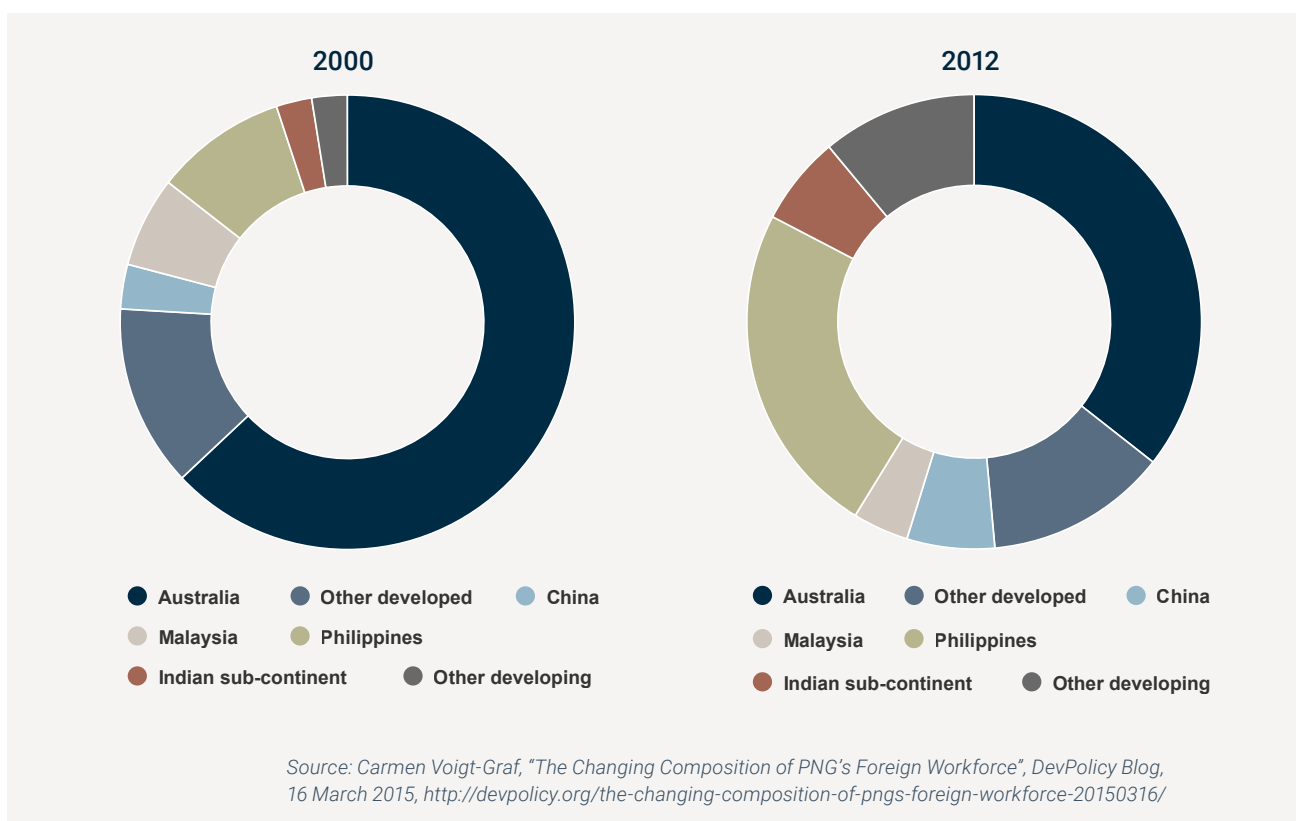
The private sector’s response to this skills shortage (complementing efforts by state and development partners) has been to employ foreign workers and to provide a range of in-house and formal training and skills development, although some businesses take the responsibility of staff training markedly more seriously than others. Very high staff turnover limits the impact of these training schemes, thereby further increasing a reliance on foreign workers.<sup>52</sup>

## FOREIGN WORKFORCE

Papua New Guinea’s foreign workforce makes up a significant component of formal sector employment in Papua New Guinea. Between 2010 and 2014 a total of 103 394 work permits were issued by the Department of Labour and Industrial Relations<sup>53</sup>, indicating a foreign workforce of at least 20 000 individuals. Arrival and departure data has shown an explosion of employment arrivals from 13 000 in 2000 to 63 000 in 2012. These numbers, however, include workers that routinely return home during the year, such as fly-in-fly-out Australians.<sup>54</sup>

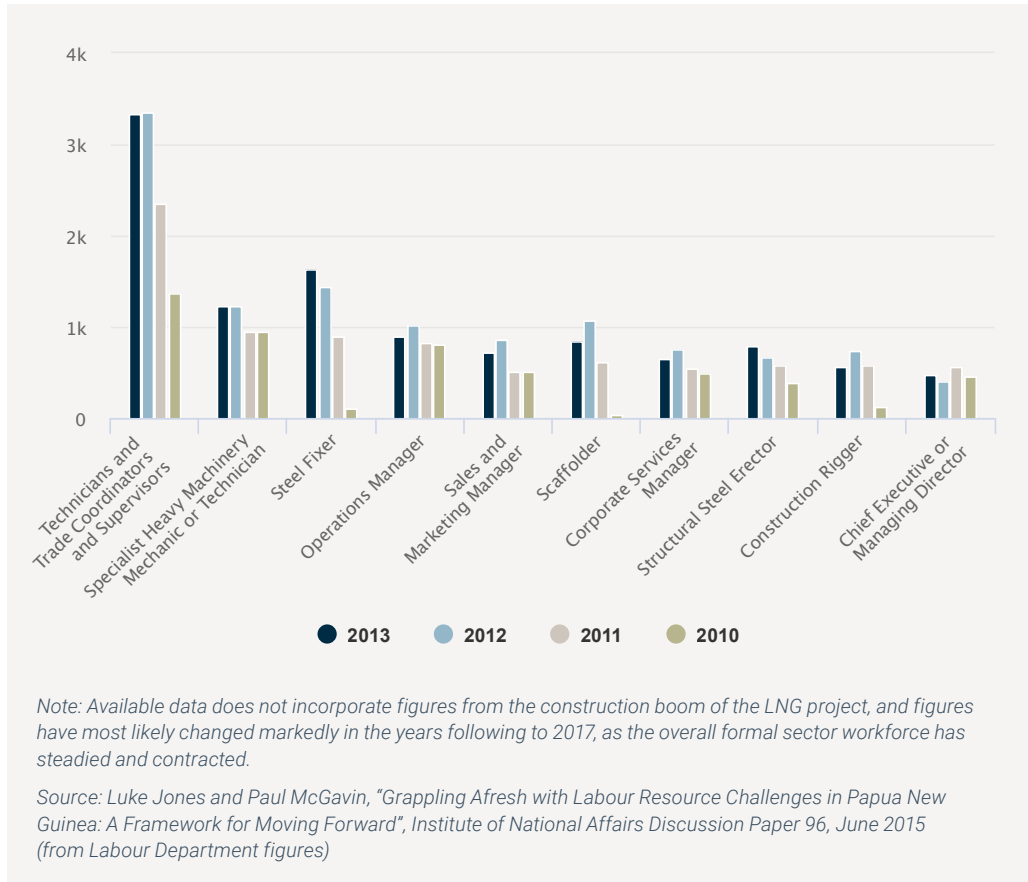
The composition of PNG’s foreign workforce is also changing. While Australia is the main source country of new foreign employees, workers from the Philippines are increasing rapidly in number, and may soon become the largest single source of employment.<sup>55</sup>

**Figure 8: Changing configuration of PNG’s foreign workforce**

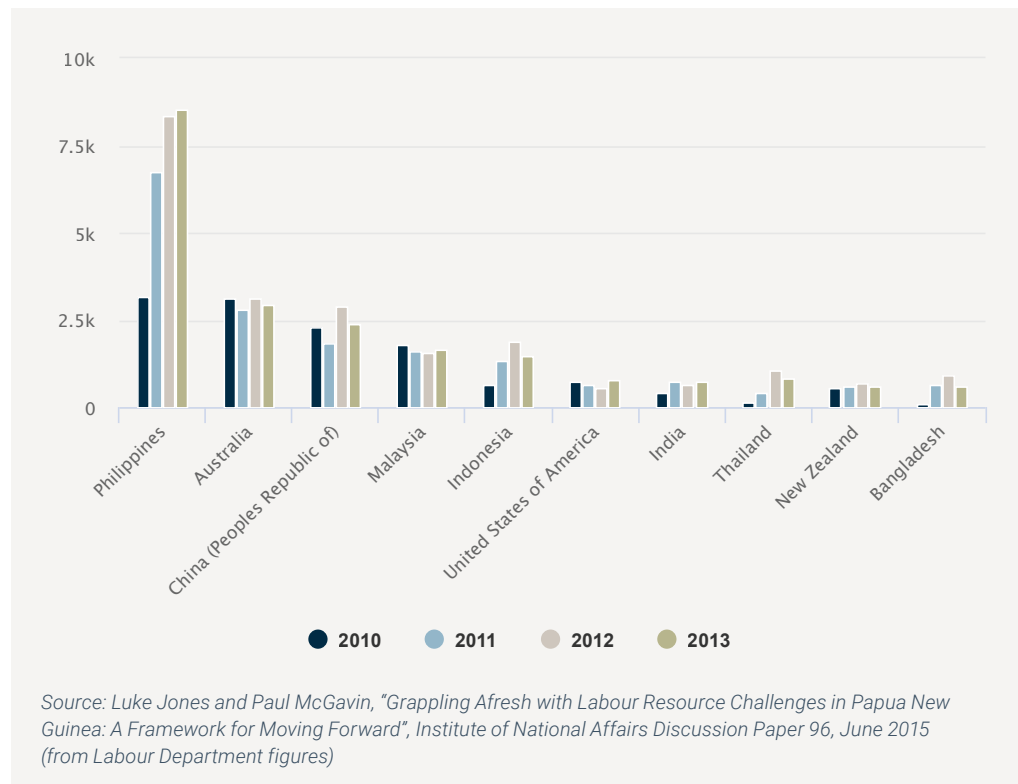


Official numbers also may omit significant numbers of illegal immigrants, those without work permits and those mis-specifying their migration details, such as labelling themselves as tourists or on business visas, when coming for longer-term work and as small-scale investors.

**Figure 9: Top 10 nationalities for which work permits were issued, 2010–2013**





**Figure 10: Top 10 job types for which work permits were issued, 2010–2103**

PNG's growing economy has attracted an increasing number of highly skilled and vocational and technical workers (particularly in the trades), both of which are in short supply in Papua New Guinea. As Jones and McGavin point out, "many of the skill sets brought into PNG over the 2010-13 period were ones that might well have been performed by Papua New Guineans".<sup>56</sup>

Foreign ownership of small and medium business in Papua New Guinea is also growing at a disturbing rate. Anecdotal evidence suggests that many businesses that were traditionally owned by Papua New Guineans are now being taken over by foreign individuals, notably new generation Chinese and more recently Bangladeshi migrants. Some of these small or micro-enterprises are owned in partnership or under the nominal ownership of a local partner, and found even in some of PNG's more remote communities such as around major logging and associated projects. While they provide useful services, and may be less risk-averse than PNG locals, there is evidence they may operate uncompetitively by accessing goods without being subject to import duties, for example. These so-called 'unregulated businesses' largely bypass income tax, GST, and other rules such as labour laws.

Apart from the loss of revenue to government, the risk is that PNG citizens become progressively excluded from the domestic labour market. The government has proposed various responses, many of which are enshrined in their Small and Medium Business Policy Proposal. The private sector has responded favourably to some of these policies, but are concerned that others will curb the future foreign investment which is critical for Papua New Guinea's continued development.<sup>57</sup> The consensus, however, is that some level of

further protections must be put in place to ensure opportunities for Papua New Guinea's domestic workforce. For example, the SME policy extends the existing list of 'restricted businesses' in which only Papua New Guineans may participate, although such restrictions have proven difficult to enforce. These changes run the risk of becoming overly nationalistic, too expensive, and scaring off much needed positive foreign direct investment.

The priority for government is to invest in technical and vocational training, as well as facilitating financial services for small businesses, while managing business policy carefully to ensure the private sector continues to grow and fuel job creation.

## **LOOKING FORWARD**

The outlook for societal trends in Papua New Guinea is bumpy at best. The combined headwinds of a youth bulge approaching its peak, few formal sector employment opportunities and weak service delivery will be difficult to overcome. The government will need to redouble its efforts to implement existing policies and develop new ones that will ensure growing opportunities for Papua New Guineans.

Despite these challenges, there are also significant opportunities, whether from education, skills development, private sector regulation, health and addressing gender disadvantage, as well as other actions to remove constraints on business and investment. The education sector is not underfunded by regional standards, but expenditure needs to be better targeted and utilised, including investment into quality education, TVET, and improving PNG's tertiary institutions (including enhanced teacher training), so that PNG's growing number of graduates are properly prepared to meet the demands of the workforce. The government could find some easy wins in health by improving immunisation coverage, health awareness, improved pharmaceutical procurement and distribution, and actively promoting family planning. Recent reviews of the health, education, tax, and SME sectors should be considered by government, after close consultation with the private sector and civil society groups (including churches), to ensure that they can support both Papua New Guinea and private sector development. The government should focus its efforts on enhancing gender inclusivity, improving data quality to guide better investment decisions, improving teacher training, improving the primary education system, and reinforcing and streamlining governance and accountability systems across the board.

The government has produced a substantial number of plans to address the development challenges of Papua New Guinea.<sup>58</sup> In some cases these need revising or refining, in partnership with stakeholders. But generally, what is needed is to turn these plans into action, and to implement policy effectively across the extremely complex systems of government. Above all the government must refocus its attention and expenditure away from status projects and back to the basics: the country's greatest natural resource, its people.

## ENDNOTES

- 1 United Nations, *World Population Prospects 2017*, UN Population Division estimates, <https://esa.un.org/unpd/wpp/Download/Standard/Population/>.
- 2 United Nations Development Program, *Human Development 2016: Human Development for Everyone*, (2016), [http://hdr.undp.org/sites/default/files/2016\\_human\\_development\\_report.pdf](http://hdr.undp.org/sites/default/files/2016_human_development_report.pdf).
- 3 International Monetary Fund, *Papua New Guinea Article IV Consultation*, January 2017, <http://www.imf.org/en/Publications/CR/Issues/2017/01/30/Papua-New-Guinea-2016-Article-IV-Consultation-Press-Release-and-Staff-Report-44596>.
- 4 Asian Development Bank, *Pacific Economic Monitor*, July 2017, <https://www.adb.org/sites/default/files/publication/337056/pem-july-2017.pdf>.
- 5 International Monetary Fund, *Papua New Guinea Article IV Consultation*, January 2017.
- 6 Papua New Guinea Treasury, *2017 National Budget Volume 1: Economic and Development Policies*, PNG Treasury (November 2016), [http://www.treasury.gov.pg/html/national\\_budget/files/2017/2017%20Budget%20Volume%201%20Economic%20and%20Development%20Policies.pdf](http://www.treasury.gov.pg/html/national_budget/files/2017/2017%20Budget%20Volume%201%20Economic%20and%20Development%20Policies.pdf).
- 7 Bank of Papua New Guinea, *Quarterly Economic Bulletin December 2016* (May 2017), <https://www.bankpng.gov.pg/wp-content/uploads/2017/05/December-2016-Quarterly-Economic-Bulletin-QEB.pdf>.
- 8 Papua New Guinea National Statistics Office, *Household Income and Expenditure Survey 2009/10* (2011).
- 9 Ibid.
- 10 United Nations Development Program, *Papua New Guinea National Human Development Report 2014*, <http://hdr.undp.org/en/content/papua-new-guinea-national-human-development-report-2014>.
- 11 Ibid.
- 12 World Bank, *World Bank Databank* (2017), <http://databank.worldbank.org/data/home.aspx>.
- 13 United Nations Development Program, *Human Development 2016: Human Development for Everyone* (2016), [http://hdr.undp.org/sites/default/files/2016\\_human\\_development\\_report.pdf](http://hdr.undp.org/sites/default/files/2016_human_development_report.pdf).
- 14 Papua New Guinea National Statistics Office, *Household Income and Expenditure Survey 2009/10*.
- 15 Ibid.
- 16 Ibid.
- 17 Joseph Ketan, "Good Governance is Crucial to Building the Nation State", in Institute of National Affairs, *PNG at 40 symposium: Learning from the Past and Engaging with the Future* (INA, 2016), [http://www.inapng.com/pdf\\_files/PNG%20at%2040%20Symposium%20ReportPB.pdf](http://www.inapng.com/pdf_files/PNG%20at%2040%20Symposium%20ReportPB.pdf).
- 18 [http://hdr.undp.org/sites/default/files/2016\\_human\\_development\\_report.pdf](http://hdr.undp.org/sites/default/files/2016_human_development_report.pdf).
- 19 Max Kep, Director of the Office of Urbanisation, Seminar on Urbanisation at the PNG Institute of National Affairs, March 2017.
- 20 United Nations Development Program, *Papua New Guinea National Human Development Report 2014*.
- 21 Save the Children with Frontier Economics, *Short Changed: The Human and Economic Impact of Child Malnutrition in Papua New Guinea*, June 2017, [https://www.savethechildren.org.au/\\_\\_\\_data/assets/pdf\\_file/0009/228492/PNG-Nutrition-Report.pdf](https://www.savethechildren.org.au/___data/assets/pdf_file/0009/228492/PNG-Nutrition-Report.pdf).
- 22 United Nations Development Program, *Papua New Guinea National Human Development Report 2014*.
- 23 Government of Papua New Guinea, *Vision 2050*, Papua New Guinea National Strategic Plan Taskforce (2009), 17, [http://www.treasury.gov.pg/html/publications/files/pub\\_files/2011/2011.png.vision.2050.pdf](http://www.treasury.gov.pg/html/publications/files/pub_files/2011/2011.png.vision.2050.pdf).
- 24 Stephen Howes, Andrew Anton Mako, Anthony Swan, Grant Walton, Thomas Webster and Colin Wiltshire, *A Lost Decade? Service Delivery and Reforms in Papua New Guinea 2002-2012, Joint Report for The National Research Institute and the Development Policy Centre* (2014), [http://devpolicy.org/publications/reports/PEPE/PEPE\\_A\\_lost\\_decade\\_FULL\\_REPORT.pdf](http://devpolicy.org/publications/reports/PEPE/PEPE_A_lost_decade_FULL_REPORT.pdf).
- 25 World Bank, *World Bank Databank* (2017), <http://databank.worldbank.org/data/home.aspx>.
- 26 Howes et al, *A Lost Decade? Service Delivery and Reforms in Papua New Guinea 2002-2012, Joint Report for The National Research Institute and the Development Policy Centre*.
- 27 Asian Development Bank, *Papua New Guinea: Critical Development Constraints* (2012), <https://www.adb.org/sites/default/files/publication/29776/png-critical-development-constraints.pdf>.
- 28 Ibid.
- 29 See Ron Duncan and Tony Lawson, "Cost Structures in Papua New Guinea", Institute of National Affairs Discussion Paper No 69 (1997); Ross Garnaut and Rabbie Namalieu, *PNG Universities Review*, Report prepared for Prime Ministers Somare and Rudd (2010); Ian Hind, John Larsen, David Week and Emmanuel Peni, *Needs Analysis Study of PNG TVET Colleges*, Australian aid program (2011).

- 30 Luke Jones and Paul McGavin, "Grappling Afresh with Labour Resource Challenges in Papua New Guinea: A Framework for Moving Forward", Institute of National Affairs Discussion Paper 96, June 2015, [http://www.inapng.com/pdf\\_files/Grappling%20afresh%20with%20labour%20resource%20challenges%20in%20Papua%20New%20Guinea%20-%20a%20framework%20for%20moving%20forward-Final\(2\).pdf](http://www.inapng.com/pdf_files/Grappling%20afresh%20with%20labour%20resource%20challenges%20in%20Papua%20New%20Guinea%20-%20a%20framework%20for%20moving%20forward-Final(2).pdf).
- 31 Bank of Papua New Guinea, *Financial Inclusion and Financial Capability in Morobe and Madang Provinces*, joint report from the Bank of Papua New Guinea, Institute for National Affairs and The World Bank (2014), [https://www.bankpng.gov.pg/wp-content/uploads/2014/06/PNG-Financial-Capability-Survey\\_1601939\\_Web-6Nov25.pdf](https://www.bankpng.gov.pg/wp-content/uploads/2014/06/PNG-Financial-Capability-Survey_1601939_Web-6Nov25.pdf).
- 32 Asian Development Bank, *Papua New Guinea: Critical Development Constraints* (2012).
- 33 Marjorie Andrew, *Gender and Economic Choice in Papua New Guinea* (The World Bank, Papua New Guinea, 2013).
- 34 The shift to urban centres seems to be changing, as indicated by the Office of Urbanisation, National Capital District Commission, and other observers.
- 35 Asian Development Bank, *Papua New Guinea: Critical Development Constraints*, ADB (2012).
- 36 Ibid.
- 37 Government of Papua New Guinea, *Papua New Guinea Country Gender Assessment 2011–2012*, joint report from World Bank, United Nations Development Program, Australian aid program, Government of Papua New Guinea and Asian Development Bank (2013), <https://www.adb.org/sites/default/files/institutional-document/33859/files/cga-png-2011-2012.pdf>.
- 38 Jones and McGavin, "Grappling Afresh with Labour Resource Challenges in Papua New Guinea: A Framework for Moving Forward".
- 39 Ibid.
- 40 Asian Development Bank, *Papua New Guinea: Critical Development Constraints* (2012).
- 41 Jones and McGavin, "Grappling Afresh with Labour Resource Challenges in Papua New Guinea: A Framework for Moving Forward".
- 42 Ibid.
- 43 Asian Development Bank, *Papua New Guinea: Critical Development Constraints* (2012).
- 44 "More than 9,000 Scored High Grades: Minister", *Loop PNG*, 16 January 2017, <http://www.looppng.com/png-news/more-9000-scored-high-grades-minister-50167>.
- 45 "11,000 Scholarships Awarded for 2017", *Loop PNG*, 15 January 2017, <http://www.looppng.com/png-news/11000-scholarships-awarded-2017-50155>.
- 46 Ronald May ed, *Policy Making and Implementation: Studies from Papua New Guinea* (Canberra: ANU E Press, Australian National University, 2009).
- 47 Jones and McGavin, "Grappling Afresh with Labour Resource Challenges in Papua New Guinea: A Framework for Moving Forward".
- 48 Business Advantage PNG, *The PNG 100 CEO Survey 2017: Papua New Guinea's Chief Executives Growing in Confidence* (2017), <http://www.businessadvantagepng.com/the-png-100-ceo-survey-2017-papua-new-guineas-chief-executives-growing-in-confidence/>.
- 49 Deloitte and UNDP, *Fulfilling the Land of Opportunity: How to Grow Employment in Papua New Guinea*, Deloitte and United Nations Development Program (2017), [http://www.pg.undp.org/content/papua\\_new\\_guinea/en/home/library/launch\\_businessreport.html](http://www.pg.undp.org/content/papua_new_guinea/en/home/library/launch_businessreport.html).
- 50 Ibid.
- 51 Jones and McGavin, "Grappling Afresh with Labour Resource Challenges in Papua New Guinea: A Framework for Moving Forward".
- 52 Deloitte and UNDP, *Fulfilling the Land of Opportunity: How to Grow Employment in Papua New Guinea*.
- 53 Jones and McGavin, "Grappling Afresh with Labour Resource Challenges in Papua New Guinea: A Framework for Moving Forward".
- 54 Carmen Voigt-Graf, "The Changing Composition of PNG's Foreign Workforce", *DevPolicy Blog*, 16 March 2015, <http://devpolicy.org/the-changing-composition-of-pngs-foreign-workforce-20150316/>.
- 55 The Philippines was already the second most important source country for arrivals for employment purposes in 2000. The country has retained this rank, but the absolute number of arrivals for employment purposes from the Philippines increased from 1232 in 2000 to 15 067 in 2012, that is, from just 15 per cent of the Australians arriving for employment to 67 per cent.
- 56 Jones and McGavin, "Grappling Afresh with Labour Resource Challenges in Papua New Guinea: A Framework for Moving Forward".
- 57 PwC, "Overview and Commentary on the PNG Government's SME Policy", *PwC PNG* (2016), <https://www.pwc.com/pg/en/publications/sme-bulletin/sme-bulletin-png-sme-policy-commentary.pdf>.
- 58 These include, but are not limited to: the Medium Term Development Plan 2011–2015, Alotau Accord 1, Alotau Accord 2, The Development Strategic Plan 2010–2030, The National Strategy for Responsible Sustainable Development, and *Vision 2050*.