



Report and Recommendation of the President to the Board of Directors

Project Number: 42135
November 2009

Proposed Loan and Technical Assistance Papua New Guinea: Pilot Border Trade and Investment Development Project

CURRENCY EQUIVALENTS

(as of 30 September 2009)

Currency Unit – kina (K)
K1.00 = \$0.373
\$1.00 = K2.681

ABBREVIATIONS

ADB	–	Asian Development Bank
ADF	–	Asian Development Fund
AusAID	–	Australian Agency for International Development
BDA	–	Border Development Authority
CCT	–	conditional cash transfer
DCI	–	Department of Commerce and Industry
EIRR	–	economic internal rate of return
FTZ	–	free trade zone
ICB	–	international competitive bidding
ICCC	–	Independent Consumer and Competition Commission
ICT	–	information and communication technology
IFC	–	International Finance Corporation
IPA	–	Investment Promotion Authority
MCCT	–	modified conditional cash transfer
NPV	–	net present value
PMO	–	provincial management office
PNG	–	Papua New Guinea
PRC	–	People's Republic of China
TA	–	technical assistance
TASF	–	Technical Assistance Special Fund
TTC	–	trade transaction cost
VSO	–	Volunteer Service Overseas
WSP	–	West Sepik Province
WSPA	–	West Sepik Provincial Administration

NOTES

- (i) The fiscal year (FY) of the Government ends on 31 December. FY before a calendar year denotes the year in which the fiscal year ends, e.g., FY2008 ends on 31 December 2008.
- (ii) In this report, "\$" refers to US dollars.

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LOAN AND PROJECT SUMMARY

Borrower	Papua New Guinea
Classification	Targeting classification: General intervention Sector (subsector): Industry and trade (trade and services) Themes (subthemes): Economic growth (promoting economic efficiency and enabling business environment), regional cooperation and integration (trade and investments), social development (human development), capacity development (organizational development)
Environment Assessment	Category B
Project Description	The Project will remove the infrastructure bottleneck along the northern transport corridor connecting West Sepik Province (WSP) of Papua New Guinea (PNG) and Papua Province of Indonesia, and improve the investment environment in WSP to enable WSP to capture trade opportunities for development. It will finance (i) the border facilities at Wutung, (ii) consulting services for project implementation and construction supervision, (iii) capacity development, and (iv) a social development program including HIV/AIDS prevention.
Rationale	WSP is one of the poorest provinces in PNG in terms of both economic and social development. However, it has potential to develop itself and drive the development of PNG's northern coastal region if it can capture the opportunities offered by Asia, particularly the neighboring Papua Province of Indonesia, which provides 25%–40% cheaper products and services and is in demand of PNG products.
Impact and Outcome	The Project will help improve the business environment in WSP by reducing the business transaction costs associated with infrastructure, compliance with government rules and regulations, and thin human capital. It aims at developing WSP into a dynamic growth center for PNG, which can catalyze the development of the neighboring provinces—including Manus, East Sepik, Madang, and Morobe provinces.
Project Investment Plan	The investment cost of the Project is estimated at \$30 million, including taxes and duties of \$2.33 million.
Financing Plan	The Asian Development Bank (ADB) will provide a loan of \$25 million from the Asian Development Fund (ADF) to finance 83% of the total cost. The Government will provide \$5 million, or 17% of the total project cost.

The ADF loan in various currencies equivalent to Special Drawing Rights 15,684,000 (\$25 million) will have a maturity of 32 years including a grace period of 8 years, an interest charge of 1% per annum during the grace period and 1.5% per annum thereafter, equal amortization, and such other terms and conditions set forth in the draft ADF loan agreement.

Period of Utilization	Until 30 June 2018
Estimated Project Completion Date	31 December 2017
Executing Agency	Border Development Authority (BDA)
Implementation Arrangements	BDA will be the Executing Agency for the Project. It will establish a provincial management office (PMO) in WSP to manage the Project on the ground, and eventually develop the PMO into a one-stop office for promoting investment and trade.
Procurement	The procurement will mainly consist of civil works and equipment and will follow ADB's <i>Procurement Guidelines</i> (2007, as amended from time to time). There are two civil works contract packages and eight equipment packages.
Consulting Services	International and national consultants will provide (i) support to BDA and its PMO in the areas of contract management, investment and tourism promotion, capacity development, and socioeconomic monitoring; (ii) construction supervision and environmental monitoring; and (iii) HIV/AIDS prevention. The consultants will be hired according to ADB's <i>Guidelines on the Use of Consultants</i> (2007, as amended from time to time). They will be recruited through quality and cost-based selection, individual consultant selection, single-source selection, or other methods as appropriate.
Project Benefits and Beneficiaries	<p>The Project will help PNG benefit from the dynamic economic development in Asia. Expanded trade with Papua Province of Indonesia resulting from the Project will (i) encourage PNG to specialize according to its comparative advantages and enable efficient deployment of national resources; (ii) increase PNG exports; (iii) disseminate to PNG ideas, management and organization skills, and technology to increase productivity of local businesses; and (iv) give PNG consumers a wider range of products at cheaper prices.</p> <p>The Project is economically viable. At a 12% discount rate, the net present value is about K5.52 million and the economic internal rate of return is 14.05%. Even at the project preparation stage, business confidence in WSP increased and a record level of business registration was reported for 2008.</p>

The investment and capacity development components of the Project will generate employment for more than 200 persons. The spillover benefits to the service sector are difficult to predict, but will be significant. The social development program of the Project will directly alleviate the non-income poverty of five border villages with a population of about 4,000.

Risks and Assumptions

The Project may face the following risks:

- (i) **Procurement.** All procurement financed under the loan will follow ADB guidelines, with which BDA is not familiar. Similar to other ADB projects in PNG, procurement of civil works will be hampered by lack of qualified contractors. In addition, BDA will have to deal with the Government's lengthy process for contract approval.
- (ii) **Financial management.** Financial discipline is generally weak in PNG. Safeguarding the financial integrity of the Project will be a challenge for BDA.

The Project includes the following mitigation measures:

- (i) providing procurement and financial consultants through technical assistance (TA) to assist BDA in finalizing the bidding documents and evaluating bids, and providing international and national consulting services under the loan to assist BDA in managing the Project;
- (ii) engaging a reputable accounting firm through the TA to provide long-term services to BDA, assisting in financial management;
- (iii) using modified conditional cash transfer to carry out the social development program to minimize demand on BDA's capacity as well as capture, leakages, and noncompliance; and
- (iv) assisting BDA staff in joining ADB training programs on procurement, financial management, anticorruption, disbursement, and project management.

Technical Assistance

A TA grant will be attached to the Project to (i) assist the Department of Commerce and Industry in developing the investment legislation and telecommunication strategy for WSP, and (ii) assist BDA in procuring civil works for border facilities and managing the financial aspect of the Project. The objectives of the TA are (i) to assist in catalyzing investment in WSP and increasing the supply of PNG products in demand by helping the Government to prepare specific investment policies and a telecommunication solution for WSP, both of which are critical to reduce business transaction costs and increase the attractiveness of WSP as a destination for investment; and (ii) to facilitate project implementation.

PAPUA NEW GUINEA PILOT BORDER TRADE AND INVESTMENT DEVELOPMENT PROJECT



I. THE PROPOSAL

1. I submit for your approval of the following report and recommendation on a proposed loan to Papua New Guinea (PNG) for the Pilot Border Trade and Investment Development Project. The report also describes the proposed technical assistance (TA) for the Trade and Investment Institutional Strengthening and if the Board approves the proposed loan, I, acting under the authority delegated to me by the Board, will approve the TA. The design and monitoring framework is in Appendix 1.

II. RATIONALE: SECTOR PERFORMANCE, PROBLEMS, AND OPPORTUNITIES

A. Performance Indicators and Analysis

2. Located in the northwest of PNG, West Sepik Province (WSP) is PNG's third largest province—with a land area of 3,605 hectares, accounting for 7.77% of PNG's total land. The land area of WSP consists of a high mountainous region to the south, Sepik basin in the center, and the low coastal region to the north. Its four districts are generally mountainous, and mountain ranges are dominated by limestone karst with a large number of caves.

3. WSP is one of the least developed provinces in PNG. It is remote and isolated from PNG's major population and growth centers, and is only accessible by air and coastal shipping. Accessibility within the province is also poor. There is no road connection between Vanimo (the capital of the province) and the four districts, and between the four districts themselves.

4. There are few economic activities in the province. The modern sector is dominated by the Government and the timber industry. Logs are exported without being processed. Around 92% of the province's 190,000 population is isolated in the rural areas, surviving on subsistence agriculture.

5. The internal revenue¹ of the province totaled less than K2 million in 2007, the highest since 2004. The province relies almost entirely on national grants to finance basic service delivery such as education, health, and transport infrastructure maintenance. It received about K5.64 million in national grants in 2008 and is guaranteed to receive this level of grants annually until 2013, which will enable it to cover about 50% of the cost of service delivery.²

6. The development indicators are among the worst in PNG. The adult literacy rate for the province is estimated around 45%. Life expectancy at birth is only 46 years, significantly shorter than the national average (57.4 years). The infant mortality rate is 71 per 1,000 live births, the fourth highest in PNG. The child mortality rate under the age of five is 64 per 1,000. The malnutrition rate is around 40%.

7. The province, nevertheless, has opportunities to improve its development status. First, it is richly endowed with minerals, forest, fishery, and eco-conditions for agricultural crops such as cocoa, oil palm, and vanilla. Culturally, it is also diverse. The province has five different cultural zones and 95 local languages. Each zone has different rites, traditions, and art styles.

8. Second, the province shares 260 kilometers of land border with Papua Province of Indonesia, which is the second richest province in Indonesia and offers products and services at

¹ Includes licenses, fees, taxes, commercial receipts, and miscellaneous revenue.

² National Economic and Fiscal Commission. 2008. *Review of Provincial Revenues*. Port Moresby.

prices 25%–40% lower than those of PNG. Vanimo (capital of WSP) is well connected with Jayapura (capital of Papua Province of Indonesia) by road. In terms of development status, Jayapura is about 40 years ahead of Vanimo.

9. Acknowledging the trade benefits, PNG and Indonesia signed an agreement on Special Arrangements for Traditional and Customary Border Crossings in 1993. Border residents with border-crossing cards are allowed to freely enter into and travel within the corresponding part of the border area of the other solely for traditional and customary purposes. Each cardholder is entitled to \$300 worth of goods free from taxes per month.

10. Indonesia is in demand of beef, beer, betel nuts, cocoa, snack foods, tuna, and vanilla from PNG, while PNG buys spare parts for trucks, rice, water, electronics, textiles, and house ware from Papua Province of Indonesia. Official Indonesian records show that the cross-border trade volume reached about \$7 million in 2007. At the border, people carry betel nuts from PNG to Indonesia and rice from Indonesia to PNG. PNG official records³ show that WSP increased its cocoa production from 545 tons in 2004 to 1,193 tons in 2007. Its share of PNG total cocoa production rose from 1.6% in 2004 to 2.7% in 2007. Statistics from WSP indicate that about 1,000 tons of vanilla were exported to Indonesia through the Wutung border in 2004 and 664 tons of cocoa in 2008.

11. Logging and mining can increase revenues temporarily but will not be in the long-term interest of the province. Constructing roads and delivering services across the vast land, with difficult terrains and geotechnical conditions, will be costly and unaffordable. The development opportunity for the province lies in strengthening economic cooperation with Papua Province of Indonesia and building growth centers.

12. International experience shows that trade and investment promote economic growth, create job opportunities, and develop human capital. Foreign trade and investment will contribute more than the needed finance. More importantly, these will bring with them employment, technical and engineering skills, management expertise, technology, a business culture, and markets.

13. Expanding cross-border trade with Indonesia will provide people in WSP with a wider choice of products at lower costs and increase their welfare. It will also improve market access for PNG exports, increase business opportunities, stimulate investment, create jobs, enhance productivity, and lead to more rapid and sustainable growth. Promising economic activities that may be stimulated include cash crop production and processing, tourism, transshipment, fishery, and pharmacy. The analysis of WSP and its development opportunities is in Appendix 2.

14. Although there seems to be a large number of traditional border-crossing points between Indonesia and PNG, the Skouw–Wutung border is the most formal one with significant trade. Indonesian border facilities at Skouw were built in 1992 and designed for vehicle crossing, with a washdown area and large parking facilities for customs and other inspections. The governor of Papua Province of Indonesia visited PNG in 2008 and made a joint statement with the Prime Minister of PNG to expand trade and economic cooperation between the two sides. The Government of Indonesia has approved an increase of tax exemption entitlements for traditional border crossers from \$300 to \$1,000. In addition to the two existing markets, it has built 60 market houses, and is planning to build larger and better border facilities.

³ Department of Commerce and Industry. 2008. *Statistical Digest*. Port Moresby.

15. Since 2006, PNG and Indonesia have been in discussions to open the Skouw–Wutung border post and Jayapura–Vanimo road for vehicles. Talks have also been held on implementation of the agreement on compulsory motor vehicle insurance; direct land, sea, and air transportation; avoidance of double taxation; and establishment of the joint business council. The Agreement on Avoidance of Double Taxation and Prevention of Fiscal Evasion is being prepared for signing.

16. PNG, however, is reluctant to open the border for vehicle crossing because the border facilities at Wutung can hardly cope with the current foot crossing, not to mention traffic flows. There are no parking lots for vehicles from Indonesia and customs and quarantine facilities. The socioeconomic study carried out under the project preparatory TA⁴ indicates that people are concerned that the border might be opened without a proper infrastructure and management system to protect PNG from diseases and illegal activities.

17. The Project is the first step of the Government and the Asian Development Bank (ADB) to enhance economic cooperation between PNG and Asia. It will help improve the business environment in WSP; and enable WSP to capture the opportunities offered by the fast-growing Asian economies for growth, development, and employment.

B. Analysis of Key Problems and Opportunities

1. Challenges

18. Developing WSP faces a combination of challenges—external, internal, physical, institutional, environmental, and social.

19. **Global economic crisis.** PNG performed well economically during 2004–2007, thanks to political and macroeconomic stability and high international commodity prices. Real gross domestic product growth was 2.7% in 2004, 3.4% in 2005, 2.6% in 2006, and an estimated 6.2% in 2007.

20. The global financial crisis that began in late 2008 has caused large falls in the prices of PNG's major export items: 75% for crude oil, 50% for palm oil, 50% for copra, 15% for cocoa, and 15% for coffee. PNG's real gross domestic product growth is projected to slow down to 4% in 2009 and 3.5% in 2010. The national grants to the provinces are expected to be reduced by 25% in 2009 as a result of the dwindling revenue.

21. **Poor infrastructure.** WSP is only connected with the rest of PNG by flight (3 times weekly) and coastal shipping (twice a month). Since WSP is not interlinked by roads, air flight is the only means to reach most parts of the vast province. Telecommunication services are costly and unreliable. Mobile phones and even landline services are often disrupted, sometimes for days. Internet access is limited to slow and expensive dial-up service. There is no water supply in Vanimo, which depends entirely on rainwater. Most of the population has no electricity service at home. Port facilities have limited capacity and can only cater to small vessels. Border facilities at Wutung post have deteriorated and are not capable of handling vehicle crossing.

22. **Difficult regulatory framework for investment.** The role of the Government of Papua New Guinea and its policies, regulations, and administrative practices are perceived as a

⁴ ADB. 2008. *Technical Assistance for Preparing the Pilot Border Trade and Investment Development Project*. Manila (TA 7125-PNG).

disincentive for businesses, as revealed by a recent survey of 243 businesses carried out by an ADB study in 2007.⁵ Nearly 70% of the businesses surveyed indicated that the Government was unhelpful, and 50% cited costly and time-consuming compliance with government regulations as a reason to abandon investments.

23. The business regulatory framework does not provide a conducive environment. It involves significant administrative discretions, cumbersome procedures and processes, and unnecessary and unwarranted opportunities for rent seeking. It emphasizes controlling rather than facilitating business development. The World Bank's *Doing Business* reports, which quantitatively measure government regulations in terms of starting a business, dealing with construction permits, employing workers, registering property, accessing credit, protecting investors, paying taxes, trading across borders, enforcing contracts, and closing a business indicate that PNG is not improving while other countries are advancing. Most of the indicators for PNG in the 2008 and 2009 reports stayed the same, but its overall ranking slipped from 89 in 2008 to 95 in 2009. PNG regressed particularly in the areas of starting a business (requiring 8 procedures and 56 days), dealing with construction permits (requiring 24 procedures and 217 days), access to credit, and trading across borders.⁶

24. The immigration and labor regulations and minimum wage requirement further reduce the competitiveness of PNG as a business destination. Of 1,048 occupation codes, 578 are reserved for nationals. Foreign workers must obtain work permits and an employment visa. Processing of work permits and employment visas is unpredictable, lengthy, and costly. Up-front training and localization programs are also required from foreign investors. In February 2009, the National Minimum Wages Board proposed a new minimum wage structure for unskilled formal sector workers in PNG. If approved, the minimum wage will increase by 274% from K37.2 to K101.8 per week within 1 year of effectiveness. The assessment of the regulatory framework is in Appendix 3.

25. As a result of the high cost of doing business, PNG tends to attract large businesses that are capital-intensive with potential to yield high returns, such as mining and logging. Agriculture and small and medium-sized enterprises, which have employment potential, have not seen rising investments. Foreign direct investments fluctuate steeply with mining activities, from about \$100 million in 2003 to less than \$40 million in 2006.⁷

26. In WSP, Vanimo has been declared a free trade zone since 2000, but no investor has ever applied to operate—reflecting investors' negative perception of the WSP business environment.

27. **Thin human capital.** The adult literacy rate in PNG is 57.3% and the combined primary, secondary, and tertiary gross enrollment ratio is 40.7%. The adult literacy rate in WSP is around 45% and there is a skills shortage in almost all professions. The liquefied natural gas project, with its skilled labor requirement anticipated to be 8,000 in the medium term, is expected to aggravate the labor market. People in WSP fear they may not be able to participate in the development because they do not have entrepreneurship, technical and vocational skills, and experience with trade and formal business enterprise.

⁵ ADB. 2007. *The Challenges of Doing Business in Papua New Guinea*. Manila.

⁶ World Bank. 2007. *Doing Business 2008*. Washington, DC; World Bank. 2008. *Doing Business 2009*. Washington, DC.

⁷ Multilateral Investment Guarantee Agency. FDI.net: Promoting Foreign Direct Investment in Emerging Markets. <http://www.fdi.net/country>

28. **Environmental and social challenges.** More than 70% of WSP's land is covered with original rainforest. Five logging companies have been authorized to operate in the province and illegal logging has been suspected. Preservation of the forest will be very difficult given the lack of economic activities, vast land, small population, and corruption. Road development may aggravate the situation.

29. Although law and security conditions seem to be better in WSP than in other parts of PNG, social conflicts and disputes over land titles, concession fees, and compensation are a regular occurrence.

2. Government Strategy

30. As early as 1965, a piece of land was acquired for Wutung border development. The Government introduced a Border Development Program in 1979 with the main objectives of improving security and stability along the PNG–Indonesia border by promoting the well-being of the people along the border and engaging them in development activities. In 2000, the Physical Planning Office of WSP prepared the Wutung (Physical Planning) Subject Development Plan in line with the Physical Planning Act, 1989. The Free Trade Zone Act was also enacted in 2000 and Vanimo was declared one of the four free trade zones.

31. Funding for the Border Development Program and the Wutung border has been limited and on an ad hoc basis. PNG's total expenditure on projects along the border is over K21 million to date, in contrast to \$30 million annual expenditure by Indonesia in its border areas. The Border Development Program was abolished in 2000 and reinstated in 2001. It prioritized road construction and establishment of border posts along the border. During 2002 and 2003, K350,000 was committed to Wutung border post facilities. In 2004, K4 million was provided for sealing Vanimo–Jayapura road and for Wutung border facilities.⁸ The road sealing was completed recently and the road is in good condition. However, the Wutung border was never completed according to the Wutung (Physical Planning) Subject Development Plan, 2000.

32. In 1993, the governments of PNG and Indonesia entered into a memorandum of understanding to establish the Joint Border Committee. Meetings of the Joint Border Committee are held annually in both countries. To date, 14 memorandums of understanding have been signed on traditional and customary border crossings, demarcation of the boundary, security, international communication, rescue activities, technical subcommittee, air service, use of the Fly River, banking, motor vehicle insurance, animal and plant quarantine, and customs.

33. The PNG's Medium Term Development Strategy 2005–2010 included private sector economic growth and least developed areas' interventions as two of the 10 guiding principles.⁹ It sets the goal of improving living standards through an overarching development strategy of export-driven economic growth, rural development, and poverty reduction. In 2005, K1.7 million was provided to Western Province¹⁰ for maintenance of staff housing, schools, health centers, airstrips, and existing feeder roads. From 2007 to 2009, K10 million–K20 million was allocated annually for border development. In October 2008, the Government established the Border Development Authority (BDA) to address the specific needs of the six border provinces including WSP, particularly infrastructure and foreign and local investment.

⁸ Department of Provincial and Local Government Affairs. 2008. *Border Development Program for Papua New Guinea/Indonesia Border*. Port Moresby.

⁹ Government of Papua New Guinea. 2004. *The Medium Term Development Strategy, 2005–2010*. Port Moresby.

¹⁰ Another province bordering Papua Province of Indonesia.

34. Aside from the Border Development Program, the Government has made efforts to increase direct budgetary support for the poor provinces. In July 2008, the Government amended the Organic Law on Provincial Governments and Local-Level Governments and introduced a new intergovernmental financing system. The new system provides for provincial and local governments as a group to receive funding for recurrent goods and services as a fixed percentage of net national revenue. This amount is referred to as the equalization amount. If national revenues rise, provincial and local governments are entitled to share in the increase; if revenues fall, the national grants will also be reduced. The percentage will increase each year from 2009 to 2013, enabling increasing funding to provincial and local governments for recurrent goods and services. The equalization amount will guarantee all provinces not to receive less than the allocations they received in 2008 during 2009–2013. The surplus will then be allocated on a needs basis.¹¹ This means that a poor province such as WSP will receive relatively more resource allocation.

35. In 1993, PNG became a member of the Asia-Pacific Economic Cooperation forum, which identified trade and investment facilitation as one of the three key areas for its future work program in 1995. PNG joined the World Trade Organization in 1995. It completed a 7-year tariff reform program in 2006 and reduced the tariff rates to 15%, 25%, and 40%. It now maintains one of the least restrictive trade regimes in the region.

36. PNG has also been an active member of World Customs Organization since 2002. It has completed the necessary legislative changes to implement practices and procedures based on global standards approved by the World Customs Organization, and is expected to accede to the Revised Kyoto Convention for the Simplification and Harmonization of Customs Procedures by 2009.

37. Currently, 50% of cargo receives instant customs clearance, 40% is subject to documentary check, and 10% requires some form of physical intervention by customs. PNG Customs Service is pursuing a customs modernization strategic action plan and striving to achieve an 80%–10%–10% split.

3. ADB Strategy

38. PNG's National Strategic Plan 2010–2050, expected to be approved by 2009, aims to improve PNG's strategic planning, institutions, and systems; develop manufacturing capability; and turn PNG into an attractive destination for business and investment.

39. Regional cooperation and integration is one of the five core operational areas in ADB's long-term strategic framework 2008–2020 (Strategy 2020).¹² The Pacific Regional Operations Business Plan, 2007–2010 identified improving trade links between PNG and Indonesia as another avenue for contributing to economic growth and poverty reduction in PNG.¹³

40. A review of the constraints and opportunities facing WSP indicates that WSP's development prospects lie in strengthening economic cooperation with Papua Province of Indonesia. Given the environmental, social, financial, and institutional constraints; the existence of the road connection between Jayapura, Vanimo, and Bewani; and the mutual desire of PNG and Papua government to expand trade, ADB's strategy is to assist PNG in improving the WSP

¹¹ National Economic and Fiscal Commission. 2008. *Review of Provincial Revenues*. Port Moresby.

¹² ADB. 2008. *Strategy 2020: The Long-Term Strategic Framework of the Asian Development Bank, 2008–2020*. Manila.

¹³ ADB. 2007. *Regional Operations Business Plan (2007–2010): Pacific*. Manila.

business environment by reducing the business transaction costs associated with border infrastructure, compliance with government policies, rules, and regulations; and thin human resources—so that foreign and domestic investment can flow to WSP and translate WSP’s rich natural and cultural resources into employment, human capital formation, and improved living standards and health and education status. To make the Project manageable, and since it is premature to develop border management systems, the Project will only provide the infrastructure for the border and will not address border operations.

41. Although business confidence increased during project preparation (as reflected in the business registration in WSP in 2008), ADB recognizes that the Project alone will not be sufficient to boost the development of WSP. Border operations, access to capital for business development, agreements on cross-border transport, and other infrastructure needs (such as power and water) will also need to be addressed. Capacity development is a long-term task and requires persistent efforts by ADB. The Project is the first initiative in ADB’s series of efforts to promote regionalism between PNG and Indonesia. ADB is considering extending its microfinance project to WSP, and has planned a regional TA for approval in 2010. The scope of the TA may include (i) preparing a profile of goods and services tradable between PNG and Indonesia; (ii) assessing benefits from forward and backward linkages of cross-border trade between PNG and Indonesia; (iii) developing an investment plan for cross-border transport and trade infrastructure; (iv) strengthening the trade-related institutions and improving the efficiency of ports and customs; (v) developing a blueprint for harmonizing transport, trade, tariff policies and standards, and regulatory frameworks; and fostering private sector growth to increase trade flow; and (vi) developing human resources in trade, transport, and transit facilitation. ADB is also making efforts to catalyze development partners’ assistance to provide water, power, and education facilities in WSP.

4. External Assistance

42. The Australian Agency for International Development (AusAID) is the most significant development partner present in WSP. Its assistance focuses on maintaining national roads and strengthening the capacity of provincial and local level governments in delivering basic services. The International Finance Corporation (IFC) has approved \$1 million to assist the PNG Investment Promotion Authority through its Registration Reform Project to streamline government approval processes and procedures for businesses. The European Commission has been supporting PNG in strengthening capacity for trade-related policy formulation, analysis, administration, and negotiation; and integration of trade aspects into PNG’s development and sectoral strategies since 2007. The external assistance is summarized in Appendix 4.

5. Lessons

43. The Project is the first to promote development of a poor area through regional cooperation in PNG and in the Pacific. Experience from ADB-financed regional projects in the Greater Mekong Subregion and Central Asia was reviewed to draw lessons. Major lessons are: (i) transport corridors may not necessarily translate into economic corridors if they are not complemented by the policy and institutional changes that enable better opportunities for the private sector; and (ii) project design needs to be simplified and avoid addressing too many issues. The design of the Project is straightforward; seeks partnership with other agencies and ADB initiatives; and has taken into account the existence of the northern transport corridor linking Jayapura, Vanimo, and Bewani. The key for economic development along the corridor is to remove the border facility bottleneck to permit traffic flow, while addressing constraints to

private sector investment to increase PNG's supply responses to Indonesian and other international markets.

III. THE PROPOSED PROJECT

A. Impact and Outcome

44. The Project will help improve the business environment in WSP by reducing the business transaction costs associated with infrastructure, compliance with government rules and regulations, and thin human capital. It aims at developing WSP into a dynamic growth center for PNG, which can drive the development of the neighboring provinces including Manus, East Sepik, Madang, and Morobe provinces.

B. Outputs

45. The Project consists of three components: (i) construction and refurbishment of border facilities at Wutung, (ii) capacity development, and (iii) a social development program. It will produce the following outputs: (i) border facilities including customs, immigration, and quarantine facilities; resident housing; roads; parking lots; and public convenience facilities (such as food houses, bus shelter, market, and clinic); (ii) a one-stop service office under BDA for promoting trade, investment, and tourism for WSP; (iii) a broadened human capital base with 500 people trained in commerce and trade; and (iv) improved human development in the five border villages.

1. Border Facilities

46. The existing border facilities, including an administration building and resident houses at Wutung, are in a state of despair. The administration building has no reliable phone or internet connection and is not equipped to handle any vehicle crossing. It is too small to accommodate the number of staff required to provide services of an acceptable standard. There are no adequate storage, quarantine, security, and public convenience facilities. Infrastructure services (such as roads, power, and water) are inadequate. Border officials are demoralized because they have been in difficult working and living conditions for years. The Project will construct or refurbish—with electric, mechanical, and hydraulic services—customs, immigration, and quarantine facilities; resident housing; roads; parking lots; and public convenience facilities (such as food houses, bus shelter, market, and clinic).

47. The border facilities will be designed based on the Wutung (Physical Planning) Subject Development Plan, 2000¹⁴ and in accordance with international border crossing and processing standards and practices. The design will take trade facilitation into account; and enables the processing of passports, immigration, customs, and quarantine formalities to be carried out under single window procedures for commercial, noncommercial, and pedestrian traffic.

2. Capacity Development

48. The institutional capacity assessment (Appendix 5) identifies weaknesses in informal and formal rules, organizations, and human capacity for PNG, which are dependent on individuals to improve them. The Government heavily emphasizes basic education, which is generally available in WSP and across the country. People in WSP are demanding technical,

¹⁴ Sandaun Physical Planning Office. 2000. *Wutung (Physical Planning) Subject Development Plan*. Vanimo.

business, and Indonesian language training so that they can be equal business partners. The Project will include a comprehensive program (i) to assist the Government's policy team to deliver the investment policy legislation, (ii) to develop entrepreneurship and business skills for people in WSP to enable them to participate in the development process and take advantage of the opportunities opened up by the Project, and (iii) to develop human resources in the areas of trade and investment promotion, business administration, financial management, information technology, and Indonesia language proficiency for PNG. Possible initiatives include (i) overseas study tours for the Government's policy team to acquire exposure to regional experience in trade and investment promotion and cross-border cooperation; (ii) short-term policy advisory services from prestigious government and business leaders; (iii) in-country workshops; (iv) short-term business skills and financial management training; (v) 3–6 month information technology training; (vi) 6–12 month scholarship programs in Indonesia for mid-level government officials and local business people; and (vii) degree study in information technology, business administration, trade, and commerce for junior government officials and new graduates. At least 30% of the trainees should be women and 50% should be from WSP. The capacity development programs will be designed, in a consultative manner, by the training specialist and investment policy strategist financed under the Project and a TA grant attached to the Project.

3. Social Development Program

49. To comply with ADB's social policies; mitigate social conflicts and disputes over land titles, concession fees, and compensation; and extend project benefits to border villages, a social development program was prepared based on needs prioritized by villagers. The program (Supplementary Appendix A) comprises five interventions: (i) power connection for Wutung village, (ii) construction of septic tanks and individual household toilets for Wutung village, (iii) safe motherhood for five West Coast villages, (iv) education support for at-risk children, and (v) HIV/AIDS prevention. Implementation of items (i) to (iv) will be carried out using modified conditional cash transfer (MCCT), by which outputs will have to be delivered and verified before cash is paid from the Project. MCCT is appropriate because education and health services are available to and accessible by the target villages, there is a willingness to pay, and MCCT is an effective way to minimize leakages and misuse of funds.

C. Special Features

1. Regional Cooperation

50. ADB's experience in the Greater Mekong Subregion indicates that neighboring countries working together can enhance political trust, expand markets and economies of scale, generate growth and employment opportunities, and brighten development prospects for all involved. ADB's Strategy 2020 identified regional cooperation as one of the core operational areas for ADB assistance to free Asia and the Pacific from poverty.

51. The Project is the first to assist one of the least developed provinces in PNG to benefit from the dynamic economic development of Asia. It has the potential to build an economic corridor and business growth centers for PNG, which will lead to the development of not just WSP, but the neighboring provinces—including Manus, East Sepik, Madang, and Morobe provinces. Trading with Indonesia has already brought benefits to the border villages. The sample survey conducted under the ADB project preparatory TA reports that border villagers have an average monthly income of K1,000 per household, which is higher than Vanimo urban area (K800 per household monthly).

2. Partnership and Project Complementarity

52. In the process of preparing the Project, close coordination and consultations with major development partners—including AusAID, the European Commission, and IFC—were conducted to join efforts, ensure complementarity, and maximize the comparative advantages of each organization. AusAID has the most significant presence in WSP. Since 2007, it has been assisting WSP in strengthening its administrative capacity for basic service delivery; maintaining the critical national roads, including the road from Vanimo to the border; and fighting HIV/AIDS. IFC is implementing the Regulatory Reform Project—addressing business indicators such as work permits, starting a business, licensing and registration, enforcing contracts, tax compliance, property registration, and investment policy; and is contemplating a national model for a special economic zone. The European Commission is assisting in capacity development for trade-related policy formulation, analysis, administration, and negotiation.

53. The Project will complement AusAID and government efforts in developing WSP. Its policy development will focus on deliberate investment and telecommunication policies for WSP, taking into account other development partners' activities in the same area.

54. The Project may also catalyze assistance from the People's Republic of China (PRC) to provide basic infrastructure in WSP such as water supply, power, and Sandaun learning center. WSP is preparing the project proposals and intends to seek PRC financing for them through the national Government.

3. Policy Dialogue with the Government

55. ADB's policy dialogue with the Government focuses on (i) the development strategy for WSP and the design of the border facilities, (ii) the importance of deliberate investment policies for WSP, and (iii) partnership between BDA and West Sepik Provincial Administration (WSPA) in project management. The Government is contemplating a blueprint for WSP aimed at opening up Lumi and building Bewani into a gateway to Indonesia. ADB considers Vanimo to be in the most advantageous position to develop first because of its convenient geographic coastal location, and proximity and road connection to Jayapura—the location of Papua Province's major population and economic activities. The Government's intention to build up facilities at Wutung has been always clear. Two pieces of land were acquired for the Wutung border post in 1965 and in 2003. Discussions with Indonesia on the official opening of the Wutung border have been ongoing since 2006. Abided by PNG's construction standards, the design life of the facilities is 50 years. Unless it is believed that WSP will not progress in terms of economic development, the design of the facilities needs to be forward-looking to save costs to the Government. The restrictiveness of the land available for the Wutung border development as well as the land problems and high costs of goods and services in PNG also favor a design taking into account future development trends.

56. While infrastructure is essential for economic growth, the importance of the regulatory framework and policies conducive to investment, trade, and private sector development cannot be overemphasized. PNG maintains one of the least restrictive trade regimes in the region, but its investment environment is not competitive to add value to its primary goods, increase gains from global trade, create jobs for its growing population, and move PNG into a nation of wealth.

57. Constraints on investment exist at both national and provincial levels. While there is a shortage of staff, skills, and funding across almost all government offices, government approvals, licensing, and procedural requirements with respect to investment are numerous and

complex. In addition, foreign investors are mandated to bear the costs of knowledge transfer. It needs to be realized that knowledge is not transferred, but acquired. Education is the ultimate way to create a skillful labor force.

58. Given the development challenges faced by WSP, deliberate policies are required to increase its attractiveness as a destination for private investment. Public resources are always limited, given the competing needs of the country. The private sector has great potential to supplement if an enabling environment is provided. The Department of Commerce and Industry (DCI) has agreed to mobilize a policy team to develop investment policy legislation for WSP.

59. The success of the Project depends on the quality of the project management, and it is in the interest of both BDA and WSPA to ensure project success. BDA was established in October 2008 and is in need of reliable and capable staff that WSPA can provide. If BDA's provincial management office (PMO) in WSP is composed of qualified staff from WSPA, it will not only save costs for BDA, but also benefit project implementation as this staff is already established in WSP and has local knowledge. WSPA agreed to join efforts with BDA and make its staff available as needed, particularly the provincial manager, a financial officer, and a female community relations officer.

4. Public Consultations

60. During project preparation, extensive consultations at national, provincial, district, and village levels were conducted to design the project concept, border facilities, social development program, and implementation arrangements; and assess the socioeconomic and environmental impacts of the Project. The consultations were conducted in the form of (i) regular project steering committee meetings; (ii) meetings and discussions with relevant national government agencies; (iii) key informant interviews at provincial, district, and village levels; (iv) focus group discussions; (v) sample surveys; and (vi) a workshop. More than 12 national and local government agencies and 600 stakeholders were consulted. The insights obtained through the consultations have been incorporated into all areas of the Project including the project components, design of the border facilities, poverty reduction and social strategy, procurement, and consulting services. The public consultations are detailed in Supplementary Appendix B.

5. Financial Management

61. A financial management assessment of BDA was carried out (Supplementary Appendix C). BDA was established in October 2008 and has been allocated a K40 million development budget, including K15 million for Wutung border development. Of its proposed 150 staff positions, 15 are financial positions. An internal audit unit is also proposed. The director for finance, with accounting qualifications and experience with development partners-financed (except ADB) projects, has been appointed. The certifying officer, accounts and payroll officer, and claim registration officer have also been appointed. The position of financial manager is still vacant. BDA has installed the Attaché accounting system and is only using it for payroll purposes.

62. In 2008, ADB carried out a country financial management assessment to consider a loan to the road sector. The country-level issues identified include (i) weak accounting, recording, and reporting; (ii) shortage of skills in financial management and management accounting; (iii) delays in the submission of audited annual project accounts; and (iv) difficulty in substantiating and liquidating the imprest accounts.

63. The Project, through the TA grant, will assist BDA in (i) refining its accounting principles, policies, and procedures; (ii) developing budgeting, accounting, and financial management and control systems in BDA and its PMO in Vanimo to maintain separate project accounts and financial statements to identify goods and services financed by various sources including ADB, BDA, and other financiers; (iii) developing controls and procedures for the flow of funds, financial information, accountability, and audits in relation to BDA's provincial offices; (iv) developing a financial management reporting system; (v) evaluating the financial aspects of the bids for civil works; (vi) maintaining records, accounts, and supporting documents; and liquidating imprest account; and (vii) ensuring the smooth financial operation of the Project.

6. Modified Conditional Cash Transfer

64. The social development program of the Project (except the HIV/AIDS component) will be implemented using MCCT—the first time under an ADB project in the Pacific. MCCT originates from conditional cash transfer (CCT), which transfers cash in advance to poor families under certain conditions or promises, e.g., sending children to school. CCT has become increasingly popular in the past few years as a development tool in Latin America and elsewhere. However, in the Pacific—where fund fungibility is likely to mean fund misuse, and monitoring and self-compliance are problematic—conventional CCT is unlikely to lead to development outcomes.

65. The innovativeness of MCCT is that it uses PNG's clan system to carry out the intervention activities and transfers cash only to the female head or a female adult of a household upon verification of completion of the activities. This modification takes into account the weak institutions and poor record of community-based development projects in the Pacific, and the local custom that relatives, friends, and neighbors often pool resources together for household projects. Other advantages are (i) direct benefits to households; (ii) delivery of intervention outputs before fund disbursement; (iii) strong ownership by communities and households; (iv) minimization of capture, leakage, and noncompliance; and (v) less pressure on BDA's capacity. MCCT has potential for WSP to replicate delivery of its basic social services using the national Government's functional grants.

D. Project Investment Plan

66. The total cost of the Project is estimated at \$30 million, including taxes and duties of \$2.33 million, which will be partly financed from the loan proceeds. The costs of different components are summarized in Table 1 and detailed in Appendix 6.

Table 1: Project Investment Plan
(\$ million)

Item	Amount
A. Base Cost ^a	
1. Civil Works	16.11
2. Equipment	2.63
Subtotal (A)	18.74
B. Consulting Services	3.78
C. Capacity Development	1.50
D. Social Development Program	0.50
E. Contingencies	
1. Physical Contingencies ^b	1.62
2. Price Contingencies ^c	2.29
Subtotal (E)	3.91
F. Financial Charges	1.57
Total (A+B+C+D+E+F)	30.00

^a In 2009 prices. Including \$2.33 million taxes and duties (12% for civil works and 15% for equipment).

^b Computed at 10% base cost for civil works.

^c Computed using Asian Development Bank cost escalation factors. For foreign exchange costs, 1% in 2010, 0% in 2011, 0.3% in 2012, 0.5% in 2013 and onward. For local currency costs, 3% in 2010 and onwards.

Source: Asian Development Bank estimates.

E. Financing Plan

67. The Government has requested ADB to provide a loan in various currencies equivalent to \$25 million from the Asian Development Fund (ADF). The ADF loan will have a maturity of 32 years, including a grace period of 8 years, an interest charge of 1% per annum during the grace period and 1.5% per annum thereafter, equal amortization, and such other terms and conditions to be set forth in the draft ADF loan agreement.

68. ADB will finance 83% of the total project cost including taxes and duties, while the Government will provide \$5 million equivalent to finance the remaining cost. The financing plan is presented in Appendix 6 and summarized in Table 2.

Table 2: Financing Plan

Source	Amount (\$ million)	Share of Total (%)
Asian Development Bank	25.00	83.00
Government	5.00	17.00
Total	30.00	100.00

Source: Asian Development Bank estimates.

F. Implementation Arrangements

1. Project Management

69. BDA will be the Executing Agency. Of 150 positions, it has staffed 28 positions and set up a core engineering group in the head office. BDA will source staff from WSPA and establish and maintain a fully staffed and adequately funded PMO at Vanimo, initially comprising the provincial manager, civil engineers or architects, an accountant, and a female community relations officer; and gradually including investment and tourism promotion officers. The provincial manager will report to the general manager. BDA and its PMO will (i) prepare bidding documents for civil works and equipment and handle the bidding, (ii) manage the contracts, (iii) develop annual training programs, (iv) promote investment and tourism in WSP, (v) implement the social development program, (vi) monitor the progress of the Project, (vii) prepare applications for fund withdrawals, (viii) prepare the project progress reports and project completion report, (ix) maintain project accounts and financial records for auditing, and (x) monitor the socioeconomic impact of the Project.

70. BDA will engage Volunteer Service Overseas (VSO) to carry out the HIV/AIDS subcomponent to prevent the spread of the disease.

2. Implementation Period

71. The Project will be implemented over 8 years. Most activities, such as construction of border facilities and the social development program, should be completed by 2014. Equipment purchase and capacity development will continue until 2017. The implementation schedule is in Appendix 7.

3. Procurement

72. BDA's procurement capacity was assessed (Supplementary Appendix D). Although the engineering group consisting of staff with degrees in civil engineering and architecture has been established, and one senior staff member has experience with supervision of ADB-financed contracts, none of the staff has experience with procurement following ADB's procurement rules. The TA will provide resources to strengthen BDA's procurement capacity.

73. The procurement will mainly consist of civil works and equipment for border facilities. All procurement to be financed under the ADB loan will be carried out in accordance with ADB's *Procurement Guidelines* (2007, as amended from time to time). Constrained by the land availability for the contractors, civil works will be divided into two packages and will follow international competitive bidding (ICB) single-stage, one-envelope procedures, as the cost estimates of both contracts exceed \$3 million—the ICB threshold for PNG. Equipment is grouped into eight packages. ICB will be followed for contracts estimated above \$500,000. Contracts below \$100,000 will follow shopping procedures. National competitive bidding will be used for contracts between \$100,000 and \$500,000. The procurement plan is in Appendix 8.

4. Consulting Services

74. International and national consulting services will be required for (i) support to BDA and the PMO in the areas of contract management, investment and tourism promotion, capacity development, and socioeconomic monitoring; (ii) construction supervision and environment

monitoring; and (iii) HIV/AIDS prevention. The Project will fund a total of 350 person-months of consulting services (128 international, 222 national).

75. All consulting services will be recruited in accordance with ADB's *Guidelines on the Use of Consultants* (2007, as amended from time to time). Individual consultants and international or national business volunteers will be engaged to provide services required under area (i) because of the diverse expertise required and the effectiveness of business volunteers in providing services. An international consulting firm will be recruited based on the quality and cost-based selection method with a quality and cost weighting of 80:20 to provide construction supervision. HIV/AIDS prevention will engage VSO's services through single-source selection. Single-source selection is justified because VSO is the only reputable nongovernment organization active in WSP fighting HIV/AIDS. BDA has requested ADB to perform the consultant selection financed under the ADB loan to expedite the Project. The plan for consulting services is in Appendix 8. The outline terms of reference for implementation support and construction supervision are in Supplementary Appendixes E and F. The HIV/AIDS program is described in Supplementary Appendix A.

5. Advance Action and Retroactive Financing

76. The border facilities are a matter of urgency for the Government, as the official opening of the border has been under consideration for several years. The Government requested ADB approval of advance action for recruitment of consulting services for investment and tourism promotion and capacity development, and procurement of two civil works packages for border facilities and a patrol boat. Advance action covers invitations for bids, bidding, bid evaluation, and limited contract awards. The advance action will be supported by the TA and undertaken in accordance with ADB's *Procurement Guidelines* and *Guidelines on the Use of Consultants*. The Government has been advised that approval of the advance action, if granted, does not commit ADB to finance the Project.

77. To facilitate project implementation, the Project will provide retroactive financing to meet the costs of the consulting services and civil works. The retroactive financing will be applicable for expenditures incurred no earlier than 12 months prior to the date of the Loan Agreement. The Government has been informed that the amount of retroactive financing must not exceed 20% of the ADB loan amount and that approval of retroactive financing does not commit ADB to finance the Project.

6. Anticorruption Policy

78. ADB's *Anticorruption Policy* (1998, as amended to date) was explained to and discussed with the Government and BDA. The Government and BDA shall adhere to ADB anticorruption requirements during project implementation. Consistent with its commitment to good governance, accountability, and transparency, ADB reserves the right to investigate, directly or through its agents, any alleged corrupt, fraudulent, collusive, or coercive practices relating to the Project. To support these efforts, relevant provisions of ADB's *Anticorruption Policy* are included in the loan regulations and the bidding documents for the Project. In particular, all contracts financed by ADB in connection with the Project shall include provisions specifying the right of ADB to audit and examine the records and accounts of BDA and all contractors, suppliers, consultants, and other service providers as they relate to the Project. If ADB determines that representatives of the Borrower, a beneficiary, a contractor, and/or a consultant are engaged in corrupt, fraudulent, collusive, or coercive practices, ADB may take the following actions:

(i) reject any proposal for contract award, and/or (ii) declare any firm or individual ineligible for ADB-financed contracts, indefinitely or for a stated period of time.

7. Disbursement Arrangements

79. The proceeds of the loan will be disbursed in accordance with ADB's *Loan Disbursement Handbook* (2007, as amended from time to time). The disbursement procedures will include direct payments, imprest account, and reimbursements. BDA will establish an imprest account with either the central bank or a commercial bank acceptable to ADB. It will use the imprest account exclusively to finance eligible expenditures as specified in the Loan Agreement. The initial amount to be deposited into the imprest account will not exceed either 6 months of estimated expenditures to be financed from the imprest account or \$500,000, whichever is less. For civil works and consulting services, direct payment or reimbursement will be used.

8. Accounting, Auditing, and Reporting

80. BDA and its PMO will maintain separate accounts for the Project and prepare separate financial statements indicating the sources and uses of funds, and have them audited by an independent auditor acceptable to ADB. The audited project accounts, BDA's corporate accounts, and the respective auditors' reports—which should include separate audit opinions on the use of the imprest account for the loan, compliance with the financial covenants of the Loan Agreement, and BDA's internal financial control—will be submitted to ADB within 6 months after the end of each fiscal year. BDA will also prepare and submit to ADB monthly and quarterly project progress reports and a project completion report within 3 months of completion of the Project.

9. Project Performance Monitoring and Evaluation

81. BDA will monitor the project performance and assess the socioeconomic impact of the Project in accordance with the design and monitoring framework of the Project. It will be assisted by 8 person-months of international consulting services. Since the baseline data have been provided under the project preparatory TA, the international consultant will commence work 1 year after the Project starts, and carry out the monitoring and evaluation exercise annually for 8 years.

IV. TECHNICAL ASSISTANCE

82. A TA grant will be attached to the Project to (i) assist DCI in developing the investment policy legislation and telecommunication strategy for WSP, and (ii) assist BDA in procuring civil works for border facilities and managing the financial aspect of the Project. The objectives of the TA are (i) to assist in catalyzing investment in WSP and increasing the supply of PNG products in demand by helping the Government to prepare specific investment policies and a telecommunication solution for WSP, both of which are critical to reduce business transaction costs and increase the attractiveness of WSP as a destination for investment; and (ii) to facilitate project implementation. The terms of reference are in Appendix 9.

83. **Cost and financing.** The TA is estimated to cost \$1.06 million equivalent. The Government has requested ADB to provide \$900,000 equivalent. The TA will be financed on a grant basis by ADB's Technical Assistance Special Fund (TASF-IV). The Government will provide \$160,000 equivalent to finance counterpart staff, office accommodation and support

services, local communication and transport, and other services and facilities required for implementation of the TA.

84. **Implementation arrangements.** DCI will be the Executing Agency for investment policy legislation and telecommunication strategy development, and BDA will be the Executing Agency for BDA capacity development. DCI will mobilize an interdepartmental policy team to study and develop the investment policy legislation and telecommunication solution for WSP, comprising senior representatives from the departments of national planning and monitoring, treasury, foreign affairs and immigration, communication and information, provincial and local level government affairs, and labor and industrial relations; National Lands Commission; Internal Revenue Commission; PNG Customs Service; Investment Promotion Authority; BDA; WSPA; and other relevant government offices.

85. The TA will require a total of 38 person-months of international consulting services to carry out the scope of the study as defined in the outline terms of reference in Appendix 9. The areas of expertise required include investment policy formulation, telecommunication, procurement, and financial management. The TA will be implemented from 2010 to 2014.

86. The TA will be carried out by both individual consultants as well as consultants from an international firm. Individual consultants will be engaged for the development of investment policy legislation and telecommunication strategy and procurement, while an international accounting firm will be selected to provide individual consultants to assist BDA in financial management. This is because required expertise is diverse, and it will be difficult for a firm to provide quality consultants for all areas. However, a reputable accounting firm will be more reliable and less risky than individual financial consultants to provide financial management services. The consultant recruitment will be in accordance with ADB's *Guidelines on the Use of Consultants*.

V. PROJECT BENEFITS, IMPACTS, ASSUMPTIONS, AND RISKS

A. Economic Benefits

87. The economic analysis (Appendix 10) of the Project compares the "with-project" and "without-project" scenarios. The assessment covers the period from 2010 to 2034 and assumes the implementation schedule in Appendix 7 is followed. All benefits and costs are in constant 2009 prices. Economic benefits such as business efficiency, job creation, skill development, and reduction in income differential between towns far from the border and towns neighboring the border, which are difficult to quantify, are excluded from the analysis.

88. The economic costs of the Project consist of (i) capital costs, including labor, material, equipment, consulting services, and physical contingency; and (ii) maintenance costs. The economic cost of land is not included because there is no incremental cost between with- and without-project scenarios, as the land has been allocated for border development. The major economic benefit arises from the reduction in trade transaction costs, resulting in increased government revenue, producer surplus, and consumer surplus from increases in imports and exports. Other economic benefits include saving in household income on waterborne diseases, and income gains from extended life expectancy and education.

89. Discounted at a rate of 12%, the Project is economically viable. The net present value (NPV) of the Project is K5.52 million and the economic internal rate of return (EIRR) is 14.05%. The calculation was subject to sensitivity analysis, which tests the effects of negative changes in

the key parameters that determine the benefits and costs of the Project. The sensitivity analysis shows that the Project remains economically viable in spite of a 10% increase in costs or 10% reduction in benefits. In the worst case scenario, where the Project suffers from both a 10% reduction in economic benefits and a 10% increase in economic costs, the Project provides an EIRR of 10.95%.

B. Project Sustainability

90. PNG currently enjoys a comfortable debt position. By 2008, PNG's public debt stood at 31.6% of gross domestic product, and its external debt at 13%—low in comparison with the International Monetary Fund's 30% threshold. The Project will have minimum impact on PNG's debt position, given its long term of repayment.

91. The annual average recurrent cost of the border facilities is around K350,000, accounting for about 0.9% of BDA's current development budget allocation of K40 million. BDA's operations are fully funded by the Government. The Project will be sustainable if the Government remains committed to the development of its border provinces and continues to make efforts to unleash the potential of the private sector by improving its policy environment and administrative efficiency. Infrastructure alone will not be sufficient to generate economic activities. Political will and policies are more powerful to achieve development breakthroughs, including infrastructure.

C. Project Impact

1. Involuntary Resettlement and Indigenous People

92. The Project has been classified category C for involuntary resettlement. The two pieces of land for the border facilities were acquired in 1965 and 2003, and have been cleared before. The Project will not cause loss of housing, strips of land, crops, trees, or other fixed assets.

93. For indigenous people, the Project is categorized category B and is required to develop a specific action for Wutung villagers who are the traditional landowners of the two pieces of land acquired for the border facilities. A series of consultations, interviews, and focus group discussions and a socioeconomic survey for 85% of households in Wutung village were carried out to identify people's concerns and development priorities, and design the border facilities and an intervention program.

94. The border facilities will include public phones, market areas, and a clinic. A social program (Supplementary Appendix A) was developed to provide access to power, build their own toilets, support pregnant women to undergo regular medical check-ups, and keep "at-risk" children in schools. The total cost was estimated to be around \$270,000 and is budgeted under the Project.

2. Poverty Reduction Impact

95. In terms of both income and non-income poverty, WSP is one of the worst provinces in PNG. Yet WSP has an opportunity to develop if it can manage to strengthen its economic linkage with Asia and maximize the benefits. The benefits of trade with Indonesia have already been manifested in border villages where villagers are earning higher incomes than in the rest of the province. In addition to income, exposure to Indonesians' way of doing business and

living standards has generated a desire to learn and catch up, and a demand for healthy lifestyles.

96. The Project will contribute to poverty reduction in WSP by creating an enabling environment for investment to stimulate economic activities in the province. With investment, particularly in agriculture and tourism, more people will be absorbed into modern sector and have better access to social services. The investment and capacity development components of the Project will generate employment of more than 200 people. The spillover benefits to the service sector are difficult to predict, but will be significant.

97. The social development program of the Project will directly alleviate the non-income poverty of five border villages. The availability of power and sanitation facilities, improved infant and maternal health, and education for children will not only improve their current living standards, but also pave the way for future generations to be free from poverty. The social development program has the potential to be an alternative for WSP to improve the effectiveness of its service delivery using the national grants.

3. Social and Gender Impact

98. During project preparation, the potential social and gender impact of the Project was analyzed through field consultations, key informant interviews, focus group discussions, and sample surveys. These consultations were complemented by consultations with government agencies, nongovernment organizations, and faith-based groups—including the National AIDS Council, Department of Health, Sandaun Provincial AIDS Council, provincial health, education, commerce and trade, forestry, and agricultural divisions; Vanimo Green District; Wards; Sandaun Provincial Council of Women; and the Catholic Diocese of Vanimo. More than 100 women were consulted. The consultations reveal that people appreciate the income opportunities provided by the border. They are concerned about the social service delivery and opening of the border without proper infrastructure and systems in place to protect PNG people from diseases, HIV/AIDS, and illegal activities. The design principle for the border facilities, purchase of equipment, and the social development program have factored in their concerns. For instance, the border facilities will include closed circuit television for security monitoring and a clinic, which will be operationalized by VSO for HIV/AIDS prevention and other medical services to the villagers. A marine patrol boat has been included under the Project to strengthen PNG Customs Service' law-enforcing capabilities in the northern coast.

99. Women and vulnerable groups are not disproportionately affected by the Project. Women may be more vulnerable to HIV/AIDS than men because of their low social status and violence against women. To promote gender and social equity, the Project includes interventions for women and vulnerable groups as follows:

- (i) providing training programs to women to develop their entrepreneurship and business skills;
- (ii) providing financial assistance to pregnant women for regular medical check-ups and reducing infant and maternal deaths;
- (iii) transferring cash to the female head or a female adult of a household upon completion of the relevant intervention activities;
- (iv) involving local women's groups in the verification process for MCCT; and
- (v) targeting young women for HIV/AIDS education.

100. The summary poverty reduction and social strategy is in Appendix 11.

4. Environmental Impact

101. The Project has been categorized environment category B in accordance with ADB's *Environment Policy* (2002) and *Environmental Assessment Guidelines* (2003). The construction of border facilities will take place on land previously cleared. Sanitation facilities in Wutung village will be constructed within the village compound. An initial environmental examination report, environmental management plan, and environmental management and monitoring plan have been prepared. A summary initial environmental examination is in Supplementary Appendix H.

102. Consultations were held with all relevant public sector, private sector, and community organizations in the project area. There was universal support for the Project and open debate on its environmental risks and benefits. Consultations informed changes to the project scope, implementation arrangements, and the environmental management and monitoring plan.

103. The project area does not include any protected areas or areas of conservation value. The Project will not create any impact on cultural or heritage sites. Major environmental risks include the removal of asbestos during site preparation and the appropriate design of septic tanks in Wutung village where the groundwater is as low as 1 meter below the surface.

104. As summarized in the environmental management and monitoring plan, which will form part of the construction contract, the mitigation measures to address the environmental impacts are appropriate and comprehensive. Environmental management and monitoring will be undertaken by BDA with support from the construction supervisors. No further environmental study is required.

D. Project Risks and Mitigation Measures

105. The Project may face the following risks:

- (i) **Procurement.** All procurement financed under the loan will follow ADB guidelines, with which BDA is not familiar. Similar to other ADB projects in PNG, procurement of civil works will be hampered by lack of qualified contractors. In addition, BDA will have to deal with the Government's lengthy process for contract approval.
- (ii) **Financial management.** Financial discipline is generally weak in PNG. Safeguarding financial integrity will be a challenge for BDA.

106. The Project includes the following mitigation measures:

- (i) providing procurement and financial consultants through the TA to assist BDA in finalizing the bidding documents and evaluating bids, and providing international and national consulting services under the loan to assist BDA in managing the Project;
- (ii) engaging a reputable accounting firm through the TA to provide long-term services to BDA, assisting in financial management;
- (iii) using MCCT to carry out the social development program to minimize demand on BDA's capacity as well as capture, leakages, and noncompliance; and
- (iv) assisting BDA staff in joining ADB training programs on procurement, financial management, anticorruption, disbursement, and project management.

VI. ASSURANCES

107. In addition to the standard assurances, the Government and BDA have given the following assurances, which will be incorporated in the legal documents:

- (i) **Governance and anticorruption.** The Government will cause BDA to ensure that (a) the Project is carried out in compliance with all applicable PNG anticorruption regulations and ADB's *Anticorruption Policy*; (b) all relevant staff actively participate in the training in PNG's anticorruption regulations and ADB's *Anticorruption Policy*; and (c) a project website is developed and maintained to disclose the audited project financial accounts, project progress, and procurement activities.
- (ii) **Counterpart financing.** The Government will ensure that throughout the implementation of the Project, adequate budgetary allocations of the required counterpart funds are made, approved, and released in a timely manner to ensure proper implementation of the Project.
- (iii) **Provincial management office.** The Government, through BDA and WSPA, will ensure that the PMO in Vanimo will source sufficient staff from WSPA to manage the Project, particularly the MCCT, and be established and remain fully staffed throughout the implementation of the Project. The Government will ensure that BDA will appoint the project implementation specialist as the deputy provincial manager of the PMO.
- (iv) **Policy team.** Within 3 months of loan effectiveness, the Government will cause DCI to establish an interdepartmental policy team on a full-time basis, comprising senior representatives from the departments of national planning and monitoring, treasury, foreign affairs and immigration, communication and information, provincial and local level government affairs, and labor and industrial relations; National Lands Commission; Internal Revenue Commission; PNG Customs Service; Investment Promotion Authority; BDA; WSPA; and other relevant Government offices. The interdepartmental policy team will study and develop the investment policy legislation and telecommunication solution for WSP with the assistance from the attached TA.
- (v) **Policy approval.** Within 30 months of the loan effectiveness, the Government will issue laws and/or regulations, in a form and substance satisfactory to ADB, to implement the investment policy and a telecommunication strategy for West Sepik Province to be developed with the support from the attached TA.
- (vi) **Capacity development.** The Government will ensure that at least 50% of the trainees to be trained under the Project are from WSP.
- (vii) **Technical evaluation committee.** The Government will cause BDA to appoint the procurement and financial specialists to be engaged under the TA to the technical evaluation committee to assist in the evaluation of the bids.
- (viii) **Construction quality.** The Government will cause BDA to ensure that the Project is built in accordance with the technical design specifications and that construction supervision, quality control, and contract management are implemented in accordance with internationally accepted standards.
- (ix) **Operation and maintenance.** The Government will make available adequate budget allocation on an annual basis to BDA for the operation and maintenance of the project facilities, and ensure that such budget will be used for its intended purposes.
- (x) **Environment.** The Government through BDA will ensure that (a) the Project is carried out, and all project facilities are designed, constructed, operated,

maintained, and monitored in compliance with all applicable PNG environmental laws and regulations, and ADB's *Environment Policy*; (b) in case of any discrepancies between PNG's environmental laws, regulations, and procedures and ADB's requirements, ADB's *Environment Policy* will prevail; (c) all environmental mitigation measures, institutional requirements, and monitoring plans specified in the initial environmental examination are complied with; (d) all the above requirements are incorporated in the bidding documents and civil works contracts to ensure compliance; and (e) environmental compliance monitoring is undertaken in accordance with the initial environmental examination as updated.

- (xi) **Resettlement.** The Government will ensure that no involuntary resettlement will be involved in the Project. In the event that any resettlement impacts are unavoidable for any project activities, the Government will prepare resettlement plans for such activities in accordance with ADB's *Involuntary Resettlement Policy* (1995).
- (xii) **Guidelines for modified conditional cash transfer.** Within 6 months of loan effectiveness, the Government, through BDA, will develop, and submit to ADB for approval, guidelines for implementing the MCCT scheme. The guidelines will include, among other things, (a) eligibility criteria for the recipients, (b) eligible expenditures that may be financed, (c) approval procedures for eligible activities, (d) administration mechanism including accounting and funds flow, and (e) monitoring and reporting mechanism. The Government, through BDA, will ensure that any activities related to the MCCT scheme are implemented in accordance with the guidelines.
- (xiii) **Monitoring and evaluation.** The Government will cause BDA to monitor and evaluate the project performance and socioeconomic impacts in accordance with the design and monitoring framework as updated.
- (xiv) **Labor, health, and gender development.** The Government, through BDA, will ensure that at least 30% of the participants in the capacity development programs will be women. The Government will cause BDA to ensure that civil works contractors engaged under the Project (a) comply with all applicable labor laws and related international treaty obligations, and do not employ child labor under the Project; (b) provide information to all construction workers during the construction period on the prevention of sexually transmitted infections, including HIV/AIDS, in health and safety programs; (c) provide prompt and equal pay to men and women for work of equivalent value in accordance with national laws and international treaty obligations; (d) provide safe working conditions for both male and female workers; and (e) provide separate and culturally appropriate facilities for men and women workers. The Government will cause BDA to ensure that specific provisions to this effect are included in the bidding documents and contracts for civil works. The Government will cause BDA to monitor compliance and report to ADB on the implementation of these activities in the project progress reports.

VII. RECOMMENDATION

108. I am satisfied that the proposed loan would comply with the Articles of Agreement of the Asian Development Bank (ADB) and recommend that the Board approve the loan in various currencies equivalent to Special Drawing Rights 15,684,000 to Papua New Guinea for the Pilot Border Trade and Investment Development Project from ADB's Special Funds resources with an interest charge at the rate of 1.0% per annum during the grace period and 1.5% per annum thereafter; a term of 32 years, including a grace period of 8 years; and such other terms and conditions as are substantially in accordance with those set forth in the draft Loan Agreement presented to the Board.

Haruhiko Kuroda
President

6 November 2009

DESIGN AND MONITORING FRAMEWORK

Design Summary	Performance Targets and/or Indicators	Data Sources and/or Reporting Mechanisms	Assumptions and Risks
<p>Impact West Sepik Province (WSP) developed into a dynamic growth center</p>	<p>Trade volume increased from \$7 million in 2007 to \$14 million per year after 2017</p> <p>Revenue from taxes and duties on trade increased from \$60,000 in 2007 to \$120,000 per year after 2017</p> <p>Internal revenue of the province increased from \$700,000 in 2007 to \$1.4 million after 2017</p>	<p>Reports and records of the Provincial Administration</p> <p>Revenue data from Papua New Guinea (PNG) Customs Service</p> <p>Reports of National Economic and Fiscal Commission</p> <p>Project performance monitoring reports</p>	<p>Assumption Good bilateral relationship between PNG and Indonesia</p> <p>Risk Territorial disputes</p>
<p>Outcome Business environment in WSP improved</p>	<p>Business registrations in the province increased to more than 310 (2009) after 2014</p> <p>Number of tourists and business visitors increased to more than 28,000 (2009) per year after 2014</p>	<p>Reports from provincial administration</p> <p>Feedback from the local chamber of commerce</p> <p>Project performance monitoring reports</p>	<p>Assumptions Law and order is maintained in WSP</p> <p>There are few border incidents leading to border closure</p> <p>Power and water supply are provided with the assistance of either multi-development partners or bilateral sources</p>
<p>Outputs</p> <ol style="list-style-type: none"> 1. Border facilities provided 2. Investment policy legislation for WSP approved and made effective 3. Telecommunication strategy for WSP developed and approved by the Government 4. Border Development Authority (BDA) office in Vanimo becoming a one-stop service office for promoting trade, investment, and tourism for WSP 	<p>Customs, immigration, quarantine facilities, resident houses, and markets are constructed and refurbished by 2014</p> <p>Investment policy legislation is developed by 2011 and made effective by 2012</p> <p>A cost-effective feasible telecommunication strategy for WSP is developed by 2011 and approved by the Government by 2012</p> <p>BDA establishes a full-fledged and well-functioning office in Vanimo by 2011</p>	<p>Progress reports of the Executing Agency</p> <p>Construction supervision reports</p> <p>Project performance monitoring reports</p>	<p>Assumptions Political stability is maintained and staff turnover is low</p> <p>There is no change in government ownership and priority</p> <p>Customary landowners are reasonable and cooperative</p> <p>Risks Government does not approve contracts and issue work permits and visas to international consultants and contractors' personnel in a timely manner</p> <p>There is no reasonable level of market competition for civil works, equipment, and consulting services.</p>

Design Summary	Performance Targets and/or Indicators	Data Sources and/or Reporting Mechanisms	Assumptions and Risks
<p>5. Human capital base in the areas of trade and investment promotion, business entrepreneurship and administration, information technology, and Indonesian language proficiency broadened</p> <p>6. Human development in terms of health and education improved in five border villages</p>	<p>Around 500 individuals, including 150 women, are trained by 2017</p> <p>110 households in Wutung village are connected to quality and stable electricity supply by 2014</p> <p>110 toilets and 22 septic tanks are constructed by 2014</p> <p>180 pregnant women receive regular medical check-ups by 2014</p> <p>About 100 "at-risk" children are prevented from dropping out of school by 2014</p> <p>HIV/AIDS incidences in WSP are not more than 119</p>		
<p>Activities with Milestones</p> <ol style="list-style-type: none"> 1. Complete civil works for customs, immigration, and quarantine facilities by 2014. 2. Develop the investment policy legislation by 2011 and implement it from 2013. 3. Develop a cost-effective feasible telecommunication strategy for WSP by 2011 and implement it from 2013. 4. Provide business volunteers to assist BDA's office in Vanimo from 2010. 5. Train 500 individuals from WSP and the national Government in trade and investment promotion, business entrepreneurship, and other related areas by 2017. 6. Procure the necessary equipment by 2017. 7. Connect Wutung village with power and build sanitation facilities for Wutung village by 2014. 8. Provide assistance to pregnant women and at-risk children from the five border villages from 2011 to 2014. 9. Complete the HIV/AIDS prevention program by 2014. 			<p>Inputs</p> <p>Asian Development Bank financing: \$25 million</p> <p>Government financing: \$5 million</p> <p>Beneficiaries: PNG economy, people in WSP, and private entrepreneurs</p>

ANALYSIS OF WEST SEPIK PROVINCE AND ITS DEVELOPMENT OPPORTUNITIES

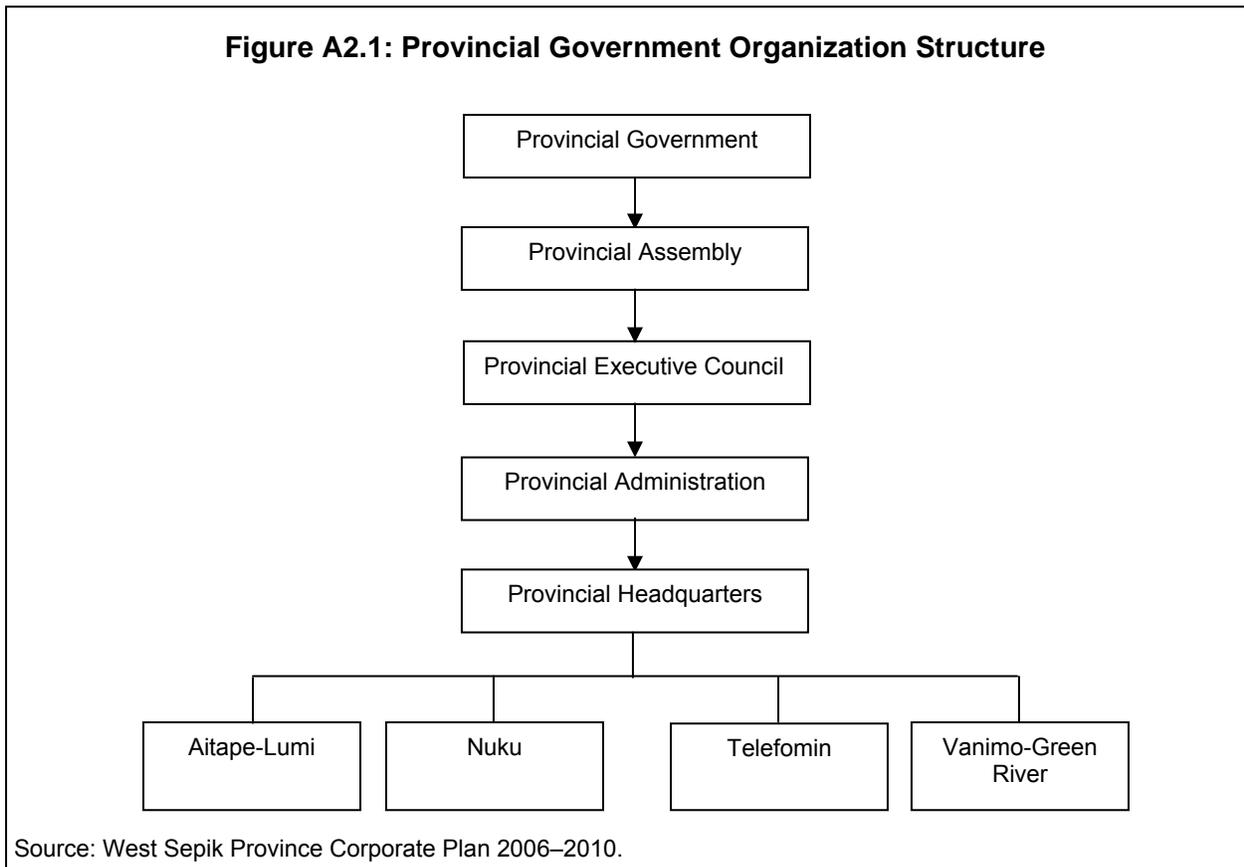
A. General Information

1. West Sepik Province (WSP) is located on the northwest end of Papua New Guinea (PNG) with a land area of 3,605 hectares, the third largest land size in PNG. It has three broadly defined zones: the high mountainous region to the south, Sepik basin in the center, and the low coastal region to the north. Its four districts (Aitape-Lumi, Nuku, Vanimo-Green River, and Telefomin) are generally mountainous, while the coastal areas of Vanimo-Green River and a larger part of Aitape-Lumi are relatively flat with undulating hills and swampland. Limestone karst dominates highland areas, with a large number of caves.

2. The 2000 National Census showed that the province had a total population of 185,741, of which 95,523 were males and 90,218 females, indicating a ratio of 106 males to 100 females. The population density was 5 persons per square kilometer, with an average household size of 5.5 persons. The average population growth rate in the province has been 2.4% since 1980. Youth under the age of 15 constituted about 44% of the total population.

B. Political and Administrative Structure

3. There are two levels of government in the province—provincial government and local level government. The structure of the provincial government is in Figure A2.1.



4. The four districts are further divided into 17 local level governments, each of which has a similar structure. The provincial executive council and provincial assembly make decisions relating to policy, budget, and project development.

C. Provincial Administration

5. The provincial administration is responsible for service delivery in the province. It consists of two levels of administration. The first level is the provincial headquarters administration, and the second level comprises the four district administrations. The current staff ceiling for the provincial administration is 435. Of these, 106 positions are based at the provincial headquarters while 329 positions are distributed between the four districts and local level governments throughout the province. There are over 800 teachers working in the province. The structure of the provincial headquarters administration is in Figure A2.2.

D. Provincial Revenue

6. The provincial revenue¹ consists of national grants, distribution from goods and services tax, and provincial revenue generated in the province. In 2008, national grants were increased by about 25% from K4.51 million in 2007 to K5.64 million. The provincial resource envelope is summarized in Table A2.

Table A2: Provincial Resource Envelope
(K million)

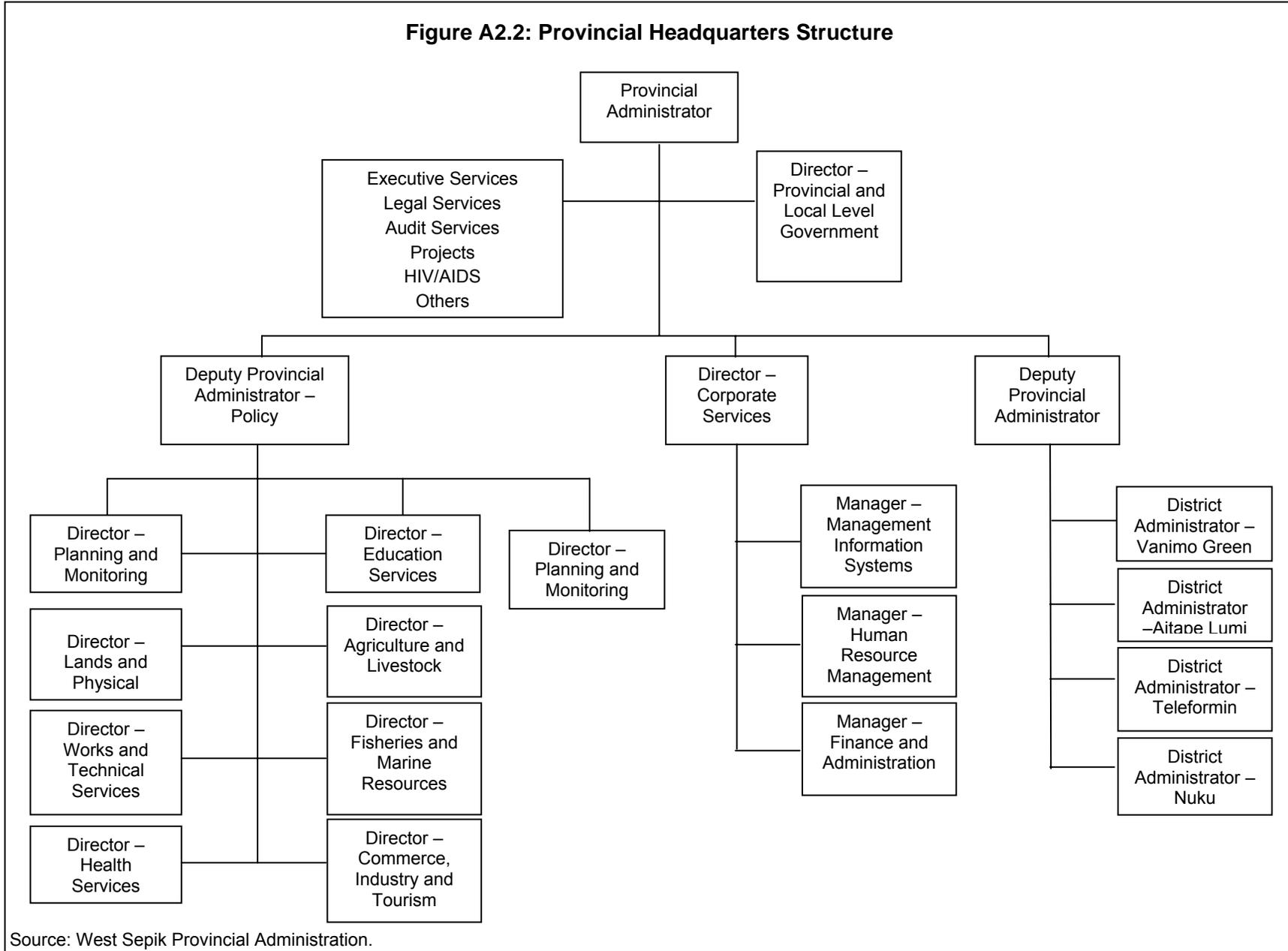
Item	2004	2005	2006	2007
A. National Grants				
1. Goods and Services Grant (recurrent)	2.323	2.663	2.719	3.030
a. Block grant ^a	0.671	0.606	0.591	0.656
b. Health function grant	0.207	0.274	0.301	0.355
c. Education function grant	0.676	0.776	0.840	0.955
d. Transport infrastructure maintenance function grant	0.548	0.676	0.670	0.744
e. Village court function grant	0.000	0.000	0.000	0.067
f. Derivation grant	0.221	0.332	0.317	0.253
2. Local Level Government Grants	0.815	1.522	1.319	1.475
Subtotal (A)	3.138	4.185	4.038	4.505
B. Goods and Services Tax Distribution	1.128	1.128	1.128	1.145
C. Own Source of Revenue	0.708	1.069	1.194	1.882
1. Licenses, fees, and taxes	0.215	0.204	0.301	0.407
2. Commercial receipts	0.478	0.385	0.599	1.182
3. Other revenues	0.014	0.480	0.294	0.293
Total Revenue	4.974	6.382	6.360	7.532

^a Covers the costs of provincial government administrative overheads and the costs for other sectors not covered by the function grants.

Source: National Economic and Fiscal Commission.

¹ Excluding revenue for development activities and staff grants.

Figure A2.2: Provincial Headquarters Structure



Source: West Sepik Provincial Administration.

E. Business Sector

7. Subsistence farming is the most common economic activity throughout the province. Logging companies are the largest employers in the province. There are 66 sole proprietorship businesses, 25 cooperatives, 19 corporations, 40 storekeepers (17 female and 23 male), and 160 peddlers (72 female and 88 male) registered in Vanimo. Nine corporations and 15 sole proprietorships were registered in 2008–2009. Not all businesses are registered in the provincial business registry since their main companies are registered elsewhere in PNG. Most registered businesses are in agroforestry activities, construction, maintenance, wholesale, and retail.

F. Development Challenges and Opportunities

8. **Infrastructure.** The province is linked with the rest of PNG by air flights and coastal shipping, but not by roads. Internally, the four districts are not interconnected by roads, and travel is only possible by air. Airfares are prohibitively expensive—a round-trip from Port Moresby (national capital) to Vanimo (provincial capital) costs about K1,600. There is only one ship carrying goods such as rice, building materials, and vehicles from Lae or Madang to Vanimo twice a month. Two passenger ships operate weekly between Madang, Wewak, Aitape, and Vaimo. The ships sometimes break down, leading to the stores running out of essential household goods, particularly salt and meat.

9. Power supply is only available to urban communities. Power interruptions are frequent. Most establishments and offices have a backup power generator in place. Telecommunication services are unreliable and costly. Internet service provided on fixed lines is very slow and expensive. The average fastest download speed is 16 kilobytes per second. Water supply, sanitation, and sewerage systems are generally not available. Most households rely on rainwater tanks or water trucks for water supply, buckets, and pit toilets.

10. **Land problems.** As elsewhere in PNG, the majority of land in the province is customarily owned. There is no official measurement of alienated state and customary lands within Vanimo. Ownership of land is controversial, and disputes over land titles, concession fees, and compensation issues are regular occurrences.

11. **Access to capital.** Prospective businesses in the province have almost no access to capital. Banks do not provide loans unless the loans are 100% guaranteed by cash deposits or 100% secured by collateral. Since land titles are subject to disputes, the use of land as collateral has been limited—even for landowners.

12. **Human development.** According to the 2000 census, school attendance was very low in the province. Only 24% of males and 20% of females aged 5–29 were in school; 62% of males and 47% of females aged 10 years above had ever been to school. Only 14% males and 11% females had completed grade 10.

13. The infant mortality rate is 71 per 1,000 live births, the fourth highest in PNG. The child mortality rate before the age of 5 is 64 children per 1,000. Life expectancy is 45.6 for men and 46.5 for women. The maternal mortality rate is difficult to determine as more than 80% of pregnant women deliver in the villages. It was estimated that 200 mothers per 10,000 die annually. There are 119 confirmed cases of HIV/AIDS, of which 45 (38%) are men, 62 (52%) are women, and 12 (10%) unknown.

14. **Opportunities.** The province is richly endowed with natural resources such as copper, gold, rainforest, and tuna. It has fertile land to grow cocoa, vanilla, oil palm, betel nuts, vegetable, and flowers. Culturally, it is diverse with five different cultural zones and 95 local languages—each with different rites, traditions, art styles, rules for land ownership, settlement patterns, male–female relationships, and food.

15. The Government established the Border Development Authority (BDA) in 2008 to address the infrastructure needs of six border provinces including WSP. It is contemplating an ambitious economic corridor development plan for the province, including road linkages, airports, and development zones.

16. The Australian Agency for International Development (AusAID) is assisting the province in improving basic service delivery such as education, health, and infrastructure maintenance through provincial performance improvement initiatives (divided into three phases). Phase 1 focuses on capacity development for corporate management; phase 2, service delivery; and phase 3, a combination of both. The province has received K250,000 for completion of phase 1 and will receive up to K1 million during phase 2. AusAID is also sealing and maintaining the major roads in the province, including the one connecting Vanimo with Jayapura, the capital of Papua Province of Indonesia.

17. The People’s Republic of China (PRC) still has about \$100 million development aid that has not been allocated to projects. The aid will be highly concessional loans with an interest rate of 2% and repayment period of about 20 years. If the PRC’s aid is mobilized to provide power, water supply, and a learning center, the business environment in WSP will be significantly improved.

18. The Government and the Asian Development Bank are considering extending a microfinance project to the province.

19. The province shares 260 kilometers of land border with Papua Province of Indonesia, which offers services and products 25%–40% cheaper. The trade volume between WSP and Papua Province of Indonesia reached \$7 million in 2007.

ASSESSMENT OF REGULATORY FRAMEWORK FOR TRADE AND INVESTMENT

A. Introduction

1. The regulatory framework that governs trade and investment in Papua New Guinea (PNG) is complex. Key legislation that comprises this regulatory framework includes the (i) Organic Law on Provincial Governments and Local-Level Governments, 1998; (ii) Investment Promotion Act, 1992; (iii) Customs Act, 2006 (being amended); (iv) Free Trade Zone Act, 2000; and (v) labor law (Employment of Non-Citizens Act, 2007). These laws and regulations have sound intent and objectives, but in reality, either they are not implemented, or they hinder trade and investment as they incur high compliance costs.

B. Organic Law on Provincial Governments and Local-Level Governments

2. While the Organic Law on Provincial Governments and Local Level Governments (Organic Law) does not directly regulate trade and investment, it is a key element of the regulatory framework as it is the legislation that establishes provincial and local-level governments and their roles. A key purpose of the Organic Law is to provide the basic human needs for water, health, education, transportation, communication, accommodation, and social order through economic self-reliance; and to create subordinate institutions of government for the provinces and local government areas.

3. The PNG's Medium Term Development Strategy 2005–2010 identified that the key objective of the Organic Law was to improve service delivery by transferring significant responsibilities and funds to provincial and local level governments. However, the Medium Term Development Strategy acknowledges that services have deteriorated since the Organic Law was passed. Service delivery systems are dysfunctional and there is widespread confusion over functional and financial responsibilities across the three levels of government. Institutional capacity to deliver services is generally poor.¹

4. There is little evidence in West Sepik Province (WSP) that these problems have been addressed and impediments to service delivery overcome. This failure is disappointing as the legislation provides for a range of benefits to be delivered to provincial and local governments.

5. Section 91 of the Organic Law states that the national Government shall make the following grants to the provincial and local governments: (i) administrative support grants, (ii) development grants, (iii) town and urban services grants, and (iv) economic grants. The development grant provides specifically for a provincial infrastructure grant, of which 50% will go to social services and administrative infrastructure, and 50% to land and other physical infrastructure development. When considered in the context of development of a free trade zone area, with improved forward budget planning and more efficient use of financial resources, this grant has the potential to enable infrastructure development that will be important in attracting investors to the free trade zone area.

6. Section 42 of the Organic Law provides that a provincial legislature may make laws on (i) mobile trading; (ii) primary, secondary, technical, and vocational education, but not curriculum; (iii) sale and distribution of alcohol; (iv) public entertainment; (v) culture and cultural centers; (vi) museums and libraries; (vii) sport and recreation; (viii) tourism; (ix) village and urban or community courts; (x) community, urban, and rural development; (xi) agriculture; (xii) fishing and fisheries; (xiii) trade and industry within the province; (xiv) rural health;

¹ Government of Papua New Guinea. 2004. *The Medium Term Development Strategy, 2005–2010*. Port Moresby.

(xv) gambling, lotteries, and other games of chance; (xvi) transportation and facilities; (xvii) town and urban planning; (xviii) land development, including provincial titles and leases provided that the terms of such titles and leases shall not exceed the terms of titles and leases that may be granted by or under national laws; (xix) forestry and agroforestry; (xx) renewable and nonrenewable natural resources (but not maximum or minimum volume, or quantities, export prices, tax measures or taxation, levies, or dues to be levied); (xxi) mediation and arbitration (but not jurisdiction), but not in respect of disputes referred to in section 118(2); (xxii) commissions of inquiry; (xxiii) traditional currencies, (xxiv) family law, marriage, adoption, and maintenance but not bride or groom wealth; (xxv) parks, reserves, gardens, scenic, and scientific centers; (xxvi) registration of vehicles; and (xxvii) provincial housing (but not state-owned housing).

7. This section is a very powerful legislative tool to allow WSP to tailor specific provincial legislations and policies to its circumstances to encourage investment. For example, items (i), (viii), (x), (xiii), (xvi), (xvii), and (xviii) are all areas where specific provincial legislations and policies could be developed to facilitate trade and investment.

8. For example, town and urban planning regulations could be tailored to provide favorable planning provisions to attract developers. This is not to say that planning provisions could be relaxed to facilitate unsustainable and inappropriate development; rather, planning regulations could more clearly identify areas suited for particular types of development to encourage investment. Planning provisions should also align and be consistent with areas identified as free trade zones or special economic zones.

9. Like most provinces, WSP has not made use of any of these positive policy opportunities provided for under the Organic Law, and has not passed any provincial legislation since the introduction of the Organic Law.

C. Investment Promotion Act

10. The Investment Promotion Act aims to promote investment in the interests of national, social, and economic development, and for that purpose, to establish a body to be known as the Investment Promotion Authority (IPA). The specific purposes of the act are to

- (i) promote and facilitate investment in the country by citizens and foreign investors;
- (ii) provide for the grant of a certificate to a foreign enterprise;
- (iii) define the activities open to a foreign investor;
- (iv) provide for a register of foreign investment opportunities;
- (v) promote investments that will materially benefit the country and its people;
- (vi) monitor the impact of investment and the activities of enterprises; and
- (vii) establish the IPA to assist the state in achieving the purposes.

11. The purposes of the Investment Promotion Act are sound, with the broad objectives of facilitating investment and trade. However, in practice, many procedural aspects of the act are obstacles to investment, particularly foreign direct investment.

12. Some of the roles of the IPA (section 6) include

- (i) providing information to investors in the country and overseas;
- (ii) encouraging and facilitating investment in the country by assisting investors to obtain all necessary licenses, compliances, and approvals;
- (iii) facilitating the introduction of citizens and foreign investors to each other and to activities and investments of mutual benefit;

- (iv) providing a system of certification of a foreign enterprise and requiring that a foreign enterprise may only carry on business if so certified; and
- (v) monitoring the activities of foreign enterprises to determine whether a foreign enterprise is certified and complies with the terms and conditions of its certificate to carry on business in the country.

13. While the IPA has delivered item (i), although the capacity of the IPA in Vanimo is limited, the other four roles actually inhibit rather than promote investment.

14. With respect to item (ii), the Investment Promotion Act requires a raft of approvals and licenses, in addition to approvals required under other acts. For example, a foreign investor wishing to construct a tuna packaging plant in Vanimo will not only be required to obtain planning and building approval for the land use and building works, but also need to obtain a license for the activity if it is within the free trade zone area, and ensure the company is registered under the Companies Act, 1997 and then also meet the stringent requirements and assessment under the Investment Promotion Act.

15. The IPA, in its Investment Promotion Regulation, 1992, defined types of activities that are reserved to PNG citizens and national enterprises. The list of such reserved activities—“cottage-based activities”—includes many small business industries, where foreign investment could very well promote overall economic growth of the country, and in particular could result in increased employment in some of the less developed provinces.

16. The IPA procedures for foreign direct investment approval lack clarity and transparency, and have consequently left IPA vulnerable to accusations of political influence and corruption. Uncertainty about the future shape of investment conditions, including the structure of incentives, is likely to compound the unattractiveness for foreign investment.

D. Free Trade Zone Act

17. The Free Trade Zone (FTZ) Act was developed by the Government to establish the framework and mechanism for the creation, operation, administration, and coordination of free trade zones in PNG; and to make provision for the creation and establishment of authorities in respect of such free trade zones and for the conferral upon such authorities of statutory powers and functions relating to the management, control, and regulation of such free trade zones and for related purposes.²

18. The processes of the FTZ Act that lead to development and subsequently trade and investment are as follows:

- (i) Declaration of an area of a province as a free commercial or free industrial zone (section 3).
- (ii) After consultation with the provincial administration, appoint a company incorporated under the Companies Act, 1997, as an authority for the FTZ (section 4).
- (iii) The appointed authority has the following functions (section 6):

² Government of Papua New Guinea. 2000. *Free Trade Zones Act 2000*. Port Moresby.

- (a) establishment and maintenance of the framework and mechanisms for the integration, coordination, planning, monitoring, management, and regulation of the FTZ;
 - (b) transformation of the FTZ into a highly developed agro-financial center providing efficient and effective services to commercial enterprises;
 - (c) promotion of the flow of investors, both foreign and local, into the free trade zone and the provision of linkages among industries in and around the FTZ;
 - (d) stimulation and generation of capital within the FTZ by providing an attractive climate conducive to the development of business enterprises and incentives for business activities; and
 - (e) fostering and promotion of financial and industrial cooperation with other FTZs in the country and between PNG and other industrialized countries.
- (iv) The ownership of the company appointed by the authority must consist of at least a 50% share held by the provincial government, at least a 20% share held by landowners to which the FTZ declaration covers, and the state has the right, not obligation, to acquire no more than 30% (section 8).
 - (v) Goods imported to or exported from an FTZ are exempted from customs or excise duty or other tax imposed under a relevant applicable law (section 11).
 - (vi) The Minister for Commerce and Industry must make a declaration approving authorized activities that can be conducted in the FTZ (section 13).
 - (vii) A person or company must not deal or dispose of goods within a FTZ unless it is in accordance with an authorized activity and in accordance with a license or permit issued under the FTZ Act (section 14).
 - (viii) Application for the license or permit must be to the authority (section 21) and can only be issued for a maximum period of 12 months (section 23).
 - (ix) Section 26 provides for a mechanism for appeal to the Minister for Commerce and Industry about a license application decision by the authority.
 - (x) Part 5 of the FTZ Act provides for the Minister for Commerce and Industry to advertise and grant leases on land within the FTZ. Depending on whether building works are required, the lease may be either a maximum of 10 or 40 years.

19. The FTZ Act has excellent policy objectives in terms of attempting to promote trade and investment. However, the reality on the ground is that there has been no development associated with the declaration of the FTZ Act in 9 years in WSP.

20. The Companies Office records indicate that Sandaun Trade Development Limited with a business name of Sandaun Trade Development Authority existed for a number of years, but was never appointed by the minister as an FTZ authority in accordance with section 4 of the FTZ Act. Furthermore, Sandaun Trade Development Limited has since been de-registered as a legal entity.

21. The requirement to appoint an authority is considered to be too resource-intensive. For an authority to be required to receive, assess, and issue licenses and permits, it must have adequate capacity and resources. The mandate of the authority also duplicates already existing approval mechanisms, such as IPA and planning and building approvals for development.

22. The fact that a lease can be granted for up to 40 years is a positive step in terms of granting security of land tenure to a potential developer, but this is offset somewhat by the fact that under section 23 of the FTZ Act, licenses have a maximum lifespan of 12 months. It is

difficult to understand the merit in having a lease for 40 years yet a license that must be approved annually by the authority. This does not promote investors' confidence.

E. Customs Act (presently being amended)

23. The Customs Act sets out the administrative policies and procedures for external trade in PNG, including cross-border trade through the Wutung border crossing in WSP. It also sets out the policies and procedures for fiscal administration of external trade in the province.

24. PNG has been an active member of the World Customs Organization since 2002. It has completed the necessary legislative changes to implement practices and procedures based on global standards approved by the World Customs Organization and is striving to accede to the Revised Kyoto Convention for the Simplification and Harmonization of Customs Procedures by 2009. The revisions to the Customs Act with respect to administrative appeals, advance binding rulings, a code of ethics and conduct, and post-clearance audit are significant and will result in excellent improvements. They were passed by Parliament in November 2006 and were intended to be effective from January 2007 through the budgetary amendments. However, the Speaker of Parliament has yet to certify the amendments, and consequently, the amendments have yet to be formally announced and an updated act published.

25. PNG Customs Service has established a customs review tribunal, which is to provide an independent adjudication of appeals lodged by a trader. This is one of the best actions by customs. Provisions should be made for publication of decisions of the tribunal that are of general application, in accordance with the principles of the Revised Kyoto Convention. While this policy establishes time limits for lodging an appeal to the tribunal and for lodging an appeal to the courts on a decision by the tribunal, there should be a time limit obligation on the tribunal to render a timely decision on its cases (e.g., within 60 or 90 days of the time that an appeal is heard).

F. Land Tenure and Security

26. PNG's customary land tenure system is firmly entrenched in the nation's culture, and is recognized in the legal system. It underpins village farming systems and provides a welfare safety net for the majority of people in provincial areas. Customary land ownership is a major constraint to economic development.

27. As a general rule, customary land cannot be used as collateral by landowners seeking investment funds because of the absence of secure legal tenure. Individual landowners have little incentive to improve the land if the resulting benefits accrue to a large number of people who did not contribute to the improvement effort. Mobilizing customary land for large-scale economic projects is costly, time-consuming, and uncertain.

28. The current legal land reform initiative before Parliament is aimed at settling land title disputes. The legislation is designed to make the process of gaining secure access to customary land easier, through improvements in land administration processes, settlements of disputes, and development of the institutional framework for a viable land market, including long-term leases. It is intended that decisions on land use are devolved to the landowning social unit, the collective body claiming rights to the land by customary law. The incorporated landowning social unit is the forum for decisions about the use of land by customary law and now by statute. The new law provides a framework for progress in making more productive use of customary land.

29. Various options for land tenure are embedded in the law: lease–lease back, land tenure conversion, state acquisition, and customary development land (the new creation under the legislation). Incentives are built in through the legislation to give the various levels of government, as well as landowning units, motivation to make more productive use of land—in particular, there is sharing of taxes collected with respect to the leasing and use of land. This will give incentives to local and provincial governments to develop infrastructure to attract investment in customary land under their jurisdiction. It will also give landowning units incentives to overcome disagreements in order to mobilize the land for investment—by themselves or by others.

G. Trade Agreement between the Government of Indonesia and the Government of Papua New Guinea

30. The trade agreement between the Government of Indonesia and the Government of Papua New Guinea, 2000 provides for the following:

- (i) an undertaking to facilitate trade for business persons;
- (ii) an offer of “most favored nation treatment” on trade between the two parties;
- (iii) exclusion of preferential treatment offered by either party to other trade partners;
- (iv) the requirement to comply with domestic laws in both parties;
- (v) the facilitation of trade fairs;
- (vi) arrangement that payments for trade in goods and services be made in freely convertible currencies;
- (vii) consultations between the parties on any problems of market access;
- (viii) establishment of a joint trade committee to deal with any difficulties related to the trade in goods;
- (ix) confirmation that national quarantine provisions of each party apply to trade in goods; and
- (x) protection of each other’s intellectual property rights.

31. This agreement is rather routine, and reaffirms rights and obligations already covered under PNG’s and Indonesia’s membership in the World Trade Organization. The agreement does very little to actively promote and facilitate new trade and investment between Indonesia and PNG, which is constrained by many other regulatory aspects.

H. Labor Law (Employment of Non-Citizens Act)

32. The purpose of the Employment of Non-Citizens Act is to provide a balance between the needs of the economy for foreign labour and the aspirations of Papua New Guineans for decent work by (i) assisting business to attract and retain the services of qualified, skilled and experienced non-citizens without unnecessary impediments; and (ii) promoting a work permit system that contributes to the creation of employment, training and skills-acquisition opportunities for all Papua New Guineans.

33. The purpose of this act attempts to strike a balance between providing a regulatory framework that allows businesses to engage the services of noncitizens where required without unnecessary impediments, yet also ensure that the importation of foreign labor, both skilled and unskilled, does not disadvantage Papua New Guineans in terms of causing local unemployment. Key aspects of this act are as follows:

- (i) The hiring of a noncitizen requires an approval to recruit from the Department of Labour and Industrial Relations, as well as a work permit for the relevant noncitizen employee.
- (ii) Work permits are generally available for noncitizens with management, professional, or technical skills, although they are usually only issued for a limited period. Applicants must be conversant with English, Pidgin, or Motu. Once a work permit has been granted, an employment visa is issued by the Department of Foreign Affairs on application by the holder of the work permit. Work permits are usually for 3 years and cover a particular position. The employee working in the position can be replaced without approval. Work permits are only issued after the employee has arrived in PNG.
- (iii) Noncitizens who require entry into PNG for business reasons (but not to work) can apply for a 12-month multiple entry (60 days at a time) business visa.
- (iv) There is also a recently introduced entry permit class known as the working resident entry permits. These are temporary permits that may be granted to employees of major development project companies prior to a work permit being obtained. Application must be made to the Immigration and Citizenship Division of the Department of Foreign Affairs.
- (v) Some jobs are reserved exclusively for citizens and one of the conditions of employing foreign workers is that the employer must train citizens to improve their skills and equip them to take over from the foreign workers. A training levy is imposed on most employees to achieve this end. Specific occupations, covering 578 vocation codes out of a total of 1,048, are reserved for nationals.

34. A study undertaken by the IFC³ indicated that obtaining a noncitizen work permit can take 6 months and cost K5,000 and there is anecdotal evidence of corrupt practices. Discretion is also exercised in the associated visa approvals process. A further impediment is that staff nationalization plans are required up-front before permits are issued.

35. Requirements of the Employment of Non-Citizens Act are politically appealing, but may have kept large numbers of people unemployed because of lack of investment. It needs to be realized that skill transfer does not only depend on trainers, but also the capacity of trainees. Education is the ultimate way of creating a skilled labor force.

36. Timely and efficient accessibility to noncitizen workers, particularly in remote regions such as Vanimo, is important to business where specific labor skills may not exist within the local labor market.

³ International Finance Corporation. 2003. *A Diagnostic of the Environment for FDI, Papua New Guinea*. Washington, DC.

EXTERNAL ASSISTANCE TO WEST SEPIK PROVINCE AND TRADE SECTOR

Table A4.1: Australia

Project Name	Grant Amount (K)	Date Approved
Warasikau–Nuku Regravelling and Sealing	9,594,345	2005
Provincial Performance Improvement Initiative	500,000	2007
Coastal Highway Regravelling	6,600,000	2007
Mai/Nuku Junction–Milak Ford Regravelling and Drainage Works	7,495,053	2009
Milak Ford–Asini Ford Regravelling and Drainage Works	6,243,303	2009

Source: Australian Agency for International Development.

Table A4.2: International Finance Corporation

Project Name	Grant Amount (\$)	Year of Approval
Registration Reform Project	1,000,000	2009

Source: International Finance Corporation.

Table A4.3: European Commission

Project Name	Grant Amount (€)	Year of Approval
Trade Related Assistance to PNG	3,000,000	2007

Source: European Commission.

INSTITUTIONAL CAPACITY ASSESSMENT

1. **Introduction.** The capacity assessment is carried out from an institutional economics point of view, according to which institutions including informal and formal rules are the key to explaining different economic performance across countries. To promote trade and private investment, it is essential to understand the current institutions of Papua New Guinea (PNG) and design appropriate interventions accordingly.
2. **Informal rules.** PNG is linguistically and culturally diverse, with more than 800 ethnic groups. While this is certainly an advantage, it poses challenges to communication, understanding, social harmony, collective decisions in the interest of the majority, and nation building. The *wantok* system, customary land ownership, and the “ask and give” culture suit subsistence gardening production well and provide a social safety net. However, they hamper modern governance that requires government be impartial to develop and enforce laws and regulations, and business development which requires clear property rights and thrift and saving for business growth.
3. **Formal rules.** PNG’s laws and regulations are characterized by overcentralization and protection of nationals. Construction contracts are between the state and contractors. Contracts with values above K10 million need to go through 32 procedures before the approval of the National Executive Council, the cabinet. Foreign investment approval is centralized at the Investment Promotion Authority (IPA), which has to certify the financial and operational capacity of the foreign investors regardless of the investment amount. This also applies to company registration. Approval of work permits and visas and issuance of passports are all centralized in Port Moresby, and require months of waiting time. Compounded by the underdeveloped and costly transport and telecommunication infrastructure, administrative discretions, and shortage of funding and staff, compliance with the formal rules is expensive and time-consuming and has become a major hindrance to trade and investment. Detailed assessment of the regulatory framework governing trade and investment is in Appendix 3.
4. The “cottage list” that restricts a list of business activities to nationals, investment and labor laws that require hiring one international staff with three nationals and up-front localization programs, and the minimum wage requirements are understandable and politically appealing. However, they reduce the attractiveness and competitiveness of PNG as a destination for foreign investment because these requirements translate into costs. Lack of foreign investment in the agriculture, manufacturing, and service sectors means job loss, a sluggish economic growth pattern, slow technical and skill development, and persistent subsistence farming.
5. Information on the Government’s policies, rules, and regulations is not generally available to the public, particularly in their totality. No single source of information describes the regulatory approval procedures and trade, tariff, customs, quarantine, immigration, foreign exchange, and tax policies. Unclear legal and regulatory requirements provide opportunities for rent-seeking activities and cause major delays and compliance costs.
6. **Organizational capacity.** There are 26 national departments, 34 statutory authorities, and 20 provincial governments in PNG. West Sepik Province (WSP) has 17 provincial and local governments. More than 50% of the recurrent budget went to consumption of goods and services by the Government. Intergovernmental relations and responsibilities between provincial and local governments are unclear. Policies and decisions made at high levels may not necessarily be implemented at the operational levels. There seems to be a shortage of staff and

funding across government departments. The customs officers at Wutung border have served in their posts for 8–10 years and were not able to be rotated because of funding constraints.

7. The Commerce Division of West Sepik Provincial Administration has two staff members. In 2007, its budget allocation was K12,000. The Physical Planning Board and Building Board are the two local authorities for granting construction permits. According to the Physical Planning Act, 1989 and Building Board Act, 1978; the two boards should hold a meeting once a month but only two or three meetings were held annually in the past years.

8. The Border Development Authority (BDA) was established in October 2008. It has mandates to coordinate development activities, provide infrastructure, and promote both foreign and local investment in the border provinces. Of 150 positions, it has filled 28 positions including key positions such as the executive chair, general manager, corporate director, planning and implementation director, and human resource manager. Even when all positions are filled, BDA will require capacity development in project management, procurement, project evaluation and reporting, project supervision and monitoring, financial management, and investment promotion to carry out its mandates as well as the responsibilities of the Executing Agency for the Project.

9. PNG Customs Service has made substantial progress toward acceding to the Revised Kyoto Convention for Simplification and Harmonization of Customs Procedures and has set an example in the Pacific. However, according to the diagnostic report of the World Customs Organization, it needs to upgrade its information technology infrastructure and strengthen law enforcement capability to further improve its clearance efficiency and facilitate trade.

10. **Human capacity.** The adult literacy rate for PNG is 57.3% and the combined primary, secondary, and tertiary gross enrollment ratio is 40.7%. Life expectancy at birth is 57 years. For WSP, the adult literacy rate is around 45% and life expectancy at birth is 46 years. Skills shortage exists in almost all professions—particularly policy strategists, managers, mining and civil engineers, geologists, financial controllers, and information technology specialists. The skilled labor requirement of the liquefied natural gas project, which is anticipated to be 8,000 in the medium term, will further aggravate the labor market.

11. Human capacity is not just about skill, but also work ethics. It seems fairly common that in PNG, a skilled worker fails to catch his flight, turn up at a scheduled meeting, deliver his promise; and may even disappear under a contract.

12. People in Vanimo and Wutung border acknowledges that trade with Indonesia is an opportunity. However, they fear they may not be able to participate because they do not have the fundamental perspectives, culture, or experience with trade and formal business enterprise. They have specifically requested entrepreneurship training and technical and vocational business training with respect to starting a business; registering a business; knowledge of a potential market; understanding of technology; capacity to manage books and records; skills in recruiting, training, deploying, and managing employees; and paying taxes.

DETAILED COST ESTIMATES

Table A6.1: Detailed Cost Estimates by Expenditure Category

Item	(K million)			(\$ million)		
	Foreign Exchange	Local Currency	Total Cost	Foreign Exchange	Local Currency	Total Cost
A. Base Cost^a						
1. Civil Works						
a. Border Administration Complex	13.40	15.72	29.12	4.90	5.75	10.65
b. Administration Houses	8.06	6.87	14.93	2.95	2.51	5.46
Subtotal (A1)	21.46	22.59	44.05	7.85	8.26	16.11
2. Equipment						
a. X-Ray Machines	0.10	0.60	0.70	0.04	0.22	0.26
b. Computers and Network	0.50	1.01	1.51	0.18	0.37	0.55
c. Office Furniture and Appliances	0.00	0.38	0.38	0.00	0.14	0.14
d. House Furniture and Appliances	0.00	1.19	1.19	0.00	0.44	0.44
e. Closed Circuit Television	0.15	0.25	0.40	0.05	0.09	0.14
f. Customs Patrol Boat	3.00	0.00	3.00	1.10	0.00	1.10
Subtotal (A2)	3.75	3.43	7.18	1.37	1.26	2.63
B. Consulting Services						
1. Project implementation support	3.17	0.00	3.17	1.16	0.00	1.16
2. Construction supervision	1.01	5.36	6.37	0.37	1.96	2.33
3. Financial auditing	0.00	0.80	0.80	0.00	0.29	0.29
Subtotal (B)	4.18	6.16	10.34	1.53	2.25	3.78
C. Capacity Development	2.73	1.35	4.08	1.00	0.50	1.50
D. Social Development Program						
1. Power	0.00	0.08	0.08	0.00	0.03	0.03
2. Sanitation	0.00	0.49	0.49	0.00	0.18	0.18
3. Safe Motherhood	0.00	0.03	0.03	0.00	0.01	0.01
4. Education for At-Risk Children	0.00	0.08	0.08	0.00	0.03	0.03
5. HIV/AIDS	0.08	0.60	0.68	0.03	0.22	0.25
Subtotal (D)	0.08	1.28	1.36	0.03	0.47	0.50
E. Contingency						
1. Physical Contingencies ^b	2.15	2.26	4.41	0.79	0.83	1.62
2. Price Contingencies ^c	0.58	5.67	6.25	0.21	2.08	2.29
Subtotal (E)	2.73	7.93	10.66	1.00	2.91	3.91
F. Financial Charges	4.29	0.00	4.29	1.57	0.00	1.57
Total Cost (A+B+C+D+E+F)	39.22	42.74	81.96	14.35	15.65	30.00

^a In 2009 prices. Including \$2.33 million taxes and duties (12% for civil works and 15% for equipment).

^b Computed at 10% base cost for civil works.

^c Computed using Asian Development Bank cost escalation factors. For foreign exchange costs, 1% in 2010, 0% in 2011, 0.3% in 2012, 0.5% in 2013 and onward. For local currency costs, 3% in 2010 and onwards.

Source: Asian Development Bank estimates.

Table A6.2: Detailed Cost Estimates by Financing Agency
(\$ million)

Item	Cost	ADB (ADF)		Government	
		Amount	% of Cost Category	Amount	% of Cost Category
A. Base Cost^a					
1. Civil Works					
a. Border Administration Complex	10.65	9.05	85.00	1.60	15.00
b. Administration Houses	5.46	4.64	85.00	0.82	15.00
Subtotal (A1)	16.11	13.69	85.00	2.42	15.00
2. Equipment					
a. X-Ray Machines	0.26	0.26	100.00	0.00	0.00
b. Computers and Network	0.55	0.55	100.00	0.00	0.00
c. Office Furniture and Appliances	0.14	0.14	100.00	0.00	0.00
d. House Furniture and Appliances	0.44	0.44	100.00	0.00	0.00
e. Closed Circuit Television	0.14	0.14	100.00	0.00	0.00
f. Customs Patrol Boat	1.10	1.10	100.00	0.00	0.00
Subtotal (A2)	2.63	2.63	100.00	0.00	0.00
B. Consulting Services					
1. Project implementation support	1.16	1.16	100.00	0.00	0.00
2. Construction supervision	2.33	2.33	100.00	0.00	0.00
3. Financial auditing	0.29	0.00	0.00	0.29	100.00
Subtotal (B)	3.78	3.49	92.33	0.29	7.67
C. Capacity Development	1.50	1.50	100.00	0.00	0.00
D. Social Development Program					
1. Power	0.03	0.03	100.00	0.00	0.00
2. Sanitation	0.18	0.18	100.00	0.00	0.00
3. Safe Motherhood	0.01	0.01	100.00	0.00	0.00
4. Education for At-Risk Children	0.03	0.03	100.00	0.00	0.00
5. HIV/AIDS	0.25	0.25	100.00	0.00	0.00
Subtotal (D)	0.50	0.50	100.00	0.00	0.00
E. Contingency	3.91	3.19	81.60	0.72	18.40
F. Financial Charges	1.57	0.00	0.00	1.57	100.00
Total Cost (A+B+C+D+E+F)^b	30.00	25.00	83.33	5.00	16.67
% Total Cost	100%		83.33%		16.67%

ADB = Asian Development Bank, ADF = Asian Development Fund.

^a In 2009 prices. Including \$2.33 million taxes and duties (12% for civil works and 15% for equipment), which will be partly financed from the loan proceeds.

^b Bank charges incurred by the imprest account will be financed from the loan proceeds.

Source: Asian Development Bank estimates.

PROCUREMENT PLAN

A. Project Information

Country	Papua New Guinea
Name of Borrower	Papua New Guinea
Project Name	Pilot Border Trade and Investment Development Project
Loan or TA Reference	To be determined (tbd)
Date of Effectiveness	tbd
Amount US\$ (total from all financiers):	\$30 million
Of which Committed, US\$	tbd
Executing Agency	Border Development Authority
Approval Date of Original Procurement Plan	
Approval of Most Recent Procurement Plan	
Publication for Local Advertisement	
Period Covered by this Plan	18 months after approval of this plan

B. Procurement Thresholds, Goods and Related Services, Works, and Supply and Installation

Procurement Method	To Be Used Above
ICB Works	> \$3 million
ICB Goods	> \$500,000
NCB Works	> \$100,000, ≤ \$3,000,000
NCB Goods	> \$100,000, ≤ \$500,000
Shopping Works	≤ \$100,000
Shopping Goods	≤ \$100,000
Exceptional Methods	

ICB = international competitive bidding, NCB = national competitive bidding.

C. Procurement Thresholds, Consultants' Services

Procurement Method	To Be Used Above (Value \$)
Quality- and Cost-Based Selection (QCBS)	\$600,000
Individual Consultant Selection	
Exceptional Methods	
Single-source selection, selection of individual consultants.	

D. List of Contract Packages and Consulting Services

Contract Description	Estimated Cost (\$ million)	Procurement Method ^a	Expected Date of Advertisement	Prior Review (Y/N)	Comments
A. Civil Works					
1. Border Administration Complex	10.65	ICB	2010	Yes	
2. Administration Housing	5.46	ICB	2010	Yes	
B. Equipment					
1. Office Furniture	0.13	NCB	2013	Yes	
2. Office Appliances	0.01	Shopping	2014	Yes	
3. X-Ray Machines	0.26	NCB	2013	Yes	
4. Computers and Network	0.55	ICB	2013	Yes	
5. Housing Furniture	0.26	NCB	2013	Yes	
6. Housing Appliances	0.18	NCB	2013	Yes	
7. Closed Circuit Television for Security Monitoring	0.14	NCB	2013	Yes	
8. Customs Patrol Boat	1.10	ICB	2010	Yes	
C. Consulting Services					
1. Project Implementation Support	1.16	ICS	2010		ADB selection Diverse expertise required
2. Construction Supervision	2.33	QCBS	2012		ADB selection
3. HIV/AIDS Prevention	0.25	SSS	not applicable		ADB selection NGO required

ADB = Asian Development Bank, ICB = international competitive bidding, ICS = individual consultant selection, NCB = national competitive bidding, QCBS = quality- and cost-based selection, SSS = single-source selection.

^a For ICB contracts, three copies of the invitation to bid and the prequalification and bidding documents should be submitted to the Asian Development Bank (ADB) for approval 21 days before the proposed date for the issuing of the bidding documents. The bid evaluation report and the proposal for contract award should be submitted to ADB for review and approval 30 days before the expiration of the bid validity. Domestic preference will apply to ICB contracts only.

Source: Asian Development Bank estimates.

E. National Competitive Bidding

1. General

1. National competitive bidding (NCB) shall conform to the provisions set in the Public Financial Management Act (PFMA) as issued in 1995 and amended in 2003, and the specific procedures prescribed in the Financial Instructions issued in 2005, with the clarifications and modifications described in the following paragraphs required for compliance with the provisions of ADB *Procurement Guidelines*.

2. Participation in Bidding

- (i) Government-owned enterprises in Papua New Guinea shall be eligible to bid only if they can establish that they are legally and financially autonomous, operate under commercial law, and are not a dependent agency of the Borrower, Executing Agency, or Implementing Agency.
- (ii) Foreign bidders shall be eligible to participate in bidding under the same conditions as national bidders.
- (iii) Bidding shall not be restricted to pre-registered firms and such registration shall not be stated in the bidding documents as a condition for the submission of bids. Where registration is required prior to award of contract, bidders: (i) shall be allowed a reasonable time to complete the

registration process; and (ii) shall not be denied registration for reasons unrelated to their capability and resources to successfully perform the contract, which shall be verified through post-qualification.

3. Classification of Contractors; Qualification; Post-qualification

- (i) Post-qualification shall be used unless prequalification is explicitly provided for in the loan agreement and/or procurement plan.
- (ii) Bidding shall not be restricted to any particular class of contractors, and non-classified contractors shall also be eligible to bid. Qualification criteria (in case prequalification was not carried out) shall be stated in the bidding documents, and before contract award, the bidder having submitted the lowest evaluated responsive bid shall be subject to post-qualification.

4. Conflict of Interest

2. Bidders may be considered to be in conflict of interest with one or more parties in this bidding process if, including but not limited to:

- (i) they have controlling shareholders in common, or
- (ii) they receive or have received any direct or indirect subsidy from any of them; or
- (iii) they have the same legal representative for purposes of this bid; or
- (iv) they have a relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the bid or another bidder, or influence the decisions of the employer regarding this bidding process; or
- (v) a bidder participates in more than one bid in this bidding process. Participation by a bidder in more than one bid will result in the disqualification of all bids in which the party is involved. However, this does not limit the inclusion of the same subcontractor in more than one bid; or
- (vi) a bidder or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the contract is the subject of the bid; or
- (vii) a bidder or any of its affiliates has been hired (or is proposed to be hired) by the employer or Borrower as engineer for the contract.

5. Preferences

3. No preference shall be given for domestic bidders and for domestically manufactured goods.

6. Advertising, time for bid preparation

- (i) Invitations to bid shall be advertised in at least one newspaper of national circulation or freely accessible and well-known website, allowing a minimum of 4 weeks for the preparation and submission of bids, such 4 weeks period to begin with the availability of the bid documents or the advertisement, whichever is later.
- (ii) Bidding of NCB contracts estimated at \$500,000 or more for goods and related services, or \$1,000,000 or more for civil works, shall be advertised on ADB's website via the posting of the procurement plan.

7. Standard Bidding Documents

4. Until national standard bidding documents approved by ADB are available, bidding documents acceptable to ADB should be used.

8. Bid Security

5. If required by the bidding documents, bid security shall be in the form of a bank guarantee from a reputable bank. A bidder's bid security shall apply only to a specific bid.

9. Bid Opening and Bid Evaluation

- (i) Bidders may deliver bids, at their option, either in person or by courier service or by mail.
- (ii) Bidders shall not be allowed to amend their tenders after the closing date and time for submission of bids.
- (iii) Bids shall be opened in public, immediately after the deadline for submission of bids. No bid shall be rejected during bid opening. The name of the bidder, the total amount of each bid, and any discounts shall be read aloud and recorded in the minutes of the public bid opening.
- (iv) Evaluation of bids shall be made in strict adherence to the qualifications and evaluation criteria stipulated in the bidding documents.
- (v) No bidder shall be rejected merely on the basis of a comparison with the employer's estimate and budget ceiling without ADB's prior concurrence.
- (vi) The contract shall be awarded to the technically responsive bidder that offers the lowest evaluated price, and meets the qualifying criteria. In determining the lowest evaluated price, the following are to be considered: (i) bid price, as offered, (ii) arithmetical corrections on the bid price, if any, and (iii) monetary value of the evaluation criteria that are stated in the bidding document.

10. Rejection of Bids

6. Bids shall not be rejected and new bids solicited without ADB's prior concurrence.

11. Extension of the Validity of Bids

7. In exceptional circumstances and with prior ADB approval, the procuring entity may, before the expiration of bid validity, request all bidders in writing to extend the validity of their bids. In such a case, bidders shall not be requested nor permitted to amend the price or any other condition of their bid. Bidders shall have the right to refuse to grant such an extension without forfeiting their bid security, but bidders granting such an extension shall be required to provide a corresponding extension of their bid security.

12. Disclosure on Contract Awards

8. At the same time that notification on award of contract is given, the Borrower, Executing Agency, or Implementing Agency shall publish the following information on contract award on a free and open access website or other means of publication acceptable to ADB: (i) name of each bidder who submitted a bid; (ii) bid prices as read out at bid opening; (iii) name and evaluated price of each bid that was evaluated; (iv) names of bidders whose bids were rejected

and the reasons for the rejection; and (v) name of the winning bidder, price it offered as well as the duration and summary scope of the contract awarded. The Executing or Implementing Agency shall respond in writing to unsuccessful bidders who seek explanations on the grounds on which their bids are not selected.

13. No Negotiations

9. There shall be no negotiations, even with the lowest evaluated bidder, without ADB's prior concurrence. A bidder shall not be required, as a condition of award, to undertake obligations not specified in the bidding documents, or otherwise, to modify the bid as originally submitted.

14. Inspection and Auditing

10. Each contract financed from the proceeds of a loan or grant shall provide that the contractor or supplier shall permit ADB, at its request, to inspect their accounts and records relating to the performance of the contract and to have said accounts and records audited by auditors appointed by ADB.

15. Member Country Restriction

11. Bidders must be nationals of member countries of ADB, and offered goods must be produced in and supplied from member countries of ADB.

TECHNICAL ASSISTANCE FOR TRADE AND INVESTMENT INSTITUTIONAL STRENGTHENING

1. To complement the Project, technical assistance (TA) is needed to reduce business transaction costs associated with compliance with government rules and regulations and telecommunication so that the business environment in West Sepik Province (WSP) is improved and attractive to private investment. As a new establishment and executing agency for the Project, the Border Development Authority (BDA) will need assistance to build its capacity to implement the Project. The TA will consist of three parts: (i) development of investment policy legislation for WSP, (ii) study of telecommunication options for WSP, and (iii) capacity development in the areas of procurement and financial management for BDA.

A. Development of Investment Policy Legislation for WSP

2. To capture the trade opportunity with Indonesia and worldwide, WSP needs to attract investment to expand production, increase supplies of its marketable products, and promote tourism. However, WSP faces formidable challenges at both national and provincial levels to improve the investment climate. Unless deliberate government investment policies are provided and economic activities are stimulated, the chance of development will be slim and investment in border facilities may be wasted.

3. Policy development needs to be internally driven. The TA will provide an investment policy strategist (international, 18 person-months) to assist a government policy team in developing investment policy legislation for WSP. Responsibilities include but are not limited to the following:

- (i) Assisting BDA in establishing a well-motivated and dedicated policy team led by senior government officials.
- (ii) Introducing to the policy team the most recent successful country experience in investment promotion in Asia and the Pacific, particularly the experience of the People's Republic of China (PRC), Malaysia, the Philippines, Singapore, or some other countries.
- (iii) Developing overseas short visit plans and agenda, and organizing overseas tours to expose the policy team to successful experiences in investment promotion in Asia and the Pacific.
- (iv) Assisting the policy team in preparing the reports of the study tours.
- (v) Assisting the policy team in reviewing Papua New Guinea (PNG) laws and regulations governing foreign and national investment, and related constraints such as land.
- (vi) Assisting the policy team in developing an investment act for WSP.
- (vii) Organizing workshops with the participation of distinguished political and business leaders and development partners to advise on the investment act.
- (viii) Assisting BDA in the Government's approval of the investment policy legislation and pilot testing in WSP.
- (ix) Assisting BDA in developing an information guide to the act, customs, immigration, quarantine, tariff, taxes, business registration, land, construction permit, etc.

4. The investment policy strategist needs to have extensive investment promotion and country experience. The output will be the approved investment policy legislation for WSP.

Reporting requirements include (i) monthly progress reports to be submitted in the first week of the following month, (ii) a draft final report, and (iii) a final report.

B. Study of Telecommunication Strategy for WSP

5. **Background.** Telecommunication is a regulated sector in PNG. The Independent Consumer and Competition Commission (ICCC) handles the regulatory requirements related to the Telecommunications Act, 1996. ICCC provides the telecom regulatory contract and Pangtel provides any technical regulations. ICCC and Pangtel have concurrent powers and they are required to consult each other. In the event of any disagreement, the decisions of ICCC will prevail.

6. Telikom PNG is the corporate entity set by the Government as the sole provider of telecommunication services, and it abides by the ICCC regulatory contract. Telikom PNG provides voice, internet, and data services.

7. A subsidiary of Telikom PNG, Pacific Mobile Communications provides the internet gateway services. Tiara Internet Gateway (under Pacific Mobile Communications) provides services to the internet service provider. Telikom PNG is also active in the mobile communication sector, using another subsidiary B-Mobile.

8. The mobile phone sector is partially open for competition, with Digicel offering mobile phone services along with B-Mobile. There is a third company, Green Com, whose operations have not been very successful. According to some media reports, a major stakeholder has left the company, leaving the operations to deteriorate.

9. The country's domain space of (.pg) is administered by Papua New Guinea University of Technology in Lae. Five internet service providers are licensed: DG Computers, Global Technologies, Online South Pacific, Daltron Electronics, and Datec.

10. The country's main internet pipe connects Port Moresby to Australia and is owned by Telikom PNG. Pacific Mobile Communications operates this gateway and leases the gateway for use to the internet service providers.

11. Another internet pipe (Pipe Pacific Cable 1), under construction by Australia's Pipe Networks, is expected to be commissioned later this year. It connects Sydney to Guam and provides onward connectivity to the United States and Asia. This will have connectivity to Lae, thus providing another internet gateway.

12. In 2008, PNG's Academic and Research Network became operational, and connects to AsiaSat 4 through a teleport hub in Singapore. This network is operated by a consortium and maintained by a local team. Members of this private network include the Education Department, Office of Libraries and Archives, Papua New Guinea University of Technology, University of Papua New Guinea, Vudal University, Goroka University, Pacific Adventist University, Divine Word University, National Research Institute, National Agriculture Research Institute, and Office of Higher Education.

13. A major recent development is the new information and communication technology (ICT) policy for the telecommunications sector that was released in April 2009. According to the policy, the responsibilities of ICCC and Pangtel will be merged and managed under a new regulatory structure. The internet gateway will open to more operators other than Telikom PNG.

A universal access scheme, which is taking telecommunications to less-developed areas, will be given importance. These changes are sweeping and are expected to change the marketplace.

14. **Scope of study.** The scope of the study is to investigate telecommunication options for WSP that can promote trade and investment, be used by BDA and customs, and stimulate overall economic activities in the province—taking into consideration the current telecommunication infrastructure, emerging trends in the Pacific region, the status of implementation of ICT policy, applicability of the technology in WSP, and affordability.

15. **Objectives.** The objective of this study is to evolve a telecommunication technology strategy for WSP by (i) evaluating the progress of the new telecommunication policy and its possible extension to WSP, and (ii) evaluating all available and possible technologies for deployment of telecommunication services in WSP.

16. **Terms of reference for telecommunications specialist** (international, 4 person-months). The specialist will be responsible for the following:

- (i) Surveying the telecommunication infrastructure available in PNG, including infrastructure for mobile communications, internet connectivity, rural connectivity, especially in WSP, and communication methods used (radio, satellite, etc). The providers to be covered are Telikom PNG, B Mobile, Digicel, and any other carrier licensed since May 2009.
- (ii) Studying PNG's ICT policy and reporting on the progress of the implementation of the policy at the time of the study. The report should cover but not be limited to the state of governance bodies set up, high-level details of obtaining operator licenses under the new scheme, details of the new operators, their infrastructure and schemes, and especially progress of the universal access scheme.
- (iii) Understanding the infrastructure and services provided by the academic and educational network operated by PNG Academic and Research Network, and exploring the feasibility of piggybacking this network for development activities in WSP.
- (iv) Documenting the information on the telecommunication backbone provided by the main carrier and operator, Telikom PNG, and other mobile operators available at the time of the study.
- (v) Exploring the feasibility of using the telecommunication infrastructure available in neighboring Indonesia, as Vanimo, the capital of WSP, is very close to Jayapura, Indonesia. Identifying if a network pipe is available in Jayapura that can be used for expansion in Vanimo for internet communication. Identifying if technical feasibility exists for internet connectivity, and if it exists, exploring if the new PNG telecommunication policy will allow such expansions, either as a joint exercise between Indonesian telecom and Telikom PNG or through a new business entity.
- (vi) Developing a comprehensive telecom strategy for WSP based on the information collected. The strategy should first address internet access for businesses and government establishments in Vanimo and possibly end users, and second improving voice communication facilities in and around Vanimo.
- (vii) Developing various options for implementation of the strategy (such as augmenting existing infrastructure, providing new infrastructure, and piggybacking available infrastructure) from within the region and country as well as across the border, from Indonesia.

- (viii) Analyzing the viability of each option, taking into consideration the benefits, cost, and technological viability. Develop costing models for various options so that options can be compared and one or many selected for implementation.

17. **Outputs.** The study report should broadly consist of the following:

- (i) Details of available telecommunication infrastructure in PNG, taking into consideration any recent or anticipated changes.
- (ii) Technology options analysis for expanding telecommunication infrastructure in WSP, especially in Vanimo town and a technology strategy built around this feasibility. The analysis should take into consideration the changes in ICT policy and the capabilities provided by various operators including those in Indonesia but not limited to Telikom PNG, Digicel, and the PNG Academic and Research Network.
- (iii) Cost models and viability analysis for various options so that one or more options can be adopted for implementation.

C. Capacity Development for BDA

18. To comply with Asian Development Bank (ADB) procurement and financial management requirements, BDA will need procurement and financial consultants' support. The terms of reference include but are not limited to the following.

19. **Procurement Specialist (Civil or Structural Engineer)** (individual international consultant, 4 person-months). Tasks include the following:

- (i) Preparing the bidding documents for the border administration complex (package 1) and resident housing (package 2), taking into account the ones prepared by the consultant engaged under the project preparatory TA¹ in accordance with ADB's *Procurement Guidelines* (2007, as amended from time to time).
- (ii) Assisting BDA in responding to ADB's requests for clarification on the bidding documents.
- (iii) Evaluating the bids as a member of the technical evaluation committee and preparing the bid evaluation reports in accordance with ADB's *Procurement Guidelines*.
- (iv) Assisting BDA in responding to ADB's requests for clarifications on the bid evaluation reports.

20. **Financial Specialist** (international to be recruited from a firm, 12 person-months for 5 years on an intermittent basis). Tasks include the following:

- (i) Reviewing BDA's (a) accounting principles, policies, and procedures; (b) existing accounting and control systems; (c) safeguards to protect assets from fraud, waste, and abuse; and (d) financial management reporting system.
- (ii) Assisting, with reference to ADB's financial management questionnaire, in (a) refining BDA's accounting principles, policies, and procedures; (b) developing budgeting, accounting, and financial management and control systems in BDA and its provincial management office (PMO) in Vanimo to maintain separate

¹ ADB. 2008. *Technical Assistance for Preparing the Pilot Border Trade and Investment Development Project*. Manila (TA 7125-PNG).

- project accounts and financial statements to identify goods and services financed from different sources including ADB, BDA's own resources, and other financiers;
- (c) developing controls and procedures for flow of funds, financial information, accountability, and audits in relation to BDA's provincial offices; and
- (d) developing a financial management reporting system.
- (iii) Developing disbursement and/or cash management processes and procedures with appropriate internal controls and reporting for the various sources of funding.
- (iv) Evaluating the financial qualifications of the bidders for package 1 and 2 as a member of the technical evaluation committee, and contributing to the bid evaluation reports.
- (v) Reviewing BDA and its PMO's accounts and financial statements on a quarterly basis for 5 years with reference to ADB's financial management questionnaire, identifying deficiencies, and assisting BDA and PMO in correcting the deficiencies.
- (vi) Assisting BDA in reconciling its accounts with ADB and liquidating its imprest account.
- (vii) Assisting BDA in preparing and submitting the financial statements in a timely manner for auditing, and ensuring BDA submits to ADB auditors' reports within 6 months after the end of each fiscal year.
- (viii) Providing training to BDA staff on financial management and accounting.

D. Cost Estimates and Financing

21. The TA is estimated to cost \$1.06 million. The Government has requested ADB to provide \$900,000 equivalent. The TA will be financed on a grant basis from ADB's Technical Assistance Special Fund (TASF-IV). The Government will finance \$160,000 in kind by providing counterpart staff, office accommodation and support services, local communication and transport, and other services and facilities required for the implementation of the TA. The cost estimates and financing plan are summarized in Table A9.

Table A9: Cost Estimates

(\$)

Item	Total Cost
A. Asian Development Bank	
1. Remuneration and Per Diem	766,000
2. International and Local Travel	48,300
3. Contingency	85,700
Subtotal	900,000
B. Government Financing	160,000
Total	1,060,000

Source: Asian Development Bank estimates.

ECONOMIC ANALYSIS

A. General

1. Development literature and country experiences indicate that trade and investment are an engine of economic growth and play an important role in poverty reduction. This is because (i) trade encourages specialization according to comparative advantages, enabling efficient deployment of national resources; (ii) trade expands markets; (iii) trade disseminates ideas, management and organization skills, and technology, increasing productivity of local businesses; (iv) trade generates investment essential for employment; and (v) trade gives consumers access to a wider range of products at cheaper prices.

2. The volume of international trade has not reached its optimal level based on differences in factor endowments, tastes, and technology between countries, even after a global reduction in average tariff and non-tariff barriers. The lower than expected trade volume is more pronounced in case of trade between neighboring developing countries, often evident from substantial price differences between such countries. Trade transaction costs (TTCs) have been offered as a possible explanation of this shortfall. The most obvious examples of TTCs are (i) a truck carrying goods for trade across the border will charge more for plying on a poor road or for a long waiting time, thus increasing the monetary costs of the goods; (ii) lack of warehousing facilities would result in loss, damage, and spoilage of goods in transit and may increase insurance charges; and (iii) lack of access to good transport and communication services may impose a high opportunity cost by restricting market access. Empirical estimates using a gravity equation found that the tax equivalent of such TTCs could be as high as 74% (21% transportation, 44% border-related costs) for industrialized countries.¹ Costs for developing countries could be even higher.

3. West Sepik Province (WSP) borders Papua Province of Indonesia, which offers 25%–40% cheaper services and products. Trade across the border has taken place but is limited by the closure of the Bewani–Vanimo–Jayapura road as the border facilities at Wutung, WSP are not ready for handling vehicle crossing. With the Project, a modern border facility accommodating traffic flows will be built to facilitate trade. Such trade facilitation will lead to a reduction in TTCs, encouraging exports and imports from and to Papua New Guinea (PNG); and resulting in a net gain in producer surplus, consumer surplus, and incremental government revenues from exports and imports. The social development program of the Project is to mitigate the social risks and comply with ADB's social policies. The social development program was designed based on people's priorities—health and education.

4. Alternative ways to promote trade have been considered and found unfeasible. The room for further tariff reduction is very limited as PNG already has one of the least restrictive trade regimes in the Pacific region. Compared with other constraints, such as infrastructure and government investment policies and administrative practices, tariffs are a less binding constraint restricting trade.

5. Renovation of the current administration building will not help resolve the issue of traffic flow. The Wutung border area needs to be re-planned and new facilities need to be built to reduce TTCs associated with transportation, storage, and communications.

¹ Anderson, James, and Eric van Wincoop. 2004. Trade Costs. *Journal of Economic Literature*. Vol. 42 (September 2004): page 692.

6. The economic analysis of the Project was conducted by comparing the “with-project” and “without-project” scenarios. The assessment covers the period from 2010 to 2034 and assumes the implementation schedule in Appendix 7 is followed. All benefits and costs are in constant 2009 prices. The analysis excluded economic benefits such as business efficiency, job creation, skill development, and reduction in income differential between towns far from the border and towns neighboring the border, which are difficult to quantify.

B. Costs

7. Project economic costs include civil works costs, equipment costs, consulting service costs, physical contingency, and maintenance costs. The economic cost of land is not included because there is no incremental cost between with- and without-project scenarios, as the land has been allocated for border development. Taxes and duties are excluded from the economic assessment. Costs were divided into tradable and non-tradable components. The non-tradable components are made of domestic labor, materials, and other expenses, and are estimated to represent 73% of the costs. Costs for skilled and unskilled domestic labor were adjusted by a shadow wage rate factor of 0.95 and 0.50 respectively to arrive at the economic opportunity cost. A standard conversion factor of 0.95 was applied to calculate the economic price of other non-traded goods, and to estimate the opportunity cost of maintenance costs.

C. Benefits

8. Without the Project, TTCs associated with loss, damage, and spoilage of goods in transit; lack of access to transport and communication services; and market access restrictions will be high—equivalent to a tax of at least 25%. The Project will reduce the TTCs and increase the volume of trade. The total increase in trade can be estimated from the price elasticity of exports and the price elasticity of imports. As the trade considered here is bilateral, the price elasticity of both exports and imports is expected to be higher than the multilateral price elasticity of both exports and imports. We have assumed the price elasticity of demand for both imports and exports to be 1.55. Another important assumption made in the benefit estimates of the border facilities is a reduction in TTCs by 12%.

9. The benefits of the social development program are also significant. Providing electricity improves the quality of life of the households connected with electricity, and decreases the cost of using other sources of fuel. In PNG, the willingness to pay for electricity is K1 per kilowatt-hour (kWh). The tariff per kWh is equivalent to \$0.20. Sanitation reduces both morbidity and mortality, especially for children under 5. Fewer ailments reduce the portion of household income spent on treating waterborne diseases. Safe motherhood reduces both maternal and child mortality. A reduction in school dropout rates increases social benefits, as the income differential between a person with a school education and a person without a school education is substantial. Reduction in HIV/AIDS prevalence increases the household income by reducing the expenditure on treatment. It also saves lives. To estimate the economic value of life saved by the social development program, the net value method has been adopted. To find the net value, the gross income throughout a person’s life has been computed. The average annual per capita income in Wutung is K2,000 and the average working life of a person is 30 years. The total income stream discounted comes to about K21,000, which is the gross income of a person. Gross consumption is estimated to be 50% of gross income. With an assumed probability of survival of 85%, the net value of life saved is estimated to be K8,925.

D. Results of Economic Analysis

10. The total economic benefit from the Project is quite substantial. Discounted at a rate of 12%, the economic net present value (NPV) of the Project is K5.52 million, and the economic internal rate of return (EIRR) is 14.05%. The net benefit streams of the Project are provided in Table A10.1.

Table A10.1: Net Benefit Streams—Undiscounted
(K million, 2009 prices)

Year	Border Facilities	Electricity	Sanitation	Safe Motherhood	Education	HIV/AIDS	Total Benefits
2010	0.00	0.07	0.04	0.04	0.08	0.05	0.27
2011	0.00	0.13	0.11	0.09	0.15	0.08	0.56
2012	0.00	0.20	0.21	0.13	0.23	0.11	0.88
2013	0.00	0.20	0.25	0.17	0.29	0.15	1.06
2014	0.00	0.20	0.25	0.17	0.29	0.19	1.10
2015	4.25	0.20	0.25	0.17	0.29	0.24	5.40
2016	4.50	0.20	0.25	0.17	0.29	0.28	5.69
2017	4.76	0.20	0.25	0.17	0.29	0.34	6.00
2018	5.03	0.20	0.25	0.17	0.29	0.40	6.33
2019	5.31	0.20	0.25	0.17	0.29	0.47	6.68
2020	5.61	0.20	0.25	0.17	0.29	0.55	7.06
2021	5.93	0.20	0.25	0.17	0.29	0.64	7.47
2022	6.25	0.20	0.25	0.17	0.29	0.75	7.91
2023	6.60	0.20	0.25	0.17	0.29	0.88	8.38
2024	6.96	0.20	0.25	0.17	0.29	1.02	8.89
2025	7.35	0.20	0.25	0.17	0.29	1.19	9.44
2026	7.75	0.20	0.25	0.17	0.29	1.39	10.04
2027	8.17	0.20	0.25	0.17	0.29	1.61	10.68
2028	8.61	0.20	0.25	0.17	0.29	1.88	11.39
2029	9.07	0.20	0.25	0.17	0.29	2.18	12.16
2030	9.56	0.20	0.25	0.17	0.29	2.53	13.00
2031	10.07	0.20	0.25	0.17	0.29	2.59	13.57
2032	10.60	0.20	0.25	0.17	0.29	2.66	14.17
2033	11.17	0.20	0.25	0.17	0.29	2.72	14.79
2034	11.76	0.20	0.25	0.17	0.29	2.79	15.45
						NPV	5.52
						EIRR	14.05%

EIRR = economic internal rate of return, NPV = net present value.

Source: Asian Development Bank estimates.

E. Sensitivity Analysis

11. Sensitivity analysis was carried out to test the effects of negative changes in the key parameters that determine the benefits and costs of the Project. The analysis was conducted by increasing the costs and reducing the benefits.

12. Among the individual variables affecting the Project, TTCs have the highest impact on the Project. Even small changes in TTCs affect the benefits of the Project as shown in Table A10.2.

Table A10.2: Impact of Trade Transaction Costs on the Project

Reduction in TTC benefits (%)	ENPV (K million)	EIRR (%)
0	5.52	14.05
10	2.29	12.87
15	0.68	12.26
20	(0.94)	11.64
25	(2.55)	11.00
30	(4.16)	10.34
35	(5.77)	9.67
40	(7.39)	8.98

() = negative, EIRR = economic internal rate of return, ENPV = economic net present value, TTC = trade transaction cost.

Source: Asian Development Bank estimates.

13. On the positive side, the prices in WSP are 25%–40% higher than those in Papua Province of Indonesia. A large part of the prices is the TTC, which can be reduced by a modern border system and efficiency in operations. A modest reduction of TTCs can produce substantial economic gains. For example, if TTCs are reduced by 15% instead of 12% as assumed in the base case, the NPV will increase by K8.11 million. Such a change will have a lasting impact on WSP.

14. Capital costs also have a significant impact on the economics of the Project. An increase in capital costs of about 15.82% reduces the NPV of the Project to zero. The impact of capital costs on the entire Project is shown in Table A10.3.

Table A10.3: Impact of Capital Costs on the Project

Increase in Capital Costs (%)	ENPV (K million)	EIRR (%)
0	5.52	14.05
10	2.32	12.80
15	0.73	12.24
20	(0.87)	11.72
25	(2.47)	11.22
30	(4.07)	10.75
35	(5.67)	10.31
40	(7.27)	9.89

() = negative, EIRR = economic internal rate of return, ENPV = economic net present value.

Source: Asian Development Bank estimates.

15. The significant impact of the increase in capital costs would call for serious efforts to avoid cost overruns during project implementation.

16. A reduction in total benefits has a higher impact on the Project in comparison with a same increase in total costs. A reduction of 12.16% in total benefits decreases the NPV of the Project to zero, while an increase of 13.84% in total costs decreases the NPV of the Project to zero. In conducting an analysis of the adverse situations the Project may face, even with either a 10% reduction in benefits or a 10% increase in costs, the Project provides a positive NPV. In the worst case scenario, where the Project suffers from both a 10% reduction in benefits and a 10% increase in costs, the Project provides an EIRR of 10.95%.

Table A10.4: Sensitivity Analysis

Sensitivity Test	Economic Internal Rate of Return (%)	Net Present Value (K million)	Switching Value (%)
Base case	14.05	5.52	
Reduce benefits by 10%	12.37	0.98	12.16
Increase costs by 10%	12.53	1.53	13.84
Increase costs by 10% and reduce benefits by 10%	10.95	(3.01)	

() = negative.

Source: Asian Development Bank estimates.

17. Overall, the Project is economically viable, even with the assumption of zero salvage value after 25 years, omission of unquantifiable benefits, and adverse changes considered in the sensitivity analysis.

SUMMARY POVERTY REDUCTION AND SOCIAL STRATEGY

Country and Project Title: Papua New Guinea: Pilot Border Trade and Investment Development Project

Lending/Financing
Modality:

Project

Department/
Division:

Pacific Department

I. POVERTY ANALYSIS AND STRATEGY

A. Link to the National Poverty Reduction Strategy and Country Partnership Strategy

Improvement of trade and investment is identified in the Medium Term Development Strategy 2005–2010^a as a strategic priority to promote export-driven economic growth and rural development (including agriculture, forestry, fisheries, and tourism) on a sustainable basis. Encouraging trade and investment is particularly stated in the strategy's guiding principles under (i) least developed areas intervention, (ii) empowering Papua New Guineans and improving skills, and (iii) "sweat equity" and Papua New Guinean character. Although the draft national poverty reduction strategy is silent on trade and investment, it is indirectly incorporated in pillar three: improve and maintain physical infrastructure to facilitate access to social services and income.

Improvement of trade and investment is one of the priorities of West Sepik Province (WSP) under its commerce, trade, and industry plan. It is reflected in the soon-to-be finalized provincial development plan as well as the draft district development plans, which encourage creation of income-earning opportunities particularly in rural areas.

The Pilot Border Trade and Investment Development Project will contribute to promoting economic growth and social development in WSP, with extended benefits to Manus, East Sepik, Madang and Morobe provinces by providing a trade and investment-friendly environment and improved border facilities, and encouraging the cross-border trade with Papua Province of Indonesia. It has the potential to translate the Bewani–Vanimo–Jayapura road into an economic corridor. The improved trade and investment-friendly environment and improved border facilities will allow for continued and increased trade volume to and from Indonesia and faster and cheaper access to the large market across the border for Papua New Guinea (PNG) products such as tinned goods, coffee, vanilla, and other agricultural produce from WSP and the northern coastal region as well as imports of capital goods and consumables from Indonesia and other parts of Asia.

The Asian Development Bank (ADB) country strategy and program for PNG, 2006–2010,^b supported the Medium Term Development Strategy. ADB's assistance was proposed to focus on (i) public finance management, (ii) private sector development, (iii) the transport sector, and (iv) health and HIV/AIDS. The Project will contribute to private sector development and HIV/AIDS prevention in WSP by improving the business environment and supporting nongovernment organizations' efforts in combating HIV/AIDS.

B. Poverty Analysis

Targeting Classification: General Intervention

1. Key Issues

Poverty estimates for PNG have not been updated since the last household survey in 1996. From 1996 to 2003, the number of Papua New Guineans living below \$1/day is estimated to have doubled from 1.1 million to 2.2 million people. The poverty headcount index for the \$1/day poverty line was about 39.4% in 2003, up from 24.6% in 1996. An estimated 70% of the population, or 3.9 million Papua New Guineans, now live on less than \$2/day, up from 54% in 1996.

WSP's population has increased from about 130,000 in 1990 to 190,000 in 2000, with the majority (92%) of the population living in rural areas. The crude population density is five people per square kilometer (km²), an increase from four persons per km² in 1990. The increasing population is placing considerable pressures on the province's capacity to effectively deliver basic social services, infrastructure, and income opportunities—particularly for those who live in the rural areas. This is seen to contribute to an increasing number of the rural population moving to urban areas and settling on illegal settlements on state and customary lands (58% of Vanimo communities).

In most parts of the province, the annual per capita income is K50–K70. The west coast villages have reported a higher income (on average, K500 fortnightly per household or K1,000 monthly per household) than the sample urban households (K400 average fortnightly or K800 monthly). Given the average household size of seven, this income represents a monthly per capita income of about K140 or annual per capita income of K1,700. This could be explained by the proximity to the border, easy access to markets, and income opportunities for these communities.

Access to basic social services by the province's population, especially those in rural areas, is poor. About 20% of the province's aid posts in all four districts are closed; 66% of the schools are run by churches. Gender enrollment is biased toward males because of cultural norms that restrict females' status or role. Access to water supply for most people in the four districts is through rainwater tanks, creeks, and streams. There are no sanitation and sewerage treatment facilities in all districts in the province. Reticulated power supply is only in Vanimo. All district centers rely on limited capacity generators, while most rural communities depend on kerosene lamps for power. Even with the reported increase in income by the west coast communities, their living conditions are as poor as other parts of WSP.

Road connectivity is also poor. There is no road connection from the capital to its four districts or between the districts. There are only about 60 km sealed roads and about 1,400 km gravel road networks in the four districts—restricting access to social services and markets. In the poorest of the four districts (Telefomin), people have to walk on average 6 hours to get to the nearest village, district center, or market. Overall, remoteness and isolation as well as limited trade and investment activities play a significant role in the low level of access to services and income opportunities, particularly for the rural people in the province.

Women provide most of the subsistence agriculture workforce. Females receive less education and medical care. Male children are allocated a far greater share of the household income than female children. Female literacy and school enrollment rates in the province lag well behind those of male students, particularly those in rural areas, with 16% of males and 13% of females aged 5 and over attending school in 2000. Similar to the national trend, even with a women's national policy being approved in 1990, female participation in politics and public service management is still minimal. Domestic violence against women in the province is common.

The human development indicators for the province are some of the worst for the country. The infant mortality rate is the fourth highest in the country at 71 per 1,000 live births—higher than the national rate of 67 per 1,000 live births.^c Life expectancy is 45.6 for men and 46.5 for women—the lowest in the country.

2. Design Features.

The Project includes a package of assistance to address both income and non-income poverty. Construction of the border facilities and promotion of trade with Indonesia and investment will help stimulate economic activities in WSP, create job opportunities, and increase people's income.

The social development program targets alleviation of non-income poverty. It comprises (i) power connection for Wutung village, (ii) septic tank and individual household toilet for Wutung village, (iii) safe motherhood for five villages, (iv) education support for at-risk children for five villages, and (v) HIV/AIDS prevention. All components except (v) will be implemented through modified cash transfer (MCCT), which will transfer cash to the female head or a female adult of a household upon completion of the relevant intervention activities. HIV/AIDS prevention will be carried out by Volunteer Service Overseas (international nongovernment organization) to change people's behavior. The program is expected to improve people's living conditions significantly and support people to venture into new businesses such as tourism, and reduce infant mortality and maternal deaths in the target villages.

The capacity development component includes training programs for local people who are eager to learn and catch up with their Indonesian neighbors. It will help develop entrepreneurship and business skills and strengthen local people's capability in participating in and benefiting from the trade opportunities with Indonesia. At least 30% of the trainees will be women.

II. SOCIAL ANALYSIS AND STRATEGY

A. Findings of Social Analysis

Primary Beneficiaries. The primary beneficiaries of the Project will be the population of about 190,000 in WSP, 92% of whom live in the rural areas. They include the following groups of people: (i) an estimated 700 households living in communities along the road connecting the border to the town of Vanimo (west coast) who sell a range of agriculture produces and PNG products along the border and Indonesian goods to Vanimo town as well as those households living in 26 residential and settlements in Vanimo urban area; (ii) drivers of public motor vehicles that provide a range of transport services within Vanimo and to the border; (iii) businesses in WSP, including informal vendors, trade store owners, and the hospitality industry; and (v) high school and/or technical school graduates in the province who may find employment resulting from the project activities.

Poor and vulnerable groups—their needs, demands, constraints, and capacity. Most of people in WSP are poor in terms of access to income and basic social services. There is no reticulated power supply, no functional aid posts, and no proper toilets. Education is generally limited to primary school. With each new government administration, increasing access to income opportunities and access to improved social services such as power, sanitation, water supply, and education continue

as their development priorities.^d

Poor access to basic services, particularly health and education, and limited employment opportunities were the main constraints preventing men and women including out-of-school youths in the west coast and Vanimo urban area to participate fully in any community and provincial development priorities. In the 2000 census, for example, there are very low proportions of males and females ages 5–29 attending school (24% males and 20% females). In particular, a higher proportion of males than females had been to school and completed grade 6 for age 10 and above (67% for males and 63% for females.) This illustrates the overall low educational attainment in the province for both genders, particularly for women.

According to the National AIDS Council, the HIV prevalence rate in rural PNG is predicted to jump from 2.0% to 3.5% of the population by 2010. The Australian Agency for International Development (AusAID) estimated that within 20 years, up to 40% of the adult population would be living with HIV/AIDS. WSP had a total of 119 infected persons starting from 1987 to 2007, the 12th highest among 19 PNG provinces. More women than men are affected—there are 62 female cases and 45 male cases.

B. Consultation and Participation

1. Provide a summary of the consultation and participation process during the project preparation.

During the process of identifying and designing the Project, consultations were held at various levels, involving a broad range of stakeholder groups and over 600 individuals. The consultations were conducted in the form of (i) a large stakeholder workshop; (ii) key informant interviews at provincial, district, and village levels; (iii) focus group discussions; and (iv) a set of sample surveys of rural (west coast) and urban (Vanimo town) households. These consultations are the basis for the social and poverty analyses of the proposed Project. The insights obtained through the consultations have been incorporated into the project design in the form of a participation strategy in general and for women, and in the mitigation measures and complementary actions to increase the Project's benefits received by the poor and other vulnerable groups.

2. What level of consultation and participation (C&P) is envisaged during the project implementation and monitoring?

Information sharing Consultation Collaborative decision making Empowerment

3. Was a C&P plan prepared? Yes No

If a C&P plan was prepared, describe key features and resources provided to implement the plan (including budget, consultant input, etc.). If no, explain why.

Extensive consultations have been done during the project preparation phase and are being institutionalized under the Project through the project design.

The Border Development Authority (BDA) provincial management office (PMO) in Vanimo will include a community relations officer on a full-time basis. The community relations officer will (i) disseminate project information to stakeholders regularly, and (ii) consult with relevant provincial administration officials at various levels and villagers from Wutung and the other four west coast villages with respect to the social development program of the project and training programs. The Project has included an international training specialist to develop annual training programs for 4 years in consultation with stakeholders. Volunteer Service Overseas will be utilized to engage people in constructive dialogues through healthy activities such as sports. The total budget is about \$270,000.

C. Gender and Development

1. Key Issues. Although there were reported improvements in decision making in the households where couples are starting to make joint decisions, men are still generally the main authority who make the final decision, particularly on (i) how much is spent; (ii) when to stop having children; and (iii) when money is limited, which child stays in school. Men's role is so closely tied with economic and social status that there is still a widely held view that women without husbands are considered to be in hardship and are often excluded from community decision making.

Despite improvements in education, women's status (including in WSP) is still low compared to that of men. Women could not make independent decisions, particularly on contraception. The husband has the final say if they will use any family planning method, even in cases of life-threatening pregnancies.

With the shift from an agricultural to cash economy, facilitated by access to the border, an increasing number of women are starting to join the workforce or getting involved in small-scale businesses. This places additional responsibilities and is causing stress on women and the whole family.

Similar to other women in the province, women in west coast villages have limited access to income opportunities because of

low levels of skills, lack of capital, and absence of reliable market information. As mentioned previously, most business opportunities originate from the Indonesian border where their business counterparts are seen to have a considerable edge. The Indonesians have advanced business skills (i.e., bargaining) and more evolved marketing strategies (i.e., offering competitive prices, variety, customer service) that the west coast villages still have to develop. External assistance is needed to bridge the skills gap to facilitate equal trading relationships.

2. Key Actions. Measures included in the design to promote gender equality and women's empowerment—access to and use of relevant services, resources, assets, or opportunities and participation in decision-making process:

- Gender plan Other actions/measures No action/measure

Given women's low social status and vulnerability to violence and HIV/AIDS, the Project will

- (i) provide training programs to women to develop their entrepreneurship and business skills;
- (ii) provide financial assistance to pregnant women for regular medical check-ups and reduce infant and maternal deaths;
- (iii) transfer cash to the female head or a female adult of a household upon completion of the relevant intervention activities;
- (iv) involve local women's groups in the verification process for MCCT; and
- (v) target young women for HIV/AIDS education.

The economic, health, and social/gender impact of the Project will be monitored through the project performance monitoring system and consistently reflected in the progress reports. In addition, all data collected during the Project will be gender-disaggregated.

III. SOCIAL SAFEGUARD ISSUES AND OTHER SOCIAL RISKS

Issue	Significant/Limited/ No Impact	Strategy to Address Issue	Plan or Other Measures Included in Design
Involuntary Resettlement	Land was acquired and cleared a long time ago. No impact.		<input type="checkbox"/> Full Plan <input type="checkbox"/> Short Plan <input type="checkbox"/> Resettlement Framework <input checked="" type="checkbox"/> No Action
Indigenous Peoples	Wutung village used to own the land where border facilities will be located. The Project is classified category B.	Assistance in power connection, sanitation, safe motherhood, keeping at-risk children in school, and HIV/AIDS prevention.	<input type="checkbox"/> Plan <input checked="" type="checkbox"/> Other Action <input type="checkbox"/> Indigenous Peoples Framework <input type="checkbox"/> No Action
Labor <input checked="" type="checkbox"/> Employment opportunities <input type="checkbox"/> Labor retrenchment <input checked="" type="checkbox"/> Core labor standards	Positive impact on employment opportunities, particularly the service sector.		<input type="checkbox"/> Plan <input type="checkbox"/> Other Action <input checked="" type="checkbox"/> No Action
Affordability			<input type="checkbox"/> Action <input checked="" type="checkbox"/> No Action
Other Risks and/or Vulnerabilities <input checked="" type="checkbox"/> HIV/AIDS <input type="checkbox"/> Human trafficking <input type="checkbox"/> Others (conflict, political instability, etc), please specify	The Project may impact HIV/AIDS prevalence in the province.	A HIV/AIDS prevention program has been developed. A clinic will be built as part of the border facilities.	<input type="checkbox"/> Plan <input checked="" type="checkbox"/> Other Action <input type="checkbox"/> No Action

IV. MONITORING AND EVALUATION

Are social indicators included in the design and monitoring framework to facilitate monitoring of social development activities and/or social impacts during project implementation? Yes No

The design and monitoring framework has included as indicators: (i) the number of households provided with power (110 households), septic tanks, and toilets (110 households); (ii) the number of children from poor households with access to

primary education; (iii) the number of pregnant women from poor households who will receive regular medical check-ups; (iv) the number of women who will be trained under the capacity development program; and (v) the number of HIV/AIDS incidences.

^a Government of Papua New Guinea. 2004. The Medium Term Development Strategy, 2005–2010. Port Moresby.

^b ADB. 2006. Country Strategy and Program 2006-2010. Manila.

^c Health Sector Status Presentation, Vanimo-Green Development Forum, 27 April–1 May 2009.

^d ADB Participatory Poverty and Hardship Assessment, 2002, and project sample survey and focus group discussions held during February–March 2009.