



# Report and Recommendation of the President to the Board of Directors

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Project Number: 39071  
June 2010

## Proposed Loan and Technical Assistance Grants Republic of Indonesia: Metropolitan Sanitation Management and Health Project

Asian Development Bank

## CURRENCY EQUIVALENTS

(as of 14 June 2010)

Currency Unit – rupiah (Rp)

Rp1.00 = \$0.00011

\$1.00 = Rp9,195

## ABBREVIATIONS

ADB	– Asian Development Bank
APBD	– local government budget
APBN	– central government budget
BAPPENAS	– National Development Planning Agency
CPMU	– central project management unit
DGHS	– Directorate General of Human Settlements
LIBOR	– London interbank offered rate
LPMU	– local project management unit
MDG	– Millennium Development Goal
MPW	– Ministry of Public Works
MSMHP	– Metropolitan Sanitation Management and Health Project
NGO	– nongovernment organization
OCR	– ordinary capital resources
O&M	– operation and maintenance
PDAM	– regional government water supply enterprise
PPMU	– provincial project management unit
TA	– technical assistance
UNICEF	– United Nations Children's Fund

## GLOSSARY

KARTAMANTUL	– agglomeration of Kota Yogyakarta, Kabupaten Sleman, and Kabupaten Bantul
<i>kota</i>	– city
<i>kabupaten</i>	– district

## NOTES

- (i) The fiscal year (FY) of the Government of Indonesia and its agencies ends on 31 December.
- (ii) In this report, "\$" refers to US dollars unless otherwise stated.

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## CONTENTS

	Page
I. THE PROPOSAL	1
II. THE PROJECT	1
A. Rationale	1
B. Impact and Outcome	3
C. Outputs	3
D. Investment and Financing Plans	5
E. Implementation Arrangements	6
III. TECHNICAL ASSISTANCE	7
IV. DUE DILIGENCE	7
A. Technical	7
B. Economic and Financial	8
C. Governance	8
D. Poverty and Social	9
E. Safeguards	9
F. Risks and Mitigating Measures	9
V. ASSURANCES AND CONDITIONS	10
VI. RECOMMENDATION	10
APPENDIXES	
1. Design and Monitoring Framework	11
2. List of Linked Documents	13

## I. THE PROPOSAL

1. I submit for your approval the following report and recommendation on a proposed loan to the Republic of Indonesia for the Metropolitan Sanitation Management and Health Project (MSMHP). The report also describes proposed technical assistance (TA) for Capacity Development for Metropolitan Sanitation Management and Health, and if the Board approves the proposed loan, I, acting under the authority delegated to me by the Board, will approve the TA.

2. The project will improve urban wastewater services in two major cities in Indonesia: Medan, the capital of North Sumatra Province, and Yogyakarta, the capital of Yogyakarta Province.<sup>1</sup> It will respond to the needs of urban communities, including low-income households, by optimizing existing assets, expanding coverage, improving governance, and building local institutional capacity for community-based and government-owned wastewater service providers and regional governments.<sup>2</sup> The design and monitoring framework is in Appendix 1.

## II. THE PROJECT

### A. Rationale

3. Providing access to clean water and sanitation is an integral part of the government's efforts to improve health conditions in the country. Indonesia has made progress in providing basic sanitation services, but standards remain below those of many other developing countries in the region. According to the United Nations Development Programme, 55% of the population had access to improved sanitation in 2000.<sup>3</sup> Following the Asian financial crisis in 1997–1998, access to sanitation has shown little progress, as new investments have been largely postponed and existing systems have deteriorated for lack of adequate maintenance or repair.

4. The 2004 National Socioeconomic Survey shows that most households in Indonesia use on-site facilities for wastewater management, as partial sewerage coverage is only available in a small number of urban centers. In urban areas, 59% of households used septic tanks for final disposal of human waste. As with water, the number of people without adequate sanitation is much higher among the poor.

5. Many urban and peri-urban areas in Indonesia have priority disease profiles linked to water supply and sanitation: diarrhea, skin disease, intestinal worms, malaria, and dengue. Poor people in urban slum areas, particularly children, women, and elderly people, are more affected than others.

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<sup>1</sup> Yogyakarta includes the agglomeration of Kota Yogyakarta, Kabupaten Sleman, and Kabupaten Bantul (KARTAMANTUL).

<sup>2</sup> The Asian Development Bank (ADB) provided project preparatory technical assistance. ADB. 2005. *Technical Assistance to the Republic of Indonesia for Preparing the Metropolitan Sanitation Management and Health Project*. Manila (TA 4763-INO, for \$1.2 million, increased to \$1.7 million in 2008).

<sup>3</sup> United Nations Development Programme. 2003. *Human Development Report 2003*. New York. Improved sanitation is defined as access to adequate excreta-disposal facilities, such as a connection to a sewer or septic tank system, a pour-flush latrine, a simple pit latrine, or a ventilated improved pit latrine. Depending on the source, reported MDG figures can be slightly different. In 2008 a joint monitoring program of the United Nations Children's Fund (UNICEF) and the World Health Organization published a report that showed Indonesia providing access to safe drinking water to 80% of its population (urban 89% and rural 71%) and access to improved sanitation to 52% (urban 67% and rural 37%).

6. Key sanitation problems include the following: (i) In many cities, revenues from service charges are too low to cover operation and maintenance (O&M) costs, leaving sanitation services dependent on subsidies from city governments that are generally inadequate to provide good service. (ii) Many city agencies are involved in sanitation, causing institutional overlap and lack of direction. (iii) Strategic planning for sanitation is lacking in many cities, with no master plans being implemented. (iv) Present sanitation frameworks are not attractive to private investors on a wider scale. (v) Wastewater treatment plants are often dilapidated and operate well below capacity. (vi) There is a shortage of desludging tankers and sludge-processing plants for the proper maintenance of septic tanks. (vii) Qualified manpower is in short supply. (viii) Water resources are polluted by poorly built septic tanks and leaking sewers. (ix) Community awareness about sanitation is low, and community participation needs improvement.

7. The private sector already finances most on-site sanitation facilities such as toilets, septic tanks, and sludge-collection trucks. However, private investors are very reluctant to invest in piped sewerage systems, mainly because sewer charges are currently far too low for full cost recovery, let alone profitability.

8. The government's *Roadmap to Acceleration of Urban Sanitation Development 2010–2014* foresees, by 2015, open defecation eliminated through increasing access to off-site sewerage networks in 16 cities, and community sanitation facilities available in every city, with 226 cities considered high priority.<sup>4</sup>

9. The MSMHP will help to address these issues by financing (i) investment programs for improved sanitation infrastructure and equipment and (ii) consultant support for project implementation support. Associated TA for institutional development and capacity building will complement these efforts.<sup>5</sup>

10. The project is in line with the provisions of the Indonesia country strategy and program, 2006–2009, which aims to help the government achieve its medium-term national development plan, 2005–2009 objectives of higher pro-poor, sustainable growth and achieving the Millennium Development Goals (MDGs).<sup>6</sup> Five areas of engagement were identified in the country strategy and program to achieve these goals: (i) improved infrastructure and infrastructure services, (ii) a deepened financial sector, (iii) improved decentralization, (iv) accelerated MDG achievement, and (v) strengthened environmental and natural resource management.

11. Several donor and development partner agencies support the government in further improving the water supply and sanitation sectors. Agencies include, for example, ADB, Australian Agency for International Development, Japan International Cooperation Agency, United States Agency for International Development, and World Bank. Regular meetings of the agencies discuss sector issues and coordinate effective engagement with the government on sector-related policy and future project work.

<sup>4</sup> Sanitation Development Technical Team. 2009. *Roadmap to Acceleration of Urban Sanitation Development 2010–2014*. Jakarta.

<sup>5</sup> Selection of participating cities has been demand driven and based on a selection process including: (i) invitation of expression of interest; (ii) initial assessment of demand, commitment, and preparedness; and (iii) compilation of a shortlist of cities.

<sup>6</sup> ADB. 2006. *Country Strategy and Program: Indonesia, 2006–2009*. Manila.

12. Key lessons from urban community sanitation activities in Indonesia show that (i) community systems can very effectively reduce pollution in densely populated areas if communities have been involved from the beginning through community mobilization, training, and related activities; (ii) once community members understand the importance and benefits for themselves, they often make land available above or below ground or in combination with other facilities; (iii) women must be involved in the planning process to ensure facilities' suitability and sustainability; (iv) water and electricity must be supplied; and (v) sanitation-user charges must be collected to cover O&M costs.

## **B. Impact and Outcome**

13. The impact will be reduced environmental pollution of surface water and shallow groundwater in Medan and Yogyakarta (footnote 1). Reduced environmental pollution will benefit public health and improve the quality of life in these cities.

14. The outcome will be increased access to improved wastewater services in Medan and Yogyakarta (footnote 1).

## **C. Outputs**

15. The project will have three outputs: (i) community mobilization for improved health and hygiene (communal sanitation), (ii) infrastructure development for sewerage (large civil works), and (iii) project implementation support. Associated TA for institutional development and capacity building will complement these activities.

### **1. Community Mobilization for Improved Health and Hygiene**

16. The output has two subcomponents: (i) community mobilization and empowerment for communal sanitary facilities and (ii) constructing about 280 new communal sanitation facilities.

17. Community mobilization and empowerment for communal sanitary facilities includes social marketing and awareness campaigns to eligible community groups; organizing community implementation teams; preparing community action plans; training community implementation teams in administrative procedures; screening sites for environmental suitability; supervising and monitoring community implementation team activities; and training in O&M. The project will benefit from lessons learned from previous ADB-financed projects in the sector.<sup>7</sup>

18. Constructing communal sanitary facilities will include simplified community sewerage systems; communal toilet, washing, and bathing units; and communal septic tanks. In Medan, the location of communal septic tanks is prioritized in areas covered by the Urban Poverty Alleviation Program, as community self-help groups have already been established there. In

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<sup>7</sup> Previous ADB loan financing for Medan include (i) ADB. 1981. *Report and Recommendation of the President to the Board of Directors: Proposed Loan to the Republic of Indonesia for the Medan Urban Development Project*. Manila (Loan 0550-INO); (ii) ADB. 1988. *Report and Recommendation of the President to the Board of Directors: Proposed Loan to the Republic of Indonesia for the Second Medan Urban Development Project*. Manila (Loan 0919-INO); and (iii) ADB. 1997. *Report and Recommendation of the President to the Board of Directors: Proposed Loan to the Republic of Indonesia for the Metropolitan Medan Urban Development Project*. Manila (Loan 1587-INO). Previous loan financing for Yogyakarta includes ADB. 1992. *Report and Recommendation of the President to the Board of Directors: Proposed Loan to the Republic of Indonesia for the Central Java and D.I. Yogyakarta Urban Development Sector Project*. Manila (Loan 1198-INO).

Yogyakarta, communities were selected on the basis of topographic features and poverty incidence. Community members will be responsible for the O&M of the systems.

## 2. Infrastructure Development for Sewerage

19. For sewerage, the interventions will include rehabilitating and expanding existing off-site sanitation systems in Medan and Yogyakarta, providing approximately 28,000 additional house connections. In addition, two decentralized wastewater treatment systems for low-cost housing blocks will be constructed in Medan. The environmental benefits of off-site treatment of human waste are substantial and can be realized cost effectively, as existing wastewater-treatment plant capacity is underutilized in both cities.

20. **Medan.** Medan, a city of 2.1 million, has a sewerage system with 11,200 connections, serving 2.6% of the population. The system and associated wastewater treatment plant are operated by the regional water utility PDAM Tirta Nadi.

21. The project will finance rehabilitating and expanding the sewerage system that currently serves part of the city. This will entail constructing and replacing pipes, constructing and upgrading pumping stations, replacing pumps, and installing about 13,300 new sewer connections. Further, selected components of the existing wastewater treatment plant will be rehabilitated and upgraded.

22. For the national low-cost apartment housing program, two decentralized wastewater treatment systems are included in the project, both in Medan. Plant effluent will be discharged through a pipe in a nearby waterway, while the solids will regularly be removed to sludge-treatment plants. Minimal recurrent maintenance costs will be financed from user charges.

23. **Yogyakarta.** Yogyakarta and its neighboring districts of Bantul and Sleman form the metropolitan area of KARTAMANTUL, which has a total population of 2.4 million and joint development and operation of basic urban services, including water supply and sanitation. Yogyakarta's sewerage system has 10,100 connections serving 6.0% of the service area population of 870,000. The sewer systems in Yogyakarta, Bantul, and Sleman are operated by separate municipal public works departments, while the wastewater-treatment plant is operated by the provincial department for regional infrastructure and settlements.

24. The current wastewater-treatment plant in Sewon operates at only about 10% of its installed capacity, partly because of the low connection rate but also because of its limited coverage area. To fully utilize idle wastewater-treatment capacity, the project will finance a substantial expansion of the existing sewerage network, adding about 14,700 new connections. Of these, about 8,600 will be installed in Yogyakarta itself, primarily in the subdistrict of Umbulharjo; 4,400 in the district of Sleman; and 1,700 in the district of Bantul.

## 3. Project Implementation Support

25. The project implementation support consultant will assist the project management units centrally, provincially, and locally in, among other things, (i) project management and coordination, (ii) project performance monitoring, (iii) reporting, (iv) procurement and contracting, (v) construction supervision, and (vi) social safeguard compliance.



## D. Investment and Financing Plans

26. The project is estimated to cost \$63.25 million. The investment plan is summarized in Table 1.

**Table 1: Project Investment Plan**  
(\$ million)

Item	Amount <sup>a</sup>
<b>A. Base Cost<sup>b</sup></b>	
1. Communal sanitation	4.35
2. Infrastructure development for sewerage	44.40
3. Project implementation support	4.64
<b>Subtotal (A)</b>	<b>53.39</b>
<b>B. Contingencies<sup>c</sup></b>	
1. Physical contingencies	3.08
2. Price contingencies	3.94
<b>Subtotal (B)</b>	<b>7.02</b>
<b>C. Financing Charges during implementation<sup>d</sup></b>	<b>2.84</b>
<b>Total (A+B+C)</b>	<b>63.25</b>

<sup>a</sup> Includes taxes and duties of \$2.18 million to be financed from government resources.

<sup>b</sup> In April 2010 prices.

<sup>c</sup> Physical contingencies are computed at 10% of civil works base costs and 5% of equipment base costs. Price contingencies are computed on the basis of domestic and international price escalation factors, which include a provision for potential exchange rate fluctuation assuming purchasing power parity exchange rates.

<sup>d</sup> Includes interest and commitment charges. Interest during construction has been computed at the 5-year forward London interbank offered rate plus a spread of 0.20%. Commitment charges for an Asian Development Bank loan are 0.15% per year to be charged on the undisbursed loan amount.

Source: Asian Development Bank estimates.

27. The government has requested a loan of \$35.00 million from ADB's ordinary capital resources (OCR) to help finance the project. The loan will have a 25-year term, including a grace period of 5 years, an annual interest rate determined in accordance with ADB's London interbank offered rate (LIBOR)-based lending facility, a commitment charge of 0.15% per annum, and such other terms and conditions set forth in the draft loan agreement. The government has provided ADB with (i) the reasons for its decision to borrow under ADB's LIBOR-based lending facility on the bases of these terms and conditions and (ii) an undertaking that these choices were its own independent decision and not made in reliance on any communication or advice from ADB.

28. The loan proceeds of \$35.00 million will be made available to the Ministry of Finance, which will channel the funds to the Ministry of Public Works (MPW). The Directorate General of Human Settlements (DGHS) in the MPW will utilize the loan proceeds to finance works and goods for the proposed program of sewerage infrastructure development (output 2) and consulting services for project implementation support (output 3). The remainder of the project cost, which is estimated at \$28.25 million, will be financed from the budgetary resources of the MPW (\$11.39 million), the provincial governments of North Sumatra and Yogyakarta (\$0.49 million), and the cities of Medan and Yogyakarta (\$13.53 million). The government will cover financing charges that accrue during the grace period, estimated at \$2.84 million, from its own financial resources. Taxes and duties will be financed from counterpart contributions.

**Table 2: Financing Plan**  
(\$ million)

<b>Source</b>	<b>Amount (\$ million)</b>	<b>Share of Total (%)</b>
Asian Development Bank (OCR)	35.00	55.34
National government <sup>a</sup>	14.23	22.49
Provincial governments	0.49	0.78
Regional governments	13.53	21.39
Medan	6.03	9.54
Yogyakarta	7.50	11.85
<b>Total</b>	<b>63.25</b>	<b>100.00</b>

OCR = ordinary capital resources.

<sup>a</sup> Includes \$2.84 for interest during construction.

Source: Asian Development Bank estimates.

## **E. Implementation Arrangements**

### **1. Project Management**

29. Project management units at central (CPMU), provincial (PPMU), and local (LPMU) level are responsible for subproject implementation, assisted by consultant teams that operate at the same three levels. The LPMUs report to the PPMUs, and these report to the CPMU. The CPMU mainly provides oversight to ensure compliance with the loan agreement between ADB and the government and progress reporting to ADB.<sup>8</sup>

30. **National.** The DGHS of the MPW is the executing agency and will establish the CPMU. A central steering committee, chaired by the DGHS and including representatives from National Development Planning Agency (BAPPENAS), MPW, Ministry of Health, Ministry of Finance, Ministry of Home Affairs, and Ministry of Environment, will guide and coordinate the project, making policy and strategic decisions. The DGHS will assign a project manager in the CPMU, who will be responsible for project implementation, including project supervision, monitoring, accounting, and reporting. The CPMU will be assisted by a central support team consisting of international and national consultants.

31. **Province.** Provincial government agencies appointed by the executing agency will be responsible for subproject procurement and implementation financed from DGHS budgets (including ADB loan proceeds) and will establish PPMUs. Provincial government agencies will also implement subprojects related to the MSMHP that are financed from provincial government budgets. The PPMUs will be assisted by a provincial support team consisting of international and national consultants, which are part of the central support team. Provincial steering committees will monitor and provide advice to the PPMUs.

32. **City.** The implementing agencies of MSMHP subprojects financed by city governments' own budgets will be the governments of Medan and Yogyakarta, which will establish LPMUs. City sanitation working groups will provide advice to the LPMUs. In each participating city, a local support team will provide consultant assistance to the LPMU.

33. The implementation arrangements are summarized in Table 3 and described in detail in the project administration manual.

<sup>8</sup> Reporting includes quarterly progress reports and other reports as may be required.

**Table 3: Implementation Arrangements**

Aspects	Arrangements		
Implementation period	October 2010– December 2014		
Estimated project completion date	31 December 2014		
Estimated loan closing date	30 June 2015		
Project management			
(i) Executing agency	Directorate General of Human Settlements (DGHS), Ministry of Public Works		
(ii) Project management units	Central project management unit, DGHS, minimum 2 staff Provincial project management units, minimum 3 staff each <sup>a</sup> City project management units, minimum 2 staff each		
Procurement	International competitive bidding	4 contracts (3 works, 1 goods)	\$ 21.14 million
	National competitive bidding	5 contracts (4 works, 1 goods)	\$ 9.86 million
Consulting services	Quality- and cost-based selection	430 person-months	\$ 4.00 million
Disbursement	The loan proceeds will be disbursed in accordance with ADB's <i>Loan Disbursement Handbook</i> (2007, as amended from time to time) and detailed arrangements agreed upon between the government and ADB		

<sup>a</sup> The provincial project management unit for Medan is in the Department for Spatial Planning and Settlements of the Province of North Sumatra, and for Yogyakarta in the Department of Public Works, Housing, and Mineral Energy Resources of the Special Region of Yogyakarta.

Source: Asian Development Bank.

### III. TECHNICAL ASSISTANCE

34. To ensure the long-term sustainability of the investment, capacity development TA will complement the loan project. The TA responds to the need to strengthen institutions and the capacity of local governments, utilities, and communities in improved environmental and sanitation management; increase community awareness; and conduct better hygiene campaigns. The TA will deliver three outputs: (i) improved delivery of communal sanitation initiatives, (ii) improved operation and maintenance of sewerage infrastructure, and (iii) strengthened institutions in environmental sanitation management.

35. The TA is estimated to cost \$1.65 million equivalent, of which \$0.50 million equivalent will be financed as a grant by ADB's Technical Assistance Special Fund (TASF-other sources) and \$1.00 million equivalent will be financed as a grant by the Government of Australia and administered by ADB. The Government of Indonesia will provide \$0.15 million equivalent in-kind to cover office and support facilities, counterpart staff, administrative support, and local transportation for counterpart staff. The TA will be implemented over 24 months starting in October 2010 and ending in September 2012. TA and proposed MSMHP implementation arrangements are the same. The DGHS in the MPW is the executing agency.

### IV. DUE DILIGENCE

#### A. Technical

36. Investment in urban sanitation improvements, combined with hygiene awareness programs, will directly benefit the vast majority of people in the project cities and strengthen local government authorities and communities in facilitating and delivering these basic services. Benefits will include (i) increased coverage of sanitation services; (ii) increased cost recovery from the provision of improved sanitation services; (iii) reduction in pollution caused by wastewater; (iv) improved public health; (v) improved institutional capability and governance;

(vi) increased community participation and empowerment; and (vii) increased economic opportunities, employment creation, and poverty reduction.

37. It is estimated that, by 2014, about 2.7 million people in Medan and Yogyakarta will benefit from improved and new wastewater collection and treatment systems, including communal facilities, central sewerage systems, and on-site facilities. Regarding piped sewerage, it is estimated that, by 2014, about 250,000 people (13% of the population of Yogyakarta and 5% of Medan) will directly benefit from improved wastewater collection and treatment.

## **B. Economic and Financial**

38. The economic benefits of the project are significant, especially in the densely populated parts of the participating cities, where population pressure is high and surface and groundwater pollution pose major public health hazards. The expected benefits consist largely of reduced mortality and morbidity, followed by the avoided cost of septic tank desludging.

39. Revenues from the Medan sewerage system already fully cover O&M expenditure, with estimated affordability rates of about 1.4% of median household expenditure during 2010–2014.<sup>9</sup> Low-income households in "twin blocks" are expected to pay Rp4,700 for semiannual desludging of decentralized wastewater treatment systems. This is equivalent to about 0.2% of monthly household expenditure. Assuming that Yogyakarta will raise wastewater charges to full O&M cost-recovery levels by mid-2014, the monthly charge would remain below 2.0% of monthly household expenditure. In summary, the O&M expenditure of all revenue-generating services proposed under the project can be fully financed from tariff revenue by mid-2014, while remaining affordable to the intended beneficiaries. A financial review of PDAM Tirta Nadi, which is also responsible for managing and operating sewerage systems in Medan, indicates satisfactory financial performance of the utility.

## **C. Governance**

40. A financial management assessment of the PPMU for Medan showed experience in implementing externally financed projects, while the PPMU for Yogyakarta does not have such experience. Both agencies follow government regulations on accounting and financial reporting. Implementation support from consultants will assist both PPMUs in project implementation and financial management.

41. The procurement capacity of both PPMUs, which will implement the project on behalf of the executing agency, was assessed. Both have established project implementation units. They have substantial experience with implementing Indonesian procurement guidelines, which are similar but not fully consistent with ADB procurement guidelines. Neither agency has recent experience with foreign-assisted procurement and will require procurement support provided by the implementation consultant team.

42. ADB's Anticorruption Policy (1998, as amended to date) was explained to and discussed with the government and the DGHS. Specific policy requirements and supplementary measures are described in the project administration manual. Within 6 months of loan effectiveness, the

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<sup>9</sup> Affordability estimates refer to monthly sewer charges only, not including connection fees. To ensure that the cost of wastewater charges remains below the 2% threshold, new customers will have the option to pay the connection fee in installments—a system which is already in place in Medan and Yogyakarta.

CPMU will have established a project-specific website for public disclosure on the use of the loan proceeds, including details of procurement and contract awards, which will be updated within 1 week of contract awards.

#### **D. Poverty and Social**

43. The project has been designed to minimize the financial costs to poor households and low-income neighborhoods of installing sanitation improvements. A gender action plan included in the project design aims to enhance women's ability to participate in decision-making regarding sanitation facility development and to ensure that women and men at the project sites benefit equally from improved communal sanitation and wastewater services. The project will actively involve women as both implementers and beneficiaries and is designed to ensure that women are hired as key staff and as part of facilitation teams. The project will involve nongovernment organizations (NGO) from the start, particularly in the planning and implementation of communal sanitation facilities.

44. Improved sanitation and a cleaner environment resulting from the project facilities will reduce the disease incidence linked to dirty water and an unclean environment, thus improving public health. This benefit will particularly accrue to infants and children, who are more vulnerable and suffer more frequently and severely from these diseases. Better use of latrines and septic tanks, and increased collection and disposal of wastewater, will improve public hygiene and dramatically curtail most of these diseases. The project will help reduce direct and indirect causes of infant and child mortality related to poor sanitation.

#### **E. Safeguards**

45. The project has been classified under category B for involuntary resettlement and under category C for indigenous peoples. Land acquisition is not expected to be required, but a resettlement framework has been prepared to address potential issues. There are no groups of indigenous peoples in the project cities.

46. The project has been classified under environmental category B. The project's impacts are site-specific, with proven and readily designed mitigation measures. Initial environmental examinations were conducted, and environmental management plans were developed and will be implemented in compliance with ADB's environmental assessment requirements prescribed in its Environment Policy (2002). The executing agency will implement, monitor, and periodically report to ADB on the status of environmental management plan implementation.

#### **F. Risks and Mitigating Measures**

47. Major risks and mitigating measures are summarized in Table 4.

**Table 4: Summary of Risks and Mitigating Measures**

<b>Risks</b>	<b>Mitigating Measures</b>
Community participation and ownership	Community participation and ownership will be supported by associated capacity development TA.
Continued policy support for decentralization, agency capacity, and institutional development	The project assumes a stable political environment, continued economic growth, and continued support for decentralization and regional autonomy policies that are in place. Capacity development TA will support institutional strengthening and capacity building.
Environmental impacts	Potential temporary impacts during construction and operation will be mitigated through proper environment management plan implementation.
Involuntary resettlement	None of the proposed components is expected to involve land acquisition or involuntary resettlement, but a resettlement framework has been prepared to address potential issues.

Source: Asian Development Bank.

## **V. ASSURANCES AND CONDITIONS**

48. The government and the DGHS have assured ADB that the implementation of the project shall conform to all applicable ADB policies including those concerning anticorruption measures, safeguards, gender, procurement, consulting services, and disbursement as described in detail in the project administration manual and loan documents.

49. The government and the DGHS have agreed with ADB on certain covenants for the project, which are set forth in the loan agreement.

50. ADB will not disburse the loan proceeds until the government will have established (i) the CPMU, including the appointment of the Project manager; (ii) the two PPMUs, including the appointment of the head of each PPMU; (iii) the two LPMUs, including the appointment of the head of each LPMU; (iv) the central steering committee; and (v) the two provincial steering committees.

## **VI. RECOMMENDATION**

51. I am satisfied that the proposed loan would comply with the Articles of Agreement of the Asian Development Bank (ADB) and recommend that the Board approve the loan of \$35,000,000 to the Republic of Indonesia for the Metropolitan Sanitation Management and Health Project from ADB's ordinary capital resources, with interest to be determined in accordance with ADB's London interbank offered rate (LIBOR)-based lending facility; a term of 25 years, including a grace period of 5 years; and such other terms and conditions as are substantially in accordance with those set forth in the draft loan agreement presented to the Board.

Haruhiko Kuroda  
President

25 June 2010

## DESIGN AND MONITORING FRAMEWORK

Design Summary	Performance Targets and Indicators with Baselines	Data Sources and Reporting Mechanisms	Assumptions and Risks
<b>Impact</b>  Reduced environmental pollution in the participating cities	2.7 million people with access to improved sanitation from existing and new facilities in both Medan and Yogyakarta  In urban areas benefitting from the project, at least 30% reduction of diarrhea among children 1–5 years old	National statistics  Health center data in the project areas	<b>Assumptions</b>  Central and local governments continue to prioritize reducing environmental pollution in urban areas.  Grant resources will be mobilized for surveys (baseline and at project completion).
<b>Outcome</b>  Increased access to improved wastewater services in the participating cities	Medan: increase in population with access to sewer connections from 2.6% in 2008 to 5% in 2014  Yogyakarta: increase in population with access to sewer connections from 6% in 2008 to 13% in 2014	Data on sanitation provided by CPMU  National statistics	<b>Assumptions</b>  City governments are sufficiently resourced to implement the project.  Urban communities are committed to connect to the sewer system.  Wastewater tariffs cover at least operation and maintenance cost.  <b>Risks</b>  Project implementation is delayed.  Awareness programs are not implemented in a timely manner.
<b>Outputs</b>  1. Community mobilization for improved health and hygiene implemented  2. Infrastructure development for sewerage completed	280 communal sanitation facilities completed by end of 2014  At least 30% participation rate of women in community implementation teams in planning and decision-making for sanitation facilities development by 2013  Medan: increase in number of sewer connections from 11,200 in 2008 to 24,500 in 2014	Data provided by CPMU	<b>Assumptions</b>  City governments demonstrate continued commitment.  Communities are mobilized and willing to implement facilities.  <b>Risks</b>  Community mobilization progress is slow.

Design Summary	Performance Targets and Indicators with Baselines	Data Sources and Reporting Mechanisms	Assumptions and Risks
3. Project implementation and capacity development support completed	<p>Yogyakarta: increase in number of sewer connections from 10,100 in 2008 to 24,800 in 2014</p> <p>Project implemented by 2014</p> <p>Capacity development completed by 2014; at least 40% of participants are women</p>		
<b>Activities with Milestones</b> <ul style="list-style-type: none"> <li>1.1 Community mobilization and empowerment for communal sanitary facilities by 2014</li> <li>1.2 Construction of communal sanitation facilities by 2014</li> <li>2.1 Award of goods and civil works contracts for sewerage systems by early-2011</li> <li>2.2 Completion of rehabilitation and construction of sewerage systems by 2013</li> <li>2.3 Completion of decentralized wastewater-treatment facilities for low-cost public housing by 2012</li> <li>2.4 New customer connections to piped sewerage systems by mid-2014</li> <li>3.1 Award of project implementation support contract by early-2011</li> <li>3.2 Completion of project implementation support contract by 2014</li> </ul>			<b>Inputs</b> <p>ADB: \$35.00 million</p> <p>Government: \$28.25 million</p> <p>Associated TA:</p> <p>TASF: \$0.5 million</p> <p>AusAID: \$1.0 million</p>

ADB = Asian Development Bank, AusAID = Australian Agency for International Development, CPMU = central project management unit.

Source: Asian Development Bank.



**LIST OF LINKED DOCUMENTS**

<http://www.adb.org/Documents/RRPs/?id=39071-01-3>

1. Loan Agreement
2. Summary Sector Assessment: Sanitation
3. Project Administration Manual
4. Project Classification Summary
5. Contribution to the ADB Results Framework
6. Development Coordination
7. Financial Analysis
8. Economic Analysis
9. Country Economic Indicators
10. Summary Poverty Reduction and Social Strategy
11. Gender Action Plan
12. Initial Environmental Examination
13. Resettlement Framework
14. Risk Assessment and Risk Management Plan
15. Financial Review of PDAM Tirta Nadi
16. Capacity Development for Metropolitan Sanitation Management and Health