Reflections on 2020 and looking forward to 2021

2020 proved very challenging for the whole world, both amongst developed and developing countries. The year started innocently enough for most, but the destructive bush fires that raged during the last Australian summer were a precursor to a year of climate-related records and devastation, from fires in California to those in Brazil, more frequent and intense cyclones, reported record melting of glaciers and Arctic sea ice and the hottest, or possible second hottest year on record.

Covid may have displaced climate change as the lead global story over the year, also deferring the Climate Change Summit (COP26), and temporarily restraining greenhouse gas emissions in the face of the travel restrictions and reduced industrial activity, but the challenge looms to keep global warming well below 2°. The good news from 2020, including for energy rich countries like PNG, has been the continued fall in the cost of renewable energy and that solar, wind, hydro and other sources have already provided the majority of power in several major economies at peak supply periods, with several countries from China to Britain bringing forward major further commitments to carbon neutrality; technology change, reduced costs and major private sector commitments, including from major funds, as well as public sector reforms, including removal of inbuilt subsidisation of hydrocarbon usage in some countries are required to meet the challenge. The catastrophic effects of climate change are becoming more widely recognised, not just in low lying areas and disadvantaged developing countries, and the commitment by the incoming US Administration to re-adhering to the Paris Accord are critical, even if the biggest challenge lies in the major, currently coal dependent, emerging economies, notably China and India.

For much of the rest of 2020 global and media attention was focused upon the Covid-19 virus, which was first detected in Wuhan, China, in December 2019, but declared a global pandemic by WHO in March 2020. The novel and pernicious coronavirus including its severe resurgences, and the responses to the outbreak by governments, businesses and citizens themselves, brought major health, economic and welfare implications around the world, both in developing and, surprisingly to some, also in developed countries, despite their better health services. Again, despite controversy, science and technology are providing the best prospects for escaping the current pandemic and lockdowns into 2021, notably through the development of a selection of vaccines and also treatments over a very condensed period, using a variety of new and more traditional technologies. With 1.8 million deaths ascribed globally to the virus by the end of 2020, it highlights both the risks and need for preparation against other inevitable future exotic (and maybe zoonotic) diseases, as well as both the successes (as in Taiwan and NZ) and many mistakes (including delays and lack of transparency) made around the world by authorities and citizens in responding to this pandemic, and the remarkable capacity of science to respond, where funding is available. By contrast, other major lethal diseases, including malaria, which still kills some 440,000 per annum worldwide, including substantial numbers in PNG, despite an initially effective treated bednet program, pose major threats but have gained inadequate funding and attention. However, after some 50 years of research into a malaria vaccine, and other

effective replacement controls and treatments, a potential roll-out of such a tested vaccine finally seems more realistic and imminent.

For Papua New Guinea the year started with some optimism that the improved economic performance of 2019 would continue into the new year, with sound commodity prices, undisrupted production, and promises from Government of more transparent governance, including fiscal and debt management, and an opportunity to address the constraints to some major resource projects proceeding, upon some realistic concessions, that would entail enhanced, though not radically transformed, benefit sharing arrangements.

The start of 2020 saw a big drop in hydrocarbon, and vegetable oil prices, in the face of a glut of mineral oil supply and failure by OPEC, or others, including frackers, to agree supply constraint. Then Covid-19 erupted, which, combined with associated travel restrictions, progressively undermined global markets, commencing with tourism and hospitality, disrupting most other business and commercial activities, sports, arts and public services, except those able to be conducted online. Only niche businesses, such as ICT software providers, those geared to e-commerce, and various pharmaceutical producers seemed to thrive. Citizens the world over, whether in New York, Delhi or Port Moresby, had the rare and almost unifying experiencing of sharing new and inconvenient disruptions to their lifestyle and livelihoods, including lockdowns, quarantine and concerns over an impending health threat. The sense of unity and novelty rapidly wore off, as the disruption extended, especially for those, particularly in developing countries, without savings and wholly dependent upon their own production or trading activities for survival. Different provinces and urban authorities in PNG applied restrictions in different ways, and it was quite apparent to businesses, households and the Government that the authorities' capacity to provide needed support to businesses or needy households, as applied in developed and many emerging economies, didn't exist, for want of personal or business data, suitable mechanisms, financial inclusion, as well as the Government's own financial weakness.

PNG had suffered major budget deficits since 2012, partly resulting from unrealistic expectations of resource revenue and deficient public expenditure planning and control. Providing interim fiscal stimulus from deficit financing could be justified, but, with debt and debt servicing costs steadily rising, major annual deficits could not be sustained, especially considering the deficient standards of public goods and services. A further deficit of K4.6 billion was also budgeted for 2020, but with the severe drop in business activity, employment and profitability, revenue was slashed, and, combined with Covid-19 related measures, drove the deficit forecast up by a further K2 billion, despite major expenditure cuts to projects and public sector operations.

The COVID-19 outbreak in PNG caused confusion, including for scientists. Early closure of international borders seemingly forestalled a surge in cases, and enabled the country's long neglected health service to undertake some awareness and preparation for testing, controls and potential treatment. The initial lockdown in April and subsequent curfew, tested institutional capacity and the social response and economic impact. With the severe shortfall in revenue, burgeoning debt and debt servicing costs (debt to GDP of 51%, and debt servicing reaching K2.3 billion, 13% of 2019 expenditure), and lacking wide financial inclusion, reliable

data or social protection systems, it was recognised that interventions to safeguard businesses, jobs and household welfare, as applied in developed countries, would have limited effectiveness in PNG

With only about 15% of the eligible workforce in the formal sector and the informal economy largely unbanked, the only way to sustain livelihoods and household welfare would be through sustaining economic activity, while maintaining health protocols and restricting international travel. Schools resumed across the country after a five weeks closure, and some further freeze in the National Capital.

Initially PNG saw very few cases of Coronavirus. A few were detected in several locations around the country, largely from domestic transmission, but almost all subsequently recovered or tested negative. This may have reflected the low rate of testing, successful restraint and/or a benign strain. When cases increased in late July, it was feared numbers would multiply, especially in dense urban settlements. Infections had burgeoned in Indonesia, as in some other tropical countries, so initial notions of relatively immunity in warm climates were scuppered.

In August numbers grew, but soon flattened, with 532 confirmed cases, from 23,777 tests and 7 deaths across the country by 26 September. Infection was recorded in 13 of the 22 provinces, but largely in NCD and Western Province, Ok Tedi mine, with extensive testing. This may reflect low testing rates across PNG, and perhaps reluctance to be tested, but until December there were no further apparent spikes in illness around the country. As in much of Africa, the prevalence and impact, remains remarkably low, especially considering the high prevalence of other health conditions. This low rate of Covid-19 may reflect the young demography of PNG, but various other factors have been suggested, which remain speculative, with no assurance of continued low rates. The spikes in December, notably in West New Britain, and the appearance overseas of more infectious strains of the virus highlight, the need for sustained vigilance, prevention measures, monitoring the science, and early access to vaccines and treatment, if PNG authorities are to safeguard the country's citizens and help open the economy, trade and travel in the nearer future.

The Government in 2019 made great store on taking back the economy, including enhancing benefits from resource projects, which gained wide popular appeal. During 2016-2017, particularly, tax revenue from the extractive resource projects was remarkably low, and just a fraction of rates prior to 2012. This could partly be explained by low commodity prices (notably for hydrocarbons since 2014) and the early phase in the life-cycle of some major resource projects. However, gold prices had held firm and most projects were long established and tax revenues in other resource rich countries generally seemed greater than PNG's.

As commodity prices improved in 2018 and 2019 tax revenue from the resource sector was picking up, but still appeared comparatively low in PNG, by international standards. It was clear that a few projects had secured exceptionally concessional fiscal arrangements, including the Ramu Nickel/Cobalt project, with its major tax holiday and exemptions for foreign employees. It was also clear that some projects were making extensive, if permissible,

use of provisions for depreciation and shifting expenditure and losses between years. It was also apparent that more recent projects had secured more concessional arrangements than earlier projects and that, while this might have been necessary to attract investment in 2002, or into new industries or green field sites in the 2010s, some review was overdue. On the other hand, it was also clear that the Government's focus on acquiring equity in resource projects, and often borrowing heavily for the purpose, even on experimental projects, such as Solawara1, raised exposure to risk and weakened net revenue in some years, while deficient transparency and parallel budget processes with some State-owned enterprises operating as rent-takers from resource projects, was clouding details of revenue received by the State from some resource projects. So, the picture was mixed and complex.

The need to review and update fiscal arrangement in the sector was apparent, or for individual projects when their licenses fell due for review or renewal, but this needed to be conducted in an open and orderly manner, avoiding undue disruption. It required constructive dialogue with the industry and project investors/operators, with the State utilising sound international reviews and evidence, and not being pushed about, or spoon fed. However, the art of making a good deal, requires a readiness for compromise, unless there are very good grounds for not doing so, such as if the project is of marginal benefit, or can be advantageously deferred or rescheduled, rather than having multiple new projects simultaneously. Clearly, the costs or risks (including environmental) for some projects may be excessive and the Government fully justified in rejecting or deferring them, at least until better knowledge or technology is available. In 2019/2020 the Government's stand seemed unduly rigid over some prospective resource projects, seen as potentially providing a substantial economic stimulus impact, but most notably with the Porgera mine. Unlike other projects, the Porgera mine was a long operating mine in a remote part of the Highlands, in which the State had once held a significant equity, which was subsequently sold, except the Province's small but valuable share, together with the landowners'. The investors/operator were ready to markedly improve the State's and local equity and other benefits, and robust negotiations were certainly justified, but unfortunately the State's demand seemed excessive and unduly rigid, and failed to appreciate the extent of economic and social benefits and revenue provided by the mine, notably in direct and indirect employment, including via contractors and their employees and the livelihoods for informal economy participants. It also sent a negative message to private investors in the sector, and outside the sector, over their role and prospects in PNG.

As a long established mine in a remote location, Porgera provided more extensive benefits, and had more dependents, both locally and along the length of the Highlands Highway than most resource projects, and its multiplier impact upon the economy was considerable. In April 2020, in the year when the economy, employment, export earnings and revenue were taking a hammering, the unnecessary closure of such a major resource projects was more than unfortunate, particularly considering that gold prices, alone amongst commodities, were strong and pushing up to record levels (of USD 2,000/oz); the closure could be seen as an 'own goal', at a time when the government was desperately seeking to plug a growing budget deficit, and approaching international lenders for concessional loans.

Nevertheless, despite the major economic Papua New Guinea, it was hit less hard economically than many other countries, including many of its Pacific and regional neighbours which are more dependent upon major industries, such as tourism or oil. The Pandemic and the Government's restrictions severely impacted revenue, while interventions and the stimulus package, reflected in the Supplementary Budget 2020, raised the forecast deficit for 2020 to PGK 6.6 billion, despite major cuts applied to projects and public sector operations. The Government secured highly concessional funding under the Covid-19 Global response from the IMF and other international sources, with PGK 4.6 billion secured from external borrowing (USD 400 mill from Australia, \$ 364 from IMF and \$500 mill from ADB sources) and K2 bill envisaged from domestic borrowing. The ceiling for debt to GDP, which had been set under the Fiscal Responsibility Act at 30% had been progressively raised, and was now reset at 60%, although for 2020 the forecast was 51.5%, stabilising in subsequent years with expected renewed economic growth, improving revenue and expenditure control. Such recovery is all dependent, however, upon investment-favourable policies, constraining Covid-19 and sound fiscal management, including effective public expenditure targeting and control during the lead-up to the 2022 National Election. Debt servicing costs reached 19% of revenue in 2020 and their planned reduction will depend upon further displacement of higher cost commercial borrowing, and the kina not further weakening unduly.

In a Symposium conducted in 2016 assessing public policy over PNG's first 40 years of Independence¹, the main conclusion was that economic and social development failings stemmed largely from lack of due process and respect for rule of law, as needed for a functioning state. So, while PNG has achieved remarkable success remaining largely unified and democratic, progress on economic, social and political development has been patchy and disappointing. The review concluded that with greater adherence to agreed rules and systems, adapted to PNG's needs, then economic, social and political progress would be strengthened markedly and more equitably.

Helped by a generally open press, improved literacy and access to education and information (albeit partly unreliable), public awareness has grown on the impact of deficient government systems, limited openness and accountability, and absence of women in both Legislature and Executive. Pressure from the public for change is growing, not confrontationally, but firmly, as highlighted in the recent Bougainville elections, where support for a new generation and women candidates was apparent.

Despite the pandemic, significant progress has occurred during 2020 on governance reforms, which will hopefully be sustained during the invariable political tussling, leading towards the 2022 National Election. Valuable State and civil society partnerships mechanisms have progressed, some nurtured through Consultative Implementation Monitoring Council (CIMC), which provides a platform for government-civil society dialogue and reform, and Transparency International PNG (TIPNG), including the Open Government Partnership (OGP),

¹ PNG at 40: Learning from the Past and Engaging with the Future, Institute of National Affairs 2016

advancing fiscal transparency, civil society participation, freedom of information and the Extractive Industries Transparency Initiative (EITI). EITI now in its seventh year of reporting, but currently reinforcing reporting requirements, and adding beneficial ownership, subnational transfers and contract transparency, plus gender and environmental standards in 2021. Fiscal transparency, entailing greater awareness and accountability over resource rentals, including the future functioning of a transparent and well managed sovereign wealth fund, are considered critical components for economic stability and sustainable resource and debt management.

The Government also announced various legislation to improve governance, long sought by reformers, for early tabling in Parliament, commencing with Whistle-blowers' legislation, passed in February, to be followed by Rights to Information and the long-heralded Anti-Corruption (ICAC) Organic Law. To address 'systemic and systematic' corruption undermining the State of Papua New Guinea, and its institutions, ICAC will need adequate independence, powers, human and financial resources, and strong institutional and public support. Legislation for Rights to Information and to empower EITI processes have been deferred to 2021, but in September the National Court made a landmark ruling supporting freedom of information under the Constitution over mining contract transparency.

Although many of Parliament's committees remain largely moribund, including the critical Public Accounts Committee, Parliament has established a Public Sector Reform Committee to review deteriorating public sector service delivery and propose remedial measures. The country has established over 1,000 public sector institutions, with regulatory and service delivery functions, but most have proven largely ineffective, sometimes duplicative, costly and lacking accountability. The Committee realises its implementation capacity is limited, so is targeting strategic measures for maximum impact.

Looking forward to 2021

2021 will invariably be another challenging year, with Covid-19 and its economic effects still prevalent around the world, and still impacting PNG. 2021 will again be a tough year for PNG leading up to the 2022 Election, with the temptation for frivolous public expenditure, which particularly now PNG cannot afford. Demand for goods and Commodity prices have generally increased somewhat, and the rollout of several vaccines provides grounds for optimism over constraining the Coronavirus during the year, and particularly safeguarding the most vulnerable. These may permit some return to a new normal, including restoration of economic activities and jobs, including in PNG. Addressing global challenges and tensions will be a major issue, most notably climate change and destruction of the major sinks, such as forests and marine habitats, other environmental threats, as well as growing geo-political and trade tensions, including in the Pacific region.

For Papua New Guinea a major focus must be on kickstarting the economy and the long static or declining job market, by addressing major business and investment constraints and boosting domestic and foreign investor confidence, but also encouraging greater local participation and diversity of activities using local capital and skills.

A check list of tasks and priorities for the year should include:

- Preventing, constraining, managing and moving on from the Covid-19 pandemic; this remains critical during 2021, even if the virus has not been unduly rapacious in PNG in 2020. Its capacity to mutate and pose a major threat to PNG is ever present, even before any vaccine reaches these shore, and the need for vigilance and capacity must be sustained and enhanced for future new respiratory or other contagious diseases. Covid-19's arrival in PNG almost coincided with that of the African Swine Fever, a killer disease for pigs, also via Asia. PNG has also had multiple plant and animal pests and diseases arrive over recent years threatening industries, livelihoods and food security. Vigilance of land, sea and air borders must be reinforced as well as capacity to respond quickly in each case.
- Encouraging business and investment and hence jobs, through restoring investor confidence, including both domestic and foreign investors, through:
 - \circ open and regular dialogue with the business sector
 - o investor-friendly and stable policies
 - more reliable and affordable public goods and services, including transport, power, telecommunications, etc. and quality education and skills training
 - more available foreign exchange, with a more market determined exchange rate mechanism
 - more competitive and open mechanisms, eg for public procurement, State land management etc
 - addressing grand and petty corruption, and also security issues, affecting the private sector
- sound resource management and better oversight and utilisation of the proceeds; this requires greater transparency over resource management, including using the EITI process, for transparency of transfers, subnational and landowner transfers, contract transparency, accessible and community participation in social and environmental planning, not just in the extractive sector but in all resource management.
 - Determining a new generation of resource sector management rules and conditions, including beneficial sharing, through open dialogue with domestic stakeholders and industry, including use of cost-benefit analysis and international comparative data, but recognising the wider economic impacts, through rigorous processes (i.e. evidence-based), rather than undue focus of populist rhetoric
 - Having a well-managed and accountable sovereign wealth fund in place will be critical for revenue stabilisation and sanitisation, to counter future Dutch disease implications, if and when commodity prices and revenue do appreciate over time or at shorter notice and new resource projects commence
- safeguarding natural resources and opportunities for PNGeans in resource projects/ utilisation and economic activities: this needs open discussion on priorities, including through mechanisms, such as the current national Land Use Planning exercise. It

includes the need for an open forum to help determine the right balance over what resources, business activities and jobs should be restricted exclusively for Papua New Guineans in future, while also encouraging foreign investment and competition to bring in needed capital needed for local job creation, specific skills and quality goods and services. This entails realistic balance, including for emphasis on education, training and standards to help fill the gaps. Clearly industries requiring major capital and locally unavailable technology/skills require international investment and human resources, but for other industries in resource management, and neither the State nor private investors have the capital or experience for the level of investment needed to develop opportunities and generate needed jobs for young Papua New Guineans, so foreign investment restrictions should not be unduly onerous, while foreign employment restrictions and data cooperation is also required between respective authorities to ensure compliance and application of tax and other obligations

- diversifying the economy must gain greater attention, including new technologies, including e-commerce, but with traditional products, notably agricultural innovation and intensification a major emphasis, with a focus on sustainability and consolidation, to reduce marketing costs, gain certification and quality and branding, domestic value adding and developing the local market for domestic products,
- PNG must enhance its major role (with international support) in addressing climate change, including safeguarding existing forest, soil and marine resources, reforestation and agro-forestry (and safeguarding associated habitats and biodiversity), but also setting standards and targets in critical areas, notably energy sources and use, notably focus on PNG's rich renewable energy resources and phased displacement of old carbon-based fuel sources in power generation and transportation (with gas as a transitional power source)
- Prudent economic and fiscal management is critical to investment and economic • confidence and performance and hence the prospects for ordinary Papua New Guineans; with many years of deficit financing of the Budget and growing debt and debt servicing costs, greater attention is required on the costs and performance of the public sector and the inbuilt waste and abuse, including in procurement and overheads (including with the politically controlled SIP grants). The public deserve a reliable public sector, providing quality public goods, including roads, schools and health facilities, but they cannot afford inefficiencies and abuse, or massive and burdensome debt and debt servicing costs. They also cannot afford bloated or deficient SOEs, some operating as major rent collectors, that provide exorbitant conditions and utilise their own revenue, while others remain severely undercapitalised and underperforming. Government should also avoid performing functions that the private sector can perform better, while ensuring that they perform their regulatory functions effectively and transparently, including revenue collection, labour/wages and health and environmental standards.
- Widening the Tax base; this is an ongoing process, but too much of the cost of government falls on less than ½ million formal sector employees, a relatively small

number of companies and GST. At the end of the day this requires growing the economy and formal sector, while more effectively formalising businesses that are significant and profitable and should be registered and contributing tax, and should be employing staff on formalised terms. It also requires that interagency data and cooperation is enhanced, and intelligence used to clamp down on tax avoidance and transfer pricing. With stronger revenue collection from different sources, the government could consider lowering the business tax rates to encourage investment, and raising the tax thresholds for lower income earners that are really suffering with the high living costs and challenges posed in 2020 by Covid and its restrictions. Ensuring that rents gained from resource investments and license fees from fisheries and other sources actually reach consolidated revenue, rather than waylaid with parallel budgets by SOEs and Public authorities, is also critical.

- Seriously addressing violence/conflict, both tribal and inter-community clashes and ongoing fights, but also Violence against women and children and sorcery accusation related violence (SARV), are critical; these are development, as well as welfare and humanitarian issues, and they plague society, requiring local and national solutions, based upon local knowledge and information-sharing, support for awareness, capacity and intervention, both addressing underlying causes, prevention and providing timely and suitable intervention in partnership between authorities, civil society and local leadership
- Open Government: For too long PNG has sought to perform government transactions behind closed doors; project financing, resource contracting, revenue, public accounts, much public decision-making and leaders benefits have been kept discreet or only released very belatedly and often partially; this has enabled nonperformance and other abuse. There have been valuable recent moves towards greater transparency, including through EITI and the Open Government Partnership (OGP) process, including fiscal transparency, and commitment to more open budgeting, contracting, integrated financial management and timely audits, the new Whistleblowers' Legislation and commitments to Rights to Information legislation. The frameworks are falling into place, but they all need commitment and resources and, to date, the output and accessibility to information remains limited or late. Public access to timely financial and operational information is critical to accountability and public requirements for performance and effective service delivery.
- Tackling corruption and poor public sector performance/service delivery; in November 2020 Parliament passed the long-heralded Organic Law on the Independent Commission Against Corruption (ICAC), and K4 million has been committed in the 2021 Budget to progress its establishment, together with funding from the EU to support the process. An effective and independent entity to tackle, particularly cases of grand corruption, including resource and contracting corruption, will provide a major step to tackling this scourge that has been progressively undermining the country's administration, resource management and capacity to deliver public goods. Why the existing organisations that were tasked with tackling these problems in the past and how corruption became so pernicious are matters for

address; likewise, the excessive appeal of gaining public office in PNG and the demanding, abused and competitive nature of PNG politics, which need to be addressed separately. Corruption is everyone's business and tackling it must, therefore be mainstreamed through public and private/civil society institutions and the public, as the task of addressing this great scourge, which late Sir Mekere called Systemic and Systematic some 20 years back, requires awareness, prevention as well as penalties, and cannot simply left to a new organisation.

- Competition/and consumer protection: reviews or PNG's limited competition and consumer protection laws and capacity were undertaken several years back and the recommendations now need to be applied. Competition is critical to quality and affordable goods and services, but also requires favourable investment conditions and generally a growing market to ensure that there are competitors eager and willing to invest and supply goods and services, including sometimes competing with State-owned enterprises. More competitive power, ports and telecommunications provision will all, for example, bring down the costs of a wide range of other goods and services, and generate whole new industries and opportunities...
- investment in education and health (including nutrition and health awareness): the • countries that perform the best and most sustainably are not, generally, those with rich natural resources, although these are important, but those that have invested in their people and their health, education and skills; the State plays a part in this, as do households and society as whole. Society's commitment to knowledge and learning and its entrepreneurial spirit, together with the market and state institutions designed to assist, are critical to provide openings for thinkers, innovators and entrepreneurs. Quality and equitable public education, as provided in Finland, may not be affordable in PNG yet, but Finland was also fairly recently a developing country dependent upon sustainably managing its forest resources. PNG has made major strides, and some schools, Education Divisions and some universities have been innovative, cost-effective and performed well, using the limited resources available, but there is a very long way to go, as highlighted by the very severely inadequate places in schools and tertiary institutions for the country's schools students, as well as widely inadequate standards. Health and nutrition which gained major focus in the early years after independence have been sadly neglected for years (if not everywhere), but given greater attention during the year of Covid-19. This must be sustained and much greater support and awareness on health, nutrition and lifestyles, including to counter alcohol and substance abuse, and nontransmissible diseases, is required. The long prevailing diseases are still there and threatening, and while a malaria vaccine is now finally looking hopeful, health, as with corruption, is everyone's business, and requires awareness, capacity and resources.
- ICT- internet and mobile phones, E-commerce, E-Education and Accountability: accessible internet, including through mobile phones, is critical in a modern society and for PNG to participate in the global economy, providing jobs and economic and educational opportunities. The major bottlenecks must be overcome, such as a very costly new fibre-optic cable, which provides a major capacity and internet gateway,

which has remained inaccessible to the local service providers and therefore users for over a year. Rural mobile towers need upgrading to 3 and 4G, and affordable services and access for education, as now being provided in some provinces, need to be rolled out across the country. Clearly service providers won't recover their investment, especially if lower rates are offered, unless usage expands substantially, with new services offered, which in turn requires that economic opportunities and activity also increase, which is a chicken and egg situation.

- Elections, Women's seats and political participation: the progressive deterioration of • electoral standards until 2017 needs to be reversed. Various post-election recommendations need to be implemented to make the election process more transparent and democratic, with adequate preparation, accurate and accessible electoral roll, voter awareness, monitoring and deregistering and other penalties for abuse, prior to, during or after the election, without the task entirely being offloaded to the Court of Disputed Returns. Accurate voter registration or identification, authority and capacity of the Electoral Commission (preferably with 3 Commissioners and independent verification) are all needed, and finally, as in other countries where women have been missing or disadvantaged in the Legislature and executive, there needs to a proactive mechanism to counter the imbalance and to ensure their participation; there may be inadequate time for major Constitutional reforms, but significant measures can still be made to ensure that PNG no longer is left in the disgraceful situation of being the only sizeable democracy without a women representative. Bougainville has shown the country, something of what can be achieved at both the government and local council level.
- Data: PNG has the internet, computers and a relatively substantial public service in 2021, and yet much data, whether demographic, economic and trade or social, is less available, timely or available now than in the late 1970s/early 80s shortly after independence. Efforts are being made, if slowly, to extend the integrated financial management system (IFMS) across the provinces and districts, and government agencies, and some institutions have kept pace with the communications era, but timely, accurate and locally managed data are critical to planning and public resource management. The land and data management contracts by government have resulted, like many road contracts, in appreciating contract prices, and deficient or lack of output, which goes back to the need for effective and transparent public procurement process and stakeholder participation.