



# Annual thematic performance report 2009: Infrastructure

December 2010

## Summary

*“If you look at just about any of the Millennium Development Goals, you will find that infrastructure is the fundamental need and the binding constraint<sup>1</sup>”*

Infrastructure<sup>2</sup> is one of the four main pillars of Australia’s development assistance program. It has seen a considerable increase since 2007 on the back of four specific infrastructure measures totalling \$1,754 million. In 2009-10 infrastructure expenditure was estimated to be \$446 million or around 12 per cent of Australia’s total development assistance. At the country program level the share of infrastructure ranges from 36 per cent in the Mekong countries to 14 per cent in the Philippines. Infrastructure expenditure is likely to more than double by 2015-16 in line with projected growth in development assistance.

Australia supports infrastructure because it helps alleviate poverty, promotes economic growth and it is in Australia’s national interest to do so. Grants are used to catalyse much greater funding for pro-poor infrastructure. Geographically most of Australia’s support goes to East Asia and the Pacific and is focussed on transport and water, sanitation and hygiene. The largest programs are in Indonesia and Papua New Guinea (PNG).

Australia’s infrastructure support has delivered impressive results since 2008-09. It contributed to approximately:

- 5,000 kilometres of roads being maintained or rehabilitated in PNG, Timor Leste, Laos, the Solomon Islands and Samoa;
- 600,000 additional people obtaining access to safe water and 400,000 additional people securing access to basic sanitation in Indonesia, Vietnam, the Philippines, Timor Leste and the Solomon Islands; and
- US\$14.8 billion of infrastructure investment being leveraged by just \$52 million allocated to specific program development funds managed by the Asian Development Bank (ADB) and the World Bank, that is, approximately 280 times the funds provided.

In terms of quality Country Annual Program Performance Reviews (APPRs) for 2009 continued to rate infrastructure activities highly. Particularly well-performing activities included:

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<sup>1</sup> Prof Jeffrey Sachs, Director, the Earth Institute, Columbia University at the Millennium Development Goals Summit, New York, September 2010.

<sup>2</sup> Infrastructure includes transport, water and sanitation, energy, telecommunications and sub-sectors related to urban development such as solid waste management, drainage and public transport.

- the *Indonesia Infrastructure Initiative (IndII) Facility and Water and Sanitation Programs* in Indonesia;
- the national *Rural Water Supply and Sanitation Programs* in Vietnam and Timor Leste;
- a *Power Sector Expansion Program* in Samoa; and
- the *Governance for Growth Program* in Vanuatu.


Achievements against prescribed Quality at Implementation criteria were also relatively good. Monitoring and evaluation was an area identified as being in need of more attention and action is being taken on this. Activities in the Mekong sub-region being co-financed with the multilateral development banks are ranked lower than others. To help address this, supervision resources have been increased by mobilising specialist consultants to participate in supervision missions and to follow up on issues arising from the missions.

The continued expansion of infrastructure programs will need careful planning. It will be important to engage in fewer but larger activities. Inevitably these will be more complex. Risks associated with implementation delays, financial management, procurement, and land acquisition/resettlement will need to be effectively managed. Plans are in hand to strengthen the workforce by a combination of staff development and recruiting infrastructure specialists. The sub-sector focus should remain on transport and water, sanitation and hygiene. Australia should however also be prepared to consider providing support to the infrastructure aspects of important emerging themes such as climate change and rapid urbanisation. Geographically attention should remain concentrated on East Asia and the Pacific. There will however be scope to do more in Africa and South Asia. Finally the current mix of bilateral and multilateral support should be maintained. Opportunities for replicating the very successful bilateral IndII Facility should be considered in other countries, or possibly at a regional level.

### Overview of Australia's Infrastructure development assistance in 2009

In 2009 infrastructure expenditure was estimated to be \$446 million or around 12 per cent of Australia's total development assistance. Allocations for infrastructure have grown steadily since 2007 when it accounted for only 8% of total Australian overseas development assistance (ODA). The estimated expenditure for 2010-11 is \$560 million equivalent to 14% of total ODA. The increases were funded through four infrastructure specific budget measures, the first of which was introduced in 2007. Expenditure on infrastructure is likely to continue to increase in line with planned increases in the overall ODA budget. At the country program level the share of infrastructure ranges from 36 per cent in the Mekong countries to 14 per cent in the Philippines.

*Why Australia provides support for infrastructure:* Australia's development assistance program supports better provision of infrastructure in developing countries because hundreds of millions of poor and vulnerable people throughout the developing world do not have access to the basic necessities of life. Almost 900 million people do not have access to safe drinking water and around 2,600 million people have no access to hygienic sanitation. In East and South Asia the length of road per person is less than one sixth of the average in developed countries such as Australia. In some Pacific Island countries up to 85 per cent of the population has no access to electricity. It is estimated that US\$200 billion per year will have to be mobilised to meet infrastructure needs in



Asia alone to 2015.<sup>3</sup> Development assistance can only be a small fraction of this. It must therefore be used strategically to catalyse investment from the private sector and to help partner governments use their own resources more effectively.

*Multi-objective strategy:* Australia supports infrastructure because of the development benefits it brings and because it is in Australia's national interest to do so. Infrastructure facilitates development by contributing to poverty reduction, economic growth and employment generation. It is an important prerequisite to achieving the Millennium Development Goals (MDGs)<sup>4</sup>. For example, the health related MDGs depend on reliable access to safe water, good sanitation and improved hygiene practices and universal primary education can only be attained if there are roads to enable children and their teachers to reach schools. In terms of national interest, Australia's support for infrastructure contributes to national security and trade. Helping governments of poor neighbouring countries, particularly those emerging from conflict, to provide basic public services, for example, by maintaining roads, makes them more stable. This is clearly in Australia's security interest. The highly visible nature of infrastructure is also important; it demonstrates in a very tangible way the impact of development assistance. For all of these reasons infrastructure is one of the top four sectors supporting Australia's international development assistance program (the others are education, health and governance).

*Direct and indirect contribution to poverty reduction:* Poverty reduction is the overriding goal of Australia's international development assistance. Infrastructure contributes to poverty reduction both directly and indirectly. Countries such as China and Vietnam that have invested heavily in infrastructure have achieved the sharpest declines in poverty. The direct impact comes from expanding access to basic services, such as water, sanitation, electricity, roads and other forms of transport modes, for poor and vulnerable people. The poor also benefit indirectly through the contribution that infrastructure makes to economic growth, that is, by facilitating the inputs and outputs of production through expanded electricity systems, better roads, railways and ports and modern telecommunications.

*Infrastructure investment was a key response to the global financial crisis:* The global financial crisis and resultant recession created particular challenges in 2009. While the impacts were generally less in developing countries with their limited exposure to the global financial system, the knock-on effects were still significant. In East Asia the impacts were most apparent in countries approaching middle-income status such as Indonesia, the Philippines and Vietnam. Increased infrastructure expenditure to boost local economies and create employment was a key part of the stimulus packages launched by these countries in response to the crisis.

*Increased funding for infrastructure:* Government's *Infrastructure for Growth Initiative* budget measure came into effect in 2007-08 providing a pool of dedicated funding to the sector. The Government's emphasis on helping partner countries achieve the MDGs saw the introduction of two further infrastructure budget measures in 2008-09; the *Pacific Regional Infrastructure Facility* and the *Water and Sanitation Initiative*. A fourth budget measure, the *Economic Infrastructure Initiative* was approved for 2009-10. In total these four budget measures amount to \$1,754 million over six years up to 2012-13. In addition around \$200 million per year is allocated for infrastructure from country programs' general budget allocations.

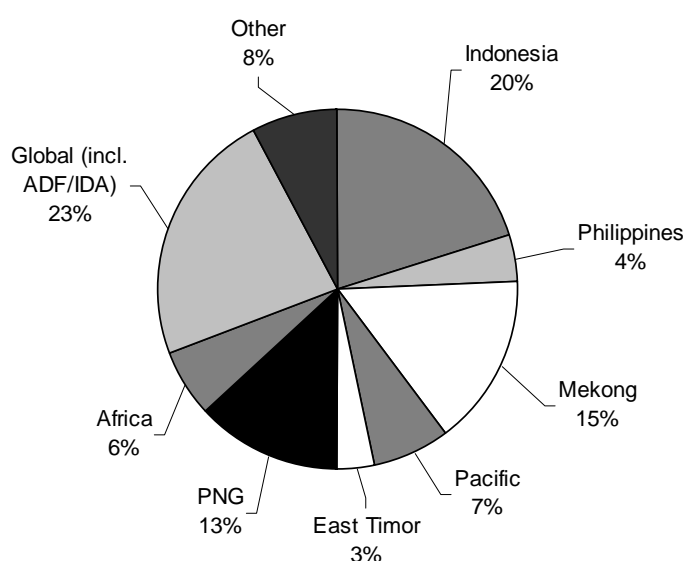
<sup>3</sup> McCawley, Peter (2010) "Infrastructure Policy in Asian Development Countries", *Asian Pacific Economic Literature*, 24:1, pg. 15.

<sup>4</sup> Prof Jeffrey Sachs, Director of The Earth Institute, Columbia University at the Millennium Development Goals Summit, New York, September 2010. "If you look at just about any of the MDGs, you will find that infrastructure is the fundamental need and the binding constraint

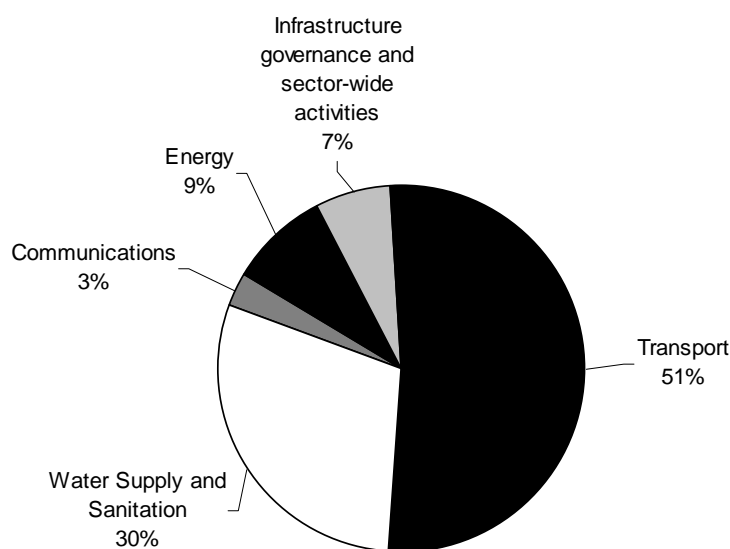
*How support is delivered:* Australia provides both 'soft' and 'hard' support for infrastructure. Soft support includes studies and advisory assistance to develop appropriate pro-poor sector policies and strategies. It also helps strengthen the capacity of partner government infrastructure agencies to better deliver and maintain effective infrastructure. Support for hard infrastructure includes funding the expansion of physical infrastructure and the rehabilitation and maintenance of existing assets. Australia uses grants in a catalytic way to leverage much greater funding for pro-poor infrastructure from other sources such as the multilateral development banks and the private sector. Grants are also used to help partner governments develop more effective infrastructure policies and to demonstrate new and innovative ideas. Specific examples of Australia's infrastructure support are presented in Annex A.

*Geographic and Sub-sector coverage:* AusAID's country/regional support to infrastructure activities in 2009-10 focussed primarily on South East Asia and the Pacific. From Figure 1a it can be seen that the largest country programs were: Indonesia, Papua New Guinea (PNG), the Mekong countries (Cambodia, Laos and Vietnam) and the Pacific. The small allocation to Africa grew significantly in 2009-10 with the development of a sizeable water, sanitation and hygiene program. The "global" allocation of 23 per cent comprises Australia's contributions to the re-capitalisation of the concessional funds of the Asian Development Bank and the World Bank and contributions to specialised trust funds managed by the two Banks. The specialised trust funds support analysis, research and the development of projects on topics such as increasing private sector involvement in infrastructure, promoting more sustainable sources of energy, and dealing with infrastructure needs of poor slum dwellers. By infrastructure sub-sector, expenditure was largely focussed on transport (51 per cent), water, sanitation and hygiene (30 per cent) and energy (9 per cent) as indicated in Figure 1b.

**Figure 1a: Total AusAID Infrastructure Expenditure by Country/Region 2009-10.**



**Figure 1b: Total AusAID Infrastructure Expenditure by Infrastructure Sub-Sector 2009-10.**



## Major Achievements

This section presents summaries of the key results achieved and the ratings of infrastructure activities against country strategy objectives abstracted from country Annual Portfolio Performance Reviews (APPRs) for 2009. More detail is provided in Annexe A on the performance of infrastructure activities in the main country programs and for the global program.

*Results achieved by country programs in 2009:* The key results of Australia's support are presented in Table 1. Australia contributed to:

- approximately 5,000 kilometres of roads being maintained or rehabilitated;
- 600,000 people obtaining safe water; and
- 400,000 people securing access to improved sanitation.

The *Transport Sector Support Program* in PNG and the *TIMWorks* and *Youth Employment Promotion Program* in Timor Leste accounted for most of the road maintenance and rehabilitation results. There was also a significant and very important road contribution made in the Solomon Islands. Australia's support in PNG included maintenance of 340 kilometres of the Highlands Highway, the economic backbone of the nation and around 400 kilometres of trunk roads in Bougainville, an autonomous province of that is emerging from conflict. Australia's support to the transport sub-sector in PNG is having a positive impact on road condition quality; the proportion of national roads classified as good or fair increased from 63 per cent to 79 per cent from 2006 to 2009.

Results on water, sanitation and hygiene were more broadly based. A detailed evaluation published by AusAID's Office of Development Effectiveness in 2009 concluded that *AusAID's support for*

*water and sanitation services in Indonesia has contributed to national efforts that have provided sustainable piped water to some 4.6 million people and dramatically improved sectoral coordination at the national and sub-national levels<sup>5</sup>. In Vietnam, Australia's support is being delivered in conjunction with the Governments of Denmark, Holland and United Kingdom. It is supporting the Government of Vietnam's five year National Target Program 2 for Rural Water Supply and Sanitation to expand access to the rural poor. The program is led strongly by the government itself, and the external partners' support is planned, budgeted and implemented through the government's systems.*

*Outputs will increase as the infrastructure program matures:* AusAID's infrastructure program is relatively "young". Annual expenditure has more than doubled over the past four years, increasing from \$190 million in 2006-07 to \$446 million in 2009-10. Most hard infrastructure projects are large. Several current projects are more than \$100 million. They typically take between seven and ten years to design and implement and the bulk of physical progress being achieved in the later stages of implementation. Progress often appears to be slow in the initial stages when construction contracts are being procured through international competitive bidding. As the program matures over the next few years and more large projects enter their main implementation phase, outputs will steadily increase. Information will also increasingly become available from evaluation surveys on the impacts made or outcomes achieved (see more on this below).

**Table 1: Infrastructure Achievements since 2008-09.**

Country	Roads rehabilitated/maintained (km)	Access to safe water (# of people)	Access to improved sanitation (# of people)
Indonesia		380,000	380,000
Papua New Guinea	2,450		
Vietnam		77,300	14,800
Philippines		59,000	
Timor Leste	2090	76,500	
Laos	120		
Solomon Islands	217	6,750	6,750
Samoa	30		
<b>Totals</b>	<b>4,907</b>	<b>599,950</b>	<b>401,500</b>

*Results achieved from "soft" support:* One of the major vehicles for soft support is a global program that is used to develop new ideas and prepare new investment projects in conjunction with the Asian Development Bank and the World Bank. Since 2008 AusAID has provided around \$52 million for this work. The Banks' report that this has leveraged more than US\$14.8 billion of infrastructure investment, that is, approximately 280 times the funds provided by AusAID. In Indonesia AusAID is helping government test a new form of targeted subsidy for the poor, called output based aid, to increase the access of households to safe water and improved sanitation. Subject to a satisfactory trial the Indonesian Government intends to channel hundreds of millions of dollars of their own budget through this mechanism. Other examples of soft support are included in the country synopses in Annex 1.

<sup>5</sup> Office of Development Effectiveness, *Annual Review of Development Effectiveness 2009: Improving Basic Services for the Poor*, Australian Agency for International Development, Canberra, 2010.

*Results – Outputs and Outcomes:* Defining and measuring the intended *outputs* for infrastructure activities is fairly straight-forward; *outcomes* are more challenging. The outputs for “hard” infrastructure activities include: kilometres of improved or maintained road; kilometres of water distribution pipe, sewers or drains; increased volume of water or wastewater treated etc. The outcomes include: for road projects, increased economic activity/reduced poverty levels within the sphere of influence of improved roads; and for water and sanitation projects, outcomes are typically improved health indicators, better hygiene practices followed etc. Outcomes usually take longer than the duration of a project to materialise. In the case of roads it may be several years after a road has been improved before the development benefits become fully apparent. Clearly it is more complicated and more expensive to collect information on outcomes than it is on outputs. In some cases intermediate, or proxy outcome indicators, such as the increased number of people obtaining reliable access to safe water and improved sanitation facilities are used. In the case of soft support like institutional capacity building, the outputs such as the number of people trained, or new asset management systems introduced are again easy to measure. Outcomes such as the counterpart institution’s capacity to operate and maintain the infrastructure for which it is responsible are more challenging to measure.

*Monitoring and evaluating outcomes:* Increased efforts are being made to measure and evaluate outcomes. For example, detailed socio-economic impact surveys are an important part of monitoring and evaluation of the *PNG Transport Sector Support Program* and the *Eastern Indonesia National Road Improvement Project*. Baseline surveys have already been carried out and periodic follow up surveys are being undertaken. These will be continued after the road works have been completed. Socio-economic surveys carried out by the World Bank in 2006 found that road improvements in PNG can have a dramatic impact on the lives of poor people living within their sphere of influence. In Oro Province surveys found that the number of people living above the poverty line increased from 29 per cent to 80 per cent after roads were improved. This was simply a result of people having better access to markets and employment. A detailed Performance Assessment Framework has been prepared for all water and sanitation activities. In addition to measuring basic access, AusAID is starting to collect data for indicators on school sanitation, the extent of uptake of improved hygiene behaviour and the effectiveness of water and sanitation service providers. Access figures are disaggregated for those below the poverty level and by gender.

*Summary of APPR ratings:* Table 2 presents the “traffic light” ratings abstracted from the 2009 Annual Portfolio Performance Reviews. For the vast majority of activities country teams concluded that the planned objectives will be either fully (green) or partly (amber) achieved. The objectives of only two programs are deemed unlikely to be achieved within the intended timeframe. The comparison with 2008 ratings shows that the relatively high performance of infrastructure activities was maintained in 2009. Particularly well-performing activities included: the *Infrastructure Initiative Facility* and *Water and Sanitation Programs* in Indonesia; *Rural Water Supply and Sanitation* in Vietnam and Timor Leste; the *Power Sector Expansion Program* in Samoa, and the *Governance for Growth Program* in Vanuatu. The performance of one of AusAID’s most important infrastructure activities, the *Transport Sector Support Program* in PNG declined. As explained in more detail in Annex A this appears to be largely a reflection of Government of PNG not fulfilling agreed budgetary commitments to the Partnership for Development in the 2010 budget (the budget announced for 2011 is however a significant improvement indicating that 2010 may have been an anomaly possibly related to the global financial crisis). The low rating for Timor Leste relates to a project intended to strengthen the capacity of the Ministry of Infrastructure. This has faced problems arising from changes in the Ministry’s priorities. AusAID staff have been engaged

intensively in negotiating a change in the scope of the project and the situation is expected to improve in 2010-11. See below for comments on Cambodia.

**Table 2: Ratings of the program's progress in 2009 towards AusAID Infrastructure Objectives**

APPR Region or Country	Objective	Rating in 2007-08	Rating in 2008-09	Change
<b>INFRASTRUCTURE</b>				
<b>Cambodia</b>	Infrastructure: Improved transport and energy infrastructure.			Not applicable
<b>Indonesia</b>	Transport and Connectivity		2 2	Increased no. of objectives.
	Water and Sanitation		2 3	Increased no. of objectives.
<b>Laos</b>	Improved rural infrastructure, particularly roads and electrification.			Improved
<b>Mekong Water Resources</b>	Regional cooperation to reduce poverty and achieve sustainable development.			No change
<b>Papua New Guinea</b>	Partnership for Development: Key national roads, ports and airports providing access to markets and services.			Declined
<b>Philippines</b>	Accountability, transparency and management of transport infrastructure investments improved.			No change
	Improved economic opportunity for rural people (better infrastructure)			No change
<b>Samoa</b>	Improved private sector development (power/electricity)			No change
<b>Solomon Islands</b>	Partnership for Development: Improved Economic Livelihoods			Not applicable
<b>Timor Leste</b>	Increasing employment: Infrastructure			Not applicable
	Increasing employment: Rural Water Supply and Sanitation			Improved
<b>Tonga</b>	Develop infrastructure to improve the everyday lives of people			Not applicable
<b>Vanuatu</b>	Improved infrastructure: develop essential infrastructure to support economic growth and service delivery.			No change
<b>Vietnam</b>	GoV identifies and prepares for the new set of development challenges associated with 2010 middle-income status (economic infrastructure).			No change
	GoV adopts better planning and implementation approaches for providing rural water and sanitation.			No change

Note:

- The objective will be fully achieved within the timeframe of the strategy.
- The objective will be partly achieved within the timeframe of the strategy.
- The objective is unlikely to be achieved within the timeframe of the strategy.

## Portfolio Review

*Quality ratings are generally good:* Achievements against the prescribed Quality at Implementation criteria was relatively good for 2009. Amongst the 21 activities rated, the quality of 96 per cent was deemed to be either *very high* or *good* with respect to relevance. On sustainability 82 per cent were considered to be acceptable though more than half of these were only ranked as *adequate*, indicating some room for further improvement under this criterion. The ratings show that monitoring and evaluation needs to be improved. As indicated in the “Major Achievements” section above the need for better measurement of results, particularly outcomes, has been recognised and greater effort is being put into this in the design of new activities.

*Activities in the Mekong are performing lower than average:* Activities in the Mekong countries are ranked lower than others (see also the APPR for Cambodia). Almost all of these activities are projects that are being co-financed with the multilateral development banks (MDBs); the Vietnam National Target Program for Rural Water Supply and Sanitation is the exception and it is highly rated. These low ratings arise from the fact that this level of intensive engagement with the MDBs is new and it has taken time for staff of the Banks and AusAID to become familiar with each others business cultures. AusAID has responded to the lower than expected performance by arranging more intensive participation by specialist consultants in supervision missions and in the follow up of issues arising from the missions.


**Table 3: Quality at Implementation Reports – Rating of Objectives**

	Relevance		Effectiveness		Efficiency		M&E		Sustainability		Gender Equality	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Very high quality	10	48%	2	10%	2	10%	4	19%	1	5%	1	5%
Good quality	10	48%	4	19%	5	24%	2	10%	6	29%	3	14%
Adequate			8	38%	6	28%	6	28%	10	48%	9	43%
<b>Sub-total Satisfactory</b>	<b>20</b>	<b>96%</b>	<b>14</b>	<b>67%</b>	<b>13</b>	<b>62%</b>	<b>12</b>	<b>57%</b>	<b>17</b>	<b>82%</b>	<b>13</b>	<b>62%</b>
Less than adequate	1	4%	4	19%	5	24%	7	33%	3	14%	5	24%
Poor quality			3	14%	3	14%	2	10%	1	4%	3	14%
Very poor quality												
<b>Sub-total Unsatisfactory</b>	<b>1</b>	<b>4%</b>	<b>7</b>	<b>33%</b>	<b>9</b>	<b>38%</b>	<b>9</b>	<b>43%</b>	<b>4</b>	<b>18%</b>	<b>8</b>	<b>38%</b>

## Conclusions, Challenges and Recommended Actions

### Conclusions

*Conclusions on performance in 2009:* 2009 saw infrastructure still in the early part of a phase of rapid growth initiated by four sector specific budget measures, part of a period when overall development assistance was experiencing unprecedented growth. It also coincided with the decentralisation of responsibility for program management to posts. This meant that staff at post



had to program sizeable amounts of new funding while at the same time they had to adapt to, and cope with, increased program management responsibilities. Staff have coped well but it will be important to take account of the lessons learned in preparing for the continued growth of the program over the next few years

### Challenges

*Managing continued growth of the program:* It is projected that expenditure on infrastructure will at least double over the next five years. There will therefore be a sizeable workload in identifying and processing the design of new activities while at the same time managing existing infrastructure portfolios. AusAID will need to mobilise adequate resources including dedicated sector specialists to its Posts to oversee this growing portfolio of infrastructure activities and to ensure that program quality is maintained

*Managing risks:* As the portfolio expands the risks associated with implementation delays, financial management, procurement, and land acquisition/resettlement will increase. These can be mitigated, though not eliminated by good and thorough designs. During implementation they also require careful monitoring by specialist staff with considerable experience of infrastructure project management in developing countries. This can, to an extent, be contracted out. However it will be very important to ensure that the AusAID staff responsible also have appropriate skills and experience.

### Recommended Actions

*Use more sector specialists:* The increasing size and complexity of the infrastructure program will require more sector specialists at Posts to accommodate the increased infrastructure workload and to better manage risks.

*Maintain a mix of multilateral and bilateral engagement:* The current mix of multilateral engagement in co-financing projects with the MDBs and bilateral projects is working reasonably well. Given the teething problems with engagement in multilateral projects in the Mekong it will be important to increase interaction between staff of the MDB's and AusAID so that there is better understanding of the respective business cultures. The *Indonesia Infrastructure Initiative Facility* is an excellent example of how high quality assistance can be delivered bilaterally using a managing contractor. The opportunity for replicating this approach should be considered in some of AusAID's other larger country and regional programs.

*Geographic focus:* The current focus on East Asia and the Pacific should be maintained with sizeable programs in Indonesia, PNG and Vietnam. There is scope for modest expansion, largely in the water and sanitation sub-sector in Africa and South Asia.

*Sub-sector focus:* Transport and water, sanitation and hygiene should remain the dominant sub-sectors. As indicated above there is an argument in terms of workload management for limiting involvement exclusively to these areas. However given the increasing challenges developing countries are facing in dealing with the infrastructure aspects of emerging issues such as climate change and rapid urbanisation there is likely to be pressure to become involved in additional areas. The demand in these areas is likely to be strongest in Indonesia, the Philippines and Vietnam.

*Monitoring and Evaluation:* Efforts to improve monitoring and evaluation need to be sustained with increased focus on measuring high-level outcomes. This is particularly important for larger activities.



## Annexe A: Country and Global Program Performance of Infrastructure Activities in 2009

**Indonesia:** Infrastructure accounted for 20 per cent (\$78 million) of the Indonesia program; the second largest sector program. Support focussed on *transport* through the Eastern Indonesia National Road Improvement Project (EINRIP) and on *water, sanitation and hygiene* in both urban and rural areas. Broader support for infrastructure policy development, project identification and preparation and the implementation of pilot projects to serve as catalysts for new approaches was delivered via the *Indonesian Infrastructure Initiative (IndII) Facility*. EINRIP is jointly funded by Australia and the Government of Indonesia (GoI). Australia has provided a \$300 million concessional loan and \$25 million of complementary grant funded technical assistance. It is a catalytic project intended to demonstrate the value of adopting: well prepared detailed designs; international standard contract documents; open and transparent procurement; and construction supervision by independent professional engineers. By 2009 designs and bidding documents had been prepared for around 400 km of roads and bridges and the implementation of 12 out of a planned 21 road rehabilitation contracts was under way.

Australia has supported Indonesia's *water, sanitation and hygiene* sector over the past decade. A detailed evaluation published by AusAID's Office of Development Effectiveness in 2009 concluded that *AusAID's support for water, sanitation and hygiene services in Indonesia has contributed to national efforts that have provided sustainable piped water to some 4.6 million people and dramatically improved sectoral coordination at the national and sub-national levels*. In 2008-09 AusAID's support to rural water and sanitation in conjunction with the World Bank enabled 380,000 predominantly poor people to secure access to safe water supplies and improved sanitation. Australia is currently supporting GoI's very ambitious program to double within five years the number of people with access to safe water and improved sanitation.

Australia funds direct investments in infrastructure, but also work with communities and governments at all levels to promote behavioural change and improvements in policy, planning and implementation. In 2009 AusAID helped government develop and pilot an innovative results-based approach to expand access in urban areas. It is envisaged that this pilot will lead to GoI channelling hundreds of millions of dollars into the sector. The *Indonesia Infrastructure Initiative (IndII) Facility* has quickly become the GoI's preferred source of infrastructure advice because it is seen as being more independent, flexible and responsive than alternative sources such as the multilateral development banks (MDBs). An example of IndII's success is the work done with the Directorate General of Highways on adoption of a medium term expenditure framework and performance based budgeting. These are important prerequisites for more efficient allocation of funding.

**Papua New Guinea (PNG):** The PNG-Australia Partnership for Development was formalised in 2008. Transport infrastructure is one of five priority outcomes identified in the partnership. Australia's support is delivered through the *Transport Sector Support Program (TSSP)*. It comprised 15 per cent of Australia's development assistance to PNG in 2009. Prior to the design of the TSSP, AusAID supported several discrete transport projects. While these projects generally achieved their objectives they had limited impact on developing the capacity of PNG transport institutions to the level that they could sustain the physical benefits delivered. TSSP was therefore devised as a more comprehensive and coordinated approach. It involves the provision of technical assistance and funding for the maintenance and rehabilitation of infrastructure. Eighty per cent of TSSP funding goes to infrastructure, mostly to maintain a network of 16 key roads that are essential



to PNG's economic sustainability. Support is also provided to the aviation and maritime sub-sectors. Given the very low capacity of PNG's transport agencies it was recognised that it would take many years to build them up to a sustainable level. TSSP was therefore envisaged to have a lifespan of at least 15 years. Implementation is being undertaken in five year phases with careful evaluation and restructuring carried out as necessary at the end of each phase.

Phase I covers the period 2007 to 2012. In 2009 a total of 2,450 km of roads were maintained and, where necessary, rehabilitated. This included 340km of the Highlands Highway, the economic backbone of the nation and around 400km of trunk roads in Bougainville, a part of the country that is emerging from recent conflict. Australia's support is having an impact: the proportion of national roads classified as good or fair increased from 63 to 79 per cent from 2006 to 2009. It is also improving the lives of the poor. Socio-economic surveys carried out by the World Bank in 2006 found that road improvements in PNG have a dramatic impact on lives of poor people living within their sphere of influence. For example, in Oro Province surveys found that the number of people living above the poverty line increased from 29 to 80 per cent after roads were improved. This was simply a result of people having better access to markets and employment.

Support to the ports and aviation sector has resulted in improved transport security standards. All maritime ports were audited to international security standards and 12 out of 22 airports achieving compliance with safety certification standards (up from 2 in 2008). Working in PNG does present challenges. While the TSSP has performed well unfortunately the Government of PNG's commitment to transport in the Partnership for Development slipped in terms of the budget allocation announced in 2009 (the budget for calendar year 2010). There are however encouraging signs that this may have been a temporary glitch resulting from the global financial crisis. The budget announced for 2011 is much more encouraging. Stresses are also being created by the huge liquefied natural gas development. This draws contractors and professional staff away from the public sector and inflates construction prices. The above notwithstanding the TSSP provides a robust and flexible mechanism for delivering Australian support to the transport sector which is key to PNG's sustainable economic growth.

**Mekong (Cambodia, Laos and Vietnam):** Australia has committed \$210 million for *transport, energy and water, sanitation and hygiene* support in the Mekong subregion. In 2009 this accounted for 36 per cent of Australia's development assistance to the Mekong. Australia's assistance is mostly delivered in partnership with the Asian Development Bank and the World Bank. The total value of the projects and programs supported is over US\$1.6 billion. Support for transport is focussed on opening up the opportunities for trade within the Mekong – and between the Mekong and the rest of the world – through greater connectivity. Complementary policy support is also being provided for trade and transport facilitation. The *transport projects* will improve physical connectivity across the sub-region through improvements to roads, railways (in Cambodia) and inland waterways. Australia's funds are contributing to increased economic growth and improved access for poor people living in remote areas. AusAID's involvement in the projects has brought a deeper focus on the avoidance of unintended adverse social impacts that can arise from improved transportation such as the spread of HIV/AIDS, human trafficking and involuntary resettlement of people affected by new construction. AusAID also promotes stronger gender equity. Australia's support for *water, sanitation and hygiene* which is concentrated in Vietnam is being delivered in conjunction with the Governments of Denmark, the Netherlands and the United Kingdom. It is supporting the Government of Vietnam's National Target Program 2 for Rural Water Supply and Sanitation to expand access to the rural poor. The program is led strongly by the government itself, and the external partners' support is planned, budgeted and implemented

through the government's systems. This support ranges from direct budget support to technical assistance, in particular for public financial management. The program helped 232,000 rural people to gain access to clean water and 44,500 people to access improved sanitation facilities between 2007 and 2009.

**Philippines:** In 2009 infrastructure accounted for 14 per cent (\$14.27 million) of the Philippines country program. The infrastructure program in the Philippines focussed on the *transport sector*. This included preparation of a \$100 million bilateral Philippines Road Maintenance Facility (PRMF) that will rehabilitate and maintain a core road network in selected provinces and strengthen provincial governments in the Southern Philippines. In the second half of the year partnership agreements were negotiated with seven provincial governments and the Department of the Interior and Local Government. Assistance was also provided at the national level particularly on private sector participation and governance - improved accountability, transparency and management. Results included the preparation of a national framework for transparent and effective public-private partnerships for toll roads; identification of medium-term investment priorities under a national transport policy plan; and building civil society capacity to monitor performance in the road sector. The latter culminated in the publication of the first national road sector quality report card which measured the current status of the Philippines' national road systems. In terms of *water, sanitation and hygiene*, through the Philippines Australia Community Assistance Program (PACAP) new water systems were provided to more than 6,000 households through basic service delivery improvements. The program Action for Conflict Transformation for Peace provided support at the community level in conflict-affected areas of Mindanao. This included the provision of 97 water supply systems which improved access to clean water for 28,000 people. However much remains to be done. The Philippines continues to under-invest in basic infrastructure which has resulted in it falling to 43 out of 57 economies in the World Competitiveness Index. It scored lowest in the provision of basic infrastructure.

**Timor Leste:** In 2009 infrastructure accounted for 15 per cent (\$8.7 million) of the Timor Leste program. The majority of this investment was directed towards rural water supply and sanitation (\$5.7 million) with the remaining amount focussed on infrastructure more broadly (\$3 million). Steady progress was made in expanding rural water and sanitation access. Australian support contributed to increased government commitment to rural water supply and sanitation and water was identified as a Key National Priority in 2010 that resulted in an estimated 76,500 obtaining access to improved water supply. With Australia's support Timor Leste expects to achieve its water and sanitation goal in MDG7. Support for public works was provided through the Youth Employment Promotion Program (YEPP) and TIM Works. YEPP is implemented by the ILO and the Secretariat of State for Vocational Training and Employment. YEPP performed strongly despite a shortfall in the government's co-contribution, with 550 km of rural roads rehabilitated and the creation of 146,484 days of short-term employment for over 3,000 people. TIM Works is also implemented by ILO and through applying labour based technology to public works programs has provided maintenance and rehabilitation to 1,540 km of roads. Capacity building support was provided to the Ministry of Infrastructure through an ADB administered project fully funded by AusAID. Progress on this project has been slower than anticipated, however efforts are continuing to make this support more effective.

**Pacific:** Australia launched the Pacific Regional Infrastructure Facility (PRIF) in 2008. PRIF is a long term multi-donor coordination and financing mechanism for infrastructure in the Pacific involving AusAID, NZAID, the World Bank and the Asian Development Bank. Initial Australian funding for the Facility is through a \$127 million budget measure from 2008 to 2012. Total



funding, including contributions from other AusAID funding streams and other Facility partners is currently in excess of \$600 million. The Facility is a new way of working with Pacific Island Countries (PICs) to improve infrastructure services, and reflects the principles of the Cairns Compact. PRIF supports both new investments and maintenance of existing assets through long-term planning and budgeting that considers the impact of recurrent costs (through whole of life costing). Working together through PRIF reduces the burden on PICs of separate, fragmented individual donor projects by having one central point of contact for all PRIF partner agencies.

Early investments have been particularly focussed on the transport sector: in Solomon Islands PRIF Partners have directly assisted with the rehabilitation and maintenance of around 25 per cent of the road network; in Vanuatu 140km of priority road on three outer islands will be rehabilitated and maintained; and in Samoa assistance enabled a rapid response to the 2009 tsunami with the rehabilitation of 30km of coastal road and the repair of seawall infrastructure. Facility assistance is beginning to expand into the energy, water and sanitation, and telecommunications sectors. In Tonga the Facility has helped the government develop a 10 year energy roadmap of investments to reduce reliance on imported fuel and increase energy security; in Vanuatu assistance to the Utilities Regulatory Authority has developed electricity tariff structures that could potentially see a halving of costs to small consumers; and in Samoa and Vanuatu long term programs to improve urban water supply and sanitation are being planned. Further details are provided on the Solomon Islands and Vanuatu programs below.

**Solomon Islands:** In the Solomon Islands, approximately 20 per cent of AusAID's bilateral program supports infrastructure. This includes improving access to *transport, telecommunications, and water, sanitation and hygiene*. AusAID support to the *transport sector* has focussed on rehabilitation and maintenance of rural roads to increase access to markets and services. In 2009 some 70 kilometres of roads were rehabilitated and a further 147 kms were maintained. Adopting labour-based approaches for road maintenance created short term employment for almost 5,000 people, the majority of whom were women. A recent evaluation revealed that for the nation's most populous island Malaita, AusAID support has generated significant social and economic benefits. Improved road access resulted in increased incomes for local agricultural producers and increased the proportion of the population within one hour's travel of a health clinic from less than 50 per cent to more than 90 per cent. In the *telecommunications sector*, AusAID provided assistance to introduce competition and independent regulation of the sector. The establishment of an independent regulator will ensure that the full benefits of competition, in both improved services and reduced prices, can be realised. AusAID's support for *water, sanitation and hygiene* has been delivered in partnership with the Ministry of Health's Rural Water Supply and Sanitation Unit. In 2009 this resulted in 6,750 people in 38 remote communities obtaining access to safe water and improved sanitation.

**Vanuatu:** Infrastructure accounted for 27 per cent (\$11.3 million) of the Vanuatu country program in 2009. As in PNG, the Vanuatu infrastructure program transitioned from several discrete projects to sector based support. The focus was on developing essential infrastructure to support economic growth and service delivery, along with economic governance reform. The *Governance for Growth Program* (\$37 million from 2007 to 2012) delivered major improvements to the *telecommunications sector*. Support for deregulation provided by AusAID to increase competition has resulted in mobile phone coverage increasing to 85 per cent of the population. Amongst other things this has enabled the introduction of mobile banking. It has been estimated that telecommunications liberalisation has boosted economic growth in Vanuatu by a full percentage point, due in part to mobile telephony contributing to offsetting household vulnerabilities; reducing



business costs for small and medium enterprises; and expanding rural productivity. The first phase of the *Vanuatu Transport Sector Strengthening Program* (\$16.9 million over two years) commenced in 2009. In addition to delivering economic benefits the program will create employment opportunities by promoting labour based construction. The program will also support the design of a new cargo terminal and the implementation of management reforms to increase the efficiency of stevedoring operations, at Port Vila. It has been estimated that improving port performance could boost economic growth by up to three per cent.

**Global Programs:** AusAID has been able to leverage the global experience, technical capacity and financial muscle of the Asian Development Bank and World Bank by contributing to a number of bilateral programs and targeted multi-donor funds managed by the two banks. AusAID's contributions of \$52 million over the past three years to four funds managed by the Banks has reportedly leveraged investment funds from the Banks and the governments involved of US\$14.8 billion, that is, approximately 280 times the grant funds provided by AusAID. The target support areas include: increased private sector participation in infrastructure, new forms of development assistance that are results based (output based aid) and emerging areas of interest such as dealing with the consequences of rapid urbanisation.