

AUSTRALIAN AID TO WATER SUPPLY AND SANITATION SERVICES IN EAST TIMOR AND INDONESIA

EVALUATION REPORT

DECEMBER 2009



Australian Government

AusAID

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Published by the Australian Agency for International Development (AusAID), Canberra, December 2009.

This document is online at www.ode.ausaid.gov.au/publications

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ACKNOWLEDGEMENTS

This report was written by an external consultant, Eric Buhl-Nielsen. The report is based on country working papers written by an external team of experts comprising Eric Buhl-Nielsen, Penny Dutton and Sandra Giltner with assistance from Sue-Ellen O'Farrell, Australian Agency for International Development (AusAID) Indonesia Desk, Devi Setiawan, consultant, and Jennifer Donohoe The Office of Development Effectiveness (ODE). The evaluation was managed by Jennifer Donohoe, Evaluation Manager, ODE under the direction of Simon Henderson, Principal Adviser, ODE.

The team is grateful to all who contributed to the two country case studies on which this report is based. Their names are listed in the country working papers. Thanks also to AusAID staff and others who provided feedback on the preliminary findings and draft country working papers. Errors of fact and judgement are, as always, the responsibility of the authors.

ABBREVIATIONS

ADB	Asian Development Bank
AusAID	Australian Agency for International Development
CLTS	Community-Led Total Sanitation
CSOs	Civil Society Organisations
CPMU	Central Project Management Unit
CWSSP	Community Water Supply and Sanitation Program
GTZ	Deutsche Gesellschaft für Technische Zusammenarbeit
MDG	Millennium Development Goal
ODE	Office of Development Effectiveness
NGO	Non-Government Organisation
PAMSIMAS	Program Penyediaan Air Minum dan Sanitasi Berbasis Masyarakat
PMUs	project management units
RWSSP	Rural Water Supply and Sanitation Program
SANIMAS	Sanitasi Berbasis Masyarakat
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WASPOLA	Water and Sanitation Policy Formulation and Action Planning Project
WHO	World Health Organization
WSLIC	Water and Sanitation for Low Income Communities
WSP	Water and Sanitation Program

EXECUTIVE SUMMARY

Background

This evaluation examines the effectiveness of the Australian aid program in improving access to water and sanitation services for the poor. The findings are based on case studies of support to East Timor and Indonesia, which examined current Australian activities and those completed in the past five years. The evaluation seeks to highlight lessons to inform Australia's future support to the sector.

Australian assistance has been effective in improving access to water supply in the two countries studied. In East Timor, some 50 000 people have been provided with access to clean water through Australian financed projects. Targeted policy support provided by Australia in Indonesia contributed to some additional 4.6 million Indonesians accessing improved water supplies through a major national project financed by the World Bank, government and community contributions.¹ Results for sanitation have not been as strong; however, Australian support has had some notable successes in promoting innovative practices. Improving sanitation is more complex than improving water supply, given the need for behavioural change to accompany infrastructure development.

These results were achieved in the context of major constraints to the sector. Indonesia, as a middle-income country, has a relatively strong policy environment and is financially able to provide services; however, it can still benefit from access to the technical expertise, research and innovation required to ensure services reach the poor and to overcome regional disparities in service delivery. In East Timor, government capacity is low and institutional structures are weak. There is disruption from conflict, and in spite of available revenue from oil, a need for support to assist direct provision of essential services because of weak implementation capacity. Both countries lack reliable data and face the problem of coordinating a sector that includes elements of infrastructure, environment, health and education and multiple stakeholders from government and donors to civil society and individuals.

In Indonesia, overall government capacity is relatively high; however, progress is still required to improve local government capacity and to transfer responsibility for the sector more systematically to the sub national level. Government capacity in East Timor is relatively strong in terms of planning, but less so in terms of disbursements and project management. Performance of the water and sanitation sector is highly dependent on progress in wider public financial management and public sector reforms.

In both countries, Australia supported projects that have used their leading status and good relationship with the partner government to successfully harmonise the efforts of most donors and Non-Government Organisations (NGOs) working in the sector. As a result, coherence and coordination of external support has increased and related government transaction costs have been reduced. Australia has promoted the use of community-based approaches that have succeeded in reaching and empowering some very poor communities, often in extremely remote locations. The evaluation found that poverty analysis is not generally carried out, however, and that replication of these approaches has been mainly limited to donor-funded activities.

¹ WSLIC2, 12th supervision mission, 1-12 December 2008, Aide Memoire.

Sustainability is also a challenge for the sector. Greater attention to the post-construction phase is required as this is when schemes are most vulnerable to failure. While community-based management has significantly improved sustainability in some cases, some communities are unable to sustain systems themselves. In cases where communities are unable to self-manage, they rely on support from local government, and yet in both countries local government capacity building has not been prioritised.

Australian support in the two countries has been predominantly parallel in nature. Parallel projects are able to deliver services more quickly as they are generally more streamlined, better resourced and managed. These types of projects are suitable in very fragile contexts such as immediately post-conflict and humanitarian responses. If continued in the longer term, however, sustainability and government legitimacy may be put at risk. Developing countries' government institutions are rarely able to sustain the level of service delivery provided by donor projects as they lack the human resources, institutional and financial capacity to do so. Where fragility is an issue, government may be further constrained by unwillingness on the behalf of users to pay fees for maintenance and operations, particularly where the original infrastructure was donor or NGO subsidised. The longer-term goal of building sufficient institutional capacity to provide sustainable services without donor assistance will require an approach based on thorough institutional analysis and a strong commitment to phasing out external support.

Australia's activities in Indonesia provide a good example of how strategic technical assistance can achieve a high impact. By supporting broader service delivery and policy development activities through partnerships with the World Bank and the Water and Sanitation Program, Australia has achieved a much greater impact than it could through bilateral assistance alone. The high dependency on technical assistance personnel in East Timor to deliver project support reflects capacity constraints locally and technical expertise has been instrumental in delivering the service delivery gains. However, this dependency also poses challenges in attempts to transition to greater country ownership in the longer-term. The means of transitioning warrants further attention in the context of efforts towards greater alignment.

In both countries, many of the successes evident now can be attributed to the long-term and flexible nature of Australia's commitment. The assistance has been long term enough to test different approaches, monitor their results and revise them to ensure continuous improvement. In Indonesia, Australia moved quickly to respond to broader changes to the institutional environment brought about by decentralisation and has consistently supported innovative service delivery approaches. The East Timor program recognised the need to promote community management and to focus on improving sector coordination, both of which are reflected in the current project's design. The experience points to the importance of arriving at a balance between adhering to agreed workplans and proactive innovation.

Recommendations

To inform thinking about effective approaches in the future, the following recommendations are made and elaborated on in this main report.

1. Australia's assistance should be underpinned by better analysis and understanding of the institutional context, taking the status of the national sector framework and country systems as the departure point for future support. This will enable better-aligned and more relevant interventions that support broader reforms at the sector level and permit more strategic consideration of the most appropriate modalities.
2. Australia should broaden its support to build appropriate capacity across the public sector, the private sector and civil society. Longer-term sustainability will depend on building capacity for an appropriate division of roles and responsibilities between the different spheres.
3. Australia should actively adjust its approach to aid delivery in line with developments in the sector. This is particularly relevant in fragile contexts and should include contingency plans for reversals in progress.
4. Separate programs for sanitation and hygiene should be considered. While there are good reasons for integrating sanitation and water supply, there is increasing evidence that separate programs may deliver better sanitation results and enable closer alignment with the appropriate government organisations.
5. Australia should invest in national monitoring and evaluation systems. Project-based systems, even if effective, are expensive and often end with project termination. Funds and technical assistance are better directed towards simple and reliable national systems even if they are less informative about project specific impacts.
6. Greater attention on promoting gender equality is required. There is still a long way to go in the sector given the crucial difference gender makes for the effectiveness and sustainability of water and sanitation services. Australia should proactively open and maintain dialogue with sector authorities, making best use of the highly qualified technical assistance available to Australia.
7. Greater priority should be given to environmental sustainability. Particularly in middle-income contexts, especially those with high population densities or vulnerable ecosystems, the challenge will be increasingly not so much the delivery of services but how to ensure the sustainable supply of uncontaminated water. This is a complex and demanding area in which Australia can provide leadership.

CHAPTER 1: INTRODUCTION AND CONTEXT

This report presents the results of an evaluation of the effectiveness of Australia's contribution to improving the delivery of essential water supply and sanitation services for the poor on a sustainable basis. The terms of reference are reproduced at Appendix A. The purpose of the evaluation is to draw lessons about what has worked and what has not, to inform the development of improved approaches. This is one of three evaluations of Australian assistance to the delivery of basic services commissioned by ODE in 2008-09. The other two examine the health and education sectors.

Approach and methodology

The evaluation is based on two case studies, one conducted in East Timor, a fragile state, and the other in Indonesia, a middle-income country. It covers Australian-funded support to water and sanitation services that have concluded within the last five years or are currently ongoing. The focus is predominantly on rural water supply and sanitation because Australia's contribution has been mostly to rural areas in both countries. The case studies are documented more fully in separate country working papers that can be found on the ODE website: www.ode.aisaid.gov.au

The approach taken in each case study was first to assess the country's national sector framework: policies; the legal and regulatory set up; strategies, programs and plans; the institutions; budgets and financial performance; and crosscutting aspects such as gender and the environment. Within this national framework, the sector's performance was compared and analysed against best-practice benchmarks (the country reports provide more details on this analysis and a summary is provided in Appendix D) and donor activities and contributions mapped. The effectiveness and relevance of Australian support against these findings was then assessed, as were the relevance of the support and prospects for replication. This report pulls together the main findings from each country visit.

The methodology involved:

- > a literature review and analysis of available secondary data
- > a visit to each case study country, to conduct interviews with key stakeholders and collect supporting data
- > field visits to a number of districts in each country, to examine how Australia, other donor, partner government and NGO water and sanitation initiatives are performing in various contexts
- > debriefs with government partners and with AusAID representatives in-country and in Canberra to test initial findings and obtain feedback.

Appendix B and the individual country working papers set out the evaluation methodology in more detail.

Report structure

Chapter 2 presents background information to build understanding of the subsequent discussion of performance. It briefly reviews the water and sanitation sector in each country and summarises Australia's support to the sector. Chapter 3 discusses the effectiveness of Australian contribution to performance in the sector and the appropriateness of the approach taken. Chapter 4 makes recommendations, based on the study's findings.

CHAPTER 2: BACKGROUND

Country context

East Timor experienced significant turmoil and change following the referendum in 1999. Fresh outbreaks of violence in 2006 resulted in worsening security and destruction of infrastructure, undermining many of the gains made since 2002. The situation is only now stabilising. Poverty has increased since 1999.² Because of disruption and the sudden exodus of many experienced Indonesian civil servants, the public sector faces massive capacity challenges. The Ministry of Finance estimates that more than US\$2 billion has been received in foreign aid since Independence but this has not yet translated into the services needed to reduce poverty and sustain peace and democracy. Sweeping civil service, financial management and local government reforms offer the prospect of a better functioning context for service delivery.

Although government revenue has increased because of oil, implementation capacity is still low and infrastructure prioritisation inconsistent. Following massive injections of external advisory support in the early years after the referendum, the Government now wants direct support for services and direct investment rather than additional capacity building and advice.

Indonesia is a recent democracy that has started but not completed a radical process of decentralisation. Its economy has largely recovered from the economic shocks of the Asian financial crisis of 1997-98 and it remains to be seen how robust it will be in the current global recession. The scale of the country and diversity of its provinces and districts is a special challenge for the development of consistent, tailored policies and strategies in the water supply and sanitation sector. Indonesia faces a dynamic process of rapid urbanisation and increasingly complex development. Long-term poverty reduction shows promising trends nationally but with strong regional disparity and a fragility that could see many people slip below the poverty line.

Sector performance

A major challenge in assessing sector performance in East Timor and Indonesia is the lack of reliable data and a robust monitoring system. Coverage rates for water and sanitation in both countries are in Table 2.1:

Table 2.1: Sector coverage³

Sector/sub-sector		World Health Organization coverage (%) in 2004 (national statistics)	
		East Timor	Indonesia
Water supply	Rural	56	69
	Urban	77	87
Sanitation	Rural	32	40
	Urban	64	73

Source: World Health Organization, Country Status Report: <http://www.wssinfo.org/en/watquery.html> (accessed 29 November 2008)

² World Bank, 'Timor-Leste: Poverty in a Young Nation', November 2008.

³ The figures in Table 1 differ from national statistics, which are themselves not consistent—in part due to different definitions.

Improved water supply coverage is less in rural areas and sanitation coverage is behind water supply in both rural and urban areas. Sector performance in East Timor is among the poorest in the region whereas sector performance in Indonesia is among the best. There is reason to believe that coverage in East Timor has fallen since 2004 due to a high rate of population growth and an increase in the number of poorly functioning water supply and underused sanitation facilities (because of insufficient maintenance and lack of hygiene promotion activities).

In East Timor, the functionality of small community-managed schemes is highly variable, ranging between 10 per cent and 70 per cent. Generally, cost recovery is poor. In urban areas, it is reported to be close to zero and in rural areas it is chiefly in the most remote and poorest communities where 100 per cent cost recovery seems to occur. According to surveys carried out in 2008⁴, very few water user groups are operational which means functionality is more likely to decrease than increase.

In Indonesia, functionality rates for rural water supply and sanitation before the adoption of the community-managed approach were very low. A survey of the schemes supported by the Asian Development Bank (ADB) in the 1990s reportedly found less than 25 per cent were functioning. Data varies for schemes where a community-managed approach has been introduced. Recently constructed projects report functionality rates of more than 90 per cent but there is evidence that functionality rates fall to around the 70 per cent mark for schemes more than two years old.

Hygiene practice is not monitored systematically in East Timor or Indonesia but anecdotal evidence suggests it is quite poor. The contribution of poor water and sanitation to disease is not well documented in East Timor but better known in Indonesia. Diarrhoea and typhoid are among the four leading causes of under-five mortality in Indonesia.⁵ The Department of Health estimates that improving basic sanitation, washing hands with soap after defecation and treating household drinking water can together reduce diarrhoea cases by up to 94 per cent.⁶

In East Timor, the major problem facing the sector is the extremely low level of operation and maintenance. The contribution of water and sanitation services to reducing poverty and sustaining democracy and peace is potentially great but undermined by the low functionality of projects. The sector depends on civil service reform, public financial management and decentralisation processes over which it has little influence. A sector transition strategy for moving from the challenges of a post-conflict era to the demands of a longer-term, sustainable sector is absent. The tension between long-term capacity building and short-term physical investment to meet immediate needs is not yet resolved. Evidence from this evaluation indicates significant advances in policy and strategy development but ownership is flawed. Sector coordination is improving but information sharing, particularly between health and water organisations, is still inadequate.

In Indonesia, the major problems facing the sector are vulnerability of sector coordination and the completion of decentralisation processes. A sector monitoring and evaluation system is not yet in place, so information about the performance of policy across Indonesia's diverse geographical and

4 Triangle Génération Humanitaire (2008). 'Manatuto District Rural Water Supply Management Survey' Contract n° RDTL-07-06-206-C-0223—Final Report. (Survey data completed December 2007). p. 3.; Oxfam. Covalima District Rural Water Supply Management—Phase 1 Contract no. RDTL-07 06-206 C-0224 Ref: RDTL 75938. 30 September 2007–30 March 2008.

5 Contribution by Indonesia (2008), United Nations High Level Event on the Millennium Development Goals.

6 WASPOLA 2008, Minister of Health Launched 10,000 Villages Total Sanitation Program (sic): <http://www.waspola.org/home/content/view/158/77/>

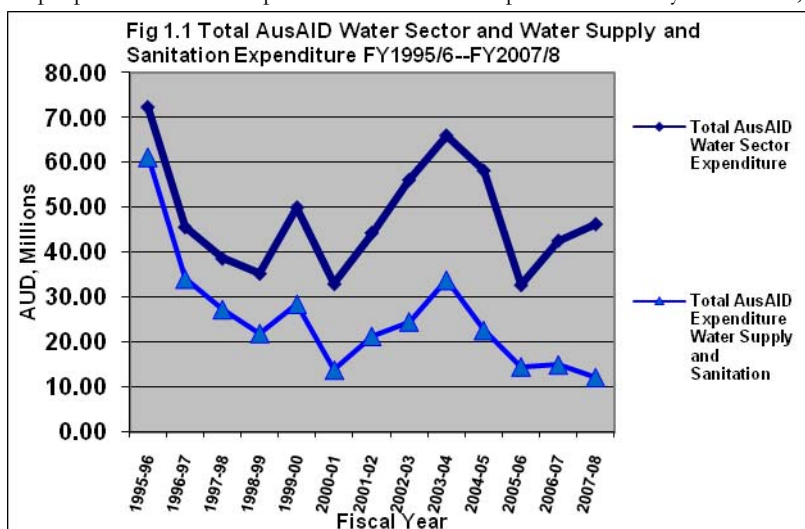
social circumstances is limited. The sector in general is not prioritised—until recently, this has been especially the case with sanitation.

In East Timor, the role of the private sector and the potential for self-supply are weak. Civil society is not active in the sector and so neither is its advocacy role. Poverty is widespread although detailed studies indicate strong concentrations of poverty in remote, rural areas, particularly in central and western regions. In Indonesia, the private sector and self-supply are much stronger and need to be encouraged further. The regulatory framework for the sector, however, is weak, especially for sanitation and environmental aspects. While the community approach is mainstreamed in theory, it is much rarer in practice. Local governments are knowledgeable and openly support community-based approaches but this is not reflected in budgets, cost norms or operational guidelines, procedures and instructions.

Appendix D provides more detailed information on the context and assessment of the national sector framework in the case study countries as do the separate country level reports.

Summary of Australian support to the sector

Across the Australian aid program, assistance to water and sanitation represents a relatively small proportion of total expenditure—around 1.5 per cent annually since 1995, and declining from a high



of 4.1 per cent in 1995-96 to just 0.5 per cent in 2007-08 (Figure 1.1).

Australia's engagement in the water and sanitation sector is broader than the two case study countries and includes urban water supply in Vietnam, Papua New Guinea and India and support for

policy development and the enabling environment through the South Asia and Africa Water and Sanitation Program hosted by the World Bank. Water safety planning is a focus, globally through support to the World Health Organization and specifically within the Pacific. Although aid to the sector is predominantly project-based, Vietnam is currently receiving budget support for the sector under a nationally targeted program. This support is being provided entirely through national systems.

In Indonesia, Australia has chosen to collaborate with the Indonesian Government and the World Bank through providing technical assistance to the Water and Sanitation for Low Income Communities (WSLIC) project. WSLIC is a large project funded by the Indonesian Government and a World Bank loan, and supplemented by contributions from beneficiary communities. The project is aimed at delivering improved water supply and sanitation services to the poor. By supporting this larger effort in the sector, Australia is making best use of its limited grant funds and is able to exert a level of influence and obtain a level of impact that is greater than the proportion of money invested.

The alternative—to set up an independent bilateral project—would not have been nearly as beneficial given the funding level.

In Indonesia Australia has also collaborated with the World Bank-hosted Water and Sanitation Program (WSP) to support the Water and Sanitation Policy Formulation and Action Planning Project (WASPOLA). This choice of partner has given Australia the opportunity to mobilise extensive long-term, in-country expertise and ensured continuity and credibility with both government and other donors. The relationship has also supported highly successful sector harmonisation efforts.

Australian support in East Timor focused on responding to the emergency need for water and sanitation infrastructure in the early years of the country's independence through the Community Water Supply and Sanitation Program (CWSSP). The support has recently been redesigned to have a greater focus on sustainability and capacity building and is provided through the Rural Water Supply and Sanitation Program (RWSSP). The RWSSP is being implemented through a managing contractor—as was the CWSSP before it—who coordinates with government and other sector stakeholders. Given the fragile nature of the state, this is the most effective way of delivering services in the short term. Greater emphasis on institutional change is required, however, to ensure services are sustained.

CHAPTER 3: AUSTRALIAN SUPPORT TO WATER AND SANITATION SERVICE DELIVERY

In assessing Australian support to improved water and sanitation service delivery, the evaluation poses two basic questions. First, how effective has Australia's contribution been in improving the services delivered to the poor? Second, how appropriate was Australia's approach, given the needs and context in the countries reviewed?

Effectiveness of Australian support

Poverty alleviation, health improvements and gender equality represent the primary objectives for Australian support to water and sanitation. Complementary objectives such as strengthening democracy; reinforcing the regulatory role of the public sector; strengthening the role of civil society; and increasing market efficiency by creating a competitive environment for the private sector are also potentially advanced through support to the sector. However, in practice, these complementary objectives have not figured prominently in Australia's work in either country.

This evaluation has examined effectiveness in terms of three major areas of Australia's contribution: delivering water and sanitation services—a strong focus of Australian assistance over the period; developing the institutional framework to support service delivery; and building capacity locally to enable services to be delivered. The last two areas are included as the means for sustaining and replicating the gains achieved in service delivery.

Delivering services

The delivery of basic water supply has been highly effective. Over a six-year period, some additional 4.6 million Indonesians have accessed improved water supplies as a result of WSLIC. Australia contributed to this result by supporting capacity building, monitoring and evaluation and policy dialogue. Australian funds were essential for ensuring that delivery systems were efficiently managed, enabling the project to operate on a large scale. In East Timor, some 50 000 additional people have accessed improved water supply as a result of the CWSSP, where Australian funds directly co-financed physical implementation.

Basic water supply has also been provided efficiently. While unit costs for water supply in East Timor are greater than in Indonesia—reflecting in part the higher costs of operating in a more fragile environment—the results achieved in both countries compare favourably with experiences elsewhere.

Notwithstanding data limitations, it is clear that delivery has been less effective for sanitation than for water supply. Statistics on the delivery and use of sanitation facilities are much harder to obtain and sanitation is not a strong government priority for either country. In spite of this overall finding, there have been some recent successes. In Indonesia, for example, policy intervention supported by Australia promoted the introduction of innovative sanitation approaches in poor urban and peri-urban communities that lacked improved sanitation (Box 3.1).

Observations at field sites visited during the evaluation indicate, albeit anecdotally, that project impact has already generated downstream benefits in some cases, such as health improvements, improved

village governance and re-investment of income from water services to further extend the water supply system and provide community loans.

Australian support in both countries has succeeded in reaching some very poor communities, often in extremely remote locations, but the evaluation found a general lack of poverty analysis and factors that could potentially exclude the poor. The demand responsive approach applied in each country resulted in services being provided to people who were without adequate services and who were, by definition, water and sanitation poor. But the AusAID project did not explicitly assess how to make the projects more pro-poor or link up with other government systems for supporting the poor. The districts supported (three in East Timor and 21 in Indonesia) were not the absolute poorest and were chosen against a broad range of criteria that included technical and operational considerations. In Indonesia, poverty targeting was at household level rather than at community or geographic level. The value of household level targeting for communal services is questionable. Some poor communities are left out if they cannot demonstrate cohesive community management or if they are situated geographically where only complex technological solutions are possible.

The gender dimensions of water and sanitation services have received insufficient emphasis in Australian support.

Women and girls bear a greater burden in fetching water and in health care, and often have the greatest self-interest in

Box 3.1: Breakthrough progress in sanitation—Indonesia

Community-Led Total Sanitation (CLTS) is a subsidy-free approach adopted by the Ministry of Health following a WASPOLA-organised study tour. Six districts piloted the approach in 2005, with WASPOLA support and training. Once evaluated, the findings from the pilots were disseminated widely with WASPOLA support. The Ministry of Health has now adopted CLTS as an official program and has set a target of 10 000 villages using national budget funds. Already more than eight programs have adopted the methodology and so far, since 2006, more than 600 villages have become open defecation free.

Sanitasi Berbasis Masyarakat (SANIMAS) is a community-based, informed choice, urban sanitation approach. Funding is provided by central and local government and NGOs, with a four per cent contribution from beneficiary communities. WASPOLA implemented and evaluated field trials of SANIMAS in densely populated peri-urban areas in seven cities. The Ministry of Public Works has now adopted SANIMAS as an official program and has issued guidelines, strategies and technical instructions for local government departments. From an initial pilot of less than 20 schemes there are now 300 schemes operating, all funded through the national budget.

sustaining the facilities built. In both countries, policy is conducive to addressing gender inequality issues, but in practice, traditional attitudes prevail. Gender issues have been mainstreamed into strategies and plans in Indonesia and there have been attempts to do so in East Timor, but little progress has been made. The projects have been loyal in applying government-accepted quotas on involving women in decision making, operations and management of services. However, results have often been superficial. There is yet to be an in-depth understanding of gender constraints, including aspirations, capacity building and opportunities for empowering women. Demand for assistance to improve gender equality in the sector has in general been disappointingly low but AusAID projects have not explicitly focused on increasing this. While the projects have accessed national and international expertise, this has led only to a series of reports that were sidelined in implementation.

Some Australian schemes are being sustained. In the absence of post-construction support and local government involvement, however, many are likely to fail well before their design lifetime. The functionality of community-based schemes is vulnerable, particularly so in fragile environments. In East Timor, a 2006 survey found that more than 90 per cent of the systems built in the sector between 2002 and 2006 with Australian funds were still functioning satisfactorily but less than 10 per cent of water user groups were operational. Visits to several project sites found that small maintenance problems were quickly turning into infrastructure failure in areas with non-operational user groups. Without a functioning water user group, community management is highly likely to fail and eventually this will cause the water supply systems to fail. The same survey showed that approximately 70 per cent of the toilets constructed are still being used, which is encouraging. In Indonesia, best estimates by the evaluation team suggest that longer-term functionality is around 70 per cent. There are inconsistencies in what is meant by functionality, which in part explains differences in reported figures.

The community-based management model has proved itself in Indonesia by vastly increasing functionality rates, which according to the Indonesian Planning Ministry had fallen to below 25 per cent under previous management approaches that did not involve communities. Nevertheless, community-based management has not been universally successful. This would indicate the need to consider a range of management models to cater for the different situations found in rural and peri-urban areas. For example, commercialised models or local government-run models may be more appropriate for multi-village or larger schemes where communities are unlikely to manage collectively or where technological demands are higher.

Community reference groups, consumer advisers and community consultation mechanisms are also valid ways of ensuring participation. More attention is needed on the role the local private sector can play as both constructors and utility managers. Greater sustainability will be achieved by ensuring that the support, more so than at present, extends to the private as well as to the public sector and supports local government in its long-term governance and regulatory role.

Even in the poorest communities, consumers are the main financiers of water supply and sanitation and in practice; there is often strong demand, even in relatively poor neighbourhoods, for individual household water connections and higher levels of service. The objectives and strategies supported by Australia have not always reflected this demand. As a consequence of the mismatch in consumer and project objectives, the systems observed in East Timor and Indonesia are not always used as intended and in some cases function poorly as haphazard house connections are made that lead to waste and stretch the capacity of the system to serve all.

Wider uptake and replication of the approaches introduced with Australian support has been patchy. Governments have tended to accept new approaches for external projects but not apply them to their own practices, especially when the new approaches are more costly or imply significant investment in capacity building or community mobilisation. The exception has been the rapid adoption in Indonesia of the CLTS approach and a program like SANIMAS to address lack of proper sanitation in urban communities.

The technologies used in AusAID-supported projects in East Timor and Indonesia are simple, robust and affordable. Spare parts are available locally and basic skills can be easily developed to carry out regular maintenance. The social approach adopted for participatory community involvement is pragmatic and makes use of local skills.

In order to encourage wider uptake through governments and community projects significant changes to existing practices and financial arrangements are required. At present, there are no mechanisms for governments to hire facilitators to carry out capacity building and to ensure community management systems are established. Without these, user fees cannot be collected and operations and maintenance are unlikely to take place. Community mobilisation requires a long lead-time, which does not suit current government budget and implementation constraints. Obtaining and training sufficient facilitators to engage communities on a national scale presents another challenge for replication, particularly given that other national programs are using similar methods.

Environmental challenges have been handled professionally but they will require more attention in the future, especially in densely populated countries like Indonesia. Australian-supported projects have been at the forefront of introducing good environmental practice. In both Indonesia and East Timor, water resources have been developed in line with their safe yield and steps taken to protect water sources from future contamination. Significant effort has also been made to encourage people to take up sanitation systems to reduce effluent flows into rivers and streams. Due to lower population density, the environmental situation is much more favourable in East Timor than in Indonesia. Indonesia, in common with many middle-income countries, is facing a growing environmental challenge. The focus of external support will therefore need to change from water supply to catchment protection, treatment and adequate disposal of wastewater and human excreta. The projects, as presently designed, cannot cope with the environmental demands already upon them. Although there is no widespread evidence that these projects are reversing the gains in service delivery achieved, there is a growing concern that it will not be long before they start to do so—probably well before the end of the technical lifespan of the facilities.

Supporting institutional arrangements

Institutional arrangements refer to the policy and legislative environment, organisational roles and responsibilities among different actors and financing arrangements in the sector. It has long been recognised that supportive institutional arrangements are important for development progress.

In both countries, Australia support for direct service delivery has not been sufficiently grounded in an analysis of the institutional arrangements nationally in the sector. Neither in East Timor nor in Indonesia has project design used an assessment of the national sector framework as the point of departure. Projects have constructed their own logical frameworks and consequently have not related clearly to ongoing national programs and practices. The focus has been on delivering services, not on improving the delivery systems themselves and, as such, opportunities to address systemic challenges in the sector have been overlooked.

The public sector's regulatory role is relatively unsupported even though it is essential to creating an efficient market for water and sanitation services and for stimulating the private sector. Environmental management is lacking, especially in Indonesia.

There is potential for engaging more directly on water supply with local government and the private sector in Indonesia while supporting the national government to provide public goods such as hygiene promotion and to correct market failures in remote and/or geologically challenging areas.

Civil society organisations have primarily been engaged as sub-contractors to implement water and sanitation programs. Their roles in innovation, demonstration, advocacy and replication have been largely overlooked.

A tendency to bypass government where it is weak has led to missed opportunities to strengthen institutional arrangements. In East Timor, the AusAID-supported projects subcontract NGOs who then engage with communities to deliver water and sanitation services. The Government receives little recognition for this provision of services and does not have the resources to monitor or support operations and maintenance. This leaves Government with the thankless task of explaining to communities why it is unable to repair the systems when they break down or extend them to meet increasing demand. An opportunity to reinforce nation-building efforts has therefore been missed. In Indonesia, decentralisation is taking root following the reforms of 2001. Local government is building its capacity to channel subsidies to communities and ensure efficient delivery of basic services. However, WSLIC finances and interacts directly with communities, which in turn has tended to consign local government to a spectator role. The next phase of WSLIC, called PAMSIMAS—*Program Penyediaan Air Minum dan Sanitasi Berbasis Masyarakat*—is more closely rooted in the mandate of local government.

Support for policy development has been more effective in strengthening institutional arrangements. WASPOLA's role in Indonesia in improving coordination between government agencies involved in water and sanitation is widely recognised as an outstanding achievement. For example, the National Drinking Water and Environmental Sanitation Working Group has achieved unprecedented coordination between government agencies and Ministries that had previously worked in isolation. This has given the Government impetus to coordinate more widely on water and sanitation approaches and the ability to coordinate donors. While there is some uncertainty about future funding arrangements for the group, the success of the model is apparent by the desire of the Planning Ministry to scale up and to include sub-national working groups on all water and sanitation projects. Currently 200 sub-national working groups have been established, including in 15 districts where the United Nations Children's Fund (UNICEF) is implementing water and environmental sanitation projects.

Building capacity

In addition to providing water and sanitation services, Australian support in both countries has sought to build local capacity to do so. In East Timor, a capacity building strategy was developed for this, with indicators to help monitor progress. In spite of some successes, the performance of capacity building support has been mixed. **There is evidence of greater capacity in the sector but this has a narrow focus, principally at the level of individuals.**

In Indonesia, support for physical implementation of water and sanitation services has built strong capacity among staff and consultants in project management units (PMUs) and within village governments and user groups. This is due to the focus on the efficient and effective management of WSLIC. Of course, once the project ends and the PMU disbands, the skills of individuals will be available to other projects and to a certain extent to government departments. Nevertheless, the temporary nature of the project means this is a sub-optimal result.

In East Timor, long-term capacity building at the individual level has had some success. Many of the most experienced and highly competent technical staff working in the sector were trained through AusAID projects in the 1990s. NGOs and project partners have also benefited from AusAID capacity building activities and have been exposed to efficient working practices. Individual expertise is likely to continue long after projects are completed; however, the NGOs are unlikely to use this capacity once the funding dries up and some will probably disband altogether. In a fragile state, individual capacity building will often be the easiest to achieve, but it is necessary to recognise when the country situation has developed sufficiently to focus on institutional capacity building to avoid perpetuating the conditions for structural instability and chronic low capacity.

Improvements in capacity are at risk without an effective transition of responsibilities to local agents. In East Timor, the community capacity to manage water and sanitation facilities was developed systematically through the CWSSP program using NGOs employed for this purpose. Because communities are not static, however, new members need to be trained and the new, cooperative approaches to facility management reinforced. At present, there is no mechanism for refreshing or developing these skills and local government lacks the funding to provide sustainable services now that the project is complete.

In Indonesia, capacity built at village government level appears highly effective but in most instances it, too, will need to be reinforced and renewed if it is to be sustained over the technical life of the infrastructure built through the WSLIC project. However, there is no mechanism for maintaining local government capacity in this respect. The role of district government has been under emphasised and to an extent even overlooked in the effort to reach communities as directly as possible. Because the project does not work through district government, little capacity has been built at that level.

As a result, there is a gap between capacity and the need to provide post-construction services. This has led to growing recognition that systems sustainability is highly vulnerable. The direct community approach is common in Indonesia and was perhaps the only practical approach when decentralisation was either absent or new and ineffective. Progress in decentralisation now offers opportunities to engage with local government and to recognise it as a key target for building capacity and with it improving sustainability. The design of the next project (PAMSIMAS) is already exploring these opportunities.

Channelling support through individual, separate projects has not been an effective means of building organisational capacity. In East Timor, district-centred government prioritisation and participatory planning were introduced with Australian support and have been partially established within the national water authority. The use of community-based approaches has been partially institutionalised in government systems and there are plans to support the post-construction role of local government. However, building the capacity needed for other crucial government systems, such as administration, record keeping, financial management, procurement, contract management and construction supervision, has been less impressive. Even now, after nearly eight years of post-independence support and nearly 20 years of Australian support to the sector, performance of government procurement, planning and construction management is not much changed. The systems developed through the CWSSP were different from government systems and while they worked better because they were more streamlined, better resourced and better managed by supportive leadership, they are not readily transferable to government.

Indonesia has achieved some notable success in changing organisational approaches to sanitation, through the CLTS and SANIMAS. It seems government was convinced that these approaches could solve problems that had long challenged the sector. It also helped that both CLTS and SANIMAS were anchored in organisations that had the relevant mandate, making subsequent adoption and integration into local systems more straightforward.

In contrast, while policy support for water supply in Indonesia has changed the mindsets of key staff and individuals in government departments it has not had an appreciable impact on practice. Government officers appreciate the community-based approach, the importance of community contributions and the need for water user groups, but they do not systematically implement these practices in their own investment programs. In part, this is because the instructions, cost norms, rules and regulations around the employment of facilitators are not in place. As a result, individuals within government cannot make full use of their newfound knowledge.

Australia's approach

This section considers how appropriate Australia's approach was in light of the circumstances and needs of the countries studied. It focuses on four areas that impact on the effectiveness of Australian aid in the sector:

- > harmonisation of donor support
- > alignment with partner governments
- > use of technical assistance
- > monitoring and internal management arrangements.

Harmonisation of donor support

Australia's efforts have supported increased coherence and coordination of external efforts—

an achievement widely recognised by government and other donors alike. In East Timor and Indonesia, AusAID supported projects have used their leading status and recognition with government to help harmonise the efforts of most if not all other donors and NGOs successfully. In East Timor, a recently launched project supported by the United States Agency for International Development (USAID) follows the approach developed by AusAID and endorsed by the Government. In Indonesia all major donors, including the ADB, the German international aid agency (*Deutsche Gesellschaft für Technische Zusammenarbeit—GTZ*), UNICEF and a wide range of NGOs, follow the AusAID-developed and government-endorsed community-based strategy. The results include a coherent and consistent methodology for capacity building in communities as well as common approaches to training community facilitators. It also seems likely that transaction costs for partner governments have been reduced, as other donors have not needed to prepare their own policy or project strategies and have been able to move more quickly into implementation.

Alignment with partner governments

Australian support in both countries has aligned with partner government objectives. However, progress towards alignment with partner government systems and processes has been disappointing.

Progressive alignment has not been consistently pursued as part of Australia's strategy. In neither country has AusAID developed an explicit alignment strategy, based on a thorough assessment of the national sector framework and taking into account both challenges and opportunities in government systems.

In East Timor, following five years of post-independence support, AusAID outlined a four-phased approach to greater alignment in the sector and this was incorporated into the project agreement between the two governments (Box 3.2). The original intention was to use the phases as a way of progressing to greater use of government systems rather than establishing excellent but ultimately temporary project standards and systems. However, this approach has not yet been followed up.

In Indonesia, policy support is better aligned with government systems. National agencies are able to lead in the sector and there are established coordination mechanisms for the many different projects being implemented. Nevertheless, for the WSLIC project, although government provides more than half of the policy implementation and coordination costs, these expenditures are financed from temporary rather than permanent budget lines. At local and national levels, the coordination bodies that have been set up are likely to dissolve once external assistance is withdrawn. A transition from the independent project modality to a national program within three years (PAMSIMAS) is being designed as part of the third phase of support to the sector.

Parallel projects have not consciously 'shadow-aligned' with partner governments. AusAID projects have tended to be designed as operations in their own right, not as contributions to government objectives. They have been effective in the short term, but have achieved limited links with partner government processes. In the words of one senior official in East Timor: 'We support your plans, rather than you supporting our plans.' The lack of a thorough assessment of the national sector framework has created a parallel-project approach that has not been aligned to government systems. This has put long-term sustainability at risk.

Box 3.2: Intended RWSSP East Timor alignment strategy

The design called for four phases:

Phase 1—Planning, contracting and management undertaken by the RWSSP managing contractor.

Phase 2—Planning undertaken by the East Timor government, and contracting and management undertaken by the RWSSP managing contractor.

Phase 3—Planning and management undertaken by the East Timor government, contracting undertaken by the RWSSP managing contractor

Phase 4—Planning, contracting and management undertaken by the East Timor government.

To operationalise this alignment strategy, a series of benchmarks and triggers will need to be set to enable progression from one phase to the next. Similarly, minimum standards of practice and the safeguards and assistance needed to ensure that these standards are not breached will need to be defined. Finally, a process for gradually raising the level of performance from the minimum standard to a good standard is needed. The original strategy does not necessarily imply that the four stages could be reached within the time span of a single project. Especially in a fragile state, the process will likely take much longer.

In East Timor, the RWSSP (and the CWSSP before it) is managed by a contractor and implemented by international and national NGOs under subcontracting arrangements. The managing contractor is highly effective and the approach provides a secure and fast means of ensuring service delivery. During the early years of East Timor's independence, this approach had strong merits. However, without conscious effort to mirror government

processes or support institutional capacity building, the projects have bypassed government and developed approaches that are not fit for subsequent adoption and replication. In Indonesia, implementation of WSLIC is managed by a Central Project Management Unit (CPMU) comprising a mix of consultants and government employees. Infrastructure is constructed through tendering to the local private sector. The solution is effective but again is removed from internal government operations and lacks an established recurrent budget. In practice, the solution is similar to the managing contractor modality—both involve parallel decision making, reporting and accountability chains.

Use of parallel projects has also encouraged oversimplified institutional arrangements. In East Timor, the RWSSP is anchored in the water authority within the Ministry of Infrastructure. This corresponds to the mandate for water supply but not to the mandates for sanitation and hygiene promotion, which are in the Ministry of Health and the Ministry of Education. An aligned approach would require the project to be managed jointly by all three Ministries, which would be more complex but ultimately better matched to the aims of assistance.

In Indonesia, a similar challenge faced WSLIC during its first phase when it was originally anchored in four different line agencies. For simplicity, the second phase (WSLIC2), also supported by Australia, was located in the Ministry of Health but problems in technical quality and isolation from government procedures arose because this Ministry's mandate did not extend to the construction of water infrastructure. The third phase being designed (PAMSIMAS), sees a return to coordinated management by the four line agencies that hold the mandate of water supply and sanitation with Public Works as the lead agency. While this implementation arrangement is more complex, it is also better aligned.

Use of technical assistance

The need for, role of and volume of technical assistance varies considerably in the two countries studied, reflecting in part differences between a middle-income country and a fragile state. On balance, the evaluation concluded that Australian technical assistance was largely appropriate though the degree of dependence on it in East Timor should be reduced in the move towards greater alignment.

Technical assistance to the water and sanitation sector in Indonesia has been tailored to country circumstances. In Indonesia, finance is relatively accessible either through internal revenue or through loans, as is the availability of qualified labour for the sector. What is missing is exposure to innovative ideas and approaches and technical advice of a strategic and policy nature. All of Australia's support to project and policy activities has been in the form of technical assistance. This technical assistance supplements large investments funded through government revenues and loan funds. It also complements other donors' project activities.

Australia provided A\$11 million in technical assistance to WSLIC2 out of a total budget of US\$106 million (or less than six per cent, which is low by international standards). There is only one long-term international expert, who is the counterpart to the project leader and under government contract. The remaining funds are used to pay for long-term national staff and short-term consultancy inputs. So far, the arrangement has worked well although long-term staff are often not paid for months at a time due to government budget cycles and procurement rules that make it difficult to contract consultants over multiple financial years, and it is doubtful if the arrangement would suit any but the most patient and accommodating of experts. The WASPOLA program is similarly staffed with a single long-term international project manager supplemented by national staff and short-term experts. The total volume of Australia's technical assistance support to WASPOLA is A\$10 million. This is executed by the WSP.

Australian technical assistance has been strategic, achieving high impact at low cost mainly by complementing large loan funds from the World Bank as well as co financing from the Indonesian government and communities, both in cash and in-kind. Experience in Indonesia also endorses the approach of simultaneously supporting institutional development and accompanying investment (alone or in concert with other donors or government programs).

Support in East Timor has been heavily dependent on technical assistance personnel due to country circumstances. Transitioning to a more sustainable model is a challenge. While the country is resource rich, the water and sanitation sector receives very little financing and its ability to spend is limited by low implementation capacity. The scope to absorb advice is limited because of small numbers of well-qualified government technical and managerial staff. Around two-thirds of Australian support to the sector in East Timor has been in the form of long- and short-term technical assistance personnel who manage and implement the project. The remaining one-third supported physical construction of water and sanitation facilities and a variety of community mobilisation and local capacity building activities.

The proportion of funds allocated to technical assistance personnel is very high in East Timor compared to other countries. In part, this is explained by the lack of government capacity during the early years of Independence and the dearth of private sector skilled resources. The CWSSP took on full responsibility for service delivery in the districts in which it operated and was staffed accordingly, with technical assistance personnel operating primarily in executive roles rather than in an advisory

capacity. The relatively heavy expatriate content (especially short-term personnel) is also a factor explaining the high proportion of cost allocation to technical assistance. The managing contractor has used some regional personnel and this seems a very promising approach. Nevertheless, more generally, analysis of the need for and appropriate role of international technical assistance personnel has not been formally documented. International personnel support all areas of the project. Decisions on what project proposals to support are taken by the team leader rather than through the Program Management Group, while technical assistance staff control the financial and human resources. While the high level of technical assistance personnel and its primary focus on providing capacity may have been necessary due to country circumstances in the early days of Independence, there is a need to reduce the amount of gap-filling technical assistance as the sector develops—to balance with the need for institutional capacity building and investment activities. The balance may have been struck earlier had the original four-phase alignment plan been followed.

A common success factor for technical assistance in East Timor and Indonesia is the long-term nature of the commitment. Technical assistance support extended over several project cycles during a period of more than 10 years. It is unlikely that the same or even proportionate results would have been achieved if technical assistance input had been withdrawn after three years, as was envisaged in some project documents. Although technical assistance will need to adapt and change its focus, the experience in both East Timor and Indonesia indicates that gains can be made.

Another success factor is the flexibility and innovation provided by technical assistance personnel. In Indonesia, advisers shifted their focus to the rural strategy and on creating mechanisms for multi-sectoral coordination once it became obvious that efforts to establish a policy for the urban sector would not yield results. Technical assistance support has also been used successfully to pilot innovative approaches. Examples include the active promotion of sanitation without subsidies and the use of NGOs as implementing agents; both of which have succeeded in East Timor and Indonesia. The level of trust between the Government, those providing technical assistance and the donor is crucial in balancing adherence to agreed workplans and innovation.

Monitoring and internal management

External monitoring of Australian support has been carried out regularly and has been effective. In Indonesia, World Bank supervision missions produce annual progress reports and in East Timor, external experts monitor progress every six months. The high frequency of monitoring missions to East Timor has proved useful in the program development phase but it should be reduced once implementation begins.

Project monitoring systems, however, have been narrowly focused and overly complicated, limiting their value. Project monitoring has been detailed and often very expensive. They are designed to serve only project purposes with little contribution to improving sector information systems. Efforts might have been better directed at strengthening national systems to produce simple, reliable data for the sector, in particular for sanitation and hygiene where data is poor. The proposed monitoring and evaluation system for the RWSSP in East Timor has repeated the errors of the past by being exceedingly detailed and internally focused.

Notwithstanding their dedication and ability, AusAID staff at Post have struggled to support projects, because of their lack of sector expertise, demands on their time and frequent staff turnover. Most staff have not been trained in or widely exposed to sector-wide approaches and the implementation of alignment principles. They also have to operate in a complex environment with government and other donor staff. A pragmatic level of delegation to the partner organisation in Indonesia (World Bank and the WSP) and to a well functioning managing contractor in East Timor (supplemented with regular support from AusAID in Canberra) has been used. This, however, limits the capacity of AusAID staff to initiate changes in the way assistance is provided.

This situation may in part explain the delays and confusion that has at times occurred during the transfer from one phase of support to another. In East Timor, for example, the bridging period between the CWSSP and the RWSSP was protracted because of considerable variation in technical opinion within AusAID and among its consultants. Similarly, in Indonesia design considerations for the next phase of support have been unnecessarily complicated and time consuming.

CHAPTER 4: RECOMMENDATIONS

To inform thinking about effective approaches in the future, the evaluation team offers the following recommendations.

1. **Australian assistance should be underpinned by better analysis and understanding of the institutional context**, taking the status of the national sector framework and country systems as the departure point for future support. This will enable better-aligned and more relevant interventions and permit more strategic consideration of the most appropriate modalities; be that sector budget support or some form of project. It will also support better understanding of the different strengths and potential roles of key actors in government, the private sector and civil society. This recommendation can be implemented by making full use of common diagnostic tools that are already operational in most countries and supplementing these with sector specific assessments as necessary.
2. **Australia should broaden its support to build appropriate capacity across the public sector, the private sector and civil society.** The potential roles of government, private sector and civil society have received relatively limited attention beyond their direct contribution to the delivery of project-funded services. Longer-term sustainability will depend on building capacity for an appropriate division of roles and responsibilities between the different spheres, and the role of government—in regulating the sector, providing post-construction support and nation building—should not be overlooked or undermined. Implementation of recommendation 1 will be a starting point for action on this, providing an assessment of how the sector functions, what the needs are and what other support is being provided. This may include support for recurrent funding for government.
3. **Australia should actively adjust its approach to aid delivery in line with developments in the sector.** This is particularly relevant in fragile contexts and may include reversals in progress. Regular assessment of the capacity of government and other actors are required to allow Australia to adjust modalities and its use of government systems. AusAID and project staff will also need to be trained and become familiar with alternative modalities. Provision of best practice examples may also help in this regard.
4. **Consider separate programs for sanitation and hygiene.** Although there are also good reasons for integrating sanitation and water supply, there is increasing evidence that separate programs may deliver better sanitation results and enable closer alignment with the appropriate government organisations. As a starting point, assessment of how sanitation and hygiene services are currently provided will help identify scope to support separate programs.
5. **Australia should invest in national monitoring and evaluation systems.** Project-based systems are expensive and they produce data only for project areas and often end with project termination. Funds and technical assistance are better directed towards simple and reliable national systems even if they are less informative about project specific impacts. Australia needs to engage in a debate with partners on how to strengthen the evidence base for the sector and to ensure cooperation between sectors for monitoring and evaluation where appropriate. At the same time, Australian supported projects should elevate their own monitoring to consider effects on national sector performance beyond a rather narrow focus on project specific activities.

6. **Greater attention on gender equality issues is required.** There is still a long way to go in the sector given the crucial difference gender makes for the effectiveness and sustainability of water and sanitation services. Australia should proactively open and maintain dialogue with sector authorities, making best use of the highly qualified technical assistance available. Australia should use its influence and its relatively flexible grant funding to leverage support within government and from other donors and multilaterals for including meaningful gender analysis, design and practice in project development and implementation.
7. **Greater priority should be given to environmental sustainability.** Particularly in countries with high population densities and/or vulnerable ecosystems, the challenge will be increasingly not so much with the delivery of services, but how to ensure environmental sustainability. This is a complex and demanding area where Australia can provide leadership.

APPENDIX A: TERMS OF REFERENCE

Water Supply and Sanitation Sector Evaluation

Series—Improving the provision of basic services for the poor

Background

During 2008-09, the ODE will evaluate the Australian aid program's performance in three key service sectors: health, education and water supply and sanitation. These terms of reference relate to the water and sanitation sector evaluation. Improving basic services for the poor was identified as a significant challenge for the aid program in the ODE 2007 Annual Review of Development Effectiveness.

A greater focus on aid effectiveness and increased spending on water supply and sanitation has given rise to the need to assess various aid modalities and their relative benefits in different settings. Some competing priorities need to be considered such as the long-term objective of building capacity for sustainable improvement versus the immediate needs of the poor for enhanced service delivery. There are also questions over how to maintain effectiveness whilst scaling up efforts in the sector, particularly where capacity is an issue.

This study seeks to evaluate the effectiveness of contemporary aid delivery mechanisms to improving water and sanitation service delivery to the poor. A focus on two case study countries, East Timor and Indonesia, will allow the evaluation to comment on different delivery mechanisms and potential areas for future improvement.

Purpose

To inform understanding of how Australian aid can support sustainable improvement in the delivery of essential water and sanitation services. The evaluation will do this by assessing the effectiveness of previous Australian support and drawing out lessons on what has worked and what has not, in order to identify improved approaches. It will also indicate what should be continued, and what Australia should be doing differently. A key role of the evaluation will be to identify the factors that explain the results observed and consider the implications for future support.

Scope

The evaluation will include a desk review, case studies and field visits. It will review major Australian activities supporting the delivery of essential water and sanitation services completed within the last five years and assess their contribution to water and sanitation service performance in recipient countries.

It will also consider where possible the extent to which current and planned activities reflect the lessons of previous support to the sector. 'Water supply and sanitation system' is defined broadly to include all stakeholders involved in financing and delivering essential water and sanitation services, including private sector and not-for-profit organisations as well as public sector water and sanitation

bodies. The evaluation will examine the effectiveness of joint efforts in the sector. It will not attempt to attribute results to Australian funds in a narrow sense.

The evaluation will address the following core question:

Is the approach used by the aid program to improving the delivery of essential water and sanitation services to poor women, men, girls and boys effective?

Subsidiary questions will be:

- > Does Australian assistance to the sector meet the needs of poor men, women, girls and boys?
- > Is the approach taken by Australia to provide support cost effective?
- > Is the aid provided likely to have sustained results?
- > Are the current approaches scalable and/or applicable to different countries/regions?

Example questions are outlined at the end of this Appendix.

Management arrangements

The ODE will manage the evaluation and will procure a team of independent consultants to conduct the evaluation. The team will consist of two to three consultants with (collectively) significant experience in:

- > water and sanitation service delivery (technical and institutional knowledge)
- > aid modalities: bilateral, multilateral, sector-wide approaches etc.
- > gender equity impacts of aid and engendering aid programs
- > public financial management
- > community development
- > governance
- > social development
- > evaluation methodology and practice
- > country knowledge and experience in selected evaluation field sites.

Ideally, the team will also include a representative from the partner government and a representative from the ODE. Local consultants known to both the Post and partner government may be employed to assist in the logistical arrangements or preliminary research where required.

A reference group will be set up to provide technical and quality review of the evaluation terms of reference, methodology and draft report and may include among others:

- > members of AusAID's infrastructure, gender and fragile states thematic groups
- > Australian, international or local NGO representatives
- > technical experts unable to join the field team
- > representatives from desk or Post
- > others with specialist knowledge (i.e. gender) to ensure high evaluation quality
- > the reference group will provide advice to the team leader but will not have a management role.

Implementation

The evaluation will include several phases. Time permitting, preparation will include a brief visit by the evaluation team to Canberra to consult with thematic and country representatives to gain a deeper understanding of the context in which water and sanitation sector programs have been developed.

Preparation phase

- > consultation with desk and Post
- > document and data review and analysis (sector and country)
- > development of evaluation methodology and fieldwork guides
- > development of evaluation tools and report outline
- > identification of key stakeholders for interview
- > develop field research plan
- > consultation with associated AusAID staff.

Outputs for preparation phase

Synthesis report summarising Australian support to the water and sanitation sector and the available evidence on results:

- > background paper on intended fieldwork locations
- > detailed research methodology and evaluation tools
- > list of key stakeholders for interview
- > field research plan.

Fieldwork phase

The evaluation team will conduct fieldwork in East Timor for approximately 10 days and in Indonesia for approximately 15 days. The ODE will liaise closely with Posts to coordinate with existing planned reviews and ensure there is no duplication or avoidable burden on the programs.

Fieldwork will primarily be based on semi-structured interviews and focus group meetings (as appropriate) with key stakeholders identified by the team including:

- > AusAID field staff
- > government officials at different points in the delivery chain
- > managing contractors (technical assistance personnel)
- > other donors and multilaterals
- > private sector
- > relevant NGOs/Civil Society Organisations (CSOs)
- > intended beneficiaries.

Fieldwork will be conducted at a number of sites as well as at the central level in each location. Site choice will be informed by inter alia available poverty analyses, variation in water and sanitation

service providers and variation in outcomes of Australian support and performance of the water and sanitation services.

Outputs for fieldwork phase

- > a summary of all information acquired from key informant interviews, meetings, focus group discussions and other activities carried out during fieldwork
- > data and reports collected from field locations
- > other documentary evidence such as photographs and maps
- > draft country reports for each country visited.

Report writing, review and finalisation

Subsequent to the fieldwork phase, the evaluation team and the ODE will ensure that all relevant information is gathered to prepare a preliminary draft report for review. The team and the ODE will participate in a visit to Canberra to debrief and discuss the evaluation findings. Information may include (but is not limited to):

- > retreat minutes
- > written inputs from team members
- > other data and evidence collected from field sites
- > previously prepared sector and country reviews
- > the team leader will be responsible for producing a country report for each field study location and an overall report for the sector that encompass the views of all team members based on discussion and written inputs
- > after the research team agrees with the draft report, the final draft will be subjected to peer review prior to finalisation
- > the ODE will present the findings to the Parliamentary Secretary for International Development Assistance

Outputs for report writing, review and finalisation phase:

- > minute of evaluation team retreat
- > individual written inputs from evaluation team members
- > draft evaluation report for review
- > minute of peer review meeting
- > final report
- > Power Point presentation

Schedule

Timing is dictated by the fieldwork schedule, which in turn should be aligned as far as possible with partner government or AusAID activities and not clash with other planned missions. The availability of core team members will also influence the timeline.

The current schedule for field visits is:

- > East Timor: second to third week of December 2008
- > Indonesia: second to fourth week of January 2009.

It is hoped that fieldwork for both locations can be completed no later than the end of January 2009 to ensure results are available in time to feed into the broader service delivery evaluation.

Potential evaluation questions

Relevance of Australian support

- > Is the predominant model of water and sanitation service delivery supported by the Australian aid program fit for purpose in meeting the priority service needs of poor men and women? If not, why?
- > Are the improvements in water and sanitation service delivery supported by the aid program sufficient to improve priority outcomes for poor men and women related to water and sanitation services (including primary outcomes such as access and affordability and secondary outcomes such as improved health)?
- > Has Australian support been based on an adequate assessment of the constraints to service delivery for poor men and women, including political economy factors, the impact of conflict (where applicable) and the willingness and capacity of stakeholders to deliver the necessary improvements?
- > Has the aid program supported the right stakeholders in the water and sanitation sector?
- > Have sufficient resources been directed to address the targeted constraints?
- > Has the design and implementation of Australian support achieved the right balance between long-term capacity development and short-term, visible results?
- > Does the previous and current pattern of assistance provide a sound basis to scale up assistance effectively for water and sanitation service delivery?

Appropriateness of approach

- > Has the strategy to improve service delivery supported by the aid program been coherent, realistic and well budgeted, and based on consultation and stakeholder ownership?
- > Has alignment of Australian support with partner governments been appropriate given assessment of responsibilities, capacity and commitment and, where applicable, the impact of conflict?
- > Has an appropriate balance been struck between support for capacity building, provision of technical assistance and the provision of goods and services?
- > Has Australian support been sufficiently harmonised with other international and national actors to manage the risks of fragmentation?
- > Has the choice of instruments and modalities for Australian support been appropriate, given local context and timing/sequencing issues? Are current modalities adequate to enable a scaling up of support to water and sanitation service delivery?
- > Has the aid program adequately managed the risks of Australian support eroding existing local capacity?

- > Has the approach taken by Australia addressed concerns of aid volatility and predictability?
- > Where relevant, has Australian support been sufficiently whole-of-government to address linked political-security-development issues?
- > Has adequate, timely performance information been available and have appropriate changes been made to approach of the aid program in the light of this?

Effectiveness of Australian support

- > What outcomes have been achieved as a result of Australian support and have these improved the delivery of essential water and sanitation services?
- > Has access to essential water and sanitation services increased for the poor, women and other vulnerable groups?
- > What contribution has Australian support in the sector made towards improving gender equality/reducing gender inequality?
- > What factors explain variations in the outcomes achieved and system performance within the case study countries?
- > Has Australian support helped improve the productivity of the system, including: incentives to deliver better services, more efficient delivery mechanisms, increased resources at the front-line, and greater reach of services to the poor, women and other vulnerable groups?
- > Has Australian support strengthened key accountabilities within the water and sanitation system between policy makers, service providers, civil society organisations and poor service users?
- > How sustainable are the gains that have been achieved, in terms of the effectiveness of Australian support in building:
 - Political support and pro-poor policy making capability?
 - System capacity, including financial viability and harnessing skills of state and non-state providers?
 - Voice and participation of poor women and men or advocacy groups in the system?

Scalability

- > Is there potential for successful interventions to be scaled up within the case study country?
- > Is there potential for successful interventions to be applied to different countries? What aspects would be transferable?

APPENDIX B: METHODOLOGY

The initial terms of reference (Appendix B) were developed by the ODE in consultation with the associated country desks and Posts, the infrastructure thematic group and the Watsan Reference Group.⁷

The two case study countries were selected in consultation with the associated country program lead and the infrastructure group. Indonesia and East Timor were selected as they have substantial and long-term funding from Australia to the sector, variation in contexts (middle-income versus fragile state), and because they represent different aid modalities.

An independent evaluation team was appointed in November 2008 to carry out the water supply and sanitation evaluation. The team consisted of three independent consultants all with experience in the sector, knowledge of the case study countries and complementary specialisations in economics, public financial management and community development. Care was also taken to ensure the team had a strong understanding of the latest thinking in aid effectiveness, including gender equality, coordination and alignment.

The consultant team was joined and supported by an evaluation manager from the ODE and a representative from the Indonesia desk (in the case of the Indonesia field visit).

A local independent sector specialist provided support to the evaluation in Indonesia.

The first step of the evaluation was a review of existing information on the AusAID water and sanitation program, the national sector framework in each case study country, and donor assistance to the sector in each case study country. A list of documents consulted is in Appendix D and the country reports with background papers are available separately.

Verification was then carried out through key stakeholder interviews in Canberra, East Timor and Indonesia. The briefings were also used to gain a broader understanding of the current context for Australia and the selected case study countries. See list of key stakeholder interviews and meeting schedule in country reports.

In the case study countries, field site visits were also carried out to illustrate and confirm the issues identified from the document review. The sites were selected to ensure that the following types were represented:

- > AusAID-assisted project that is working well
- > AusAID-assisted project with problems
- > partner government own projects
- > non-AusAID donor or NGO projects.
- > The selection of a variety of project sites was designed to ensure that the team's findings were not skewed only to positive results.

In both countries, the evaluation team was assisted by AusAID Posts, partner government representatives, other donors and NGOs to identify and be guided to field sites. Efforts were made to

⁷ An AusAID-funded group consisting of NGO, academic and private sector representatives.

balance this very useful and informative activity for all actors involved, and the need to ensure local informants were given the opportunity to express themselves freely.

In-country debriefings were held on the preliminary findings with key partner government and post representatives at the end of each field visit. A debriefing visit was held in Canberra subsequent to the second country visit to present and test preliminary findings with key stakeholders in AusAID.

The evaluation reports include a country report for each case country and a synthesis report of key findings for aid effectiveness in the sector.

APPENDIX C: COUNTRY SUMMARY SHEETS— INDONESIA AND EAST TIMOR

Country summary—East Timor	
<i>Population</i> ⁸	Estimate (2008): approximately 1.1 million
<i>Area</i>	15 007 km ² including two islands and the enclave of Oecussi within the Indonesian Territory
<i>Ethnic groups and languages and religion</i>	Ethnic groups: Austronesian (Malayo-Polynesian); Papuan; small Chinese minority Languages: Tetum (official); Portuguese (official); Indonesian, English. There are about 16 indigenous languages. Tetum, Galole, Mambae, and Kemak are spoken by significant numbers of people Religion (2005): Roman Catholic 98%; Muslim 1%; Protestant 1%
<i>Gross Domestic Product per capita</i> ⁹	Purchasing Power Parity estimate (2008): US\$2500 Nominal value estimate (2008): US\$421 Comparisons (2008): Uganda US\$469; Kiribati US\$709; Australia US\$50 150
<i>Key poverty statistics</i> ¹⁰	About 50% of the population lives below the basic needs poverty line of US\$ 0.88/day About 33% of the population lives below the extreme poverty line of US\$0.71 day
<i>Key human development Statistics</i>	UN Human Development Index Rank 150 out of 177 Adult literacy rate: 58.6% (male 56.3%, female 43.9%) ¹¹ Average life expectancy: 56 years
<i>Government and administrative divisions</i>	Direct elections of President; National Parliament elected by party list proportional representation 13 districts, 65 sub-districts, 443 sucos (towns or villages), and 2336 sub-villages or hamlets (<i>aldeia</i>). Decentralisation being piloted. The national government is responsible for urban water supply and sanitation; rural water supply and sanitation are in theory community-managed.
<i>Water supply coverage</i> ¹²	Millennium Development Goal (MDG): 86% of urban population and 75% of rural population with sustainable access to safe drinking water by 2015 Current population with access: total 66.5%; urban areas 77%; rural areas 56%
<i>Sanitation coverage</i>	MDG: 60% of urban population and 40% of rural population with access to basic sanitation by 2015. Current population with basic sanitation: total 48%; urban areas 64%; rural areas 32%

8 July 2008 estimate <<https://www.cia.gov/library/publications/the-world-factbook/geos/tt.html>> Accessed 1 March 2009. Population, area, ethnic group, and religion data from this source.

9 Purchasing Power Parity data from source cited in footnote 1. Nominal estimates from International Monetary Fund World Economic Database, summarised at [http://en.wikipedia.org/wiki/List_of_countries_by_GDP_\(nominal\)_per_capita](http://en.wikipedia.org/wiki/List_of_countries_by_GDP_(nominal)_per_capita)> Accessed 4 March 2009.

10 Government of Timor-Leste, Ministério das Finanças, Direcção Nacional de Estatística and World Bank. Timor-Leste: 'Poverty in a young Nation.' Preliminary Draft November 2008. p. 3.

11 UNDP. 2006. Timor-Leste 2006 Human Development Report. 'The Path out of Poverty: Integrated Rural Development.' p. 15. Overall literacy estimate from footnote 1 source, male and female rates based on 2004 data.

12 MDGs from Government of Timor-Leste, 'Millennium Development Goals Where are we now?' 2005. Data for water supply and sanitation coverage from World Health Organization, Country Status Report, <<http://www.wssinfo.org/en/watquery.html>> Accessed 29 November 2008

Country summary—Indonesia	
<i>Population</i> ¹³	Estimate (2008): approximately 238 million
<i>Area</i>	1 919 440 km ² on 17 508 islands (about 6000 inhabited; about 60% of the population lives on island of Java)
<i>Ethnic groups and languages and religion</i>	<p>Ethnic groups (2000 census): Javanese 40.6%; Sundanese 15%; Madurese 3.3%; Minangkabau 2.7%; Betawi 2.4%; Bugis 2.4%; Banten 2%; Banjar 1.7%; other or unspecified 29.9%</p> <p>Languages: Indonesian (official); English approximately 737 local/ethnic languages</p> <p>Religion (2000 census): Muslim 86.1%; Protestant 5.7%; Roman Catholic 3%; Hindu 1.8%; other or unspecified 3.4%</p>
<i>Gross Domestic Product per capita</i> ¹⁴	<p>Purchasing Power Parity 2007n estimate: US\$3600</p> <p>Nominal value estimate (2008): US\$2181</p> <p>Comparisons (2008): Malaysia US\$7866; Thailand US\$4099; China US\$3180; Sri Lanka US\$2099; Philippines US\$1908; Vietnam US\$1047; India US\$1043</p>
<i>Key poverty statistics</i> ¹⁵	<p>About 49% of the population lives below Purchasing Power Parity poverty line of US\$2 per day</p> <p>About 17% of the population lives below the national poverty line of about US\$1.55 per day</p>
<i>Key human development statistics</i>	<p>Rank: 107 out of 177</p> <p>Adult literacy rate: 88% (male 92%, female 83%)</p> <p>Average life expectancy: 68 years</p>
<i>Government and administrative divisions</i>	<p>Election of two national councils (both open list proportional representation and direct voting for members), provincial and district councils, and direct election of President, provincial governors, and district and municipal mayors (<i>bupati</i>)</p> <p>33 provinces (<i>provinsi/propinsi</i>) and 440 districts (<i>kabupaten</i>). Other administrative divisions: city (<i>kota</i>); subdistrict (<i>kecamatan</i>); village (<i>desa</i>).</p> <p><i>Districts are responsible for water supply and sanitation.</i></p>
<i>Water supply coverage</i> ¹⁶	<p>MDG: 57.4% of population with sustainable access to safe drinking water by 2015</p> <p>Population with access to water total: 78%</p> <p style="padding-left: 40px;">in urban areas: 87%</p> <p style="padding-left: 40px;">in rural areas: 69%</p>
<i>Sanitation coverage</i> ¹⁷	<p>MDG: 65.5% of population with basic sanitation by 2015</p> <p>Population with basic sanitation total: 56.5%</p> <p style="padding-left: 40px;">in urban areas: 73%</p> <p style="padding-left: 40px;">in rural areas: 40%</p>

13 July 2008 estimate <<https://www.cia.gov/library/publications/the-world-factbook/print/id.html>> Accessed 1 March 2009. Population, area, ethnic group, and religion data from this source.

14 Purchasing Power Parity estimate from source in footnote 1. Nominal estimates from International Monetary Fund World Economic Database, summarised at <[http://en.wikipedia.org/wiki/List_of_countries_by_GDP_\(nominal\)_per_capita](http://en.wikipedia.org/wiki/List_of_countries_by_GDP_(nominal)_per_capita)> Accessed 4 March 2009.

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16 World Health Organization, Country Status Report, <<http://www.wssinfo.org/en/watquery.html>> Accessed 29 November 2008.

17 World Health Organization, Country Status Report, <<http://www.wssinfo.org/en/watquery.html>> Accessed 29 November 2008.

APPENDIX D: ASSESSMENT OF THE WATER AND SANITATION SECTOR IN THE CASE STUDY COUNTRIES

National context for the water and sanitation sector

East Timor experienced significant turmoil and change following the referendum in 1999. Fresh outbreaks of violence in 2006 resulted in worsening security and destruction of infrastructure. The situation is only now stabilising. Poverty has increased since 1999. Because of disruption and the sudden exodus of many experienced Indonesian civil servants, the public sector faces massive capacity challenges. Sweeping civil service, financial management and local government reforms promise to provide a well-functioning context for the water and sanitation sector in the future even although at present the many unfinished processes tend to impede sector progress. Although government revenue has increased because of oil revenue, the level of execution is still low and infrastructure prioritisation inconsistent. Following massive injections of external advisory support in the early years after the referendum, the Government expresses now a demand for services and investment rather than for more capacity building and advice.

Indonesia is a recent democracy that has started but not completed a radical process of decentralisation. The economy has largely recovered from the economic shocks of the Asian financial crisis of 1997-98 and it remains to be seen how robust it will be in the new global financial crisis. The scale of the country and the diversity of provinces and districts is a special challenge for the development of consistent yet tailored policies and strategies in the water supply and sanitation sector. The country faces a dynamic process of rapid urbanisation and increasing complex development. Poverty reduction shows promising trends nationally but with strong regional disparity and a fragility that could see many people slip below poverty lines.

Sector performance

A major challenge in assessing sector performance in both case studies is the lack of reliable data and the absence of a simple robust monitoring and evaluation system. According to the World Health Organization¹⁸, coverage rates for East Timor, Indonesia and other countries in South East Asia for water and sanitation are shown in the table below:

Table 4.1: Sector coverage¹⁹

Sector/sub-sector		World Health Organization coverage (%) in 2004 [national statistics]	
		East Timor	Indonesia
Water supply	Rural	56	69
	Urban	77	87
Sanitation	Rural	32	40
	Urban	64	73

Source: World Health Organization, Country Status Report, <http://www.wssinfo.org/en/watquery.html> accessed 29/11/2008

¹⁸ World Health Organization, Country Status Report, <<http://www.wssinfo.org/en/watquery.html>> Accessed 29 November 2008.

¹⁹ The figures in Table 1 differ from national statistics, which are themselves not consistent—in part due to different definitions.

The figures in Table 4.2 differ from national statistics, which are themselves not consistent—in part due to different definitions in coverage. Table 4.3 shows that rural coverage is less than urban coverage and sanitation is behind water supply. Sector performance in East Timor is amongst the poorest in region whereas in Indonesia sector performance is amongst the best in the region. There is strong evidence that coverage in East Timor has fallen since 2004 due to a high rate of population growth and a large number of poorly functioning water supply and sanitation facilities because of lack of proper maintenance.

The unit costs for water supply based on gravity fed systems supplying small rural communities with public taps are shown in Table 4.4. The cost level at individual schemes varies depending on the distance to source and complexity of the scheme. Community mobilization, hygiene promotion and post construction mentoring can add an additional 30% to these costs.

Table 4.5: Cost levels

Sector/sub-sector	Estimates of unit costs (US\$)	
	East Timor	Indonesia
Water supply (rural) USD/person	35 to 80	12 to 20
Sanitation (rural) USD/household	5 to 100	unavailable

Source: Australian aid to water supply and sanitation service delivery in East Timor and Indonesia—working papers 1 and 2, June 2009

Table 4.6 indicates the cost levels in East Timor and Indonesia. The table reveals the higher costs associated with construction in fragile countries. The table also shows that the sanitation cost levels vary much more than water cost levels due to the huge difference between subsidised and self-supplied sanitation solutions. Self-built facilities can cost under US\$5 per household and pour flush facilities built with subsidies can cost up to US\$100 per household.

Like the statistics for coverage and unit costs, the data for functionality vary greatly depending on the definitions used and the source of survey. Table 4.7 shows the functionality of rural water supply and sanitation facilities.

Table 4.8: Functionality

Sector/sub-sector	Estimates of functionality (%)	
	East Timor	Indonesia
Water supply (rural)	10 to 70	30 to 90
Sanitation (rural)	70	30 to 90

Source: Australian aid to water supply and sanitation service delivery in East Timor and Indonesia—Working papers 1 and 2, June 2009

In East Timor, the functionality of small community-managed schemes is highly variable with a range of between 10 per cent and 70 per cent. Generally, cost recovery is poor. In urban areas, cost recovery is reported to be close to zero and in rural areas it is chiefly in the most remote, and ironically poorest, communities, that 100 per cent cost recovery seems to take place. According to project surveys, very few water user groups are functioning which means the functionality is more likely to decrease than increase. In Indonesia, the functionality rates for rural water supply and sanitation, before the adoption of the community-managed approach have been very low. A survey of ADB supported schemes in the 1990s reportedly found less than 25 per cent of the schemes were functioning at all. This is not surprising as in the absence of a community-managed approach there was no management. The data for schemes where a community-managed approach has been introduced varies. Recently

constructed projects report functionality rates of more than 90 per cent, but there is evidence that for schemes over two years old, the functionality rates falls to around the 70 per cent mark.

Data on hygiene practice is not collected on a consolidated basis in East Timor and Indonesia but anecdotal evidence suggests that it is quite poor. The contribution of poor water and sanitation to the disease burden is not well documented. The health impacts of poor water and sanitation in Indonesia are better known. Water-related diseases of diarrhoea and typhoid are two of the four leading causes of under-five mortality in Indonesia.²⁰ The Department of Health emphasises that diarrhoea cases can be reduced by around 32 per cent by improving basic sanitation; up to 45 per cent by washing hands with soap after defecation; and by 39 per cent through treating household drinking water. These activities combined can reduce diarrhoea cases by up to 94 per cent.²¹

National sector framework

The national sector framework is the set of national policies, laws, strategies, and guidelines together with the institutions and systems that make them work, including the budgets, plans and programs that guide expenditure in the sector.

The national sector framework was assessed as part of the country evaluation because external aid effectiveness and appropriate modalities are closely linked to how well the national sector framework is conceived and how well it functions in practice. Any evaluation of how well external support is aligned to government systems must also start with an assessment of the sector constraints, the suitability of government systems, and what, if any, opportunities are presented or have been overlooked, for closer alignment.

The national sector framework of East Timor and Indonesia was assessed against the criteria and best practice trends outlined in Table 4.9.

Table 4.10: Elements of the national sector framework

Element	Best practice trends and criteria
Policy	The policy should be tailored to the circumstances of the country and take account of lessons learned, nationally and internationally. There should be evidence that the impact and performance of the policy is regularly monitored and the results fed back to allow policy adjustment. Policy development should have been participatory and the policy should be well disseminated and understood by sector stakeholders. Key areas of policy should reflect the experience gained on issues such as demand responsive approach; sustainable cost recovery; role of women; environmental sustainability; management at the lowest appropriate level; role of civil society; creating a rewarding and competitive environment for the private sector.
Legal and regulatory framework	The legal framework should be updated and serve the policy. The legal instruments of the sector should be compatible with the overall legal framework of the country and provide a sound basis for a well-regulated sector. Regulations should be fair, transparent and enforced. The sector should have a performance measurement framework that measures as a minimum the coverage, unit costs and functionality of the sector.
Strategies, guidelines, programs, plans	The strategies, guidelines, programs and plans should be policy loyal as well as being technically and economically feasible. They should provide sufficient guidance for sector actors whilst leaving space for experimentation and innovation. The programs and plans should be consistent and well conceived and should lead to the achievement of sector targets. There should be an appropriate balance between water supply and sanitation. The strategies must make it clear to what extent the government, in the

²⁰ Contribution by Indonesia 2008, *United Nations High Level Event on the Millennium Development Goals*.

²¹ WASPOLA 2008, *Minister of Health Launched 10,000 Villages Total Sanitation Program* (sic): <http://www.waspola.org/home/content/view/158/77/>

Element	Best practice trends and criteria
	light of its capacity limitations, will focus its efforts on public goods (e.g. regulation) and reacting to market failure and provide an enabling environment for civil society and the private sector rather than crowd them out.
Institutions	The institutional arrangements in the sector should be consistent with the policy and with efficient implementation of the programs and plans. The arrangements should ensure that there is strong sector leadership and that implementation is decentralised and brought as close to the users as possible. The institutions should be accountable to government and to sector stakeholders and there should be a good coordination between the public, private and civil society roles and functions. In particular, there should be close coordination between those institutions responsible for water, health (sanitation) and education (schools). The public sector should ensure that the policy and regulatory framework is in place and that subsidies are effectively channelled and where appropriate that publicly operated systems work well. The private sector should be in a position to respond to demand and be able to provide services in a transparent and efficient manner. Civil society should undertake an advocacy and piloting role to ensure that the voice of people including those often marginalised are heard. The research and educational community should be encouraged to develop innovations and ensure that the human resources are developed to serve future sector needs.
Budgets and financial performance	The budgets of the sector should reflect the demands of policy, the strategy for targeting subsidies, and the policy targets in terms of coverage. The level of cost recovery should be adequate to ensure a sustainable sector. There should be an appropriate balance between capital and recurrent costs and in particular, there should be adequate provision for community mobilisation, training and empowerment including the empowerment of women.
Cross cutting aspects	The policy and equally importantly the sector practice should be pro-poor, should empower women, and should take into account environmental sustainability ensuring that water resources are not extracted beyond their safe yields, that access to water is fair, that catchments and water sources are not contaminated and that the consumers receive good quality water.

The key issues that emerged in each country are summarised in Table 4.11—more detailed information is provided in the country papers.

Table 4.12: Main findings on the national sector framework

Element	Main findings East Timor	Main findings Indonesia
Policy	Policies stalled in several key areas. Policy implementation rather than lack of policy is the main issue.	Framework satisfactory for community-managed water supply and sanitation (rural areas) but incomplete for urban areas. Community-based strategy endorsed and well accepted but not yet approved or fully institutionalised.
Legal and regulatory framework	Some key laws and regulations in place e.g. water services 4/2004, tariff and sanitation decrees passed; but others stalled. Operations and maintenance roles unclear.	Decentralisation —sector is benefiting but sector budgets still quite centralised. Water resources law approved, but not implemented entirely (e.g. Apex body not established) National and local laws and regulations are not reflected in local regulations. Insufficient enforcement of laws.
Strategies, guidelines, programs, plans	Strategies are mostly developed by projects and then endorsed by government. Some health guidelines are well conceived. Water planning framework is missing. District water and sanitation plans not updated since 2005. Health sector has a strategic plan (2008–12)—water role strongly recognised.	Water and sanitation sector prominent in planning guidelines and national medium term plans but less prominent in practice in the operational annual work plans and budgets at local government level. Poverty and gender mainstreamed in strategies and plans. Effective new strategies within sanitation being implemented by government. Performance measurement framework missing.
Institutions	Capacity poor but visibly increasing—large district centred staff increases planned. Lack of managerial skills. Private sector weak.	Local government has a wide mandate but is not resourced or capacitated. There is a gap in the provincial role, which is being adjusted at present. Missing apex (ministerial) body responsible for the sector. Inter-ministerial coordination is only informal at

Element	Main findings East Timor	Main findings Indonesia
	Consumers (especially urban) not paying bills, which threatens sustainability. Civil society advocacy role in sector is missing.	national level. It is successful but vulnerable. Institutional challenges in the urban sector due to financial problems in many utilities. Private sector robust at village level but no large-scale private sector investment in the sector. Civil society active, mostly in harmony with government policy.
Budgets and financial performance	Unstable budget process. Multiyear sector investment plans supplanted by reliance on only annual processes. Inadequate capital budget for water supply and sanitation. Inadequate recurrent costs for government operations.	Low expenditure at national and local levels. For open menu community approaches: only five per cent expenditure on water sector where community decides. Sector expenditure not correlated with Gross Domestic Product or local government revenue. Sector investment plan missing. Sector budget fragmented between many agencies and budget lines.
Cross-cutting aspects	Gender: Donors attempting to 'mainstream' gender issues but little actual progress through the water and sanitation sector. Environment: Policies and laws lacking, institutions not capable of enforcement. Governance: Decentralisation incomplete. Sector dependent on broader public financial management reforms.	Gender: Sector policy is conducive, barriers and traditional attitudes remain. Environment: Growing recognition of importance but many constraints faced. Governance: Improving indicators. Decentralisation incomplete. Sector dependent on broader public financial management improvements and consolidation.

In East Timor, the major problem facing the sector is the extremely low level of operation and maintenance. The water and sanitation contribution to service delivery and sustaining democracy and peace is potentially immense but undermined by low functionality of projects. The sector is dependent on civil service reform, public financial management and decentralisation over which it has little influence. A sector transition strategy is missing for moving from responding to the challenges of a post-conflict era to responding to the demands for establishing a longer-term and sustainable sector. The balance between the longer-term aims of capacity building and need for short-term physical investment to meet immediate needs is a persistent issue which is not yet resolved. There have been significant advances in policy and strategy development but the ownership is flawed. Sector coordination is improving but there is still insufficient information sharing particularly between the health and water institutions. The role of the private sector and the potential of self-supply are under-emphasised. Civil society is not evident in the sector and the advocacy role is absent. Poverty is widespread although it is clear from detailed studies that there are strong concentrations of poverty in remote, rural areas particularly in the central and western regions.

In Indonesia, the major problem facing the sector is vulnerability of sector coordination and the completion of decentralisation. A sector monitoring and evaluation system is not yet in place which is likely to lead to loss of information on the performance of policy across the diverse geographical and social circumstances of Indonesia. The sector is not highly prioritised and until recently, this has especially been the case for sanitation. The private sector and the potential for self-supply is strong and needs to be further encouraged. The regulatory framework for the sector is weak especially for sanitation and environmental aspects. While the community approach is mainstreamed in conceptual terms, this is much more rarely the case in practice—local governments are knowledgeable and openly

supportive of community-based approaches but these approaches are not reflected in budgets, cost norms or operational guidelines, procedures and instructions.

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