Papua New Guinea (PNG) is one of the Asian Development Bank’s (ADB) 14 Pacific developing member countries that has exhibited some forms of fragility. Core state political, security, and service delivery functions are sometimes limited and concentrated around urban areas. PNG is also prone to natural disasters such as landslides and floods which often damage critical infrastructure.

Since 2007, PNG has been included in ADB’s list of fragile and conflict-affected situations (FCAS) countries. However, following the harmonization of ADB list of FCAS countries with the list of the World Bank (i.e., the average of World Bank country policy and institutional assessment and ADB country performance assessment), PNG was removed from the FCAS list in 2013.¹ This does not mean that fragility has disappeared in PNG. Attention is still required to ensure the effectiveness of development assistance. The PNG Government, a member of the

¹ Following endorsement of ADB’s FCAS operational plan in April 2013, ADB list of FCAS countries is harmonized with the list of the World Bank. FCAS countries are determined as those having a harmonized quantitative cutoff of 3.2 or less, or those having the presence of a United Nations (UN) and/or regional peacekeeping or peacebuilding mission during the past 3 years. The 2013 list (based on the 2013 country performance assessment scores) include Afghanistan, Kiribati, the Republic of the Marshall Islands, the Federated States of Micronesia, Nauru, Nepal, Solomon Islands, Timor-Leste, and Tuvalu. The average rating of PNG is above the cutoff of 3.2 (that is 3.3). Weak performance and fragility do not disappear when a country shows a small improvement in performance scores that might move it above an arbitrary cutoff point such as a score of less than 3.2.
The g7+ group of fragile countries, also recognizes the challenges of fragility. This fragile situation assessment explores the context and implications of fragility in PNG, particularly the two focus areas of ADB operations in the country: transport and energy. The study aims to determine the drivers of fragility in transport and energy sectors, focusing on governance and how ADB and the government respond to these drivers, and to offer practical recommendations for the PNG Country Partnership Strategy (CPS) 2016–2020.

**Transport Sector**

**Drivers of fragility.** The consequences of deteriorating transport infrastructure in PNG are severe: it hinders access to markets and services, imposes high costs on producers and consumers, discourages investment, and worsens the isolation and poverty of a significant proportion of the population. After a number of years of underinvestment in transport infrastructure (particularly before 2004), PNG is now undertaking a large investment to upgrade its widely deteriorating transport infrastructure. The rehabilitation task for the transport sector is currently beyond the government’s capacity to fund and implement. This issue is compounded by poor capacity of government institutions and unsustainable donor-sponsored efforts to strengthen institutions.

The transport sector is also challenged with issues of procurement, contracting, and land compensation. Procurement and contracting issues include insufficient capacity of individual contractors to implement large projects resulting to slow implementation, cumbersome procurement processes, unreasonable compensation demands resulting in costly delays and disruptions, insufficient in-house project supervision capacity, design issues, and issues on proper alignment of donor programs. The customary land ownership in PNG, whereby 97% of land is owned by clan-based structures, poses further land compensation issues, such as incomplete land registration, misrepresentation, and lack of transparency in the land administration system.

PNG is highly prone to large-scale natural disasters such as earthquakes, tsunamis, volcanic activity, floods, landslides, sea level rise, and droughts. This vulnerability forces the government to reallocate funds from routine maintenance to emergency works. Population growth, poverty, environmental degradation, inadequate infrastructure, and a traditional land tenure system can contribute to and exacerbate the vulnerability of PNG to natural disasters. While the current land tenure system promotes a close relationship with the land among local populations, some landowners’ desire for quick cash needs leads them to sell precious timber resources and contributes to natural resource degradation.

**Government’s response.** As outlined in PNG’s Development Strategic Plan 2010–2030 and Medium Term Development Plan 2011–2015, the government will use proceeds from extractive industries, cost recovery mechanisms, and new approach to investment planning to address funding issues. The government has also committed to reduce reliance on foreign aid, and to channel external resources to building infrastructure, including infrastructure in

---

2 The g7+ is a voluntary association of countries that are or have been affected by conflict and are now in transition to the next stage of development. The main objective of the g7+ is to share experiences and learn from one another, and to advocate for reforms to the way the international community engages in conflict-affected states; see g7plus.org.


5 ADB's Safeguard Policy requires compensation for people affected or displaced by any development project, including landowners and neighboring communities.

health and education. The government encourages good governance through public sector reforms, financial management reforms, and public–private partnership.\(^7\) Implementation of the National Land Development Program, including customary land tenure reforms, is expected to ease the issues on land. 

**ADB’s response.** ADB’s approved transport projects between 2010 and 2014 focus on improvement of national roads and bridges, civil aviation, and sea port, including institutional strengthening and capacity development linked to transport projects. In response to the impact of natural disasters on transport projects, climate proofing of ongoing and planned Pacific infrastructure projects by ADB and contributing development partners has begun in PNG and in other Pacific countries including Cook Islands, Solomon Islands, Timor-Leste, Tonga, and Vanuatu. In addition, a differentiated risk framework has been developed under ADB’s operational plan for FCAS to guide ADB staff in improving the flexibility, speed, and efficiency of ADB operations in a fragile context like PNG.\(^8\)

---

**Energy Sector**

**Drivers of fragility.** Lack of access to affordable and reliable electricity limits private sector development and economic growth in PNG. Grid-connected power is largely restricted to the main urban areas, giving access to electricity to about 10% of the population. Power supply in the main urban centers is often unreliable, with regular power outages and demand at times exceeding generation capacity. Demand is expected to rise significantly, fueled by high economic growth partially associated with the proposed liquefied natural gas plant near Port Moresby as well as the continued growth in the mining sector and associated industry.\(^9\) Distributed power is rarely available outside urban centers. About 90% of the population has no access to electricity, and the progress in providing electricity to rural areas has been slow.

PNG continues to rely heavily on diesel or fuel-oil power plants and generators in spite of the country’s abundant renewable energy resources. PNG falls short of exploiting these resources because most of them are in remote locations where they are not readily exploitable and demand is limited. The natural gas sector is still in its infancy, but could also prove to be appealing to private investors.\(^10\)

Increased access to and improved quality of supply is hindered by a lack of sector planning and the lack of community service obligations payments to the state-owned power provider, PNG Power, in unprofitable areas of the country. This erodes the company’s profitability and reduces its ability to reinvest in and maintain its network infrastructure. On the main grids, power outages are becoming increasingly frequent because of insufficient generation and poorly maintained transmission and distribution systems. There is a lack of investment in maintaining generation, transmission, and distribution assets. This contributes to frequent

---


power shortages and ultimately leads to higher social and economic costs borne by the country.

**Government’s response.** The government plans to extend power to underserved areas targeting 70% access to electricity by 2030. Over the longer term, the government plans to build an electricity supercorridor that passes through areas where electricity can be generated at lowest cost with a national grid feeding it off and transmission lines passing through each of the economic corridors. In the Electricity Industry Policy, alternative energy sources are earmarked for a key role in the power mix. The government targets to supply 25% of the country’s electricity needs from renewable resources including geothermal, wind, and biomass. In 2014, the World Bank has begun to support the government in mapping potential renewable energy resources. The PNG Development Strategic Plan emphasizes the importance of private sector participation in funding energy infrastructure, such as the building of transmission lines and electricity generation capacity. The government is also looking to restructure PNG Power, which has regulatory responsibilities in addition to being the primary source of power generation and distribution.

**ADB’s response.** ADB is a key player in the development of the energy sector in PNG. Between 2010 and 2013, ADB approved a number of projects including Port Moresby Power Grid Development Project, Implementation of the Electricity Industry Policy, Improved Energy Access for Rural Communities, and Town Electrification Investment Program. Capacity building efforts are integrated into these energy projects, such as establishing implementation capacity within the Energy Division of the Department of Petroleum and Energy and capacity building of power utilities and communities.

**Drivers of fragility.** Weak governance and institutions have had significant long-term impacts on economic growth, delivery of public goods and services, credibility of the state, and efforts to alleviate poverty. PNG has largely comprehensive laws and institutions, but governance remains weak when compared with other major economies in Southeast Asia and the Pacific. A 2012 ADB study concludes that the major constraints to development in PNG are the low levels of government effectiveness in service delivery, poor law and order situation, and weak control of corruption. The study also points to land administration and difficult access to formal land titles as critical constraint to private investment and infrastructure development.

Geographical constraints, insufficient support to lower levels of government, and poor public financial management contribute further to poor service delivery. High unemployment combined with ineffective policing leads to poor law and order situation. Threat of land grabs from among customary landowners and inefficient land administration system constrain the productive use of lands.

**Government’s response.** PNG Vision 2050 highlights the significant role of churches and civil society in ensuring government accountability. A focus is also given to the local government in ensuring direct funding through appropriate legislation. There are also measures to improve the quality of government workforce, implement an effective service delivery mechanism, reform 3% of alienated land, and establish a policy and legislative framework for good governance. The government sees the provision of employment and income opportunities as a long-term response to mitigate law and order problems. The focus is to develop manufacturing, agriculture, forestry, fisheries, and tourism ventures to generate

---

around 70% of gross domestic product (GDP), with the balance coming from mining, petroleum, and gas ventures in the nonrenewable sector.\textsuperscript{14} The National Land Development Taskforce was established to implement the National Land Development Program to (i) improve land administration, (ii) improve land dispute settlement, (iii) design a framework for developing land held under customary tenure, and (iv) design institutional frameworks to support the development of a viable land and properties market.\textsuperscript{15}

**ADB’s response.** ADB’s current CPS (2011–2015) focuses on helping sustain the performance of the public sector and alleviate the constraint on the performance of ADB’s portfolio arising from the use of government systems and processes. To contribute to good governance, five technical assistance projects were approved between 2011 and 2014 for implementation: Facilitating Public–Private Partnerships, Regulating and Sustaining Road Transport, Supporting Public Financial Management (Phase 2), Implementation of the Electricity Industry Policy, and Supporting the Anti-Money Laundering and Combating the Financing of Terrorism in PNG.

---

**Recommended Strategies for Country Partnership Strategy 2016–2020**

**PROPOSED OPERATIONAL FOCUS**

**Rural transport connectivity, including rehabilitation and upgrading of provincial and district roads.** The PNG Development Strategic Plan highlights improvement of service delivery and income opportunities to the rural population as one of the government’s key priorities. About 85% of the population lives in rural PNG. However, rural areas are often deprived of basic services such as health, education, and electricity. Transport connectivity will facilitate provision of agricultural extension services, health services, schools, proper housing, electricity, telecommunications, water supply, and postal services. Access to basic services and income opportunities will empower the rural majority to become key players in advancing PNG’s economic growth and help promote inclusiveness of development assistance. Transport projects in the rural areas should be complemented with strengthening of the lower levels of government, especially at the provincial and district levels, to effectively implement local development programs.

---


and to make resource allocation decisions. An important feature of ADB’s strategy in the transport sector is ensuring that its investments are sustainable. While “missing link” roads offer improvements in the quality of land transport systems, focus should first be placed on ensuring that the existing road network system can be rebuilt and maintained before adding other assets to the system.

Development of renewable energy resources. ADB’s approach in renewable energy will need to take full account of the implementation capacity constraints in the sector and the difficulties PNG Power faces in raising sufficient revenues to make investments commercially viable. ADB’s role in the sector could be using its existing implementation structures to leverage additional support to implementation arrangements, thereby reducing complex interventions in the sector. ADB may explore cofinancing opportunities or additional support from special funds such as Japan’s Asian Clean Energy Fund under the Clean Energy Financing Partnership Facility. This will complement ADB’s initiatives in the Pacific region and PNG to promote sector reform, energy conservation and efficiency (supply- and demand-side measures), renewable energy deployment, and alternative and cleaner fuels.

Revival of the Public Service Program with focus on public financial management. Strengthening public financial management (PFM) systems is vital to government’s ability to effectively and efficiently utilize public finances for service delivery and infrastructure provision. Strengthened PFM is also needed to ensure that revenues from the recent commencement of liquefied natural gas exports and other mining and petroleum projects are efficiently and equitably utilized and aligned to national development priorities. ADB should therefore continue to support the government in PFM. In 2001, ADB approved the Public Service Program, a $70 million loan from ordinary capital resources to be disbursed in two equal tranches over 2 years. The program was designed to support policy reform measures in four areas: (i) building a performance-oriented public service, (ii) reorienting personnel management systems and processes, (iii) strengthening probity and oversight agencies, and (iv) improving delivery of basic services by both national and provincial governments. The ADB Operations Evaluation Department (now Independent Evaluation Department) rated the program as partly successful overall, less efficient in resource delivery and use, and less likely to be sustained in terms of its outputs and outcomes. Its second tranche was not released due to increased uncertainty about reform commitment. Building upon the lessons from previous PFM reform efforts and responding to the slow sector-wide reform progress, ADB may focus its support on specific interventions linked to ADB’s existing portfolio of projects that address critical public sector constraints to service delivery. ADB PFM assistance could also be more strongly linked to areas where a clear demand for assistance can be established. ADB should also remain ready to support the government in its efforts to implement the Extractive Industries Transparency Initiative and to adopt the Santiago Principles for the proposed establishment of a sovereign wealth fund. ADB also needs to ensure its efforts are aligned with other development partners particularly with the long-term advisory positions funded by Australia across the PNG public service.

PROPOSED OPERATIONAL APPROACHES

Long-term institution building as called for in ADB’s operational plan for fragile and conflict-affected situations. Institution building has not been a focus of the current ADB country strategy (PNG CPS 2011–2015), however, a number of capacity development projects linked to infrastructure projects have been supported. One of the highlights of ADB’s operational plan for FCAS is developing a framework for long-term institution building suited to FCAS developing member countries. The long-term institutional strengthening framework prepared under ADB’s operational plan for FCAS

---

19 The generally accepted principles and practices for sovereign wealth funds, informally known as the “Santiago Principles,” are a set of voluntary principles agreed to by the international working group of sovereign wealth funds in September 2008. The 24 principles offer guidelines covering governance, accountability, transparency, and conduct of investments for sovereign wealth funds.
could be piloted in PNG. Priority should be given to developing broad capacities of central agencies and core government functions with a compact between ADB and the PNG government to strengthen country systems.

Using longer-term, programmatic approaches in sector interventions to create stability and predictability of aid. ADB should continue adopting a long-term and strategic arrangement of individual yet interlinked projects aimed at achieving large scale impacts. Between 2010 and 2011, portfolio performance in PNG displayed some significant improvement mainly attributed to (i) a tighter focus of ADB support to transport and energy sectors complemented by smaller engagements in health, public financial management, and private sector development; (ii) a longer-term, programmatic approach using the multitranche financing facility providing long-term funding pipelines and enabling capacity building within sector ministries and development of project pipelines; and (iii) a gradual scaling up on the number of projects being implemented through resident missions along with staffing capacity.

Pursuing opportunities for government to increase its counterpart funding. Future programming discussions should pursue opportunities for government to increase its counterpart funding to be spent through existing implementation structures at national and subnational levels of government. Ongoing discussions with the government indicate that demand for ADB resources remains strong and primarily sought for those sectors, where ADB is seen as having a comparative advantage over other development partners, and which are of a high priority to the present government administration. Principal among these sectors are transport (particularly roads, bridges, and airports) and energy.

Ensuring inclusiveness of ADB assistance. Given the fragile context in PNG, ADB's comparative advantage and focus on hard infrastructure must be balanced with the inclusiveness of its assistance. ADB should demonstrate that its resources benefit the country's most marginalized communities. Looking for opportunities to accompany large infrastructure projects with technical assistance and grant-financed activities can be valuable in improving the inclusiveness of ADB investments.

Participating proactively in regional initiatives in private sector development and addressing climate change. The next CPS should look into the ongoing regional initiatives and explore how PNG could get involved and benefit from the initiatives in private sector development and addressing climate change. In 2012 and 2013, the Private Sector Development Initiative supported financial institutions in PNG and Timor-Leste to develop branchless banking models. On the issue of climate change, ADB has helped the government address sustainability risks by creating dedicated revenue streams and funds, promoting cost-recovery mechanisms, and strengthening climate change resilience.

---

Conclusion

**Strong institutions must be established for ADB’s investments to bring lasting and inclusive impact.** Strategy 2020 has identified good governance and capacity development as some of the drivers of change and crucial to improving the cost-effective delivery of public goods and services and broadening inclusiveness.22

**Supporting government-led efforts on aid coordination is vital to help achieve aid effectiveness.** ADB support in this area is vital to help the government achieve a mature level of aid alignment to its national development strategies. ADB should take the lead in major sectors where it operates such as transport and energy, and participate in other sectors such as health and education in aid coordination. ADB may also tap its multitranche financing facility to bring in cofinancing schemes in energy and transport projects.

**Focusing on ADB’s niche areas of transport and energy sectors will help reduce aid fragmentation.** The government views aid fragmentation as a serious issue to be addressed: “whereby donors seem to support everything and anything with their aid funds resulting in the funds being spread too thinly” leading to unsustainable development initiatives.23 A recent Independent Evaluation Department study of ADB support for PNG noted that ADB’s past engagement in PNG was characterized as (i) having a wide sector focus, intervening across a large number of social and economic sectors despite ADB’s limited financial and human resources; (ii) a shorter-term, project-based approach that led to ADB involvement in a sector for 3 to 5 years before moving on to another sector; and (iii) projects being implemented from Manila. ADB should focus its assistance to the development of transport and energy sectors where it has achieved significant experience and yielded greater impact on the recipient country. ADB’s assistance in the transport and energy sectors can indirectly but significantly support health and education sectors by providing the necessary infrastructure for citizens to access social services.

---
