

## **INSTITUTION BUILDING IN INFRASTRUCTURE SECTOR<sup>1</sup>**

### **I. ISSUES TO ADDRESS**

1. A policy reform agenda is needed to ensure infrastructure assets receive sustained, efficient, and effective maintenance. This paper outlines the institutional problems relevant to transport infrastructure provision in Papua New Guinea (PNG), explains the Asian Development Bank (ADB) long-standing policies and efforts to strengthen capacity, and gives special attention to recent initiatives.

### **II. INSTITUTIONAL PROBLEMS IN THE INFRASTRUCTURE SECTOR**

2. PNG has an unflattering record in the implementation of transport infrastructure development and maintenance. Investments are prone to long delays and cost over-runs. Less than a third of the national roads are maintained in “good condition,” and provincial roads are in a worse state of repair. Port facilities are in better condition, but not without important repair and rehabilitation needs. Airports suffer runway damage and lack many basic security and safety features. Much of the poor maintenance and inadequate conditions result from the institutional arrangements governing the delivery of infrastructure.

3. The unclear roles and responsibilities among government transport infrastructure planning, funding and implementing agencies is one the most commonly cited shortfalls. Unclear responsibilities feed inaction, poor implementation and neglected maintenance. Coordination is sometimes lacking even when distinct roles are understood. The Transport Sector Coordination, Monitoring and Implementation Committee (TSCMIC) was created to increase dialogue among agencies to improve governance and the Government of PNG delivery of transport infrastructure services, but institutional independence and funding inconsistencies inhibit unified adherence to all objectives.

4. Unsatisfactory financial management follows from unclear responsibilities. Planning and prioritization may be the responsibility of one agency, funding that of another, and implementation yet another. Operations and capital investment may be the responsibility of two different units. For instance, the new National Airports Corporation (NAC), is responsible for airports operations and maintenance; PNG Air Services Limited, or PNGASL, is responsible for communications and navigation. The National Roads Authority (NRA) is responsible for maintaining roads gazetted to them, but their role in rehabilitation and upgrading is not entirely clear, and the extent to which it interacts with the Department of Works, which does maintenance on other roads, is unclear. The Land Transport Division in the Department of Transport is responsible for vehicle registration, although in practice registration is done at the provincial level, with assistance from Motor Vehicle Insurance Limited, a state-owned enterprise.) The source of funds may be held by one agency, with implementation responsibilities in another. Profits from commercial operations are not necessarily retained by the entity generating them. The unpredictability of annual budget allocations prevents sustained investment and maintenance. Disbursements to line agencies<sup>2</sup> suffer delays. Emergency repairs

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<sup>2</sup> A study of 35 AusAID-funded road projects active in 2006–2007, revealed that contracts were completed, or forecast to complete, with an average 97% delay: almost double the time agreed upon in the contract. Only two projects had less than 1 month (less than 10%) overruns, while two projects were extending three times as long, and another two projects four times as long.

(especially in the Highlands where ADB has its roads programs) often precludes funds dedicated to maintenance plans.

5. Procurement of any major civil works project is prolonged by a lengthy NEC approval process. Most externally funded transport infrastructure projects have tender values greater than 10 million Kina threshold requiring NEC (National Executive Council, or cabinet) approval, and that typically extends 6 months. (The Department of National Planning and Monitoring, DNPM, has agreed to lead a special task force to review and make recommendations to streamline the NEC procurement approval process.)

6. Unpredictable budgets and institutional shortcomings, as well as communications, reporting and supervision limitations engender poor project management and unsatisfactory accountability.

7. Government originally introduced Community Service Obligations (CSOs) requiring state-owned enterprises (SOE) to provide services that are often not commercially viable in an effort to provide inexpensive services to a wider public, particularly to people in remote areas and/or disadvantaged groups. These CSOs are prescribed in an ad-hoc fashion, without systematic identification, documentation, costing or funding. The unintended results include confused incentives, gaps in accountability, efficiency losses, and often SOEs financial losses.

8. The very constrained capacity of Papua New Guinea's civil works sector limits the implementation of transport infrastructure projects. The PNG liquefied natural gas (LNG) project is suddenly placing new and much greater demand for the services of the very few and inadequate construction companies. This raises costs, and crowds out donor-funded infrastructure projects.

### **III. CURRENT/LONG-STANDING ADB INITIATIVES TO ENSURE LONG-TERM SUSTAINED ASSET MAINTENANCE**

9. ADB has already provided sustained support for different capacity building mechanisms in Government of PNG institutions to enhance their ability to implement projects efficiently, effectively, and sustain infrastructure over the long term.

10. ADB has long supported the planning process and the information flows necessary to prioritize transport infrastructure projects rationally. ADB supported the establishment of the Road Asset Management System (RAMS) and corresponding bridge database (BAMS) furnishing data on road and bridge conditions essential to a maintenance program. ADB recently developed a transport knowledge base presenting rare aggregate information.

11. ADB is assisting the Department of Transport's new long- and medium-term plans: the National Transport Strategy 2011-2030 (NTS) and the Medium-Term Transport Plan (MTTP 2011–2015). ADB-funded experts support the preparation of these transportation plans, promote dialogue among the sector's many actors, and provide inputs necessary to address institutional arrangements.

12. In addition, ADB's new Public Financial Management (PFM) technical assistance project includes a component for capital improvement programming relevant to transport projects. Institutional Reform and Improved Governance for Sustainable Infrastructure.

13. ADB has provided institution-building support for specific statutory authorities. The ADB has provided assistance to the NRA since before its establishment in 2003, and currently has a technical assistance project supporting its further institutional development, especially financial management. Two projects supporting maritime navigational aids and community water transport have included components strengthening the National Maritime Safety Authority (NMSA). In the NRA's case, ADB has supported private sector leadership in its board.

14. These ADB institution-building efforts have included the creation of dedicated funds providing transport agencies with sustained cash flow. For instance, the establishment of a fuel on diesel that forms the basis of the NRA arose from ADB's expressed desire for dedicated funding. The new Increasing Road User Charges and Private Sector Participation in Road Development policy and advisory technical assistance (PATA) seeks to improve the NRA's finance by exploring new road user charges. Meanwhile, a trust fund created with ADB and Government of PNG funds on a 90/10 bases was essential for the establishment of the Community Water Transport Project, its subsidies for service, and long-term maintenance of piers and jetties.

15. At the project level, ADB has included support for project implementation units (PIU) providing technical assistance in the implementation of civil works. PIUs such as the Highlands Region Maintenance Group (HRMG) have proven themselves effective in this fragile situation by ensuring standards in the sustained implementation of design, procurement, project management, supervision, reporting and monitoring, while imparting best practices in the client organization. PIUs are also responsible for training and capacity building in client organizations.

16. In addition to direct cooperation with the host government, ADB is supporting donor harmonization within PNG's donor community in an effort to improve aid effectiveness. The ADB is working with the Australian Agency for International Development (AusAID) and the World Bank to simplify procurement requirements, devise standardized project reports, and unify approaches to monitoring and evaluation. ADB is also supplying information from its knowledge base to other donors, and participating in joint missions.

#### **IV. RECENT INITIATIVES**

17. ADB continues to expand its efforts to improve public- and private-sector capacity to implement transportation infrastructure projects. This section describes recent initiatives and proposed efforts.

18. The large Highlands Region Road Improvement Investment Project (HRRRIIP) multitranches finance facility (MFF) will provide a series of large loans funding long-term performance-based road maintenance contracts. These contracts will engage construction companies to maintain roads at a specified level of service over the long-term, rather than short-term delivery of road improvements according to the terms of reference. The MFF should provide assurance to contractors that they will receive sustained funding. The new Civil Aviation Development Investment Project (CADIP) MFF design also includes performance-based maintenance contracts.

19. ADB's continued support to the NRA includes a recently-approved technical assistance project, Improving Road User Charges and Private Sector Participation in Road Development. This PATA project supports the institution's efforts to identify alternative dedicated road user charges to finance road maintenance. The assistance also aims to stimulate increased

competition in the civil works sector, including a promotional effort (sometimes referred to as the “Road Show”) to attract large foreign companies to pursue contracts in Papua New Guinea.

20. ADB’s Private Sector Development Initiative (PSDI), working through the Pacific Liaison and Coordination Office (PLCO), is presently cooperating with GoPNG to develop and implement a CSO framework for SOEs, including PNGPCL, NAC, and Air Niugini. The framework will systematically identify, cost, contract, and finance CSOs on a fully commercial, transparent and accountable basis. That will facilitate the introduction of competition in these sectors, and may include outsourcing CSOs to private sector operators.

21. ADB intends to improve its monitoring mechanisms to adopt the “Baseline Survey” method already developed under AusAID and World Bank projects in PNG. Baseline surveys systematically measure the impact of road projects in terms of households’ access to school, health facilities, and markets, higher incomes, and reduced poverty.

22. ADB is exploring opportunities to selectively engage Provincial Administrators better in the development of road construction projects as part of the country partnership strategy (CPS) exercise. This follows from observation of positive World Bank experience in which good information flows to Provincial Administrators ensured these influential individuals were familiar with the projects and could respond proactively when disputes arose between contractors and local communities.

23. ADB is also addressing civil works capacity under the Transport Sector Road Map, in a separate knowledge-base paper<sup>3</sup>. The ADB hopes to increase the number of companies operating in the civil works sector, expanding capacity, increasing completion, and improving project implementation. This includes promoting the entry of large foreign contractors capable of performing long-term performance-based contracts for large sections of roads, while exploring opportunities to increase the participation of small and medium enterprises in road maintenance work. Support for vocational and technical training, and civil works engineering education programs are additional possibilities.

## V. CONCLUSION

24. Papua New Guinea has a poor record in the financing and implementation of infrastructure development and maintenance, and many of the causes result from budget shortfalls and institutional causes. Budgets often do not sustain funds to projects on a year-to-year basis, disbursements do not necessarily follow in a timely manner, and funds finally received must often be allocated to emergency works (especially in the Highlands.). Meanwhile, SOEs such as PNG Ports Corporation Ltd. suffer additional problems arising from CSOs that create inefficiencies threatening their financial viability. All these problems point to a need to improve funding, build capacity, and improve governance in the infrastructure sector. In addition to financial shortcomings, unclear roles and responsibilities lead to inaction, implementation shortfalls, and neglected maintenance. Lengthy procurement and gaps in project management confound the halting implementation of projects.

25. ADB has also supported many reforms including improved data inputs and assistance to the planning process, dedicated and improved funding, institutional support for statutory authorities, project implementation units, and donor harmonization. The ADB continues to

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<sup>3</sup> See separate “Addressing Civil Works Capacity Constraints in Papua New Guinea” under supplementary documents of the PNG country partnership strategy 2011–2015 (Appendix 2).

explore further opportunities, such as long-term performance-based maintenance contracts, improvements to the procurement process, CSO reform, the constructive engagement of administrators in provincial governments, and greater private-sector civil works capacity.