

# Infrastructure annual thematic performance report 2007–08

December 2008

Australian Government – AusAID

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# Abbreviations

AIDS	Acquired Immune Deficiency Syndrome
AusAID	Australian Agency for International Development
PNG	Papua New Guinea
HIV	Human Immunodeficiency Virus
K	kina
RWSS NTP2	Vietnam Rural Water Supply and Sanitation National Target Program Phase 2
TSSP	Transport Sector Support Program

# Summary

This report presents an overview of AusAID's support to the infrastructure sector, focusing on the performance of two of its largest programs—transport in Papua New Guinea and water and sanitation in Vietnam. These programs were chosen because Australia allocates most of its support to the infrastructure sector to them—54 per cent for transport and 13 per cent for water and sanitation. This is followed by reviews of the quality of activities that entered the portfolio in 2007-08 and the quality of activities that were being implemented during 2007–08.

In 2007–08 infrastructure accounted for 11 per cent of AusAID's total development assistance, an increase on the 8.3 per cent average for the three preceding years. With approval of the Infrastructure for Growth Initiative in 2007 and the Water and Sanitation Initiative and the Pacific Region Infrastructure Facility in 2008 and with other initiatives involving infrastructure being considered, the annual funding allocated to infrastructure is set to increase.

AusAID's infrastructure policy is being updated to reflect an increased focus on supporting poverty alleviation by helping partner countries to achieve the Millennium Development Goals. In terms of delivering support AusAID will partner multilateral organisations to a much greater extent than in the past to take advantage of their broader experience and larger skill bases. AusAID's grant funds provide a very effective complement to the development banks' credits and loans by ensuring activities for which counterpart governments are typically reluctant to borrow, such as capacity building, monitoring and evaluation, and addressing HIV and gender issues, are effectively addressed. Grant funds can also facilitate the extension of infrastructure services to the poorest and most vulnerable people and communities.

In Papua New Guinea and Vietnam the nature of Australia's infrastructure support has changed over the past two years from discrete and essentially 'ring-fenced' projects managed by Australian contractors to programmatic support that is being increasingly implemented through partner government systems. In both countries the programmatic support builds on successful project activities. Results have been good. The annual performance reviews of the Papua New Guinea and Vietnam country programs of assistance gave 'green' ratings to the high-level (development cooperation strategy) objectives towards which the transport and water and sanitation projects and programs contribute. That is, the reviews found that the objectives are on track to being achieved within their timeframes.

In Papua New Guinea independent socioeconomic surveys found that improved roads had a dramatic impact on lifting poor rural households out of poverty. This occurred largely by increasing access to markets and basic services and by creating increased employment opportunities. Coffee processors based in the highland provinces reported that new business opportunities had opened up because transportation was more reliable and transport operators reported a halving in maintenance costs.

In Vietnam AusAID's support to the water and sanitation sector over the past five years has enabled an additional 760 000 people to access clean water and 530 000 people to access

improved sanitation facilities. The initial year of targeted program budget support to the Vietnam Rural Water Supply and Sanitation National Target Program Phase 2 (RWSS NTP2) resulted in improved planning and implementation of the national program and contributed to expanded access.

In terms of challenges it will be important for the PNG transport support program to continue to promote the allocation of scarce resources to the mutually agreed core road network and to leverage increased state budget allocations for road maintenance. The challenges faced by the targeted program budget support in Vietnam relate to the very ambitious nature of the program. Firstly, it will take time for the government and the bilateral donors to adjust to this new form of engagement. Secondly, the RWSS NTP2 is based on new ideas including decentralised implementation, beneficiary participation and inter-ministerial cooperation, all of which are very different from previous operational modalities. For these reasons it would be prudent to consolidate performance in the initial nine pilot provinces, perhaps with some modest expansion, before rolling out the targeted program budget support across the whole country. This approach would enable the initial provinces to serve as centres of best practice that other provinces could follow.

In terms of quality, the average quality-at-entry and quality-at-implementation ratings for the infrastructure sector as a whole are generally good. The 2007-08 quality-at-implementation reports do, however, signal that more attention should be paid to monitoring and evaluation. Fortunately this is already taking place, although there is a tendency to make performance frameworks overly complex. They should be kept as SMART (specific, measurable, achievable, relevant and timed) as possible. Sustainability is identified as an important issue in the PNG roads sector and, as mentioned previously, it will be important to continue working with government to ensure that scarce resources for road maintenance are effectively prioritised. Some of the smaller water and sanitation projects in Vietnam stand out as poor performers. The program team is planning a review for later this year to identify the issues and ways of addressing them.

Gender equality is an important priority for the development assistance program, and the infrastructure sector provides significant opportunities to advance equality. The infrastructure response at present is mixed. More work is needed to measure and report on gender equality results and different effects on women and men within the sector.

# Introduction

This report includes an overview of AusAID's overall infrastructure<sup>1</sup> program, the results achieved and the quality of the transport program in Papua New Guinea and the water and sanitation program in Vietnam in 2007. The transport and water and sanitation subsectors were chosen because most of infrastructure support is allocated to them—54 per cent for transport and 13 per cent for water and sanitation. The respective programs in Papua New Guinea and Vietnam are largely representative of what Australia has been supporting through country development cooperation strategies elsewhere. These programs were also selected because they offer lessons for the future. Both programs have recently adopted programmatic funding, which is intended to lead to broader sector-wide approaches that are implemented through government systems, and Vietnam's experience in providing water and sanitation services will help to inform preparation of the new Water and Sanitation Initiative, which will be implemented from 2009 to 2011.

The programs reviewed are representative of the largely bilateral infrastructure programs<sup>2</sup> that AusAID has been supporting in recent years. However, the nature of that support for infrastructure will change as new infrastructure initiatives are implemented, including the Infrastructure for Growth Initiative, which began in 2007–08, and the Water and Sanitation Initiative and the Pacific Region Infrastructure Facility, both due to begin in 2009–10. These initiatives will involve partnering multilateral organisations, particularly the multilateral development banks, to a much greater extent than in the past. Working in partnership with the multilateral development banks will enable AusAID to leverage their technical expertise and large resource base, thereby enabling AusAID to have greater influence on policy dialogue with partner governments and to participate in much larger projects and programs than otherwise would be the case. It will also help to promote more effective donor–partner government coordination in line with the Paris Declaration on Donor Harmonisation. This represents a significant change in the way that AusAID does business and it will be important to take stock in the next year or two on how effectively the agency is adapting.

The Asian Development Bank and the World Bank have the expertise, the reach and the scale of operations needed for large-scale infrastructure programming, and can make highly effective use of additional funding resources. AusAID will continue to work with and through the multilateral development banks to meet the requirements of the Paris Declaration for systematic donor engagement with partner government programs and policies. The comparative advantage and the global resources of the multilateral development banks enable AusAID to efficiently and effectively disburse and manage its funding, while also helping to

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<sup>1</sup> The term 'infrastructure' can be used very broadly to cover public works (roads, other transport modes, water and sanitation, electricity generation and transmission, solid waste management, etc.) and public buildings (schools, hospitals and clinics, law and order offices, etc.). This report focuses on public works infrastructure. Public buildings infrastructure, which forms a significant part of AusAID's health, education and governance programs, is deemed to be addressed in the respective thematic performance reports for those sectors.

<sup>2</sup> Part of the Vietnam water and sanitation program is being implemented in partnership with two other bilateral donors, with all three donors sharing responsibility for preparation and program management.

coordinate with activities of partner governments and other donors and influencing how the World Bank engages with the Asia-Pacific region.

# Overview of AusAID's infrastructure program

## Background

Infrastructure accounted for \$320 million, or 11 per cent of Australia's total official development assistance, in 2007–08. This was an increase over the 8.3 per cent average for the previous three years. The planned allocation for 2008–09 is \$380 million, 19 per cent more than in 2007–08, although at 10.3 per cent of total official development assistance, a slight reduction in its overall share. With the introduction of the new initiatives mentioned previously the trend in increased allocations in absolute terms is set to continue. At this stage it is unclear if the share of assistance allocated for infrastructure activities will increase at a higher rate than the rate at which official development assistance as a whole will increase as Australia moves towards the Government's target of 0.5 per cent of gross national income by 2015.

The nature of AusAID's support for infrastructure is different in East Asia from what it is in the Pacific, East Timor and Papua New Guinea. In East Asia, AusAID's contribution is a relatively small but important part of much larger programs of official development assistance, the higher level objectives of which are to alleviate poverty and promote sustainable growth. In the Pacific, East Timor and Papua New Guinea Australia's development assistance represents a much larger proportion of total official development assistance. In many of these countries the priority focus of Australian support is to underpin state security and functionality as fundamental preconditions to tackling poverty and promoting sustainable economic growth.

## Policy

The policy framework for Australia's infrastructure assistance was implicit in the previous government's 2006 white paper<sup>3</sup> on Australian aid and in the presentation of the Infrastructure for Growth Initiative in the 2007–08 budget documentation. The white paper noted the scale of the infrastructure challenge: 'an estimated \$270 billion is required each year over the next five years to overcome critical infrastructure bottlenecks to growth in the Asia-Pacific region', and concluded that 'infrastructure development is thus critical for reducing poverty and making progress towards the Millennium Development Goals'. Other key points follow.

- > Infrastructure is critical for supporting stable development, economic growth and poverty reduction, including in areas of partner countries where unemployment is high and where development indicators are lagging (such as the southern Philippines, eastern Indonesia and the Pacific).

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<sup>3</sup> Australian Government, Australian aid: promoting growth and stability—a white paper on the Australian Government's overseas aid program, Australian Agency for International Development, Canberra, 2006.

- > Throughout the Asia-Pacific region poor infrastructure is perhaps the most binding constraint to economic growth led by the private sector.
  - In East Asia, rapid population growth and urbanisation threaten to exacerbate infrastructure bottlenecks.
  - In the Pacific, emphasis is needed on equitable access to social infrastructure in remote, rural environments where 80 per cent of the population lives mostly without adequate electricity and roads.
- > Infrastructure had been a declining sector for the aid program but the post-tsunami engagement in Indonesia in 2006 (with ‘soft lending’ for roads) marked a turning point; infrastructure will be a major focus for Australian aid in the coming decade.
- > For many countries where the binding constraint to infrastructure development was a poor investment environment, Australian expertise could help get the policies right, reduce corruption and encourage public–private partnerships.
- > Australia could finance projects that offer significant development impacts.

The infrastructure policy framework is in the process of being updated to reflect the current government’s greater emphasis on supporting poverty alleviation by helping partner countries achieve the Millennium Development Goals (MDGs). This will put greater emphasis on supporting equitable access to infrastructure services by supporting expanded coverage to the poor in rural and urban areas. More effort will be put into helping partner countries sustain infrastructure services, including in the case of some Pacific countries providing support for operation and maintenance costs.

As noted in the ‘Introduction’, AusAID will also partner multilateral organisations to a much greater extent than in the past. In the Pacific AusAID will be one of the four founding partners<sup>4</sup> of the Pacific Region Infrastructure Facility and will play a very active role in managing the facility. Elsewhere the agency will contribute to activities led by multilateral organisations, the degree of its involvement depending on the extent of contributions made and the nature of the activities. AusAID’s grant funds complement the development banks’ credits and loans very effectively by ensuring activities for which counterpart governments are reluctant to borrow, such as capacity building, monitoring and evaluation, and addressing HIV/AIDS and gender issues, are covered. Grant funds can also be used to target poverty effectively by expanding access to sustainable utility services for which cost recovery is essential—for example, by subsidising capital costs or more specifically subsidising connections for water, sanitation or electricity services.

Infrastructure support also provides opportunities to address gender inequalities—for example, by increasing mobility and safety for women and girls and reducing the often excessive burdens on their time. Poor school sanitation is often the single most important factor in girls’ under-representation in secondary school.

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<sup>4</sup> Other partners in the Pacific Region Infrastructure Facility are the Asian Development Bank, New Zealand’s International Aid & Development Agency and the World Bank.

## Portfolio

Tables 1 and 2 present planned AusAID expenditure on infrastructure from 2007-08 to 2010-11 through bilateral programs and the Infrastructure for Growth Initiative. It can be seen that road transport accounts for more than 50 per cent of the support and that multi-sector activities represent the next highest subsector, closely followed by water supply and sanitation, and energy. Multi-sector activities are largely contributions to trust funds<sup>5</sup> managed by the multilateral development banks and yet-to-be-defined facilities under the Infrastructure for Growth Initiative, such as the Indonesia Infrastructure Initiative.

**Table 1: Summary of planned expenditure on infrastructure by subsector funded by bilateral programs from 2007 to 2011**

Subsector	Number of activities	Planned expenditure	% of anticipated contributions
	no.	A\$ million	%
Energy	6	23.2	2
Information and communications technology	1	0.2	0
Multi-sector activities <sup>a</sup>	19	115.8	10
Transport—roads	9	624.9	56
Transport—other	5	108.3	10
Water supply and sanitation	19	158.7	14
Water resource management	12	67.9	6
Other	2	8.6	1
<b>Total bilateral infrastructure</b>	<b>73</b>	<b>1 107.7</b>	<b>100</b>

<sup>a</sup> Multi-sector infrastructure includes analytical and advisory activities funded under global programs and facilities such as the Indonesia Infrastructure Initiative.

**Table 2: Summary of planned expenditure on infrastructure by subsector funded by the Infrastructure for Growth Initiative from 2007 to 2011**

Subsector	Number of activities	Planned expenditure	% of anticipated contributions
	no.	A\$ million	%
Energy	8	77.2	11
Information and communications technology	0	0	0
Multi-sector activities <sup>a</sup>	6	124.8	18
Transport—roads	17	358.5	50
Transport—other	4	72.0	10
Water supply and sanitation	4	77.5	11
Water resource management	0	0	0
<b>Total economic infrastructure</b>	<b>39</b>	<b>710.0</b>	<b>100</b>

<sup>a</sup> Multi-sector infrastructure includes analytical and advisory activities funded under global programs and facilities such as the Indonesia Infrastructure Initiative.

<sup>5</sup> Multi-donor trust funds supported include the Public Private Infrastructure Advisory Facility, the Global Partnership for Output Based Aid, the Global Road Safety Partnership, the Energy Sector Management Assistance Program, the Water Financing Partnership Facility and the Clean Energy Financing Partnership Facility. There are also two bilateral trust funds, both with the World Bank—the East Asia and Pacific Trust Fund and the South Asia Trust Fund.

# Results of support for transport infrastructure in Papua New Guinea

## Background

This part of the review assesses the results of Australian assistance to the transport sector as a whole in Papua New Guinea. Australia has been supporting the PNG transport sector, particularly roads, since Papua New Guinea achieved independence in 1975. Table 3 lists the most recent projects and programs. Based on past and current commitments close to \$840 million will be spent on the sector during the period 1999-10 to 2011-12. The reported expenditure by Australia in 2007-08 was \$71.8 million<sup>6</sup>, equivalent to 19 per cent of Australia's total development assistance to Papua New Guinea.

Assistance to the PNG transport sector has gradually evolved over the years from discrete 'ring-fenced' projects managed by Australian contractors to activities increasingly implemented through government systems using a more programmatic approach. Approval of the Transport Sector Support Program (TSSP) in November 2006 was the most significant step in this evolutionary chain. It is intended that the TSSP will eventually lead to a sector-wide approach using government systems that embraces all donors active in the sector. Earlier projects had relied heavily on Australian contractors working in parallel to government using AusAID-prescribed technical standards and systems for procurement, financial management,

**Table 3: Australian support to the PNG transport sector, 1999 to 2012**

Project or program	Implementation period	Amount
		A\$ million
Transport Sector Support Program—Phase 1	2007–12	250
Transport Sector Support Program—Interim Phase	2006–07	30
Key Roads for Growth Project	2004–09	50
Bougainville Coastal Road Trunk Road Maintenance Project	2002–07	36
National Road Re-gravelling and Sealing Project	1995–06	123
Lae City Roads Upgrading Project	2001–06	50
National Roads and Bridges Maintenance Project	2000–05	125
Gazelle Road Reconstruction Project	2002–05	24
Airport Maintenance Project	2000–05	46
Bougainville Wharves Project	2002–04	14
Bougainville Coastal Road Trunk Road Rehabilitation Project	1999–02	13
Highland Highway Upgrading Project	1999–01	81
<b>Total</b>		<b>842</b>

<sup>6</sup> This includes all of the \$30 million incentive allocation for the year.

etc. The TSSP puts much greater emphasis on working with government to address institutional constraints so that scarce resources are allocated to ensure a mutually agreed core network of roads is rehabilitated and maintained in good condition. Building the capacity of counterpart organisations in the central government and in provincial governments will also receive more attention.

## Objectives

The high-level objective of the Papua New Guinea – Australia development cooperation strategy is ‘to reduce poverty and promote sustainable development’.<sup>7</sup> The strategy focuses on four core pillars :

1. improved governance and nation building
2. sustainable broad-based economic growth and increased productivity
3. improved service delivery and stability
4. a strengthened, coordinated, and effective response to the HIV/AIDS epidemic.

Support to the transport sector focuses primarily on pillar 2 but it also contributes towards delivering the other core pillars.

The components of the TSSP are:

1. *Line agency public sector reform and governance* to support operational reform in the transport sector agencies through improved public administration and sector coordination
2. *Strengthening central agency support* to strengthen links between the transport sector agencies and central agencies so that service delivery and reform programs are actively supported
3. *Provincial transport services* to assist provincial, district and local governments to improve their delivery of transport services in selected locations
4. *Maintenance of prioritised transport assets* to support the delivery of an affordable, contestable and prioritised national transport network.

## Monitoring and evaluation and results

Transport is identified in this year’s annual performance review of the PNG program of assistance as a standout sector in terms of delivering on the objectives of pillar 2 of the Development Cooperation Strategy, ‘enhancing access to markets and services’. Significant contributions were also made towards pillar 4. For example, under the Key Roads for Growth Project a partnership was established with the Provincial AIDS Council to promote HIV/AIDS awareness, standard clauses relating to the mitigation of HIV/AIDS were incorporated in all construction contracts of the Department of Works, and project staff received training and accreditation to increase awareness in communities.

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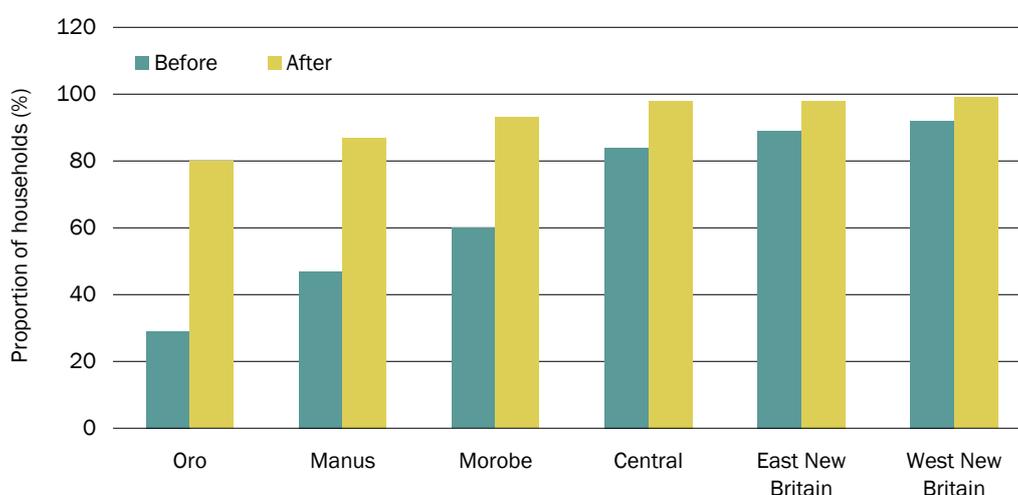
<sup>7</sup> AusAID, *Papua New Guinea – Australia development cooperation strategy 2006–2010*, Australian Agency for International Development, Canberra, 2007, p. 1.

There is evidence of very significant socioeconomic impacts being delivered by road rehabilitation and maintenance interventions in Papua New Guinea. An extensive study<sup>8</sup> covering six provinces in Papua New Guinea, which was funded by the World Bank and implemented by Australian and Finnish consultants in 2005 and 2006, found that for villages close to rehabilitated roads household incomes increased significantly because of better access to markets and increased wage-earning opportunities, directly as a result of local people being contracted to carry out routine maintenance and indirectly through better access to jobs.

The impact of road rehabilitation and maintenance on poverty is illustrated in Figure 1. For example, the percentage of households living above the poverty line in Oro Province increased from around 28 per cent to 80 per cent after roads were rehabilitated. There was also evidence of significant economic development in the villages through new agricultural products such as vanilla and allspice being grown and marketed. Women have benefited through improved access to markets to trade produce and handicrafts, as a result of gender equality action plans introduced in the Key Roads for Growth Maintenance Project, and through employment in road maintenance (around 30 per cent of the employees are women). The gender action plans also promote female participation in community-based decision making. AusAID is funding a similar socioeconomic impact study that will cover a further 10 provinces. Baseline surveys were carried out from April to June 2008.

Coffee processors in the highland provinces report that they have been able to establish a new high-value organic coffee trade as a result of the Highlands Highway being reinstated as a reliable part of the logistic chain between coffee gardens in Goroka and Lae Port. A major transport company operator reported in June 2008 that maintenance costs of their commercial heavy transport fleet had halved for the same reason. Work on the Bougainville coastal road, which reduced journey times between the major towns of Buka and Arawa from 8 hours to 3 hours, made significant differences not only in economic terms but also in helping to demonstrate the state's capacity to deliver public services in a post-conflict situation.

**Figure 1: Proportion of households living above the poverty line before and after road rehabilitation and maintenance in Papua New Guinea**



Data source:

<sup>8</sup> S Jusi, W Asigau and N Laatonen, 'Social impact benefits of road rehabilitation projects in six provinces in Papua New Guinea, South Pacific'. The study involved household surveys of around 1200 households in 24 villages (half of which were controls) in six provinces.

**Table 4: Results of PNG Transport Sector Support Program, 2006–07**

Component and objectives	Outcome indicators	Indicators	
		Baseline	Actual in 2007
<b>Component 2: Strengthening central agency support</b> To strengthen links between the transport sector agencies and central agencies so that service delivery and reform programs are actively supported	Central agencies actively supporting transport sector reform and service delivery through improved planning, budgeting and monitoring, and institutional and personnel development functions		
	Increased expenditure by the Department of Works:		
	> from budget	K83m (2003)	K97m
	> total expenditure	K208m (2003)	K315m
<b>Component 4: Maintenance of prioritised transport assets</b> To support the delivery of an affordable, contestable and prioritised national transport network	Increased percentage of national roads in good condition	20% (2006)	27%
	Reduced journey time from:		
	> Goroka to Lae	5 hours (2005)	4 hours
	> Buka to Arawa in Bougainville	8 hours	3 hours
	Reduced vehicle operating costs on Highlands Highway in Morobe and Eastern Highlands provinces as a result of improved road pavement condition	IRI <sup>a</sup> 5.63 (2005)	IRI <sup>a</sup> 3.77 equates to an estimated K6.4m in vehicle operating cost savings
Increased number of regional airports meeting safety certification standards	0 (2004)	2	

<sup>a</sup> International [Road] Roughness Index (IRI) measures pavement roughness over the longitudinal road profile.

Some of the more direct impacts of Australian activities in the PNG transport sector are presented in Table 4. The performance monitoring of earlier projects such as the Key Roads for Growth Maintenance Project placed a much greater emphasis on outputs than on outcomes. It is felt therefore that the performance of these projects is more effectively rated against the objectives of components 2 and 4 of the TSSP. The effort made to increase expenditure on the maintenance of transport facilities was successful. The Department of Works' total expenditure in 2007 was slightly more than 50 per cent above the level in 2003. However, much of the increased funding came from donors; expenditure from the Government of Papua New Guinea's own budget increased by only 17 per cent. As economic growth improves it will be important for long-term sustainability that the government budget shoulders an increasing share of maintenance costs.

The TSSP design document defined the program's goal and broad objectives and outcomes for each of the program's four components. Some broad performance measures were included for the goal and objectives but development of a comprehensive performance assessment framework was deferred until more detailed consultation could be carried out among all stakeholders. It was also envisaged that the TSSP Board would set performance indicators for the program on a year-by-year basis as a way of accommodating unforeseen trends in sector performance (recognising that overall sector performance is not under the control of the TSSP). Performance assessment is therefore by way of monitoring against rolling annual performance frameworks, supplemented by independent analytical studies.

Good progress has been made on performance assessment, with a comprehensive monitoring and evaluation (M&E) report produced in February 2008. The report proposed that M&E focus on two levels—a program-level framework (Table 5) reflecting higher level achievements and three activity-level frameworks that can assess results collectively or individually. The program-level framework will measure broad outcomes across the objectives of the four components detailed in the design document plus the cross-cutting issues of gender, HIV/AIDS, environmental impact mitigation and public expenditure management. These will be measured separately against the three themes of governance, capacity building and access (infrastructure). The activity-level frameworks comprise an Implementing Service Provider Performance Framework, a Technical Assistance Framework and a Program Management and Supervision Consultant Framework.

While gender equality results are measured as a separate section in the framework, indicators for results in each component are largely gender blind. The program will support the TSSP Board to ensure that the performance indicators that it develops are gender sensitive and that all data relating to people are sex disaggregated. There is no doubt that Papua New Guinea in general faces challenges in collecting reliable sex-disaggregated data, but this program will at least ensure that program-generated data are sex disaggregated, and support will be provided wherever appropriate to ensure that externally generated data are also gender sensitive and sex disaggregated. Once the broader performance indicators are established, the program indicators will be revisited.

**Table 5: TSSP monitoring and evaluation framework**

Component	Governance	Capacity building	Access (infrastructure)
<b>Component 1:</b> Line agency public sector reform and governance	Improved clarity in roles and responsibilities between line agencies Corporate plans used as central management documents to provide strategic guidance and promote change	Improved capacity of agencies to implement PNG government policy using PNG government systems and procedures	Infrastructure service delivery activities completed on time and within budget Improved income and social indicators in target provinces (health and education)
<b>Component 2:</b> Strengthening central agency capacity	Strengthened links between line agencies and central agencies so that service delivery and programs are supported Evidence of cross-agency partnerships	Central agency plans support links between central and line agencies	
<b>Component 3:</b> Provincial transport services	Prioritised systems for work, and budgets operational Formulation of provincial policies and implementation	Provinces report improved capacity to implement policies and prioritised work	Plans and projects providing improved access at the provincial level
<b>Component 4:</b> Prioritised transport asset maintenance	Prioritised lists developed and followed annually Compliance with relevant legislation/policies and priorities		Physical works: # km of roads (% quality) # airports maintained
Public expenditure management	Systems in place that link prioritised programs to work plan and corporate plan budgets		Priority assets maintained Activities completed according to agreed budgets and plans

Component	Governance	Capacity building	Access (infrastructure)
Gender, HIV/AIDS and environment mainstreaming	Gender, HIV/AIDS and environment policies and plans operational in each line agency	Increased awareness of HIV, gender and environment issues through training, information and planning	Both women and men considered in all TSSP activities

The TSSP M&E report correctly cautions that results and impacts will not be immediately apparent and that time will be required for these to emerge as technical assistance is engaged, infrastructure and maintenance works are implemented and strategic management decisions are taken. However, measures are already under way in terms of developing survey tools, developing M&E databases and delivering M&E awareness training within line agencies. Corporate plans, which have already been prepared by the main transport agencies, will be a key element of the M&E framework.

## Challenges

The main challenges likely to be faced by the TSSP in the coming years are:

- > ensuring that priority continues to be given to maintaining the core road network mutually agreed by government and AusAID to maximise the benefits arising from the limited funding available for maintenance
- > leveraging increased budget allocations for road maintenance
- > integrating monitoring and evaluation as a management tool for both AusAID and the government using the recently developed frameworks. This will require continued close management by program staff and may need the intervention of senior management when needed.

# Results of support for water and sanitation infrastructure in Vietnam

## Background

Australia's assistance to the water and sanitation sector in Vietnam has been a significant part of the Vietnam development cooperation strategy during the past decade. In 2007-08 it accounted for around 16 per cent of program expenditure. Table 6 lists recent projects and programs supported by Australia. Close to \$130 million has been committed to the sector for the period 1996 to 2012.

As with the transport sector in Papua New Guinea, assistance to the water and sanitation sector in Vietnam has evolved from discrete projects managed by Australian contractors to a programmatic approach using government systems. In the case of Vietnam the change is more ambitious, with Australia joining Denmark and the Netherlands (the donors) to provide targeted program budget support to the Government of Vietnam's five-year (2006–10) Rural Water Supply and Sanitation National Target Program<sup>9</sup> Phase 2. Donor support is being provided to nine provinces in an initial two-year pilot phase that effectively started in April 2007, somewhat later than planned. The original intention was to roll out the targeted program budget support to all 64 of Vietnam's provinces in the third year. However, a recent joint review team including government and the donor representatives recommended that the rollout be limited to 30 provinces (including the original nine pilot provinces).

The projected budget for the RWSS NTP2 is US\$685 million<sup>10</sup>, with US\$136 million coming from the national government and US\$101 million (of a total commitment of US\$125 million) from the donors. This part of the donors' support will be channelled through the state budget and is intended to be indistinguishable from state funds. The remaining US\$24 million of the

**Table 6: Australian support to the water and sanitation sector in Vietnam, 1995 to 2012**

Project or program	Implementation period	Amount
		A\$ million
Rural Water Supply and Sanitation National Target Program 2 (including the preparation phase)	2004 to 2012	48.0
Three Delta Towns Water Supply and Sanitation Project	1999 to 2008	51.5
Cuu Long Delta Rural Water Supply and Sanitation Project	1999 to 2008	28.3
VANGOCA Water and Sanitation for the Rural Poor	2004 to 2010	6.7
Danang Water Supply and Sanitation Project	1996 to 2005	9.8
<b>Total</b>		<b>144.3</b>

<sup>9</sup> The Government of Vietnam has established several national target programs as a strategy to better target development assistance to the poor and vulnerable.

<sup>10</sup> From Tables 4.7 and 4.8 of the program design document, June 2008. This is based on a projected budget of VND10 823 billion at an exchange rate of VND15 780 = US\$1. The Government of Vietnam's budget is VND22 600 billion (Table 4.6 of the program design document) but this appears to have been based on overoptimistic assumptions.

donors' commitment will be managed directly by the donors to fund technical assistance, audits, studies and research, supervision, and internal program management. It remains to be seen if all of the projected budget will materialise. Of the donors' total commitment of US\$125 million, AusAID plans to contribute US\$34 million, or 27 per cent. Other sources of funding for the RWSS NTP2 comprise local governments (US\$70 million), beneficiaries (US\$206 million) and preferential loans (US\$172 million).

AusAID also supported the Cuu Long Delta Rural Water Supply and Sanitation Project, which closed in 2008, and the Three Delta Towns Water Supply and Sanitation Project, which will close in 2008. These were traditional AusAID projects implemented by managing contractors. Both projects successfully achieved their primary objective of extending the coverage of water and sanitation services.

## Objectives

Support for water and sanitation was a key part of Australia's assistance to Vietnam under the 2003–07 development cooperation strategy<sup>11</sup> and it is intended that it will remain a significant component in the strategy for 2008–15. In the 2003–07 strategy 'Improving health by increasing access to clean water and sanitation' was an intermediate objective of the strategic objective to 'Develop human capital', which contributed to the development goal of 'Improved productivity and links to markets for the rural poor in the Mekong Delta and Central Coast'. The draft development cooperation strategy for 2008–15 has 'The adoption of better planning and implementation approaches for providing water and sanitation' as an objective contributing towards the development objective of 'Improving citizen's lives'.

The objectives of the RWSS NTP2 and the targeted program budget support (the donor support) are essentially the same:

- > development objective of the targeted program budget support:
  - Improved health and living conditions of the rural poor including ethnic minorities through provision of clean water, sanitation, hygiene promotion and protection of the environment.
- > ('immediate') objectives of the targeted program budget support:
  - Improved RWSS NTP2 performance and effectiveness
  - Increased coverage of safe water supply and improved sanitation facilities and hygiene promotion amongst the poor. Specific targets<sup>12</sup> are:

	Pilot phase (9 provinces)	Total targeted program budget support to RWSS NTP2
Safe water supplies (people)	1 590 000	7 430 000
Improved sanitation facilities (households)	280 000	1 300 000
Additional school latrines (schools)	2 200	10 400

<sup>11</sup> AusAID, *Viet Nam Australia development cooperation strategy 2003–2007*, Australian Agency for International Development, Canberra, 2003.

<sup>12</sup> Table 4.4 of the project design document.

## Monitoring and evaluation and results

It was decided that performance monitoring of the RWSS NTP2 should be government led and the development of an M&E framework was deferred until the Government of Vietnam was able to prepare one. Technical assistance for this was included in the targeted program budget support and an M&E framework was completed in May 2008. Related training materials are being developed for the implementing agencies.

As indicated above, detailed targets for the targeted program budget support were included in the program design document. Targets were also included for the entire RWSS NTP2. In addition, five triggers and fifteen benchmarks for moving to phase 2 were defined in the design document. The triggers and benchmarks focus mainly on the policy and regulatory aspects of the RWSS NTP2. In the absence of a formal M&E reporting system, Table 7 presents the results achieved so far against the objectives of the targeted program budget support.

Against program objective 1 an audit by the State Audit of Vietnam found that financial management procedures were largely being followed. In terms of budgeting an 8.25 per cent increase in the state budget allocation for 2008 was reported. While this is positive, unfortunately the real value of the increase is being eroded by the high level of inflation, estimated at around 25 per cent a year. Disbursement data for the nine pilot provinces indicate that expenditure of the state budget was lower than planned. Coordination among the ministries involved in the sector has reportedly improved and the targeted program budget support has been successful in ensuring that increased levels of funding have been allocated for sanitation in the pilot provinces. However, considerable improvements still have to be made on subsidy practices and facility sustainability. The reported coverage achieved in 2007 in the nine pilot projects was much lower than planned.<sup>13</sup> The report of a joint annual review carried out by government and donors in July 2008 noted that coverage was lower because construction costs had risen by around 50 per cent since 2005, when the program was designed. It also noted that state budget funding had been lower than originally planned.

At this stage no targets have been set for the program development objective of the targeted program budget support, which is to improve health and living conditions of the rural poor. While it would be relatively easy to collect data from health clinics this information is unlikely to be reliable. Accurately measuring the impact of improved sanitation on health over the entire country is difficult, and surveys that adequately screen out the numerous other variables affecting health would be expensive. Consideration should be given to carrying out some detailed health surveys in a few representative areas throughout the country. Specific targets also need to be set for most aspects of program objective 1, which address aspects of capacity building and policy development.

In addition to the achievements of the targeted program budget support, the Cuu Long Delta Rural Water Supply and Sanitation Project improved water and sanitation facilities for around 390 000 people and the Three Delta Towns Water Supply and Sanitation Project enabled an additional 140 000 people to have access to clean piped water and some 100 000 people to have access to improved sanitation facilities. Thus over the past five years AusAID's support to the water and sanitation sector in Vietnam has had a significant impact, enabling around 760 000 people to have access to safe water and 530 000 people to have access to improved sanitation facilities.

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<sup>13</sup> It appears that the coverage figures are derived by dividing the expenditure achieved by average unit costs. It is expected that more accurate reporting will become available after the M&E procedures are disseminated.

**Table 7: Performance matrix for the RWSS NTP2–targeted program budget support**

Objectives	Outcome indicator	Results		
		Target	Intermediate 2007 Actual	Ultimate target 2010
<b>Program development objective</b>				
1 Improved health and living conditions of the rural poor including ethnic minorities	Data on the incidence of diseases related to poor water and sanitation	No data available		
<b>Program objectives</b>				
1 Improved RWSS NTP2 performance and effectiveness	Improved financial management in the areas of audits and inspections, procurement and financial reporting  Improved planning and budgeting for allocating adequate funding for the Department of Health and the Department of Education and Training and for information, education and communication, and sanitation  Improved practices in the Department of Agriculture and Rural Development, the Department of Health and the Department of Education and Training related to cost norms, subsidy practices, facility sustainability, integrated planning and monitoring		Financial management reviewed OK by State Audit Authority  Improved allocation of funding for information, education and communication, and sanitation but overall government budget lower than planned  Various regulations and circulars approved or being developed but yet to be implemented	
2.1 Increased coverage of water supply among the poor (people)	Number of people with increased access to clean water	795 000	232 000	7 400 000
2.2 Increased coverage of sanitation facilities. (households)	Number of people with increased access to improved sanitation facilities	140 000	11 000	1 300 000
2.3 Additional schools and institutions having clean water and hygienic latrines	Number of schools and institutions having clean water and hygienic latrines	1100	No data	10 400
2.4 People with improved hygiene practices	Number of people with improved hygiene practices	No data available		>7 400 000

## Challenges

Australia's support to the RWSS NTP2 represents a new way of donor engagement with the Government of Vietnam. It will take time for all parties to adapt to this. The RWSS NTP2 also introduces significant changes to the way in which the government delivers its support for rural water supply and sanitation, most notably:

- > the introduction of beneficiary participation to a system that has operated through central control for several decades
- > up-front planning for operation and maintenance
- > a move away from the previous unilateral focus on water supply to give sanitation equal status
- > much greater emphasis on software aspects of providing information, education and communication to foster better hygiene practices
- > deeper collaboration between ministries and between departments.

All of these represent major changes to entrenched ways of operating. Established incentive mechanisms will also be affected. In addition to this, the scope of the program is ambitious.

The joint annual review carried out in July 2008 concluded that sufficient progress had been made towards achieving the predefined triggers and benchmarks to justify rolling out the targeted program budget support to a further 21 provinces. However, given the extent of the changes being introduced by the RWSS NTP2, the limited capacity of the local government bodies responsible for implementation, the lower than expected allocation from the state budget, and the implications for coverage arising from cost inflation, it is recommended that a more cautious approach be adopted. International and local consultants (rural water and sanitation engineers and community-based development specialists) who have had no prior involvement in the RWSS NTP2 should be hired as soon as possible to carry out a fully independent assessment of performance.

In addition, work has been done to ensure that performance measurement is gender sensitive. Many of the performance indicators could be made more gender sensitive and all data relating to people generated by the program will be sex disaggregated. Support will be provided to the Government of Vietnam to enable this, and the RWSS performance assessment framework will be amended to reflect these changes.

# Quality of infrastructure activities

In general, the quality of the infrastructure portfolio is good. The quality-at-entry ratings for initiatives designed during 2007 were high, with an overall average of 4.6 (Table 8). No rating was lower than 4 (adequate quality, with some work required to improve quality). In many cases initial drafts of the design documents were rated lower but, after revisions were made to take account of advice given during the peer review, their ratings were increased.

**Table 8: Infrastructure quality-at-entry ratings for 2007**

	Clear objectives	Monitoring framework	Sustainability	Implementation & risk management	Analysis & lessons	Average
Average	5	4.5	4.25	4.25	5	4.6

Note: Rating of 4: Adequate quality. Rating of 5: Good quality

Of the 16 completed assessments of the quality of initiatives at implementation (one assessment was outstanding), at least 81 per cent were rated as satisfactory for implementation progress, achievement of objectives, and monitoring and evaluation (Table 9). The sustainability of outcomes was considered unsatisfactory for 31 per cent of initiatives. The proportion with satisfactory monitoring and evaluation had increased from 65 per cent in 2006–07. Nevertheless, some 69 per cent of the initiatives were judged to require improvement in monitoring and evaluation (were rated 4 or lower). Fortunately, as noted in 'Overview of AusAID's infrastructure program', country programs are addressing this matter. A major effort was made for the TSSP to develop a comprehensive performance framework and monitoring and evaluation arrangements, and similar efforts are going into various co-financed projects in the Mekong subregion. As noted previously, gender equality will be given increased attention.

Sustainability is the aspect of transport in Papua New Guinea and water and sanitation in Vietnam most in need of attention. The concern about the sustainability of transport activities in Papua New Guinea relates to the government agencies' capacity to manage the increased funding that is being allocated, particularly for road rehabilitation and maintenance. Road maintenance also needs to remain focused on the agreed 16 priority roads identified in

**Table 9: Summary of quality-at-implementation ratings for 16 initiatives in 2007–08**

	Implementation progress	Achieving objectives	Monitoring & evaluation	Sustainability
	%	%	%	%
Unsatisfactory (rated 1,2 or 3)	13	13	19	31
Satisfactory (rated 4,5 or 6)	88	88	81	69
Requires improvement (rated 1,2,3 or 4)	56	38	69	50

Note: Rating of 1: Very poor quality; needs major overhaul. Rating of 2: Poor quality; needs major work to improve. Rating of 3: Less than adequate quality; needs significant work. Rating of 4: Adequate quality; some work to improve needed. Rating of 5: Good quality. Rating of 6: Very high quality.

government's National Transport Development Plan. There has been a change in emphasis within government that has resulted in some erosion of the commitment to this priority. The TSSP includes leverage, generally through the broad capacity-building components and specifically through the performance grant mechanism<sup>14</sup>, to encourage government to reverse this trend. It will require close monitoring.

Monitoring and evaluation of the PNG Key Roads for Growth Maintenance Project was assessed as less than adequate and in need of significant work. This was being addressed in June 2008 as part of the project's mid-term review. The recommendations are to focus on fewer outcome measures rather than on the large volumes of input and output data and to pay greater attention to identifying outcome measures for the program management component of the project. In terms of measuring the socioeconomic impact of the project, more effort will be made in collecting income, time use and economic activity from households living within the area influenced by project roads. With this in mind and in view of the experience gained with the similar monitoring described in 'Results of support for transport infrastructure in Papua New Guinea', the same consultants who carried out that work have been hired to extend coverage to a further 10 provinces. Baseline surveys were carried out from April to June 2008.

Implementation of the water and sanitation projects/programs in Vietnam was assessed as satisfactory except for two relatively small projects. Their problems appear to relate to staffing (high turnover and vacant positions) and insufficient coordination with government counterparts. A review will be carried out to identify measures to address any ongoing issues.

Gender equality is an overarching principle of the development assistance program. Infrastructure has significant benefits for gender equality but, as noted above, it is difficult for the sector to measure gender equality results. The commitments noted above will assist in measuring results in future reports.

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<sup>14</sup> The performance grant mechanism is a program-wide incentive mechanism whereby an additional amount equivalent to 10 per cent of AusAID's annual planned expenditure can be allocated if mutually agreed triggers are met.