**OFFICIAL USE ONLY**
R2018-0097/1

May 17, 2018

**Closing Date: Wednesday, June 6, 2018 at 6 p.m.**

FROM: Vice President and Corporate Secretary

**Indonesia - National Urban Water Supply Project**

**Project Appraisal Document**

Attached is the Project Appraisal Document regarding a proposed loan to Indonesia for a National Urban Water Supply Project (R2018-0097), which is being processed on an absence-of-objection basis.

Distribution:
Executive Directors and Alternates
President
Bank Group Senior Management
Vice Presidents, Bank, IFC and MIGA
Directors and Department Heads, Bank, IFC and MIGA

Document of
The World Bank

**FOR OFFICIAL USE ONLY**

Report No: PAD1729

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED LOAN
IN THE AMOUNT OF US$100 MILLION

TO THE

REPUBLIC OF INDONESIA

FOR A

NATIONAL URBAN WATER SUPPLY PROJECT

May 14, 2018

*Water Global Practice*
*EAST ASIA AND PACIFIC REGION*

CURRENCY EQUIVALENTS

(Exchange Rate Effective April 30, 2018)

| | | |
|---|---|---|
| Currency Unit | = | Indonesian Rupiah (IDR) |
| IDR 13,912 | = | US$1 |

FISCAL YEAR
January 1 – December 31

ABBREVIATIONS AND ACRONYMS

| | |
|---|---|
| ADB | Asian Development Bank |
| APBD | Local Government Budget (*Anggaran Pendapatan dan Belanja Daerah*) |
| APBN | Central Government Budget (*Anggaran Pendapatan dan Belanja Negara*) |
| BAPPENAS | National Development Planning Agency (*Badan Perencanaan Pembangunan National*) |
| BP | Business Plan |
| BPK | The Audit Board of Republic of Indonesia (*Badan Pemeriksa Keuangan*) |
| BPKP | Finance and Development Controller Bureau (*Badan Pengawasan Keuangan dan Pembangunan*) |
| BPPSPAM | Support Agency for the Development of Drinking Water Supply Systems (*Badan Peningkatan Penyelenggaraan Sistem Penyediaan Air Minum*) |
| BPS | Statistic Bureau (*Badan Pusat Statistik*) |
| CB | Capacity Building |
| CG | Central Government |
| CMAC | Central Management and Advisory |
| CoE | Center of Excellence |
| CPF | Country Partnership Framework |
| CPIU | Central Project Implementing Unit |
| CPMU | Central Project Management Unit |
| DA | Designated Account |
| DAK | Special Allocation Fund (*Dana Alokasi Khusus*) |
| DFAT | Department of Foreign Affairs and Trade |
| DGHS | Directorate General of Human Settlements |
| DIPA | Government's Integrated Budget Plan – Recurrent and Investment (*Daftar Isian Pelaksanaan Anggaran*) |
| DMAs | District Metering Areas |
| EAAIG | East Asia Australia Infrastructure Growth Trust Fund |
| EIRR | Economic Internal Rate of Return |
| EoI | Expression of Interest |
| ESMF | Environmental and Social Management Framework |
| FA | Field Assistant |
| FMA | Financial Management Assessment |

| | |
|---|---|
| FMS | Financial Management Specialist |
| GDP | Gross Domestic Product |
| GIS | Geographic Information System |
| GOI | Government of Indonesia |
| GPOBA | Global Program on Output Based Aid |
| GRS | Grievance Redress Service |
| HRD | Human Resources Development |
| ICB | International Competitive Bidding |
| ICR | Implementation Completion and Results Report |
| IEG | Independent Evaluation Group |
| IFR | Interim Financial Report |
| IndII | Indonesia Infrastructure Initiative (Australian Aid/DFAT project) |
| INIS-TF | Indonesia Infrastructure Support Trust Fund |
| IUWASH/IUWASH Plus | Indonesia Urban Water, Sanitation and Hygiene (USAID Project) |
| JICA | Japan International Cooperation Agency |
| KIAT | Indonesia Australia Partnership for Infrastructure (*Kemitraan Indonesia Australia untuk Infrastruktur*) |
| LARAP | Land Acquisition and Resettlement Action Plan |
| LARPF | Land Acquisition and Resettlement Policy Framework |
| LG | Local Government |
| LPSE | Government's E-procurement Service (*Layanan Pengadaan Secara Elektronik*) |
| M&E | Monitoring and Evaluation |
| MDGs | Millenium Development Goals |
| MFD | Maximizing Finance for Development |
| MIS | Management Information System |
| MOF | Ministry of Finance |
| MOHA | Ministry of Home Affairs |
| MPWH | Ministry of Public Works and Housing |
| NCB | National Competitive Bidding |
| NPV | Net Present Value |
| NRW | Non-Revenue Water |
| NUWAS | National Urban Water Supply |
| NUWSP | National Urban Water Supply Project |
| O&M | Operation and Maintenance |
| OBA | Output Based Approach |
| PAMSIMAS | Community-based Water Supply and Sanitation Program (*Penyediaan Air Minum dan Sanitasi Berbasis Masyarakat)* |
| PC | Provincial Coordinator |
| PCR | Physical Cultural Resources |
| PDAM | Local Government's owned water supply enterprise (*Perusahaan Daerah Air Minum*) |
| PERPAMSI | Indonesia Association of Water Utilities (*Persatuan Perusahaan Air Minum Indonesia*) |
| PerPres | Presidential Regulation (*Peraturan Presiden*) |
| PforR | Program for Results |
| PMM | Project Management Manual |

| | |
|---|---|
| Pokja AMPL | Working unit for water and sanitation at province and district or municipality levels (*Kelompok Kerja Air Minum dan Penyehatan Lingkungan*) |
| Pokja PPAS | National Steering Committee for Housing, Settlements, Water Supply and Sanitation (*Kelompok Kerja Perumahan, Pemukiman, Air Minum dan Sanitasi*) |
| PP | Government Regulation (*Peraturan Pemerintah*) |
| PT SMI | PT. Sarana Multi Infrastruktur (Persero) |
| QCBS | Quality and Cost Based Selection |
| RIDF | Regional Infrastructure Development Fund |
| RISPAM | Water Supply Development Master Plan (*Rencana Induk Sistem Penyediaan Air Minum*) |
| RMACs | Regional Management and Advisory Consultants |
| RPJMN | National Mid-term Development Plan (*Rencana Program Jangka Menengah Nasional*) |
| RPJPN | National Long-term Development Plan (Rencana P*rogram Jangka Panjang National*) |
| SatKer PSPAM | MPWH's Vertical Working Unit for Drinking Water Supply Development, based in the province (*Satuan Kerja Pengembangan Sistem Penyediaan Air Minum*) |
| SCD | Systematic Country Diagnostic |
| SDGs | Sustainable Development Goals |
| SPSE | Government's e-procurement system (*Sistem Pengadaan Secara Elektronik*) |
| TA/CB | Technical Assistance/Capacity building |
| TACT | Technical Assistant and Capacity Building Team |
| ULP | Procurement Service Unit (*Unit Layanan Pengadaan*) |
| UNDB | United Nations Development Business |
| USAID | United States Agency for International Development |
| UWSSP | Urban Water Supply and Sanitation Project |
| WASAP | Water Supply and Sanitaion Program |
| WASPOLA | Water Supply and Sanitation Policy Formulation and Action Planning Project |
| WSS-PER | Water Supply and Sanitation – Public Expenditure Report |
| WTP | Water Treatment Plant |

| | |
|---|---|
| Regional Vice President: | Victoria Kwakwa |
| Country Director: | Rodrigo A. Chaves |
| Senior Global Practice Director: | Guang Zhe Chen |
| Practice Manager: | Sudipto Sarkar |
| Task Team Leaders: | Irma Magdalena Setiono / Christophe Prevost |

**INDONESIA**
**National Urban Water Supply Program (P156125)**

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*Indonesia*

*National Urban Water Supply Project (P156125)*

**PROJECT APPRAISAL DOCUMENT**

*EAST ASIA AND PACIFIC*

*0000009391*

Report No.: PAD1729

| Basic Information | | | |
|---|---|---|---|
| Project ID<br>P156125 | EA Category<br>B - Partial Assessment | | Team Leader(s)<br>Irma Magdalena Setiono,Christophe Prevost |
| Financing Instrument<br>Investment Project Financing | Fragile and/or Capacity Constraints [ ]<br>Financial Intermediaries [ ]<br>Series of Projects [ ] | | |
| Project Implementation Start Date<br>06-Jun-2018 | Project Implementation End Date<br>30-Jun-2022 | | |
| Expected Effectiveness Date<br>01-Jul-2018 | Expected Closing Date<br>31-Dec-2022 | | |
| Joint IFC<br>No | | | |
| Practice Manager/Manager<br>Sudipto Sarkar | Senior Global Practice Director<br>Guang Zhe Chen | Country Director<br>Rodrigo A. Chaves | Regional Vice President<br>Victoria Kwakwa |

| | | | | | |
|---|---|---|---|---|---|
| Borrower: Republic of Indonesia | | | | | |
| Responsible Agency: Directorate General of Human Settlements - Ministry of Public Works | | | | | |
| Contact: | Sri Hartoyo | | Title: | Director General | |
| Telephone No.: | 62-21-72796158 | | Email: | srihartoyoperkim@yahoo.com | |

| Project Financing Data(in USD Million) | | | | | |
|---|---|---|---|---|---|
| [ X ] | Loan | [ ] | IDA Grant | [ ] | Guarantee |
| [ ] | Credit | [ ] | Grant | [ ] | Other |

| | | | |
|---|---|---|---|
| Total Project Cost: | 602.60 | Total Bank Financing: | 100.00 |
| Financing Gap: | 0.00 | | |

| Financing Source | Amount |
|---|---|
| Borrower | 502.60 |
| International Bank for Reconstruction and Development | 100.00 |
| Total | 602.60 |

**Expected Disbursements (in USD Million)**

| Fiscal Year | 2019 | 2020 | 2021 | 2022 | 2023 | 0000 | 0000 | 0000 | 0000 | 0000 |
|---|---|---|---|---|---|---|---|---|---|---|
| Annual | 5.00 | 15.00 | 35.00 | 30.00 | 15.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Cumulative | 5.00 | 20.00 | 55.00 | 85.00 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

## Institutional Data

**Practice Area (Lead)**

Water

**Contributing Practice Areas**

Social, Urban, Rural and Resilience Global Practice

**Proposed Development Objective(s)**

The project development objective is to provide access to improved water sources for the population and strengthen the operational performance of water service providers in selected urban areas.

**Components**

| Component Name | Cost (USD Millions) |
|---|---|
| Investment Support for Urban Water Supply Infrastructure Development | 560.00 |
| Technical Assistance and Capacity Building for Local Governments and PDAMs | 15.50 |
| Advisory and Policy Development Support for Central Government | 6.80 |
| Project Implementation and Management Support | 20.30 |

## Systematic Operations Risk- Rating Tool (SORT)

| Risk Category | Rating |
|---|---|
| 1. Political and Governance | Substantial |
| 2. Macroeconomic | Moderate |
| 3. Sector Strategies and Policies | Substantial |
| 4. Technical Design of Project or Program | Substantial |
| 5. Institutional Capacity for Implementation and Sustainability | Substantial |
| 6. Fiduciary | Substantial |

| | |
|---|---|
| 7. Environment and Social | Moderate |
| 8. Stakeholders | Moderate |
| 9. Other | |
| **OVERALL** | Substantial |

## Compliance

**Policy**

| | |
|---|---|
| Does the project depart from the CAS in content or in other significant respects? | Yes [ ] No [ X ] |
| Does the project require any waivers of Bank policies? | Yes [ ] No [ X ] |
| Have these been approved by Bank management? | Yes [ ] No [ ] |
| Is approval for any policy waiver sought from the Board? | Yes [ ] No [ X ] |
| Does the project meet the Regional criteria for readiness for implementation? | Yes [ X ] No [ ] |

| **Safeguard Policies Triggered by the Project** | **Yes** | **No** |
|---|---|---|
| Environmental Assessment OP/BP 4.01 | **X** | |
| Performance Standards for Private Sector Activities OP/BP 4.03 | | **X** |
| Natural Habitats OP/BP 4.04 | | **X** |
| Forests OP/BP 4.36 | | **X** |
| Pest Management OP 4.09 | | **X** |
| Physical Cultural Resources OP/BP 4.11 | **X** | |
| Indigenous Peoples OP/BP 4.10 | **X** | |
| Involuntary Resettlement OP/BP 4.12 | **X** | |
| Safety of Dams OP/BP 4.37 | | **X** |
| Projects on International Waterways OP/BP 7.50 | | **X** |
| Projects in Disputed Areas OP/BP 7.60 | | **X** |

**Legal Covenants**

| **Name** | **Recurrent** | **Due Date** | **Frequency** |
|---|---|---|---|
| Annual Work Plan and Budget (Schedule 2, Section IB, Paragraph 3) | **X** | | Yearly |

**Description of Covenant**

The Borrower shall: (a) prepare and furnish to the Bank by April 30 in each year - beginning in the calendar year 2019 - a proposed Project's consolidated annual work plan and budget for the following Fiscal Year; (b) taking into account the Bank's comments, finalize the plan and furnish it to Bank for its approval not later than June 30 in each year - beginning in the calendar year 2019; (c) adopt the plan as shall have been approved by the Bank (Annual Work Plan and Budget) and proceed thereafter to implement the Annual Work Plan and Budget, in a manner satisfactory to the Bank. The Borrower shall

not amend, suspend, abrogate or waiver said Annual Work Plan and Budget or any of its provisions without the prior written agreement of the Bank.

| Name | Recurrent | Due Date | Frequency |
|---|---|---|---|
| Mid Term Review (Schedule 2, Section II, Paragraph 2) | | 30-Jun-2020 | |

**Description of Covenant**

No later than June 30, 2020, the Borrower shall, in conjunction with the Bank, carry out a mid-term review of the Project, covering the progress achieved in the implementation of the Project.

**Conditions**

| Source Of Fund | Name | Type |
|---|---|---|
| IBRD | Paragraph 19 of the Minutes of Technical Discussions | Signing |

**Description of Condition**

Prior to the signing of the Loan Agreement, the Borrower will present evidence that the Project Management Manual - whose substance is satisfactory to the Bank - has been approved, adopted and formally issued by relevant authorities of the Borrower

## Team Composition

**Bank Staff**

| Name | Role | Title | Specialization | Unit |
|---|---|---|---|---|
| Irma Magdalena Setiono | Team Leader (ADM Responsible) | Water Supply and Sanitation Specialist | Urban Water Supply and Utility | GWA02 |
| Christophe Prevost | Team Leader | Senior Water Supply and Sanitation Specialist | Urban Water Supply | GWA02 |
| Budi Permana | Procurement Specialist (ADM Responsible) | Senior Procurement Specialist | Procurement | GGOPG |
| Novira Kusdarti | Financial Management Specialist | Sr Financial Management Specialist | Financial Management | GGOEA |
| Agustina Parwitosari | Environmental Safeguards Specialist | Environmental Engineer | Safeguard Specialist | GEN2A |
| Alkadevi Morarji Patel | Social Safeguards Specialist | Senior Social Development Specialist, Safeguard Po | Social Safeguards Specialist | GSUID |
| Andy Chandra Firdana | Team Member | Procurement Specialist | Procurement Specialist | GGOPG |

| | | | | |
|---|---|---|---|---|
| Angelia B. Nurwihapsari .S | Team Member | Procurement Analyst | Procurement Analyst | GGOPG |
| Dikshya Thapa | Team Member | Consultant | | GWA02 |
| Enrico Rahadi Djonoputro | Team Member | Consultant | Water Supply Engineer | GWA02 |
| Evarist F. Baimu | Counsel | Senior Counsel | Legal | LEGES |
| Evilia LNU | Team Member | Team Assistant | Team Assistant | EACIF |
| Fook Chuan Eng | Team Member | Lead Water Supply and Sanitation Specialist | Urban Water Supply | GWA02 |
| Jana Halida Uno | Team Member | Senior Operations Officer | Monitoring and Evaluation Specialist | EACIF |
| Krisnan Pitradjaja Isomartana | Environmental Safeguards Specialist | Senior Environmental Specialist | Environmental Safeguards Specialist | GEN2A |
| Pratibha Mistry | Team Member | Senior Water Supply and Sanitation Specialist | Urban Water Supply | GWA02 |
| Risyana Sukarma | Team Member | Consultant | Water Engineer and Policy Advisory | GWA02 |
| Sulistiowati Ms. | Social Safeguards Specialist | Consultant | Social Safeguard Specialist | GSUID |
| Violeta Wagner | Team Member | Senior Program Assistant | Senior Program Assistant | GWA02 |
| Virza Syafaat Sasmitawidjaja | Environmental Safeguards Specialist | Consultant | Environmental Specialist | GEN2A |

**Extended Team**

| Name | Title | Office Phone | Location |
|---|---|---|---|
| | | | |

**Locations**

| Country | First Administrative Division | Location | Planned | Actual | Comments |
|---|---|---|---|---|---|
| Indonesia | North Sumatra | North Sumatra | **X** | | |
| Indonesia | Aceh | Aceh | **X** | | |
| Indonesia | South Sumatra | South Sumatra | **X** | | |
| Indonesia | West Sumatra | West Sumatra | **X** | | |

| | | | | | |
|---|---|---|---|---|---|
| Indonesia | Central Sulawesi | Central Sulawesi | **X** | | |
| Indonesia | South Sulawesi | South Sulawesi | **X** | | |
| Indonesia | East Nusa Tenggara | East Nusa Tenggara | **X** | | |
| Indonesia | East Kalimantan | East Kalimantan | **X** | | |
| Indonesia | South Kalimantan | South Kalimantan | **X** | | |
| Indonesia | West Kalimantan | West Kalimantan | **X** | | |
| Indonesia | East Java | East Java | **X** | | |
| Indonesia | Central Java | Central Java | **X** | | |
| Indonesia | West Java | West Java | **X** | | |
| Indonesia | Jambi | Jambi | **X** | | |
| Indonesia | Papua | Papua | **X** | | |
| Indonesia | Bengkulu | Bengkulu | **X** | | |
| Indonesia | Bali | Bali | **X** | | |
| Indonesia | Banten | Banten | **X** | | |
| Indonesia | North Maluku | North Maluku | **X** | | |

**Consultants (Will be disclosed in the Monthly Operational Summary)**

Consultants Required ? Consultants will be required

# I. STRATEGIC CONTEXT

## A. Country Context

1. **Indonesia is a robust lower middle-income country made up of over 6,000 islands, with the world's eighth largest economy in terms of purchasing power parity.** Poverty fell in Indonesia since the late 1990s, from 24 percent in 1997 to 11 percent in 2014. The gradually increasing private sector investment and robust domestic consumption allowed real Gross Domestic Product (GDP) growth to increase in a steady manner from the start of the millennium, demonstrating Indonesia's resilience to the global economic downturn in 2008. The country's GDP almost doubled from US$580 billion in 2001 to US$1.1 trillion in 2011.

2. **The benefits of this growth however are not as widely shared among its 260 million population, making inclusion an important factor in its growth and service delivery strategies today.** Private consumption remains the main driver of growth in Indonesia, which has been underpinned by an expanding middle class, lower fuel prices, and falling inflation. However, between 2003 and 2010, consumption of the bottom 40 percent grew at 1-2 percent annually, while that of the two richest quintiles grew by around six percent. Consequently, the Consumption Gini coefficient shows a rise over this period – making Indonesia a country where inequality is widening almost as fast as growth is increasing**.**

3. **To make this growth more robust and broad based will require deeper reforms including better provision of basic public goods in urban areas.** About one-third of inequality in recent years can be traced back to circumstances that children are born into or inequality of opportunity, such as lack of access to clean water. This also has perverse multiplier effects on human development through stunting and malnutrition for example. Furthermore, with over half of Indonesia's population in urban areas (137.4 million in 2015), the challenge of development is increasingly becoming about managing rapid urbanization. The potential for gaining the development benefits of urbanization can only be realized if the growing need for such basic public goods, as water and sanitation is addressed. To improve the current service delivery environment and create a more equitable growth, a key strategy of the Government centers on broadening the revenue base, expanding priority expenditures, and making fiscal decentralization more efficient.

4. **Addressing the challenges from climate change is also key to ensuring shared prosperity in Indonesia.** Climate change is believed to increase the risk for hydro-meteorological disasters, which make up to 80 percent of disaster occurrences in Indonesia. The poorest and most marginalized populations tend to live in high-risk areas that are prone to flooding, landslides, sea level rise, and water shortages during drought. As the country with the second longest coastline in the world, Indonesia also faces a high risk of coastal inundation and sea level rise that may affect up to 42 million people living in low laying coastal zones. Most of these areas have experienced rapid urbanization, reaching 50 percent in 2010. To address the negative impacts of climate change, the Government will implement enhanced actions to map regional vulnerabilities and strengthen policies, regulations and institutional capacities for climate response. The medium-term goal of Indonesia's adaptation strategy is to reduce risks on all development sectors, including water, public service, infrastructure and urban system, by 2030 through local capacity

strengthening, improved knowledge management, convergent policy on climate change adaptation and disaster risk reduction, and application of technology.[1]

## B. Sectoral and Institutional Context

5. **Despite enjoying a large percentage (around 21 percent) of the fresh water available in the Asia-Pacific region, nearly one out of two Indonesians lacks access to safe water, and more than 70 percent of the nation's 260 million people rely on potentially contaminated sources.** Only a third of the urban population has access to piped water services. Furthermore, geographic disparities in urban piped water supply are marked, ranging from 7.5 percent (Bangka Belitung Province) to 70.8 percent (East Kalimantan Province). The country also has undergone significant land-use changes, and deforestation has altered the landscape, and left many areas more vulnerable to extreme events such as monsoon floods which could become more frequent with climate change, increasing the challenge in providing water supply services.

6. **Through the National Mid-Term Development Plan (*Rencana Pembangunan Jangka Menengah Nasional* – RPJMN) for the period 2015-2019, the Government of Indonesia has targeted the achievement of universal access to water supply and sanitation by the end of 2019.** To achieve this universal access target, the Ministry of Public Works and Housing (MPWH) has launched the 100-0-100 program (100 percent access to water supply, zero urban slum and 100 percent access to sanitation). The 100-0-100 program defines specific service levels to be met by the end of 2019 for universal access. For water supply, 40 percent of the population having access to piped water and 60 percent to non-piped water (in urban areas the target is for 60 percent piped and 40 percent non-piped), 85 percent of urban areas receiving at least 100 liters per capita per day and the remaining 15 percent the basic level of 60 liters per capita per day, and all supplies meeting the standards for quality, quantity, continuity and affordability. The magnitude of required scaling up to meet the ambitious target has led to significant impetus towards the development of the water supply sector[2]. The Government has launched a series of sectoral platform programs to systemize financing efforts and leverage all resources (organization and financial) available from national, provincial and Local Government programs, alongside donor financing and collaboration with private sector[3].

7. **Governance challenges remain at the central and local levels of implementation, including in the sector's regulatory framework.** Until 2015, Law 7/2004 on Water Resources provided guidance on the roles and responsibilities of the different levels of Government under decentralization in the water sector. This law was, however, annulled by the Constitutional Court in early 2015 following a legal challenge resulting on the reversion to the Waterworks Law (Law

[1] Indonesia's First Nationally Determined Contribution, November 2016.

[2] A 2015 study by the Water and Sanitation Program (WSP) estimated that about 14.6 million additional people will require access to public water supply per year if the 100-0-100 plan target is to be met, costing some US$19 billion (IDR 252 trillion) in total capital investments. MPWH's Strategic Planning (2015-2019) estimated total cost to support the agenda of urban water supply development at US$6 billion, to provide about 10 million new household connections.

[3] The Government has launched the following platform programs to support the 100-0-100: PAMSIMAS for rural water supply and sanitation, KOTAKU and National Housing Program for urban slum upgrading. Some other platform programs are currently under preparation i.e. the National Urban Water Supply Program (to be supported by this project), Regional Water Supply Program (which will be closely related to the urban water supply program), National Urban Waste Water Management Program, and National Solid Waste Management Program.

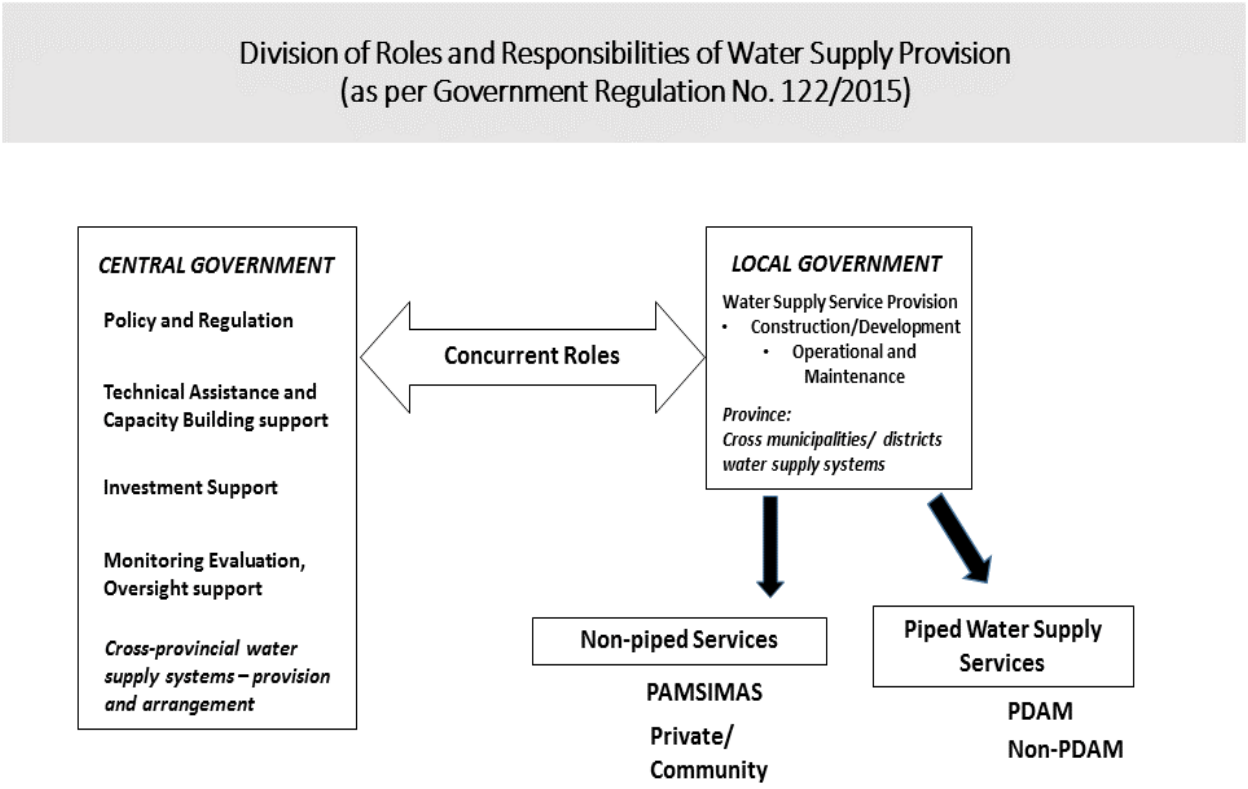
No. 11/1974) which was developed and implemented prior to decentralization. The Government has then issued two new implementing regulations (Government Regulation 121/2015 on Water Resources Management and Government Regulation 122/2015 on Water Supply Provision) providing adjustments to the Waterworks Law in order to be consistent and aligned with the decentralization law. Until a new water law is enacted, these regulations have been providing the overall legal framework for the sector. Figure 1 below illustrates the division of institutional roles and responsibilities under the current implementation regulation for water supply provision. In summary, the Central Government is responsible for policy development, regulation, investment, and monitoring; while the Local Government (LG) is responsible for ensuring water provision, and the actual implementers are the LG-owned utilities (*Perusahaan Daerah Air Minum* - PDAMs). Although the responsibility to ensure water service provision lies with the LGs, the MPWH, continues to invest more in the water sector than local governments, primarily through mandated investment in bulk water supply in regional systems and remote areas. Only around 0.3 percent of sector expenditure comes from local governments. With continuing decentralization, the Central Government ministries' budget for infrastructure investment will be more limited, presenting the Central Government a challenge to allocate resources equitably and better leverage central government programs.

8. At the local level, water delivery challenges fall into two aspects: (i) institutional capacity of local service providers (PDAMs) and (ii) the political economy surrounding the provision of public goods like water. Regarding the first, the current existing 375 PDAMs in Indonesia are hugely variant in capacity and service delivery performance. While some PDAMs service more than 50,000 connections, more than half PDAMs have less than 10,000, and a quarter have less than 5,000, due to the splitting of districts as part of the decentralization process. This fragmentation produces limited scale economies, reducing the potential of these PDAMs to be technically and financially viable[4]. Other institutional constraints faced by PDAMs are due to their limited human resource capacity whereby an understanding of technical and operational knowledge and the skill to identify projects and develop proposals are severely limited. Most of PDAMs' operational performances are generally inadequate with average national non-revenue water estimated at 33 percent[5] and only 29 percent of PDAMs operating at cost-recovery tariff levels as found by MPWH in 2013. Additionally, PDAMs also face the challenges of climate change and disaster risks and the increasing water use conflict (i.e. with the neighboring PDAMs, local farmers and/or community systems). The second challenge at the local level is the politics of revenue collection and accountability. Though the guidelines on tariff levels have been provided by Ministry of Home Affairs (MOHA), in practice, LGs are hesitant to raise tariffs. Similarly, decisions such as financial support and oversight/supervisory functions are also prone to political influences which results in limited ownership by LG and over-reliance on Central Government funding for local water supply projects.

[4] The Ministry of Public Works and Housing (MPWH) has a performance-rating system for the PDAMs (further explained in Attachment 1 of Annex 2), in which currently 214 PDAMs are categorized as 'Healthy', 103 as 'Less Healthy' and 73 as 'Sick'. Meanwhile, a separate MOHA's PDAM performance measurement system has not been consistently implemented as required by the PDAM supervisory boards.

[5] This is based on self-reported figures from PDAMs and it is likely that in reality, non-revenue water levels are much higher.

**Figure 1 Division of Roles and Responsibilities**




9. **The urban water supply sectoral platform program build upon various ongoing Government sector initiatives**, including: (i) provision of guidelines for water tariff setting stipulating that tariffs fully recover costs and a rate of return of 10 percent on investments[6]; (ii) a service providers' debt restructuring program including partial or full write off of accrued interests and penalties, and debt to equity conversion; (iii) a program of Central Government guarantees and interest subsidies for commercial loans; (iv) an output-based grants through the water *hibah*[7] program which is a Central Government's primary mechanism to increase piped water access for poor urban households[8]; and (v) special allocation funds and grants from the Ministry of Finance (MOF) for water supply and sanitation through the *Dana Alokasi Khusus* (DAK). These initiatives have indicated increasing attention from the Central Government to engage in the urban water sector. The Bank and other donors have provided support in shaping up and implementing these initiatives through a series of technical assistance (TA) and policy advisory activities over the last

[6] The guidelines for water tariff setting was issued by the MOHA. However, this is not yet accompanied by strong enforcement and monitoring/evaluation schemes. Thus, the compliance rate is still low.

[7] The Water *Hibah* program started with the Global Program on Output Based Aid (GPOBA) projects in 2009 - 2013 to provide piped water supply services for urban poor in Surabaya and Jakarta. The Government scaled it up as a national program with funding support from Australian Aid and USAID. Starting in 2016, the Water *Hibah* program is fully funded by Government's own fund.

[8] MOF Regulations 168 and 169/2008 which was issued to clarify fiscal transfer mechanism from Central Government to Local Governments, either through loans or grants. The Government later on issued the Government Regulation No. 2/2012 specifically for Grants to Local Governments followed by issuance of implementing regulations from the MOF through MOF Regulation 188/PMK.07/2012 (updated through MOF Regulation 214/PMK.07/2015 for the implementation of Water *Hibah*)

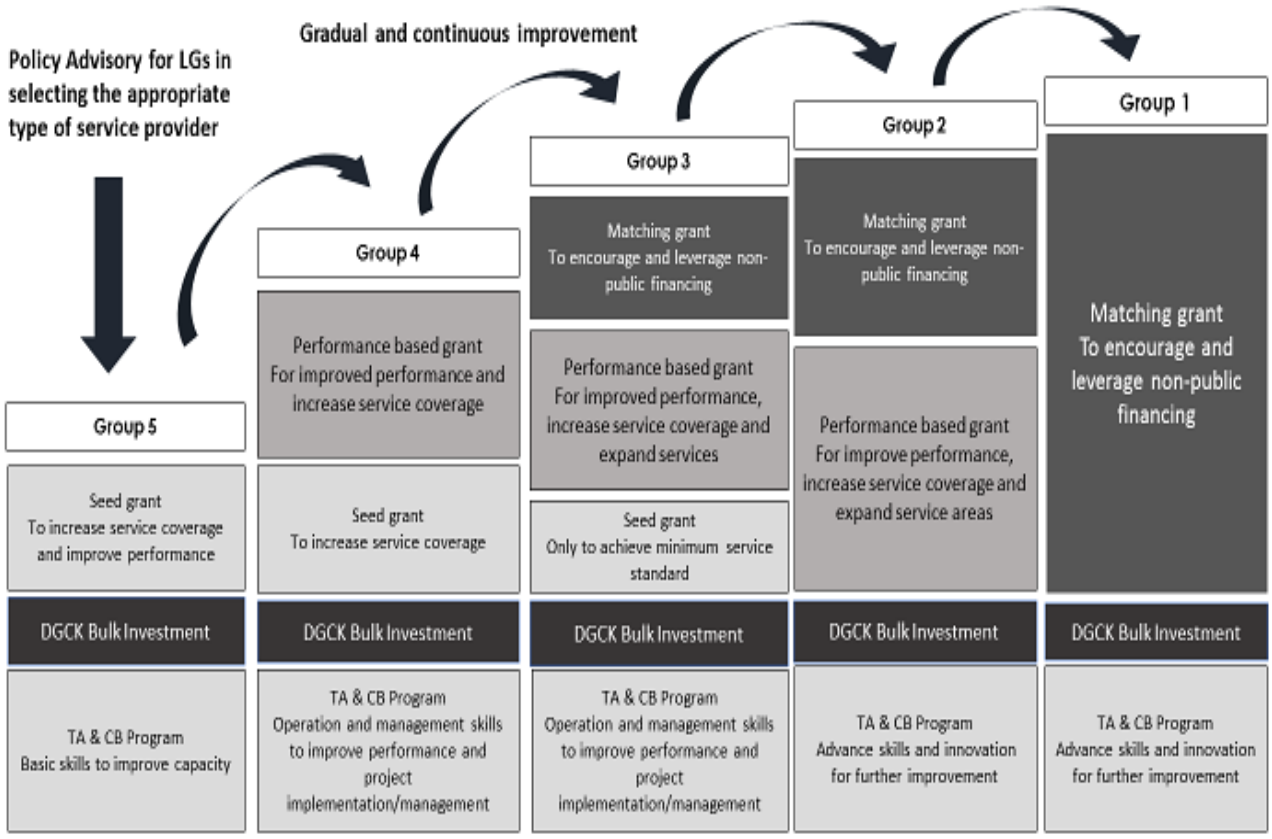
decade[9]. However, the various initiatives of increased investments from Central Government and support from development partners have not been accompanied by commensurate improvement in urban water supply services provision.

10. **Based on the need for more integrated support and better targeting of utilities based on capacity and performance, the Government has developed a basic framework for national urban water supply development - the NUWAS Framework.**[10]. The framework integrates various existing Government programs to form a comprehensive range of technical assistance, capacity building, and investment financing support, which can be targeted to LGs and/or PDAMs to achieve specific improvement aims. The framework operates at scale by simultaneously targeting the approximately 350 - 400 existing PDAMs, offering differentiated packages of support tailored to the diverse performance status, needs, absorptive capacities, and other circumstances (see Figure 2). Each support package is designed to integrate central/local government, and PDAM financing to leverage non-public sources of financing, and is aimed at lifting the service provider to a higher level of performance and towards eligibility for the next support package, leading to gradual and continuous improvement. The framework is now being operationalized by the Directorate of Drinking Water Supply Development of Directorate General of Human Settlements (DGHS) of the MPWH (See Attachment 1 of Annex 2).

[9] Major donors programs in the water supply sector included the World Bank's managed Dutch Trust Fund Water and Sanitation Program (WASAP) implemented in 2005-2011 and Australian Aid Trust Fund through the Water Supply and Sanitation Policy Formulation and Action Planning Project (WASPOLA) and Indonesia Infrastructure Support (INIS-Trust Fund); United States Agency for International Development (USAID) through Environmental Services Program (ESP) 2005-2011, Indonesia Urban Water Sanitation and Hygiene (IUWASH) 2011-2016, and IUWASH Plus 2016 – present; Australian Aid/Department of Foreign Affairs and Trade (DFAT) through the Indonesia Infrastructure Initiative (IndII) 2011-2017.

[10] The framework was developed with support from the Bank for the implementation of the national urban water supply platform. A series of TA programs were implemented with funding support from several Australian Aid trust funds (Indonesia Infrastructure Support - INIS-TF and East Asia Australia Infrastructure Growth - EAAIG), namely, Development of Indonesia Water and Sanitation Financing Program, Structuring Indonesia Water and Sanitation Investment Facility, and Development of Indonesia National Urban Water Supply Investment and Service Improvement Framework.

**Figure 2 NUWAS Framework Incentive-Based Structure**




Note: Size of the box does not reflect the available amount of each grant

11. **The proposed National Urban Water Supply Project (NUWSP) is designed to support the Government for the full operationalization of the NUWAS Framework**. The project will thus support the Central Government in building the capacity of LGs to take more leadership and responsibility to enhance their respective PDAMs, and to ultimately enable them to improve their performance. Findings and experiences from the implementation will be utilized to further improve and strengthen the framework.

## C. Higher Level Objectives to Which the Project Contributes

12. **The project directly contributes to closing the large infrastructure gap in Indonesia - a key recommendation of the Systematic Country Diagnostic (SCD) Report No. 94066-ID (September 1, 2015) for poverty eradication and improved shared prosperity in Indonesia.** The project also supports the World Bank Group's Country Partnership Framework (CPF) for Indonesia, FY2016-FY2020) Report No. 99172 (discussed at the Board on December 1, 2015) on Engagement Area 1: Infrastructure Platforms at the National Level, recommending that the Bank focus on national level engagement in partnership with government and development partners in sectors where impact at scale can be achieved through sectoral "platform" approaches. The project will also directly contribute to the World Bank Group's twin goals of reducing poverty and

ensuring shared prosperity. Consistent with the Government program, at least 20 percent of the direct beneficiaries of this project will be poor households in selected urban areas. The project will also support poor inclusive policies, and provide technical assistance to LGs/PDAMs in developing delivery mechanisms that include service provision to the poor and other vulnerable communities. Finally, the project squarely falls into the Bank's new Maximizing Finance for Development (MFD) approach[11] that entails leveraging commercial finance to support urban water supply infrastructure development, in this case by using Government funds to attract investment in utilities by enhancing the regulatory environment, and by increasing efficiency and credit worthiness of utilities.

## II. PROJECT DEVELOPMENT OBJECTIVES

### A. PDO

13. The project development objective is to provide access to improved water sources for the population and strengthen the operational performance of water service providers in selected urban areas.

### B. Project Beneficiaries

14. The direct and indirect beneficiaries of this project will be the urban population of selected municipalities and districts which will benefit from the improvement and expansion of urban water supply systems financed by the project. The total beneficiaries from this project is expected to be 1.2 million households (about six million people) living in at least 40 cities. At least 20 percent of the new connections will be intended for urban poor households. It is also expected that 200 LGs and PDAMs will benefit through improved capacity and performance and improved climate resilience from active participation in this project.

### C. PDO Level Results Indicators

15. The proposed PDO level indicators are as follow:
    (a) People provided with access to improved water sources through piped house connections, of which 50 percent women (number).
    (b) PDAMs that will graduate to the next category of performance (number)[12].

[11] The MFD principles for infrastructure finance emphasizes the use of non-public finance whenever possible, particularly long-term institutional investors. The MFD approach to investment decision-making will use commercial financing first if available, try to address market failures to attract private finance if not available, and if those efforts are unsuccessful, utilize risk instruments and the Bank's own matching capital to try to encourage non-public investment. Finally, if absolutely necessary, then public and concessional financing will be used.

[12] Following the NUWAS categorization mechanism as explained in Attachment 1 of Annex 2

## III. PROJECT DESCRIPTION

### A. Project Design

16. The Government financing to the urban water subsector (including Central and Local Governments and other financing leveraged by the Government's financing) will be aligned and undertaken through the NUWAS framework. The Bank investment will contribute to Government's financing, aimed strategically to support the consolidation and implementation of the framework, in particular to target specific investments and technical assistance elements of the framework to directly increase water access and improve PDAM's operational efficiency. This will enhance the efficiency and impact of the Government investments, and the additional leveraged resources to the subsector towards a common goal.

17. Key focus areas of the project include: (i) to improve the flow and effectiveness of available funds, whether it be from Central Government, donors and development partners, to increase investments in and improve the performance of the urban water sector; (ii) to incentivize PDAMs to move up the ladder of financial and operational sustainability so that they can increase access and provide better and climate resilience urban water services; (iii) to provide equitable but appropriate and sustainable access to investment funds for all PDAMs and LGs; (iv) to improve governance and accountability for urban water supply services in the decentralized government context; and (v) to complement existing Government initiatives to improve and provide funding to the urban water sector. This project will also support improvement of the effectiveness of Central Government's investments in bulk water facilities (including through the regional schemes) by improving capacity of LGs/PDAMs in adsorbing and optimally utilizing the additional supply provided through these facilities.

### B. Project Components

18. Three components are proposed to support (i) the physical investment windows of sectoral development platform, (ii) the technical assistance and capacity building windows of the framework, and (iii) Central Government's development, implementation and continuous improvement of the framework. A fourth component will assist the Government at central and local levels with project implementation and management support.

**Component 1: Investment Support for Urban Water Supply Infrastructure Development (estimated cost of US$560.0 million, with IBRD financing of US$70.0 million)**

19. This component will support the Central Government in providing investment support to at least 40 LGs/PDAMs of varying performance / categories through the investment packages available under the framework (see Figure 2). Bank financing will complement existing Central Government financing support for investment to be made accessible to LGs/PDAMs (this include the Water *Hibah* program, investment support through the DAK, etc.). The Bank financing will be prioritized to provide investment support through seed grants and matching grants which will be allocated to LGs/PDAMs with the following characteristics:

(a) ***Seed Grants (Stimulant Support)***. This investment support is intended for LGs in which their PDAMs have relatively low capacity (classified in groups 3, 4 and 5 according

to the NUWAS framework, Figure 2) in urban areas where the coverage is also still low. This investment support will be for capital investments and will be integrated with provision of Technical Assistance (TA) / Capacity Building (CB) programs. This type of investment support will be provided as a one-time capped and limited scope of support with a narrow pre-defined menu of activities limited to: (i) NRW reduction, (ii) utilization of idle water production capacity to provide water (extend coverage) to unserved areas, and (iii) rehabilitation and/or uprating of existing treatment plants.

(b) ***Matching Grants.*** The matching grant scheme is aimed to incentivize LGs which are more financially capable and their PDAMs are financially and technically capable (groups 1 and 2) to obtain non-*Anggaran Pendapatan dan Belanja Negara* (APBN/Central Government's budget) financing, especially domestic non-public financing, to invest in expanding and improving their water supply services. These non-public domestic financing sources may include domestic banks, PT. *Sarana Multi Infrastruktur* (PT. SMI) (or Regional Infrastructure Development Fund - RIDF), business-to-business funding, domestic private sector, and the domestic capital market. A grant equivalent to a pre-specified percentage of the approved non-public financing transaction will be provided to the LG/PDAM to be utilized for further improvement and expansion of the water supply services.

20. ***Performance Based Grants*** (to improve efficiency and service expansion). The Government has an on-going successful Water *Hibah*[13] program, an output-based grants program that will provide new-house connections to the poor. The Water *Hibah* program will be expanded to include performance-based indicators to support LGs/PDAMs in improving operation efficiency and services. Pre-specified performance-based grants will be made available to the LGs in which their PDAMs achieve specific targets of specific key performance indicators on operation efficiency and service improvement (i.e. NRW and energy efficiency, etc.). The targeted performance indicators for each participating PDAM/LGs will be pre-agreed through a performance-based agreement. The PDAM/LG will need to pre-finance these activities that may include physical activities (network rehabilitation and expansion, purchase and installation of main meters, rehabilitation or replacement of meters, creation of District Metering Areas, pressure control, pump replacement, etc.) and non-physical activities (improving customer database, implementation of active leakage detection, improve billing collection ratio, etc.). This grant is intended for LGs/PDAMs with some capacity to support with the activities' pre-financing needs (groups 2, 3 and 4). The implementation of this Performance Based Grants for improving efficiency and services will be piloted with Government funding already allocated in the Water *Hibah* Program and will be implemented following the existing mechanism through the Central Project Management Unit (CPMU) Water and Sanitation *Hibah*, also under the DGHS. This project will collaborate with CPMU Water and Sanitation *Hibah* and other donors in designing the Performance-Based Grants (starting with NRW reduction and Energy Efficiency). The

[13]Water *Hibah* Program is an on-going Government's program aimed to providing piped water supply access to the poor households. Under this program, LGs can receive grant for a specific output (i.e. number of household connections for the poor) of which they have to first directly invest in their respective PDAM. The program was initially started as a Global Partnership for Output-Based Aid in Surabaya and Jakarta, which was then scaled-up as a national program with funding from Australian Aid and USAID. In the last two years, the Government has financed this program with Government's own budget.

Government could utilize up to US$25 million of Bank financing to provide investment support to further expand and/or scale up the Performance Based Grant if needed.

21. Bank investment support under this component will be focused on supporting activities to improve quality and expand piped water supply services by improving operational efficiency and management of existing systems, ensuring the optimum utilization of the current systems prior to the investment in the development of new systems. To be eligible to receive these investment packages support, participating PDAMs will have to enter into a performance agreement with their respective LGs. Implementation of these performance agreements will be monitored and evaluated by the Central Government (DGHS, BPPSPAM, MOHA and MOF), as part of the operationalization of the NUWAS framework. An indicative list of the 40 priority LGs/PDAMs to be supported with the different packages is provided in Attachment 2 of Annex 2.

**Component 2: Technical Assistance and Capacity Building for Local Governments and PDAMs (estimated cost of US$15.5 million, with IBRD financing of US$10.0 million)**

22. This component will support the capacity building of LGs, PDAMs and other stakeholders aimed, at performance improvement in a range of technical, financial, commercial, managerial, human resources. The capacity building will also aim to strengthen climate and disaster risks resilience of urban water supply operations. A sub-component will support capacity building and training by improving the Government's Center of Excellence (CoE) Program[14]. This sub-component will support the CoE program to develop and implement additional training modules for key topics that are not yet offered under the program. The key topics will include water safety plan (that includes assessment of climate vulnerabilities), urban water management (that includes promoting effective use of water, climate resilience infrastructure design, linking water provision with sustainable land use practice, disaster preparedness and incorporation of climate information in water supply services planning), utility reform, competency-based Human Resources Development (HRD), utility financing, citizen engagement, and inclusion of services to the poor and vulnerable communities. An indicative list of the 200 LGs/PDAMs expected to benefit from to various CoE programs to be supported is provided in Attachment 3 of Annex 2. Another sub-component will provide support to selected LGs/PDAMs to improve their operational and financial performance, develop viable investment plans and prepare financing proposals for these investments (including proposals to access non-government financing from the domestic financial market). At the central level, a Technical Assistance and Capacity Building Team (TACT) will be assigned to provide support to the CoE program and to support the Central Project Management Unit (CPMU) in monitoring and evaluation of the TA/CB activities. The TACT will also help the CPMU in screening and reviewing proposals from LGs/PDAMs which will need to be aligned with the *Rencana Induk Sistem Penyediaan Air Minum* (RISPAM – LG's Water Supply Development Master Plan) and PDAM's Business Plan. At the LGs level, small Field Assistant (FAs) Teams will be assigned to directly engage with and provide support to LGs/PDAMs in data collection and reporting (utilizing the Self-Assessment Toolkit), identifying the needs of investments and TA/CB, and assisting LGs/PDAMs in preparing and submitting the proposals. These FAs will work under coordination of Provincial Coordinators (PCs) with oversight from the

[14] The Center of Excellence (CoE) is the Government's program to provide trainings and capacity building activities to PDAMs' staff. The CoE is currently anchored at and funded by DGHS, with additional support from JICA as well as from other development partners (USAID's IUWASH PLUS).

Regional Advisory and Management Consultant. The PCs will be also tasked with supporting provincial implementation units.

**Component 3: Advisory and Policy Development Support for Central Government (estimated cost of US$6.8 million, with IBRD financing of US$5.0 million)**

23. This component will support the strengthening and improvement of policies and instruments that forms the NUWAS framework, including supporting the Government agencies that have the mandates and responsibilities for them. As necessary, additional or complementary policies and instruments will be developed. This component will support the National Steering Committee of Housing, Settlements, Water and Sanitation (*Tim Pengarah POKJA PPAS*) to assess, improve and/or develop national level policies, implementation guidelines and other instruments for urban water management, regional water supply services, water governance and utility reform, private sector involvement, utility financing, poor inclusive services, citizen engagement, performance based financing (including expanding the investment options under *Water Hibah* program), and performance based contracting in the urban water sector. The key Central Government agencies in the POKJA PPAS include the BAPPENAS as the chair, MOF, MOHA and MPWH. The DGHS in MPWH – the project Central Project Management Unit (CPMU) – and the Central Project Implementing Units (CPIUs) in MOHA will be supported to improve the LGs/PDAMs monitoring and evaluation system, as well as on policy strengthening. This will enable the status of the sector towards achieving sustained universal access targets to be more easily and systematically monitored. A team of Advisory Consultant will be assigned to provide support to the CPMU and CPIUs for this component. This Advisory Team will work closely with the POKJA PPAS as well as with other key sector stakeholders.

**Component 4: Project Implementation and Management Support (estimated cost US$20.3 million, with IBRD financing of US$15.0 million)**

24. This component will provide project management support the central, provincial and Local Government levels. A Central Management Consultant (CMC) will support the POKJA PPAS, CPMU and CPIUs on (i) communication/dissemination, (ii) screening and assessment of LGs/PDAMs proposals, (iii) monitoring, verification and evaluation of project implementation, and (iv) overall project management. Two regional-based Regional Management and Advisory Consultants (RMACs) will provide project management and implementation support to provincial POKJA AMPLs, provincial implementing units and to participating LGs/PDAMs, as well as coordinate with the TACT to facilitate LGs/PDAMs accessing the capacity building and training program. The RMAC will also oversee the Provincial Coordinators (PCs) and the Field Assistants (FAs) teams. Through this component, the project will support the Government in monitoring and evaluation of operationalization of NUWAS Framework as a national platform program, not only in participating LGs/PDAMs.

## C. Project Cost and Financing

25. The International Bank for Reconstruction and Development (IBRD) and the Republic of Indonesia, represented by the Ministry of Finance, will enter into a Loan Agreement. The loan proceeds will complement the overall Central Government's investment for urban water supply

development, managed by the DG Human Settlements (DGHS) of the MPWH as the Executing Agency for this project.

26. During the project period, the Government expects a total of US$602.6 million to be invested in urban water supply development. This will include the IBRD's US$100.0 million financing and US$184.8 million of Central Government and LGs/PDAMs sector funding. With the support of the NUWAS framework, the Bank and Government sector funding is expected to leverage an additional US$317.8 million in funding from other Government programs, commercial borrowings, private sector, other donors/donors' programs, and community through connection fees where applicable. Table 1 provides a summary of costs and financing.

**Table 1 Total Costs and Financing**

| Project Components | Cost (US$ Million) | IBRD Financing (US$ Million) | Counterpart Financing (US$ Million) | | Others[15] (US$ Million) | % of IBRD Financing |
|---|---|---|---|---|---|---|
| | | | APBN DGHS | APBD / PDAM | | |
| 1. Investment Support for Urban Water Supply Infrastructure Development[16] | 560.00 | 70.00 | 75.00 | 100.00 | 315.00 | 12.5% |
| 2. Technical Assistance and Capacity Building for LGs and PDAMs | 15.50 | 10.00 | 1.00 | 2.50 | 2.00 | 64.5% |
| 3. Advisory and Policy Development Support for Central Government | 6.80 | 5.00 | 1.00 | | 0.80 | 73.5% |
| 4. Program Implementation and Management Support | 20.30 | 15.00 | 3.30 | 2.00 | | 73.9% |
| **Total Cost** | **602.60** | **100.00** | **80.30** | **104.50** | **317.80** | **16.6%** |
| Front End Fee[17] | 0.25 | | 0.25 | | | |

## D. Lessons Learned and Reflected in the Project Design

27. The development of the NUWAS framework takes into account key lessons learned from the previous Bank's urban water supply operation and the other Bank sector-related support in Indonesia and elsewhere. The Indonesia Urban Water Supply and Sanitation Project (UWSSP – P090991)[18], was a direct predecessor of NUWSP that focused on capital investment for expansion and rehabilitation of water treatment plants and distribution systems in three towns. The project raised concerns regarding sustainability and optimum utilization of the built facilities under the project due to the absence of institutional strengthening component in the project. Key features of

[15] This is the amount of funding expected to be leveraged from other sources of financing that include: Water *Hibah* program, DAK, Government-backed infrastructure funds e.g., the Regional Infrastructure Development Fund (RIDF), funding from other donors/donors' programs, commercial borrowings, private sector and community. More detailed information is provided in Annex 4. The Water *Hibah* program's annual allocation is about US$80 million, allocated and managed by the DG Fiscal Balance of the MOF, but fund channeling to Local Governments is based on results of verification and technical recommendations from the DG Human Settlements. The allocation of DAK for water supply has also showed increasing trend in the last 5 years, allocation in 2017 is approximately US$90 million, triple from the approximate US$30 million allocated in 2012.

[16] Based on the DGHS Budget Planning Document and the National Mid-Term Development Plan (RPJMN 2015-2019).

[17] The front-and-fee is estimated at US$ 250,000 (0.25% of the loan amount). As per the Borrower's preference, the front-end fees and interest rate cap/collar premium will be paid out of Borrower's own counterpart funding resources.

[18] The Indonesia Urban Water Supply and Sanitation Project (UWSSP), US$20.5 million Specific Investment Loan, closed in FY14.

NUWSP, such as the focus on capacity building over direct infrastructure investment, categorization of PDAMs and tailored capacity building based on development status, and strengthening of Central Government capacity together with Local Governments and PDAMs, are directly based on lessons learned from previous implementation experience. The NUWSP also benefitted from the series of Bank projects that financed integrated urban infrastructure development, TAs and studies implemented through the Dutch TF Water Supply and Sanitation Program (WASAP), the GPOBA Water Project in Surabaya and Jakarta, the Water Supply and Sanitation Public Expenditure Review (WSS PER) study, and other on-going projects in Indonesia, including the on-going Water *Hibah* Program and programs from other donors (USAID and DFAT). The key lessons from these several initiatives are:

a) *The lack of coordination between Central and Local Governments, and inadequate prioritization of investments has led to relatively small increases in the number of house connections, while idle capacity has also significantly increased*. The MPWH has increased investments in significant number of infrastructure development projects. However, follow-up investment by LGs/PDAMs in distribution networks and connections does not always occur. The WSS-PER suggests that tackling this issue will involve taking steps to improve the financial health of PDAMs to better enable them to invest in improved services and for LGs to prioritize.

b) *The varying financial and implementation capacities, and creditworthiness of LGs and PDAMs will require different levels and forms of financing and technical support.* UWSSP showed that physical investments may be more suitable for LGs and PDAMs with relatively strong capacity. The amount of investment should be adjusted depending on the management capacities of the LG and PDAM.

c) *Under the decentralized environment wherein Local Governments have more responsibilities in the provision of water supply services, the Central Government continues to play a role in initiating sector reforms, incentivizing and regulating the performance of Local Governments*. There is a need to develop a financing framework for the water supply and sanitation sector that enables the Central Government to map and categorized LGs and PDAMs capacity and provide the financing/investment mechanisms accordingly.

d) *Output-based financing for water supply has proven to be effective, not only in increasing coverage of piped water supply, but also in leveraging substantial financial contribution from Local Governments*. The GPOBA Water Project in Surabaya and Jakarta has introduced the output-based financing approach in the country. The approach has been scaled up through the National Water *Hibah* Program, initially funded by DFAT/AusAid and USAID financing support. Since 2016, the Water *Hibah* Program has been fully funded by Government budget.

28. Notable international example that was considered include the Brazil Federal Water Resources Management Project (PROAGUA) where the project was a tool for the development of technical and institutional capacity in water resources management by allowing in the project design for the fact that the different participating states had very different capacity starting points, and tailoring project interventions to match these differences, while successfully using 'role model' states to enhance learning.

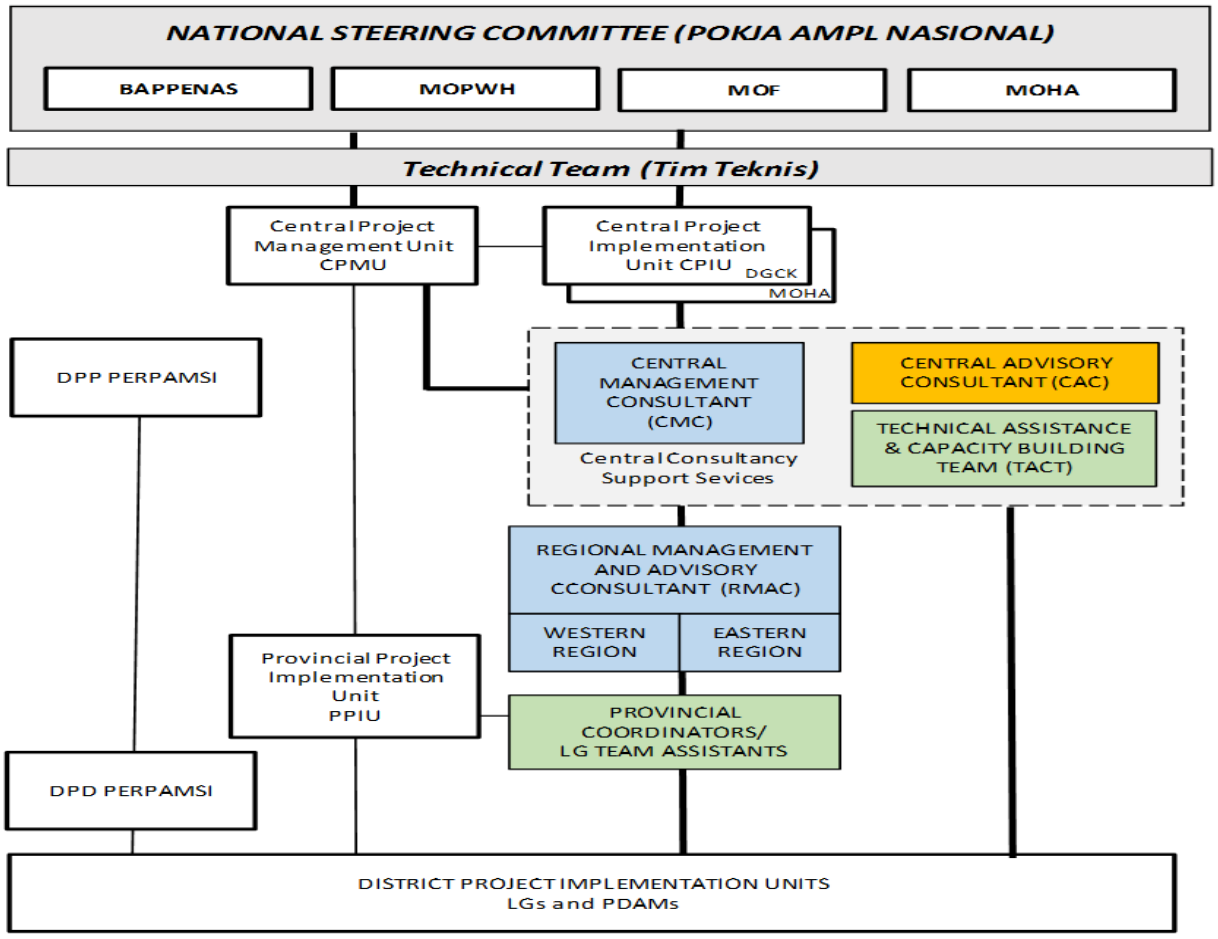
## IV. IMPLEMENTATION

### A. Institutional and Implementation Arrangements

29. The existing National Steering Committee of Housing, Settlements, Water and Sanitation (*Tim Pengarah* POKJA PPAS), chaired by the Deputy Minister of Regional Development in the Ministry of Planning/National Planning Agency (BAPPENAS) will provide the overall policy guidance during the implementation of the project. The Directorate General of Human Settlements (DGHS) of the MPWH will be the executing agency and will be responsible for the procurement and management of all Bank-financed contracts. A Central Project Management Unit (CPMU) will be established in the DGHS to manage and coordinate the input of the Technical Team of POKJA PPAS and the Central Project Implementing Unit (CPIU) which will be established in the MOHA. The CPMU will be supported by a combination of Central Management Consultant (CMC), Central Advisory Team (CAT), Technical Assistant and Capacity Building Team (TACT), Regional Management Consultant (RMACs), Provincial Coordinators and field based team assistants.

30. LGs and PDAMs will also be involved in the implementation of Components 1 and 2, in particular to lead the preparation of the RISPAM (Water Supply Development Master Plan) and PDAMs' Business Plan (BP) and execution of activities defined under the RISPAM and BP. Participating LGs will enter into Funding and Performance Agreement with the CPMU and PDAMs will enter into Performance Agreement with their respective LGs to demonstrate the commitment for participation in the project. Figure 3 below shows the institutional and implementation arrangement of the project. A more detailed description on project implementation arrangement and processing is provided in Annex 3.

**Figure 3 Institutional and Implementation Arrangement**




### B. Results Monitoring and Evaluation

31. The CPMU with support from the CMC will be responsible for monitoring and evaluation, and in conducting verification. The CPMU will submit quarterly implementation progress reports, highlighting any issues requiring attention. The CMC will coordinate with TACT, RMACs, provincial coordinators, and field assistants, to monitor implementation progress at the LGs/PDAMs level, including monitoring the performance agreements. A Self-Assessment Toolkit that has been developed and tested during the development of NUWAS Framework will be used to measure the baseline data and to measure LG's/PDAM's performance improvement. Assessments will be subjected to independent verification and cross-checked with the PDAM's performance audit report from BPKP. This toolkit will eventually be integrated with the web-based Urban Water Supply Development Management Information System (MIS) which is expected to be rolled out in stages. The project MIS will be publicly accessible, to provide updates and reliable information on project progress, contributing to lowering fiduciary risks. Project monitoring will also include spot checks and a complaints handling mechanism.

32. Specific implementation evaluation will be carried out at least during mid-term and at end of implementation. Evaluation will use quantitative and qualitative approaches to assess specific aspects of project implementation and will be done through the following:

a) *Evaluation of project's outputs*: Data on access to piped water supply and performance of LGs/PDAMs in participating cities will be obtained from the MIS and evaluated to examine the progress of achievement.
b) *Impact evaluation*: NUWSP CPMU will work with the consultant (Advisory Team) and/or other stakeholder in organizing a study on project's impact to economy, community welfare, roles of Government as policy maker and regulator, and community's behavior.
c) *Thematic/specific evaluation*: Specific/thematic evaluation will be conducted during the course of project implementation if needed.

### C. Sustainability

33. The project is part of Bank's coordinated response to support the Government's 100-0-100 program to provide universal access to safe water and sanitation and eliminate urban slums. This project enjoys a high level of political commitment and buy-in from the relevant Government of Indonesia (GOI) agencies (i.e. BAPPENAS and MPWH) and is directly aligned with the RPJMN 2015-2019 target for universal access to safe water supply services.

34. This project will consolidate a Government platform that will enable higher funding to the sector under a framework that is strong in promoting operational efficiency of PDAMs. A key feature of this project is to operationalize and incentive-based structure whereby LGs/PDAMs with different performance levels can gradually improve their capacity to deliver water supply services sustainably. The framework will feature open and transparent categorization through a web-based MIS hosted at the DGHS' system, and LGs/PDAMs will be required to report if they wish to be considered for Central Government (CG) support. Results and findings from this project implementation will feed into the further improvement and refinement of the framework.

## V. KEY RISKS

### A. Overall Risk Rating and Explanation of Key Risks

35. The overall implementation risk is considered *Substantial*. The key identified risks are related to (i) fiduciary; (ii) political and governance; (iii) technical design; (iv) institutional capacity for implementation and sustainability; and (v) sector strategies and policies.

36. Fiduciary and procurement risks are exacerbated by the weak coordination among implementing agencies, in particular, the coordination challenges with provincial and Local Government teams of participating LGs/PDAMs. Procurement risks also include delays in starting the procurement processes due to lack of readiness of technical requirements/designs because of poor planning and monitoring, and delays in carrying out the procurement process due to limited experience of Pokja/ULP in Bank's procurement procedure, and cumbersome internal process in Government. There are also risks of non-compliance with the applicable procurement procedures required under the Loan Agreement due to insistence of project implementing agencies to follow

the Government's procurement regulations instead of the governing Bank's Procurement/Consultant Guidelines in cases where the two conflicts. Finally, there are also significant integrity risks of collusion, fraud and corruption in procurement and contract implementation due to the weak governance environment in general and in the water sector in particular as evidenced in another Bank-financed water sector project. These risks will be mitigated through the implementation of various controls to improve coordination and monitoring/evaluation, and the provision of extensive implementation technical assistance support at the central, provincial and local levels. This will include responsibility of CPMU, with support by consultants, to prior review and certify that all procurement processes carried out by LGs/PDAMs under the Project are consistent with the Bank's Procurement procedures, and also to check for red flags of fraud and corruption in the procurement process and contract implementation. The Bank's oversight of procurement and contract implementation will be further strengthened by carrying out ex-post procurement reviews as part of project supervision. Consumer feedback mechanisms will also be included to strengthen governance.

37. Political and governance (including integrity) risks are exacerbated by the overall weak governance environment, low capacity and lack of political willingness of Local Governments to play leading role in the provision of water supply services and weak coordination within the different implementing agencies at Central Government, provincial and LG/PDAM teams. Under Law 23/2014, the role and responsibility of water supply provision is concurrently divided among different levels of Governments with Local Governments mandated to play the leading role. To mitigate these risks the National POKJA PPAS as Steering Committee will be supported to improve coordination at the Central Government level while the Provincial POKJA AMPL and *Kota/Kabupaten* POKJA AMPL will lead coordination at the province and municipality/district levels respectively. The project will also involve the MOHA as one of the CPIU thus they will be fully involved in NUWAS framework discussion and oversight to ensure that there is common understanding and buy-in for Central Government's effort in providing assistance to and increase Local Governments capacity and willingness to lead and be more responsible for universal access achievement.

38. Technical design risks: Achievement of the targeted outputs may be affected if anticipated funds leveraged from other sources do not materialize or if implementation of the Performance-Based Grant (PBG) scheme is delayed. Although many PDAMs have been familiar with the output based approach for new connections through the Water *Hibah* Program, this project will introduce the utilization of the PBG in a more sequential and progressive way than a one-time assessment of improved operational efficiency for example. To mitigate this risk, the project will implement the following measures: (i) establish a close collaboration and coordination with other Government's and other donors/donors' programs; (ii) provide technical assistance and capacity building component that will help LGs/PDAMs to improve performance and be more credit-worthy, thus providing them with more opportunity to access various funding sources; and (iii) provide incentive-based grants (in the form of matching grant) to encourage LGs/PDAMs to utilize more non-APBN financing. The team will also ensure close collaboration with the DG Fiscal Balance, to start the socialization of the PBG align to the Water *Hibah* Program. The team will also work will the Urban Governance team in continuing the discussion with the MPWH and DGFB to encourage Local Governments to utilize the DAK as a possible source of pre-financing, and to include the indicators of improved operation efficiency in the DAK's Technical Guidelines.

39. Risks related to institutional capacity for implementation: Sufficient time will be needed to establish and stabilize the implementation arrangements of the framework, in particular due to the fact that the framework is still new and involves multiple and multi-level implementing agencies. To mitigate implementation risks, institutional and coordination strengthening will be provided through a package of technical assistance support at the central, provincial and local levels. Design and implementation risks will also be mitigated through an initial modest design that is: (i) contained through a specific menu of support activities, (ii) limited funding size of each support activity, (iii) the selective use of pre-conditions, post-conditions and performance contracts, and (iv) a simplified web-based monitoring and evaluation mechanism.

40. Sector strategies and policies: The Waterworks Law (Law No. 11/1974) and the accompanying two implementing regulations that were issued following the annulment of the Water Law 7/2004 (Government Regulation No. 121/2015 on Water Resources Management and Government Regulation No. 122/2015 on Water Supply Provision) are adequate and sufficient to provide the legal basis for the project. The draft of new Water Law which is currently pending discussion at the House of Legislative, does not materially change the provisions of these regulations that will adversely affect the implementation of the project.

## VI. APPRAISAL SUMMARY

### A. Economic and Financial Analysis

41. There are several economic benefits from the proposed project that can be measured and quantified, especially from the Component 1 where the benefits can be quantified from the increased consumption, reduction of non-revenue water, and time saving as the result of having house connection. Economic analysis was carried out using cost benefit methodology and switching analysis of net benefit of the project based on data from 28 PDAMs included as priority cities for investment support for infrastructure development. Based on the cost benefit analysis (summarized in Table 2), the project is economically viable as demonstrated by the positive net present value (NPV) and positive gap of economic internal rate of return (EIRR) to discount rate. The results of sensitivity analysis indicated that the overall net benefits are relatively insensitive to change in number of beneficiaries and increasing total costs. Detailed review on financial performance of two PDAMs' with complete financial statements was also conducted. These two PDAMs represent conditions and characteristics of overall PDAMs to be supported under this project. Details of the economic and financial analysis conducted are provided in Annex 4. Economic and financial analysis will be carried out during implementation once the sub-projects locations and investments are identified and confirmed.

**Table 2: Summary of Economic Analysis**

| | NPV | EIRR |
|---|---|---|
| Economic Benefits | | |
| Discount Rate 10% | 64,206,487 | 28.1% |
| Switching Analysis | | |
| Case 1 Coverage (beneficiaries) | | |
| Change -20% | 35,357,114 | 20.3% |
| Case 2 O&M Cost | | |
| Change +30% | 60,487,806 | 27.0% |

## B. Technical

42. **Focus of Infrastructure Investment for Optimum Utilization of Existing Systems**. The project infrastructure investment support will focus on activities to improve the efficiency of operation and optimal utilization of existing systems. The project will focus on (i) activities to reduce Non-Revenue Water (NRW) and improve energy efficiency, enabling water and cost savings to improve and further expand their services, and (ii) activities to support LGs/PDAMs expand their distribution network and to install up to 50 percent of new connections, including connections to poor households (a minimum of 20 percent). New systems will only be supported when LGs/PDAMs have demonstrated efficient operation and adequate capacity to manage assets.

43. **Utilization of Performance Agreement**. As part of eligibility criteria to receive investment support under Component 1, each LG and PDAM will have to establish a Performance Agreement with agreed key performance indicators and targets. Performance improvement will be monitored and evaluated periodically and results uploaded onto a web-based MIS system. The Self-Assessment Toolkit will be used as the reporting tool by LGs and PDAMs and will be cross-checked against the PDAMs' audited performance report. Independent verification process will be facilitated by the CMC.

44. **Project Readiness for Implementation.** To speed up project implementation, the project management and implementation support mechanism and key consultancy services will be ready and mobilized respectively shortly after the project is effective. Terms of references for consultant services for the project have been prepared and reviewed during project appraisal. The Executing Agency has agreed to have advanced procurement for these consultancy services. The Executing Agency has also prepared a draft Project Management Manual (PMM) ready for discussion with the implementing agencies and the Bank. The PMM will be accompanied by a series of technical guidelines which are currently being developed. The Executing Agency has also conducted a NUWSP Socialization Workshop in March 7, 2017 and March 14-15, 2018 with participation from Local Governments and PDAMs of which about 30 LGs/PDAMs already submitted their Expression of Interests and Commitment to participate in the project. Review of the results of assessment and detail investment plan from these LGs/PDAMs is currently underway. About 20 percent of the investments to be supported under the Bank loan have been identified and preparation for the investment is underway.

## C. Financial Management

45. The Financial Management Assessment (FMA) has been conducted as part of Fiduciary Assessment of the project. The FMA assess the adequacy of the financial management system of the implementing agencies, DGHS to produce timely, relevant and reliable financial information on project activities, and ensure the accounting systems for project expenditures and underlying internal controls are adequate to meet fiduciary objectives and allow the Bank to monitor compliance with agreed implementation procedures and progress towards its objectives. The project financial management arrangements follow the Government system agreed by the Bank as reflected in the Project Management Manual (PMM). At this stage, as the main expenditures of the project will be construction of infrastructures to be operated and managed by PDAMs, the financial management risk of the project is mainly due to possible delays in transferring the assets

constructed/procured by DGHS (as sub-projects funded through the Matching Grant and Seed Grant scheme) to the participating Local Governments and PDAMs as beneficiaries of the project. To mitigate the associated risk, and to come up with the proposed action plan, the proposed financial management arrangement for the project is: the CPMU is expected to (i) prepare PMM which consists of project organization structure, inclusion of project budget into DIPA of DGHS of MPWH, fund flow mechanism, IFR preparation and disbursement mechanism, internal and external audit arrangement, and arrangement for transfer of assets from the DGHS to participating Local Governments and PDAMs (for assets constructed/procured through the Matching Grant and Seed Grant schemes) at the latest a year after construction completion; and (ii) conduct periodic coordination with all key stakeholders of the project.

46. The financial management risk is assessed as being **substantial before mitigation and moderate after mitigation**. This assessment has concluded that with the implementation of the action plan, the risks will be substantially mitigated, and the proposed financial management arrangements will satisfy the Bank's minimum requirements under the OP/BP10 and be adequate to provide, with reasonable assurance, accurate and timely information on the status of the loan as required by the Bank.

### D. Procurement

47. Assessment of the procurement capacity of the implementing agencies and procurement risks under the project has been completed as part of the fiduciary review.

48. All procurement under the project shall be carried out in accordance with the World Bank's "Guidelines: Procurement under IBRD Loans and IDA Credits" dated January 2011 (revised July 2014), and "Guidelines: Selection and Employment of Consultants by World Bank Borrowers" dated January 2011 (revised July 2014); and the provisions stipulated in the Loan Agreement. The "Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants", dated July 1, 2016, shall also apply to the project. It is only in the procurement of Goods, Works and Non-consulting services under the National Competitive Bidding (NCB) method, that the Government's procurement regulations may be followed subject to complying with the improvements listed in the NCB Annex of the Loan Agreement, and in such case if there is any conflict between the Government's procurement regulations and the Bank's Procurement Guidelines, the Bank's Procurement Guidelines shall prevail.

49. The bulk of the procurement spend under the project is expected to be for civil works contracts to support the urban water supply infrastructure development under Component 1 of the project, which will be carried out by the Procurement Service Units (ULPs) at *Satuan Kerja Pengembangan Sistem Penyediaan Air Minum* (Satker PSPAM) of MPWH in each province. The civil works and goods contracts are expected to be simple and of small value, much below the ICB Thresholds, and will be procured following NCB method and some through Shopping method. Selection of Consultants under Components 2, 3 & 4 will be carried out by the CPMU under the office of the DGHS/MPWH mostly following the QCBS method.

50. The CPMU under DGHS/MPWH, which will be responsible for carrying out the selection of consultants under the Project and also for overall management and coordination of the Project, has experience in the Bank's Procurement procedures through several Bank financed projects.

However, Satker PSPAMs, which will be responsible for procurement of infrastructure has limited experience in Bank financed contracts.

51. The procurement risk is assessed as *High.* There are risks of delays in the procurement processes due to lack of preparation of technical requirements/designs, capacity issues, internal approval processes in Government. There are also risks of non-compliance with the applicable procurement procedures required by the Loan Agreement due to the insistence of project implementing agencies to follow the Government's procurement regulations instead of the Bank's Procurement/Consultant Guidelines which govern procurement under the project. There are also significant integrity risks, such as collusion, fraud, corruption, unauthorized subletting of works to other firms, particularly in similar civil works contracts, due to the weak governance environment and inadequate oversight, as recently evidenced in another Bank-financed water sector project implemented by MPWH. These risks will be mitigated through a range of measures for strengthening controls, including provision of extensive implementation technical assistance support to build procurement capacity particularly of Satker PSPAMs at the provincial and local levels, enhancing CPMU's responsibility, with support of the consultants, to prior review and provide no objections to all procurement processes carried out by Satker PSPAMs under the Project, and having CPMU also be responsible for systematically collecting data, monitoring and reporting procurement performance of the Satker PSPAMs as part of its overall responsibility for management and coordination of the project. Since most of the civil works contracts will fall below the Bank's prior review threshold and will be subject to ex-post review, the Bank will also ensure proper oversight of procurement by carrying out procurement ex-post reviews as part of project supervision.

52. Detailed procurement arrangements, including key procurement risks and mitigation measures are provided in Annex 3.

### E. Environmental and Social (including Safeguards)

53. **Safeguards Policies Triggered**. The project will cover urban areas in selected districts and municipalities countrywide, and is expected to generate positive impacts from the provision of wider access to clean water services through better access to efficient, equitable and sustainable clean water services. The positive impacts include: (i) improved quantity and quality of safe water supply access, (ii) reduced incidents of water borne diseases, and (iii) more convenient access to clean and safe water at home allowing more productive time for adults and more time for children to learn and play. The proposed investments would primarily affect only localized areas at or around the sites of facilities subject to physical works. Environmental and social impacts mainly result from activities around construction, rehabilitation and operation of existing Water Treatment Plants (WTPs) facilities and their auxiliaries, which could range from construction of water intake activity, operations of the WTPs, etc. The project does not anticipate large-scale land acquisition and is unlikely to have significant irreversible adverse and cumulative environmental impacts that are sensitive, diverse or unprecedented. Given the nature of the project, the following Bank Safeguard Policies are triggered: OP4.01 Environmental Assessment (EA); OP4.10 Indigenous Peoples (IPs); OP4.11 Physical Cultural Resources; and OP4.12 Involuntary Resettlement (IR). Detail description of the safeguards policies and instrument for this project are provided in Annex 3.

54. **Environmental Assessment (EA) OP4.01**. The environmental impacts are typical from construction activities under Component 1 which will mainly finance the rehabilitation and/or extension of existing water supply infrastructures. Under this component, the Bank will not provide direct financing for construction of new water sources, new water intake and transmission line, and new water treatment plant. The Bank will indirectly provide support to construction of new systems through provision of TA and incentive mechanism to encourage eligible LGs/PDAMs to access non-public funding sources to finance construction of these new systems. The Bank's Interim Guidelines on the Application of Safeguard Policies to Technical Assistance Activities in Bank Financed Projects and Trust Funds Administered by the Bank (January 2014) will be the reference for this TA support. As the exact locations for subprojects will be defined only during project implementation, an Environmental and Social Management Framework (ESMF) has been prepared as the safeguard instrument for this project. The ESMF provides a framework to guide the environmental and social screening, assessment, and management of subproject activities' potential impacts. Subprojects will be screened according to the ESMF and the safeguards instrument will be prepared accordingly as safeguard instrument for the subproject

55. **Indigenous People (IP) OP4.10**. Most of the project activities will mainly take place in urban/peri-urban areas. However, in the provinces of Kalimantan, Sulawesi, Bali, NTB, NTT, Maluku, Maluku Utara, Papua, and Papua Barat, IPs may be present in urban/peri-urban areas. A stand alone Indigenous Peoples Plan (IPP) will be needed and prepared based on community-wide free, prior and informed consultation if the proposed subproject will affect IP communities. An Indigenous Peoples Plan Framework (IPPF) that provides guidelines to LGs/PDAMs to screen IP presence and prepare IPP has been prepared as part of the ESMF.

56. **Physical Cultural Resources (PCR) OP/BP4.11**. It is highly unlikely that the subproject sites will have an impact on PCR as they will be located in existing areas that are already constructed and no large construction and excavation activities are expected. However, since the project locations are yet to be defined, hence the likely activities affecting archeological, paleontological, historical, religious, or unique natural values would be identified during the screening process in the ESMF. The chance find procedure and mitigation measures for PCR has been included in the ESMF and the standard appropriate clauses regarding the procedures to be followed in the event of chance finds of significant artifacts will be included in construction contracts.

57. **Involuntary Resettlement OP/BP4.12**. The project does not anticipate large-scale land acquisition as most physical construction activities will be carried out in the existing areas belong to LGs/PDAMs. However, relatively small land acquisition may be required for construction of new water supply infrastructure facilities. In the event that land acquisition is foreseen, the borrower has prepared a Land Acquisition and Resettlement Policy Framework (LARPF) and once project/sub-project sites have been identified, a stand-alone Land Acquisition and Resettlement Action Plan (LARAP) will be needed. As the land acquisition process for this project is small impact, an Abbreviated LARAP will be required. LARPF was prepared to mitigate any impacts due to land acquisition activities and has been incorporated in the ESMF.

58. As the safeguard instrument for this project, the ESMF will provide guidance for project management staff at all levels, consultants, PDAMs and contractors to manage environmental and social safeguards. The ESMF provides a framework to guide the environmental and social

screening, assessment, and management of subproject activities' potential impacts. The ESMF already incorporates a LARPF, an IPPF, and a chance find procedure and mitigation measures for Physical Cultural Resources (PCR). When the information is available, subprojects will be screened according to the ESMF and the specific safeguards instrument for each subproject will be prepared accordingly. The Draft ESMF has been disclosed in the DGHS' website and public consultation was conducted on March 8, 2017 in Jakarta. The Final ESMF has been disclosed in DGHS' and in Bank's websites on October 2, 2017.

59. **Project Locations and Salient Physical Characteristics Relevant to the Safeguard Analysis**. Bank funded activities under Component 1 will focus on improving efficiency of the existing piped water supply systems through reducing non-revenue water, improve energy efficiency and expand the services by installing new distribution lines and household connections in approximately 40 cities. The Bank will not provide direct financing for construction of new sources, water intake, transmission pipelines and water treatment plants. The Bank will indirectly finance the construction of new systems through the Matching Grant schemes developed to encourage LGs/PDAMs to mobilize domestic non-public finance. Eligible LGs/PDAMs could access any other funding mechanism to fund these new systems utilizing the technical assistance provided and facilitated under Component 2. The TA for these LGs/PDAMs will include support to prepare the projects to meet or to comply with good and acceptable safeguards standards per GOI and Bank policies. This TA component should refer to the Bank's Interim Guidelines on the Application of Bank Safeguard Policies to Technical Assistance in Bank Financed Projects and Trust Funds Administered by the Bank (January 2014) wherein the terms of reference of these activities will be reviewed, assessed, reviewed and approved by the Bank. WB safeguards and Environmental and Social Management Framework (ESMF) requirements will be applied to the subprojects, regardless of the source of financing for the subprojects. Safeguard requirements as described in the ESMF will be communicated to other potential financiers, as it will be applied. The other donors and/or financiers have been also invited in the public consultation.

60. **Citizen Engagement**. The project is designed to maximize participation of stakeholders and beneficiaries at all levels in order to ensure better governance and accountability, and improve the quality of implementation. The project will place citizen participation at the core of implementation through various instruments, including consultations and discussions, information disclosure, civil-society oversight in monitoring of sub-projects outcomes, and a complaints handling mechanism. The project will also develop a series of training for LGs/PDAMs with a specific topic on citizen engagement to help them in developing and implementing citizen engagement strategies as part of their services. The participating LGs/PDAMs will be also encouraged to establish customer complaints handling mechanism and to implement regular customer satisfaction survey. The executing agency will also use the project website as a platform to collect and respond to citizen feedback, and monitor its own performance on citizen engagement.

61. **Gender**. Evidence suggests that women often benefit more from new water connections since women and girls are often responsible to fetch water from wells and other water sources when piped supplies are not available. Having water connection at home provides the adults with more convenient access leading to increased productivity, and the children with more time to learn and play. However, generally women are often less active in raising their concerns over the quality of water supply services. The project will advise LGs/PDAMs to incorporate gender aspect in their

citizen engagement activities to ensure that there is a balanced participation from men and women in each community/customer consultation activities and customer satisfaction survey (for example by ensuring active women participation in any consultation activities and women respondents in any survey), and to make sure that there are equal opportunities for PDAMs staff to participate in trainings. The project will also advise gender-disaggregated customer complaints data analysis. The project will also advise for inclusion of gender aspect in PDAMs' human resources development strategy to ensure that there is equal opportunity for PDAMs staff to participate in trainings. This will be done through introduction of gender tracking for CoE trainings participation.

### F. World Bank Grievance Redress

62. Communities and individuals who believe that they are adversely affected by a World Bank (WB) supported project may submit complaints to existing project-level grievance redress mechanisms or the WB's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project affected communities and individuals may submit their complaint to the WB's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate Grievance Redress Service (GRS), please visit *http://www.worldbank.org/GRS*. For information on how to submit complaints to the World Bank Inspection Panel, please visit www.inspectionpanel.org.

## Annex 1: Results Framework and Monitoring

**Country: Indonesia**

**Project Name: National Urban Water Supply Program (P156125)**

**Results Framework**

**Project Development Objectives**

PDO Statement

The project development objective is to provide access to improved water sources for the population and strengthen the operational performance of water service providers in selected urban areas.

| **These results are at** | Project Level |
|---|---|

**Project Development Objective Indicators**

| Indicator Name | Baseline | Cumulative Target Values | | | |
|---|---|---|---|---|---|
| | | YR1 | YR2 | YR3 | End Target |
| People provided with access to improved water sources through piped house connections (Number) | 0 | 200,000 | 800,000 | 4,000,000 | 6,000,000 |
| Women provided with access to improved sources through piped house connection (Number - Sub-Type: Breakdown) | 0 | 100,000 | 400,000 | 2,000,000 | 3,000,000 |
| PDAMs that will graduate to the next category - as reference to the categorization mechanism under the NUWAS framework | 0 | 0 | 5 | 10 | 20 |

| | | | | | |
|---|---|---|---|---|---|
| (Number) | | | | | |

**Intermediate Results Indicators**

| Indicator Name | Baseline | Cumulative Target Values | | | |
|---|---|---|---|---|---|
| | | YR1 | YR2 | YR3 | End Target |
| New piped household water connections (Number) | 0 | 50,000 | 200,000 | 800,000 | 1,200,000 |
| Number of poor households with new piped house connections (Number - Sub-Type: Breakdown) | 0 | 10,000 | 40,000 | 160,000 | 240,000 |
| Local Governments with improved financing support to PDAMs by increasing equity contribution, providing grant, or providing guarantee for PDAM to utilize non-public financing (Number) | 0 | 5 | 10 | 30 | 40 |
| LGs/PDAMs receive the matching grant as results of leveraging non-public financing for infrastructure development (Number) | 0 | 0 | 5 | 10 | 20 |
| Number of Local Governments and PDAMs participate in technical assistance and capacity building programs (Number) | 0 | 20 | 75 | 150 | 200 |

| | | | | | |
|---|---|---|---|---|---|
| PDAMs that achieve full cost recovery tariff (Number) | 0 | 0 | 15 | 30 | 50 |
| PDAMs develop/update Business Plan for investment (Number) | 0 | 5 | 15 | 30 | 40 |
| PDAMs with improved customer satisfaction (Number) | 0 | 5 | 15 | 30 | 40 |
| Men and women trained through the Center of Excellence training programs. Baseline target will be established by year 1. (Number) | 0 | TBD | TBD | TBD | TBD |
| Men trained through the Center of Excellence. Baseline target will be established by year 1. (Number - Sub-Type: Breakdown) | 0 | TBD | TBD | TBD | TBD |
| Women trained through the Center of Excellence. Baseline target will be established by year 1. (Number - Sub-Type: Breakdown) | 0 | TBD | TBD | TBD | TBD |
| The National Urban Water Supply (NUWAS) Framework is operationalized (Yes/No) | No | No | Yes | Yes | Yes |

| | | | | | |
|---|---|---|---|---|---|
| Key guidelines on sector financing and utility reform adopted<br>(Yes/No) | No | No | No | Yes | Yes |
| Grievances responded and/or resolved within the stipulated service standards for response times<br>(Percentage) | 0 | 75 | 80 | 90 | 100 |

**Indicator Description**

**Project Development Objective Indicators**

| Indicator Name | Description (indicator definition etc.) | Frequency | Data Source / Methodology | Responsibility for Data Collection |
|---|---|---|---|---|
| People provided with access to improved water sources through piped house connections | This indicator measures the actual number of people in urban areas who benefited from improved water supply services (piped household connections) that have been constructed under the project. The data on the number of people provided with access is estimated by multiplying the actual number of piped house connections with an estimate of the number of people per household connection. Number of women beneficiaries is estimated as 50 percent from the total beneficiaries | Annual | PDAMs' reports, CPMU (progress reports), MIS, Self Assessment Tool | CPMU, PPIUs |
| Women provided with access to improved sources through piped house connection | The number of women beneficiaries is estimated as 50 percent from the total beneficiaries | annual | PDAMs reports, CPMU (progress report), MIS, Self Assessment tool | CPMU, PPIUs |
| PDAMs that will graduate to the next category - as refer to the categorization mechanism under the NUWAS framework | Measures number of PDAMs with significant improved performance that result in their graduation to the next category as refer to the categorization mechanism (matrix) under the NUWAS Framework | Annual | CPMU (Progress Report), MIS, Self Assessment Tool | CPMU, PPIUs |

**Intermediate Results Indicators**

| Indicator Name | Description (indicator definition etc.) | Frequency | Data Source / Methodology | Responsibility for Data Collection |
|---|---|---|---|---|

| | | | | |
|---|---|---|---|---|
| New piped household water connections | Number of new piped household water connections which result from the project intervention. A piped household water connection is defined as a connection that provides piped water to the consumer through either a house or yard connection. Hence, they do not include, inter alia, standpipes, protected well, borehole, protected spring, piped water provided through tanker trucks, or vendors, unprotected wells, unprotected spring, rivers, ponds and other surface water bodies, or bottled water. | Annual | PDAMs' reports, CPMU (progress report), MIS, Self Assessment Tool | CPMU, PPIUs |
| Number of poor households with new piped house connections | Number of poor households (following the criteria of the Water Hibah program) provided with new piped house connections which result from the project intervention. | Annual | PDAMs' reports, CPMU (progress reports), MIS, Self Assessment Tool, Water Hibah MIS | CPMU, PPIUs |
| Local Governments with improved financing support to PDAMs by increasing equity contribution, providing grant, or providing guarantee for PDAM to utilize non-public financing | This indicator measures improvement of LGs' performance in providing water supply services through their respective PDAM, indicated by ensuring that the PDAM receive adequate financing support to be able to meet full cost recovery tariff. The types of financing support include equity contribution, providing grants or subsidy, providing financial guarantee for PDAM to utilize non-public financing, and grants (in form of cash and/or assets). | Annual | CPMU (Progress report), MIS, PDAMs' reports | CPMU, PPIUs |
| LGs/PDAMs receive the matching grant as results of leveraging non-public | Measures number of LGs and PDAMs receiving the matching grant as results of leveraging financing from non-public | Annual | CPMU (progress reports), MIS, PDAMs' report | CPMU, PPIUs |

| | | | | |
|---|---|---|---|---|
| financing for infrastructure development | finance sources such as commercial borrowings, private sector participation (CSR, PPP), etc. Eligibility criteria and amount of matching grant to be received will refer to the Project Management Manual (PMM). | | | |
| Number of Local Governments and PDAMs participate in technical assistance and capacity building programs | Measures number of LGs and PDAMs participating in the capacity building and/or technical assistance programs. Participation in the capacity building could be through participation in regular or specific training programs implemented/organized directly by the project with collaboration with other programs. | Annual | CPMU (progress report), CoE's database | CPMU |
| PDAMs that achieve full cost recovery tariff | Measures overall improvement and sustainability of operational efficiency of PDAMs. Full cost recovery tariff is achieved when the water sales revenue is adequate to cover total costs (include operational costs, debt service and depreciation). | Annual | PDAMs' reports, MIS, Self-Assessment tool | CPMU, PPIUs |
| PDAMs develop/update Business Plan for investment | Measures number of PDAMs that develop or update their Business Plan to be in good quality following the template and standards as follow up results from participation in the TA/CB programs | Annual | CPMU (Progress Report), CoE's database | CPMU, PPIUs |
| PDAMs with improved customer satisfaction | To measure improvement of PDAMs in citizen engagement and customer respond. The customer satisfaction is improved when the PDAM demonstrated better | Annual | CPMU (progress reports), MIS | CPMU, PPIUs |

| | | | | |
|---|---|---|---|---|
| | respond to customer's complaints and/or willing to implement customer satisfaction survey in regular basis | | | |
| Men and women trained through the Center of Excellence training programs. Baseline target will be established by year 1. | This indicator monitor and evaluate gender participation in the capacity building programs. | Annual | MIS, CoE's database | CPMU, CoE, PPIUs |
| Men trained through the Center of Excellence. Baseline target will be established by year 1. | This indicator monitor and evaluate number of men participate in the capacity building programs. | Annual | MIS, CoE's database | CPMU, CoE, PPIUs |
| Women trained through the Center of Excellence. Baseline target will be established by year 1. | This indicator monitor and evaluate number of women participate in the capacity building programs. | Annual | MIS, CoE's database | CPMU, CoE, PPIUs |
| The National Urban Water Supply (NUWAS) Framework is operationalized | The indication of the operationalization of the framework includes among others a roll out plan for the NUWAS Framework and utilization of its MIS to monitor the progress of all urban water supply development programs/projects. The NUWAS Framework is fully operationalized when the structure has been developed, information management system and monitoring and evaluation mechanism have been established, and annual/regular benchmarking and progress report is available and published. | No description provided. | CPMU (progress reports) | CPMU |

| | | | | |
|---|---|---|---|---|
| Key guidelines on sector financing and utility reform adopted | Guidelines for sector financing and utility reform are developed and made available to be implemented by LGs and PDAMs | No description provided. | CPMU (progress report), POKJA AMPL | No description provided. |
| Grievances responded and/or resolved within the stipulated service standards for response times | To measure improvement in grievance redress mechanism | Annual | CPMU (progress reports), MIS, PDAMs' audited performance reports | CPMU, PPIUs |

## Annex 2: Detailed Project Description

## INDONESIA: National Urban Water Supply Project (P156125)

### Sectoral Development Platform.

1. The underlying principle for the Government's sectoral development platform of service delivery in urban water supply is to provide a national urban water supply framework (NUWAS Framework) and enabling environment to facilitate infrastructure investment by all tiers of Government, and align and coordinate donor programs, to meet the universal access targets. A broad integrated framework will also allow for common policies and investment rules to be applied across the sector, ensuring consistency of approach between various sector development activities.

2. The framework utilizes various existing Government programs and projects in the urban water sector. These programs and projects (including their underlying aims, processes, guidelines and procedures) have been or will be assessed, updated, improved and aligned with the aim of integrating them into a single broad framework. The emerging framework will thus form a broad and comprehensive range of technical assistance, capacity building and investment financing support offerings which can then be targeted to various LGs and/or service providers to achieve specific improvement objectives.

3. The framework takes into account key lessons learnt over the last two decades of Government sectoral efforts, including key lessons learned from the previous Bank's urban water supply operation, and the other Bank sector-related support in Indonesia and elsewhere (see Attachment 4 to this Annex 2). The framework also takes into account the best practices and lessons learnt from the on-going Government's program in the water supply and sanitation development, in particular the Water *Hibah* Program (see Box A2.1). The most important lessons are the need to

**Box A2.1. Water *Hibah* Program**

Water *Hibah* Program is Government's program to increase piped water supply access especially for poor households and to increase local governments' investment in the sector. The program was developed based on the GPOBA's pilot project in expanding piped water supply services to urban poor in Surabaya implemented in 2009 - 2012. Starting in 2011, the project was scaled up to be a national program with initial funding support from the Australian Aid and USAID. Since 2015, the Government has started to allocate their own budget to support the program and since 2016, the program is fully-funded by Central Government budget.

To participate in the Water *Hibah* program, LGs have to meet a set of eligibility criteria that includes PDAM's performance (only for healthy PDAMs), availability of production capacity, and LGs' commitment to provide equity contribution to PDAM. To receive the grant, LGs have to first directly invest in their respective PDAM to extend piped water services and install new connections. The grant is provided as reimbursement for the achieve outputs (i.e. number of connections that meet the eligibility criteria). DG Human Settlements is in-charge in screening and reviewing LGs proposals, implementing verifications, monitoring and evaluation, and in reviewing LGs' reimbursement requests. MOF will directly transfer the reimbursement payment to LG based on DGHS' recommendation.

align the commitments and support activities of Central and Local Governments provided to any given service providers, and the criticality of an accompanying service provider improvements reform component tied to the support activities. The framework acknowledges the need to operate at scale by simultaneously targeting the approximately 350 – 400 existing urban water service providers, and the counter-need to be able to offer differentiated packages of support tailored to the differing needs, absorptive capacities and other circumstances of the many urban water service providers with their differing levels of technical and financial performances.

4. Over the last five – six years, the Government has developed and established (with significant assistance from the Bank through trust fund financed technical assistance) the NUWAS Framework. Under this framework an existing but inadequate PDAM categorization system[19] has been further refined and expanded into five categories to enable a more detailed capacity and performance category stratification of LGs and PDAMs. The five categories under the NUWAS Framework are: Category 1 (Sustainably Healthy PDAMs and LG has high or very high fiscal capacity), Category 2 (Healthy PDAMs but LG has medium or low fiscal capacity), Category 3 (Less Healthy PDAMs with coverage above 75 percent), Category 4 (Less Healthy PDAMs with coverage less than 75%) and Category 5 (Sick PDAMs). This categorization has been done to the level adequate for the purposes of basic targeting of differentiated support packages aimed at helping the LG/PDAM at a given capacity and performance level to reach the next level of capacity and performance. A range of these differentiated support packages, consisting of integrated Technical Assistance and Capacity Building (TA & CB) support and physical investment support, have also been developed for each category. The NUWAS Framework utilizes incentive-based structure to allow gradual and continuous improvement (Figure 2 of the main text shows categories of LG/PDAM and types of support packages available to each**).** Attachment 1 to this Annex 2 describes the further technical details of the categorization system and differentiated support packages under the NUWAS Framework.

5. While this existing NUWAS framework still requires further improvement, refinement and addition of more tailored support activities, it is assessed to have the minimum building block elements necessary for the basic framework to be operationalized. The project will support further improvement and refinement of the framework.

**Principles of Bank Support**

6. The Government financing to the urban water subsector (including local government and other financing leveraged by the Government's financing) will be aligned and undertaken through the NUWAS framework. The Bank investment will contribute to Government's financing, aimed strategically to support the consolidation and implementation of the framework, in particular to targeting specific investments and technical assistance elements of the framework. This will enhance the efficiency and impact of the Government own investments, and the additional leveraged to the subsector.

[19] PDAMs categorization by BPPSPAM was developed to provide a base for evaluation and monitoring of PDAMs improvements in relation to debt restructuring program, and to provide guidance for Ministry of Public Works development plans for water sector. This categorization divides PDAMs into three categories: healthy, less healthy and sick, based on scoring system from four aspects (service, financial, operational and human resources) with more than 50 indicators.

7. Key focus areas of the project include: (i) to improve the flow and effectiveness of available funds, whether it be from central government, donors and development partners, to increase investments in and improve the performance of the urban water sector; (ii) to incentivize PDAMs to move up the ladder of financial and operational sustainability so that they can increase access and provide better services; (iii) to provide equitable but appropriate and sustainable access to investment funds for all PDAMs and local governments; (iv) to improve governance and accountability for urban water supply services in the decentralized government context; and (v) to complement existing government initiatives to improve and provide funding to the urban water sector. This project will also support improvement of the effectiveness of Central Government's investments in bulk water facilities (including through the regional schemes) by improving capacity of LGs/PDAMs in adsorbing and optimal utilization of the additional supply provided by these facilities.

**Project Development Objective:**

8. The project development objective is to provide access to improved water sources for the population and strengthen the operational performance of water service providers in selected urban areas.

**Project Components**

9. Four components are proposed for the project, comprising: (i) Component 1 to support physical investment packages under the NUWAS framework, (ii) Component 2 to support technical assistance and capacity buildings (TA/CB) packages under the framework, as well as other forms of technical assistance focused on supporting LGs/PDAMs to prepare proposals to access the TA/CB and the physical investment packages under the framework, (iii) Component 3 to support the central Government's development, implementation and continuous improvement of the framework, and (iv) Component 4 to assist the Government with project implementation and management support. The following paragraphs describe these components in more detail.

**Component 1: Investment for Urban Water Supply Infrastructure Development (estimated cost of US$560.00 million, with IBRD financing of US$70.00)**

10. The component will support the physical investment support packages that have been developed under the NUWAS Framework (as discussed in para. 4 above), which currently include three types of incentive grants – seed grants, matching grants and performance-based grants. Each type is aimed at different categories/groups of LGs/PDAMs to leverage performance improvement towards the next categories/groups. Each is focused on supporting eligible LGs/PDAMs to increase the number of household water supply connections primarily through (i) the improvement and/or augmentation of its infrastructure to increase water availability [non-revenue water reduction, rehabilitation of existing water treatment plants, and rehabilitation of distribution network, etc.], (ii) the reduction of operating costs to improve its operating efficiency [energy efficiency] and financial sustainability [increase collection ratio, improve customer database, etc.], and (iii) the expansion of its distribution network to reach new customers.

11. Through this component, the Project will support central government in providing seed grants, matching grants and performance-based grants support to at least 40 LGs/PDAMs selected from

different categories/groups of performance and capacity to be able to initiate the operationalization of the different incentive grants. Included in these selected LGs/PDAMs are "PDAM *Binaan*" (priority cities for achieving 100% piped water supply coverage), cities included in the regional schemes (especially the regional schemes where bulk water supply infrastructure have been constructed), and the four remaining "sick" PDAMs in Java Island (all are in East Java). A list of these prioritized cities for this component is provided in Attachment 2 of this Annex. Through this Project, Bank financing will complement Central Government funding in providing seed grants and matching grants while provision of performance-based grants will be through the existing Water *Hibah* program. Further substantial funding from various Government and local government channels have been earmarked to complement these grants, with these expected to follow on from the initiation of these grants. LGs/PDAMs provided with this support will also have to participate in TA/CB programs and to enter performance agreements which will be monitored and evaluated. By contributing to the Government's funding, activities in this component will: (i) leverage the Bank's implementation support mechanism to help address and/or resolve technical issues that may likely arise especially in the initial years of the implementation of the NUWAS framework, and (ii) enhance the impact of the Government's investment funding, including contributing to the Government's access targets[20].

12. The following further describes the features and eligibility criteria for seed grants and matching grants:

**(a) Seed grants (Stimulant Support).** This assistance is intended for LGs in which their PDAMs have relatively low capacity and still have low coverage (Category 3, 4, and 5 under the NUWAS Framework categorization). This assistance will be for capital investments and will be integrated with provision of TA/CB programs. This type of investment support will be provided as a one-time limited scope of support with a narrow pre-defined menu of activities limited to: (i) NRW reduction, (ii) utilization of idle water production capacity; and (iii) rehabilitation and/or uprating of existing treatment plants. LGs/PDAMs which have already received this support will need to demonstrate the improved performance and/or graduate to the next level of performance category prior to being able to submit proposal for other type of results-based financing under the framework. The amount of the stimulant support will be limited based on the capacity of the PDAM/LG in managing and adsorbing funding, thus a higher capacity PDAM/LG could access higher stimulant support. The amount of seed grant per each category is as follows:

**Table A2.1 Seed Grant Allocation per each Category**

| Capacity LG/PDAM under NUWAS Framework | Max Amount of Seed Grant |
|---|---|
| Category 3 | US$4 million |
| Category 4 | US$3 million |
| Category 5 | US$2 million |

[20] The Government has provisioned for further investment support for construction of new water treatment plants and new water sources under different programs, but these will be provided only to LGs/PDAMs which have already demonstrated efficient operation and have adequate capacity to operate and manage additional assets.

**(b) Matching grants.** The matching grant scheme aims to incentivize LGs with financial capability and in which their PDAMs are more financially and technically capable (i.e., Groups 1 and 2) to obtain non-APBN financing, especially existing domestic non-public financing, to invest in expanding and improving their water supply services. These non-public domestic financing sources may include domestic banks, PT. *Sarana Multi Infrastruktur* (SMI) (or RIDF), Business-to-Business funding, domestic private sector, and the domestic capital market. A grant equivalent to a pre-specified percentage of the approved non-public financing transaction will be provided to the PDAM to be utilized for further improvement and expansion of the water supply services. The matching grant amount per PDAM/LG is as follows:

**Table A2.2 Maximum Amount of Matching Grant per each Category**

| **Capacity LG/PDAM under NUWAS Framework** | **Max Amount of Matching Grant** | |
|---|---|---|
| | % of approved transaction | Maximum in US$ |
| Category 1 | 40% | US$5 million |
| Category 2 | 30% | US$4 million |

13. **Performance-based grant (for improved efficiency and poor inclusive service expansion).** The Government has an on-going successful Water *Hibah* program, an output-based grant program that will provide new house connections to the poor. The Water *Hibah* program will be expanded to include performance-based indicators to support LGs/PDAMs in improving operation efficiency and services. Pre-specified performance-based grants will be made to the LGs/PDAMs to reward the achievement of specific targets corresponding to specific key performance indicators on operational efficiency (i.e. NRW, energy efficiency, and/or new household connections, etc.). The targeted performance indicators will be pre-agreed through a performance-based grant agreement. The PDAM/LG will need to pre-finance these activities on improving operation efficiency programs that may include physical activities (network rehabilitation and expansion, purchase and installation of main meters, rehabilitation or replacement of meters, creation of District Metering Areas, pressure control, pump replacement, etc.) and non-physical activities (improving customer database, implementation of active leakage detection, improve billing collection ratio, etc.). This grant is intended for LGs/PDAMs with some capacity to provide pre-finance (Groups 2, 3, and 4). The mechanism for Performance-based Grant is already available and currently being implemented as the Water *Hibah* program, an output-based grants program to provide new house connections to the poor. Funding sources for this program are already budgeted and allocated from central Government and other development partners. Under this project, the Bank will provide technical assistance to support expansion of the Water *Hibah* program to include other indicators that will contribute to improved operational efficiency (i.e. NRW reduction and Energy Efficiency), with close collaboration with CPMU Water and Sanitation *Hibah*, also under DGHS, MOF and Bappenas, as well as with DFAT and USAID. The Bank project resources will be also utilized to assist LGs/PDAMs to participate in the existing Water *Hibah* program (e.g., to support the preparation proposals for the existing Water *Hibah* program for poor household connections). Up to US$25 million of Bank financing can be provided to support further expansion and scale up of performance-based grant if needed and as per request from the Government.

14. The implementation of Seed Grant and Matching Grant support will utilize DGHS' existing Program Assistance mechanism. Under this mechanism, LGs/PDAMs will submit their proposal (this includes Business Plan, DED, etc.) to DGHS (CPMU) which will then procure and issue contracts based on the proposal submitted by the PDAM/LG. The PDAM will be involved during implementation especially in supervising the works. Following the completion, the results of activities will be handed over to the LG which will pass it on the PDAM. The implementation of the Performance-based grant support will utilize the existing *Hibah* mechanism. Under the *Hibah* mechanism, central Government (APBN) and donor funding is allocated through the DG Fiscal Balance of MOF and channeled to LGs/PDAMs as reimbursement payment based on technical recommendation and results of verification from DGHS.

15. Component 1 is targeting 1.2 million new household connections to be installed as the result of intervention the various investment packages, benefitting approximately six million people. At least 20 percent of these new connections will be for poor households, to be implemented trough close collaboration with the on-going Water *Hibah* program and following the criteria and procedures described in its Technical Guidelines.

**Component 2: Technical Assistance and Capacity Building for Local Governments and PDAMs (estimated cost of US$15.50 million, with IBRD financing of US$10.00 million)**

16. This component will support the provision of technical assistance and capacity building (TA/CB) support packages which form part of the NUWAS Framework (as described in para. 4 and Figure 1). The support packages are focused on the performance improvement of LGs/PDAMs in a range of technical, financial, commercial, managerial, human resources, and other areas. A sub-component will support capacity building delivered through structured training programs, primarily utilizing and augmenting the Government's existing Center of Excellence (CoE) programs. This will be followed through with another sub-component offering specific hands-on technical assistance to provide LGs/PDAMs support, on an as needed basis, to improve their operational and financial performance. Additionally, this sub-component will also provide technical assistance to support selected LGs/PDAMs to identify their investment and performance improvement needs and develop proposals to apply for funding for support they may be eligible for under the NUWAS framework.

17. Assessments of PDAMs have shown that the primary capacity gaps are: (i) a general lack of understanding of commercial operations of water utilities, (ii) a lack of understanding of, and commitment to, full cost recovery tariffs, (iii) an inability to plan for investments and to identify and develop investment projects, and (iv) inconsistencies in PDAM evaluation and monitoring procedures related to a general lack of technical and operational knowledge, including by the PDAM's supervisory board. The assessment also showed that political will and support from local government is one of the major factor contributing to a PDAM's improved performance. It was therefore recognized that training programs and courses in these topics/areas should be made available to PDAMs' management and relevant local government representatives, aimed to build better understanding of these key issues in governing, managing and operating water utilities.

18. However, existing training and capacity building programs offered by Government training facilities mainly focus on the operational and technical skills for PDAMs' personnel and less on the overall utility governance and management principles. To help address the gap, this component will focus the training and capacity building support on the following areas:

- Good governance and commercial operations of PDAMs;
- Water utility reform and efficiency improvements to help PDAM improve their operation and increase efficiency through NRW reduction and management, improvements in energy efficiency and reduction of power/fuel costs, better customer billing system and improvement in customer service in general;
- Full cost recovery tariff calculations and utility financing; and
- Performance monitoring and evaluation of PDAMs, by providing assistance to PDAMs and local governments to develop and enter into Performance Agreement, including identifying performance indicators and target that will be included in the PDAM's business plan, annual work plan and budget plan, and the Performance Agreement.

**Component 2a Capacity Building and Training**

19. This sub-component will support the central Government to develop a structured and progressive capacity building and technical assistance program to build the capacity of local governments and PDAMs to improve water supply services, develop investment projects and access financing. Under the NUWAS framework, the Government has decided to anchor its capacity building program around the existing Center of Excellence (CoE) program[21]. The CoE has already established training centers and have already developed a database of trainers (which are classified as national level and provincial level) that could be further trained and utilized to deliver training programs. The existing training modules offered by the CoE are: NRW reduction, Financial Management, Energy Efficiency, and GIS development. This component will support the development and implementation through the CoE of additional and complementary training modules for key topics that are not yet available in the existing CoE programs and implement training of trainers for these new modules. These topics include water safety plan, urban water management, utility reform, competency-based Human Resources Development (HRD), utility financing, citizen engagement, and inclusion of services to the poor and vulnerable communities. This component will also support a review and improvement of existing training modules, as well as a careful assessment for recommendations of eligibility of each PDAM/LG categorization grouping to access the different training modules on offer. The CoE training will also be extended to central government representatives from MPWH, MOHA, MOF, BAPPENAS, PERPAMSI (Association of Water Utilities), and others as required.

20. Activities will be coordinated with, and will complement, other existing training programs by other development partners, including the MPWH Technical and Management Support Programs, BPPSPAM Training Programs, PERPAMSI Training Programs; Waterlinks (regional network of water services operators); and international donor agencies programs such as: Australian's

[21] The Center of Excellence (CoE) is the Government's program to provide trainings and capacity building activities to PDAMs' staff. This program is initiated by Directorate of Water Supply Development of DGHS, initially implemented with JICA support and centralized implementation at the Drinking Water Training Center (*Balai Teknis Air Minum* – BTAM) in Bekasi. The CoE is currently anchored at and funded by DGHS, with additional support from JICA as well as from other development partners (USAID's IUWASH PLUS).

DFAT's funded Indonesia Infrastructure Initiative (IndII) and its follow up program KIAT, and USAID's Indonesia Urban Water, Sanitation and Hygiene Plus (IUWASH Plus).

21. Sub-component 2a is targeting a total of 200 LGs/PDAMs to benefit from this capacity building program through their participation in various training programs offered by the CoE.

**Component 2b Technical assistance**

22. This sub-component will support the retention of teams of experts, to be made available to provide technical assistance to LGs/PDAMs. The technical assistance provided are of two types: (i) specific hands-on technical assistance to provide selected LGs/PDAMs support to improve their operational and financial performance as part of the NUWAS framework, and (ii) technical assistance to support selected LGs/PDAMs to identify their investment and performance improvement needs and develop proposals to access support offerings under the NUWAS Framework. The topics for the specific hands-on technical assistance subcomponents are similar to that of the capacity building programs, the difference being that technical assistance consultants will provide direct assistance to the LGs/PDAMs to complement the capacity building course-based training. This hands-on technical assistance is targeted at LGs/PDAMs that have participated in the earlier described capacity building and training program after which they have identified, signed a Performance Agreement with DGHS and implemented follow-up actions as a result of their participation in the capacity building and training program. The types of technical assistance that the LGs/PDAMs can apply for depends on the extent of improvements made since participating in the capacity building programs.

23. **Specific hands-on technical assistance for improving operational and financial performance**. The project will provide assistance to PDAMs to implement specific programs, including the policies and guidelines developed by the Central Government (under Component 3). This could include, for example, non-revenue water reduction programs, energy efficiency programs, and credit-worthiness assessments, among others, based on proposals submitted by LGs to DGHS and consistent with the capacity building program just undertaken. The pipeline of technical assistance activities may extend over implementation periods beyond the life of the project. The project will collaborate with other development partner programs providing technical assistance services to LGs/PDAMs to pilot the mechanism with a few PDAMs (especially Groups 3, 4, and 5 of the 40 PDAMs selected for investment support under Component 1), fine-tuned and mainstreamed over the project period. The project will provide assistance for the development of ToRs, procurement of suitable expertise, transaction structuring, contract design, and implementation support, among others.

24. **Technical assistance for the preparation of project proposals**. LGs/PDAMs that have adequate capacity for investment (and fulfill the associated eligibility criteria), will be assisted to identify and prioritize their investment needs, and prepare project proposals that could be used to access funding from any available and suitable funding mechanism. Eligible LGs/PDAMs will receive support to identify and prepare investment projects needed by the PDAM to increase access and improve performance, and assist in preparing the project proposal and feasibility studies. This will include: (i) a review of the LGs' medium and long term development plans (RPJMD and RPJPD), and how this will affect the PDAMs' business and investment plans, (ii) project identification and preparation, including surveys related to demand, tariff affordability and

willingness to pay, (iii) identification and estimation of raw water sources availability, (iv) technical and engineering design, (v) proposal preparation, including demand analysis, system design and specifications, cost and tariff estimates, financial projections, and (vi) feasibility study preparation, including demand forecasts, revenue and cost forecasts, detailed technical designs, and environmental assessments. The project will provide specific technical assistance to eligible LGs/PDAMs to identify suitable funding sources, including from the *Hibah* Program and domestic financial market, and prepare viable project proposals to access these funds.

25. Technical assistance will be firstly prioritized for the 40 LGs/PDAMs targeted for the investment support under Component 1, focused primarily to LGs/PDAMs which do not receive technical assistance from other programs (i.e. IUWASH Plus, IndII). LGs/PDAMs outside the Component 1 cities will be able to receive TA program depending on the results of their participation in the capacity building program.

26. As the result of the TA activities under this sub-component, it is expected that 20 LGs/PDAMs will have significant improvement that allow them to graduate to the next level/category. It is also expected that 20 LGs/PDAMs will be able to access non-public financing (such as borrowing from the local commercial banks, utilizing the RIDF, and/or utilizing financing from private sector) through the technical assistance for the preparation of project proposals.

27. To support implementation of this TA/CB component, a team of Technical Assistance and Capacity Building Team (TACT) will be assigned to support the CPMU in designing and coordinating implementation of the TA/CB activities, reviewing TA/CB proposals from LGs and PDAMs, support the CoE for development of training modules, coordinating and collaboration with other TA/CB programs implemented by other development partners (i.e. USAID's IUWASH Plus, DFAT's IndII and its follow up program, PERPAMSI's programs, etc.), as well as in implementing program evaluation. TACT will be supported by a small team Field Assistants (FAs) which will work at LG level under coordination of Provincial Coordinators. FAs will support LGs/PDAMs in identification of TA/CB needs, data collection and reporting, as well as in communication and coordination between LGs/PDAMs with Central Government. Each FA team will consist of one engineer/technical specialist and one financial analyst. At the province level, Provincial Coordinators will also work closely with the Provincial Satker PSPAM in coordination with provincial POKJA AMPL and other stakeholders. TACT will be based in Jakarta but will work closely with the Regional Management and Advisory Consultants (RMACs) for organizing and implementing the TA/CB programs, under coordination of a Central Management Consultant (CMC).

**Component 3: Advisory and Policy Development Support for Central Government (estimated cost of US$6.80 million, with IBRD financing of US$5.00 million IBRD)**

28. This component will support the operationalization and improvement of urban water supply investment and service delivery framework. It will support the development and/or strengthening of policies and instruments that form the framework, including supporting the agencies that have the mandates and responsibilities for them.

29. Specifically, this component will provide the Water and Sanitation National Steering Committee (POKJA AMPL) with a pool of experts for the development or improvement of national level policies and implementation guidelines and other instruments for acceleration of achievement of universal access to safe water supply services. Key policies and guidelines to be supported include, amongst others, those in urban water management, regional water supply services, water governance and utility reform, private sector involvement, utility financing, poor inclusive services, citizen engagement, performance based financing and performance based contracting in the urban water sector. Support could also be provided to the BAPPENAS and MOHA for specific policy improvements. The results and findings, as well as experience and lessons learned from implementation of this project will feed into the refinement and strengthening of the NUWAS Framework.

30. This component will also support the Directorate General of Human Settlements (DGHS) – the project CPMU – to improve the monitoring and evaluation of LGs/PDAMs. The existing system of PDAM/LG categorization will be further refined, and a web-based management information system (MIS) developed and implemented as a means to institutionalize routine monitoring of urban water service providers and to integrate monitoring carried out by the Central Government ministries and agencies, provincial and LGs as part of their mandated responsibilities. The monitoring system will enable the information on the status of the sector towards achieving sustained universal access targets to be more easily and systematically obtained. A systematic evaluation system will be developed to inform the effectiveness of capacity building activities, and allow for adjustments in the program to improve performance. The monitoring system will also facilitate interaction among a range of direct and extended stakeholders, allowing the Central Government to engage in more constructive dialogue with LGs, allocate resources for technical assistance and investment financing more strategically and influence how LG invest in the sector. This component will support the CPMU's dissemination and dialogue activities, including provisioning for an iterative process to further improve the monitoring of LGs/PDAMs and the LGs/PDAMs categorization system over time.

31. A team of Advisory Experts (Central Advisory Team – CAT) will be assigned to support implementation of this component.

32. As a result of the intervention through this component, the NUWAS Framework will be improved and further expanded, policies and strategies for urban water supply development will be further strengthened, and an urban water supply integrated web-based MIS will be established and utilized.

**Component 4: Project Implementation and Management Support (estimated cost of US$20.30 million, with IBRD financing of US$15.00 million)**

33. This component will support project management services to the implementing agencies at central, provincial and LG levels. Project management and implementation support at the LG level will be provided by the Field Assistants (FAs) which will work under coordination of Provincial Coordinators (PCs). FAs and PCs will work under overall management and supervision from the Regional Management and Advisory Consultants (RMACs) and will also provide support to the implementation of Component 2. This component will support two RMACs. The RMAC team for Region 1 will be based in Jakarta covering the area of Sumatera, Java and Kalimantan, while the

RMAC team for Region 2 will be based in Makassar covering the area of Sulawesi, Bali, Nusa Tenggara Barat, Nusa Tenggara Timur, Maluku, Maluku Utara, Papua Barat and Papua. The RMACs will work closely with the TACT in organizing and implementing the TA/CB programs at the regional/province and at LG level.

34. At the central level, a Central Management Consultant (CMC) will provide support to the CPMU and CPIUs in overall project implementation and management (including support for financial management, procurement, environmental and social safeguards, etc.), supervision of the RMACs, TACT and all consultant services under the project.

**ATTACHMENT 1 TO ANNEX 2**

**NUWAS Framework**
**Categorization of PDAMs and LGs, and General Principles of Packages of Support**

1. The National Urban Water Supply Investment and Service Delivery Framework (NUWAS Framework), as one of the national platform of service delivery under the 100-0-100 program, is developed to respond to issues and challenges in urban water supply services. NUWAS is focusing on provision of water supply services in urban area. NUWAS Framework will cover the overall urban water supply services (starting with piped water supply services and to include non-piped water supply services in the future) and linked to the national urban development agenda.

2. The NUWAS Framework principles include improving LGs capacity in the overall urban water management, linking urban water supply services to water security and development of sustainable development, with priority focus in providing piped water supply services operated and managed by competent water utilities. The NUWAS Framework is therefore designed to encourage PDAMs, as recognized water utilities in the Local Government, to continuously improve their performance in terms of technical, operational, financial and managerial aspects.

3. The specific type of NUWAS products that each PDAM is allowed to access, depends on their performance status and committed improvements. Continuous performance improvement is required in order to access the other products offered through the NUWAS Framework. To avoid giving an incentive for PDAMs to remain at a lower level of performance, they would not be permitted to repeatedly access the same products or even types of products. PDAMs which fail to make progress will cease altogether to be eligible for financing from the NUWAS framework.

4. In order for these principles to be able to be implemented, a system to categorise and track the PDAMs and LGs performance consistently has been established.

**Categorization of PDAMs**

5. The BPPSPAM classifies PDAMs into three categories: “healthy”, “less healthy”, and “sick”. The purposes of BPPSPAM’s assessment and categorisation are to: (i) Provide a base for evaluation and monitoring of PDAMs improvements in relation to debt restructuring program; (ii) Provide guidance for Ministry of Public Works development plans for water sector; and (iii) Provide analysis and guidance for follow up programs to help improve PDAM performance. BPPSPAM classification is based on 4 (four) aspects i.e. service, financial, operational, and human resources. There are in total 54 indicators covering aspects financial, operational and administration including information on average tariff and average costs. This classification use scoring system and assessment was calculated using data from PDAM’s financial statements. Complete guidance on the scoring and assessment is provided and available at BPPSPAM’s website and most PDAMs are already familiar with the process.

6. For NUWAS Framework, the PDAMs are categorised based on their overall performance, as currently being done by BPPSPAM, but also taking into consideration the percentage coverage as

additional indicator. Coverage means percentage of population within the PDAMs allocated service area that are currently receiving services from PDAMs[22].

7. Figure A2.1 summarises the proposed PDAM categorisation based on BPPSPAM system plus service coverage. The last two columns on the right-hand side, of the table show the proposed categorisation.

**Figure A2.1 Proposed PDAM categorisation**

| Overall Score | Financial Score | Operational Score | BPPSPAM Classification | % Coverage | Proposed Categorisation | Description of Proposed Categorization |
|---|---|---|---|---|---|---|
| >= 3.5 | >= 1 | >= 1 | Healthy | >75% | Sustainably Healthy | PDAMs with excellent performance and high coverage |
| >= 3.5 | | | Healthy | <75% | Healthy | PDAMs with excellent performance but less coverage and PDAMs with good performance and coverage |
| 2.8 – 3.5 | | | Healthy | >50% | | |
| 2.8 – 3.5 | | | Healthy | <50% | Potentially Healthy | PDAMs with good performance but low coverage and PDAMs with mediocre performance but good coverage |
| 2.2 – 2.8 | >= 0.7 | >= 0.7 | Less Healthy | >75% | | |
| 2.2 – 2.8 | | | Less Healthy | <75% | Less Healthy | PDAMs with mediocre performance and less coverage and PDAMs with bad performance but good coverage |
| <= 2.2 | | | Sick | >75% | | |
| <= 2.2 | | | Sick | <75% | Sick | PDAMs with bad performance and low coverage |

Note: The categorization uses BPPSPAM data for 2014

## Categorisation of LGs

8. The categorisation of LGs is based on their fiscal capacity, in accordance with the Ministry of Finance regulation (PMK) No. 37/PMK.07/2016 on Local Government Fiscal Capacity. This regulation includes an annex that provides ready to use LG categorisation, which allocates every LG into one of the four categories as shown in Figure A2.2. This LG classification will be updated regularly to adapt to the regular updates on the regulation of LG Fiscal Capacity.

[22] This is defined as the technical coverage in the BPPSPAM PDAM performance report

**Figure A2.2 LG classification based on fiscal capacity**

| Fiscal Capacity Index | Classification |
|---|---|
| >= 2 | Very High |
| 1 <= index <2 | High |
| 0.5 <= index <1 | Medium |
| <= 0.5 | Low |

*Note: Adapted from MoF regulation No 37/PMK.07/2016*

## Proposed categorisation of PDAMs and LGs and possible financing sources

9. Figure A2.3 shows the proposed PDAMs and LGs categorisation and identifies possible financing sources of each group of PDAMs and LGs.

**Figure A2.3 Proposed categorisation of PDAMs and LGs**

<table>
<tr><th rowspan="2">LG'S FISCAL CAPACITY</th><th colspan="5">PDAM CATEGORY</th></tr>
<tr><th>SUSTAINABLY HEALTHY</th><th>HEALTHY</th><th>POTENTIALLY HEALTHY</th><th>LESS HEALTHY</th><th>SICK</th></tr>
<tr><td>VERY HIGH</td><td>GROUP 1<br>APBD, PDAM<br>APBN through MG, IG<br>TA & CB</td><td>GROUP 2<br>APBD, PDAM<br>APBN through PBG, MG and IG<br>TA & CB</td><td rowspan="3">GROUP 3<br>APBD<br>APBN through PBG, MG, SG and IG<br>TA & CB</td><td rowspan="3">GROUP 4<br>APBD<br>APBN through SG, PBG and IG<br>TA & CB</td><td rowspan="3">GROUP 5<br>APBD<br>APBN through SG and IG<br>TA & CB</td></tr>
<tr><td>HIGH</td></tr>
<tr><td>MEDIUM</td><td colspan="2" rowspan="2">GROUP 2<br>PDAM, APBD<br>APBN through PBG, MG and IG<br>TA & CB</td></tr>
<tr><td>LOW</td></tr>
</table>

10. Table A2.3 further describes each group and what they mean in terms of ability to access the various possible sources of finance. Note that for Groups 3, 4 and 5, the LG classification does not play a big role and is the same for each group.

**Table A2.3 Description of proposed categorization of PDAMs and LGs**

| Group – short description | Characteristics and explanation |
|---|---|
| **Group 1** – Sustainably healthy PDAMs, LG with very high and high fiscal capacity | PDAMs have very good performance (classified healthy by BPPSPAM classification) and have more than 75% service coverage. This indicates that PDAMs should be able to access alternative sources of financing, such as loans from commercial banks (example: through PerPres 29), and should be able to prepare project proposals and implement investment projects. These PDAMs needs to be incentivised to actively look for alternative financing, and should be encouraged to increase coverage to achieve 100% access by expanding services to areas outside of the service areas.<br>LG has good fiscal capacity and should support and encourage their PDAMs to find alternative sources of finances to further improve performance, expand coverage and achieve 100% access. |
| **Group 2** – Sustainably healthy and healthy PDAMs, various LG fiscal capacity | PDAMs are generally good performing, and have more than 50% coverage. Some PDAMs should be able to access alternative financing and should be incentivised to do so, and encouraged to achieve 100% access through either expansion of service area or through improvement in service efficiency (for example, reduce losses, using idle capacity, etc.). Public funds should be used to leverage and incentivised the above activities.<br>LGs should be encouraged to support their PDAMs in improving performance, increasing access and finding alternative financing. |
| **Group 3 –** Potentially healthy PDAMs, LGs with various fiscal capacity | PDAMs are either healthy (by BPPSPAM classification) but with less than 50% coverage, or less healthy (BPPSPAM classification) but with coverage of more than 75% (Note: based on 2014 BPPSPAM data, there are no less healthy PDAMs with more than 75% coverage). For the healthy PDAMs, the focus should be on providing incentives for the PDAMs to increase coverage, either through investments (new connections), or by improving service efficiency (loss reductions, using idle capacity, etc.). For the less healthy PDAMs, the focus should be on improving service performance either through capacity building, or investment projects accompanied by technical assistance.<br>LGs should be encouraged to support PDAMs in improving service performance. LGs need to understand PDAMs business and needs in order to provide the necessary support (such as allowing tariff increases, supporting PDAMs in project development, preparing water supply master plan, etc.). |

| Group – short description | Characteristics and explanation |
|---|---|
| **Group 4 –** Less healthy PDAMs, LGs with various fiscal capacity | PDAMs are either less healthy (BPPSPAM classification) with less than 75% coverage, or sick (BPPSPAM classification) with more than 75% coverage. For the less healthy PDAMs, the focus should be on encouraging PDAMs to increase coverage through investments or improving service efficiency (as with Group 3). For sick PDAMs, the focus should be on providing capacity building and technical assistance, investment support should only be provided if performance is improved after participating in capacity building and technical assistance programs.<br>LGs as per Group 3. |
| **Group 5 –** Sick PDAMs, LGs with various fiscal capacity | PDAMs are sick (BPPSPAM classification) with less than 75% coverage level. The focus should be on providing capacity building and technical assistance, and to assist PDAMs to increase service coverage to reach economically viable levels.<br>Discussions with LGs should include advice on how to support and increase PDAMs' service coverage, and on other alternative types of water supply service providers that can be used to increase access to water supply services, such as regionalisation. |

11. The categorisation of PDAMs as per above is used to track and monitor PDAMs' performance as they participate in the NUWAS framework, and to identify which types of products can be offered to the PDAMs, based on their groups and performance improvements.

**NUWAS Packages of Support**

12. The NUWAS framework includes 'software' programs such as capacity buildings (CBs) and technical assistance (TAs), as well as investment grants for 'hardware' or physical infrastructure development.

***Capacity Building (CB) and Technical Assistance (TA) Programs***

13. The CB and TA programs are offered to all Groups of PDAMs and LGs, with various topics that can be chosen based on the need of the PDAMs and/or LGs. The NUWAS framework will aim to coordinate and collaborate with existing and/or upcoming CB and TA programs offered by other institutions, such as PERPAMSI, Centre of Excellence, and other donor or development partner programs such as IUWASH Plus and IndII/KIAT, and other potential bilateral assistance.

*Capacity Building Program*

14. The main objective of the capacity building (CB) program is to raise the level of skills and the confidence of personnel in PDAMs and in their ability to manage the delivery of water services more efficiently, and to identify, plan and execute investment projects. Part of the CB program is also aimed for LGs, so as to improve their awareness and understanding of the types of water

service providers they can establish (which includes UPTD, regional systems, etc), and to improve their understanding of the water supply business such as the importance of having cost recovery tariffs, how to develop water supply master plan and investment plans, and how to support their PDAMs and/or other water service providers. In general, the CB programs for both PDAMs and LGs will be designed to provide incentives for PDAMs and LGs to further participate in the NUWAS framework and to continuously improve water services performance.

15. Based on the analysis of previous studies, several topics of capacity building can be offered as modules. This does not prevent to also include more advanced topics, depending on the needs and interest of PDAMs and LGs:

- Good governance and commercial operations of PDAMs;
- Efficiency improvements (including NRW reduction, asset management, billing and collection, and customer service relations);
- Full cost recovery tariff calculations;
- Investment planning and project identification and preparation;
- Performance monitoring and evaluation; and
- Social marketing, demand creation and citizen engagement

*Technical Assistance Program*

16. The topics for the TA programs are similar to that of the CB programs. The difference to the CB program is that for the TA component consultant(s) will be contracted to work with the PDAMs and LGs and provide ***direct assistance*** to them. It is preferable that the consultants be procured by the LG or PDAM and report directly to these agencies. The NUWAS framework may provide assistance in identifying qualified consultants that can provide these TAs and will make this available to PDAMs and LGs.

17. The types of TA programs that can be offered by the NUWAS framework may cover the following areas:

- Good governance and commercial operations;
- Efficiency improvements;
- Full cost recovery tariff calculation;
- Investment planning and project identification, that could possibly include
    - investment planning – including a review of the LGs' RPJMD and RPJPD and how this will affect PDAMs' business and investment plans;
    - project identification and preparation – including surveys of demand and tariff affordability or willingness to pay, identification and estimation of raw water sources, technical and engineering design;
    - proposal preparation – including demand analysis, system design and specifications, cost and tariff estimates, financial projections; and
    - feasibility study preparation – including demand forecasts, revenue and cost forecasts, detailed technical designs, and environmental assessments.
- Performance monitoring and evaluation; and
- Social marketing, demand creation and citizen engagement

### *Investment Support Grants*

18. The main target for the investment grants products is PDAMs in Group 4 and above. However, PDAMs in Group 5 may also apply for small one-off grants if they have meet or exceed their performance targets after participating in CB and TA programs. Three types of investment grants will be offered through the NUWAS framework i.e., Seed Grants, Matching Grants, and Performance-based Grants.

> **Seed grants** is a one-off CAPEX grant offered to PDAMs in Group 5, 4 and 3 after they have completed some CB and/or TA programs, and have shown some improvements from the base line indicators. The seed grant is aimed to help under-performing PDAMs to increase their coverage level to a more economical level, and/or to improve operational performance in general. Seed grants for Group 3 will be provided only for those with low service coverage, to help them in achieving the Minimum Service Standard of 60% coverage. Seed grants will be accompanied by TA for implementation. Examples of projects that can be financed by the seed grants include extension of network for new connections, rehabilitation of old systems to reduce losses coupled with new connections, etc.
>
> **Matching grants** have the main purpose to encourage good performing PDAMs in Group 1 and 2 to access alternative financing sources. The matching grant is also designed to ensure that any CAPEX investments made are accompanied by operational efficiency and improvements. For example, for a PDAM that has accessed investment funds through PerPres 29/2009 (currently under revision) to build new network and increase number of household connections, a matching grant will be given to update its customer database to improve collection efficiency.
>
> **Performance based grants** is similar to that of the Water *Hibah* program, in that grants will be provided when certain outputs are achieved. However, the difference to the Water *Hibah* program is that this performance based grants require not only additional household connections as outputs, it will also require improvements in other performance indicators, such as NRW reduction, improved collection efficiency, development of business and investment plans, etc. PDAMs from Groups 4, 3, and 2 can access this product. The existing Water *Hibah* program can be expanded to include other indicators that can contribute to improve operation efficiency and services. The Project will collaborate with CPMU Water and Sanitation *Hibah*, also under DGHS, MOF, Bappenas as well as with DFAT/KIAT and USAID/IUWASH Plus in designing the technical aspect of the PBG (i.e. indicators, unit rate, verification process). Implementation of the PBG will be piloted with funding support from Government's budget. Central Government funding will be allocated for the scale up (subject to the result of the pilot activities).

19. Each type of grants will entail a condition that the PDAMs sign a performance agreement (PA) with their respective Local Government, which will have performance indicators and targets. The PA will include the PDAMs base line performance indicator, and will be used to track the PDAMs performance. The PA, performance indicators and a self-assessment tool are being developed for the NUWAS framework.

### *Incentive structure for continuous improvements*

20. The products offered through the NUWAS framework will include an incentive based structure that will encourage PDAMs to continuously improve their service performance. Figure 2.5 shows the incentive structure of the NUWAS framework. The main concept is that PDAMs are required to show performance improvements in order to access the different products offered. To avoid PDAMs to only apply for CBs and TAs, there will be a maximum number of CBs and TAs that PDAMs can participate in, and are not allowed to attend the same CB or TA program more than once.

21. All investment grants are based on outputs and performance achieved, and will only be disbursed once the project is implemented and the specific outputs agreed are achieved. The incentive structure will be developed in more detail as part of the implementation of the NUWAS framework.

22. Note that the NUWAS products will be accompanied by general policy advice at the Central and Local Government levels, as well as project implementation and management assistance as part of the NUWAS project.

**ATTACHMENT 2 TO ANNEX 2**

## LIST OF LGS/PDAMS TO RECEIVE SUPPORT UNDER COMPONENT 1[23]

| No | Province/Kab/Kota | Remarks | NUWAS Framework Category[24] | Types of Grants | | |
|---|---|---|---|---|---|---|
| | | | | MG | PBG | SG |
| | **DI Aceh** | | | | | |
| 1 | Kota Banda Aceh | Kota Binaan | 2 | Yes | Yes | |
| | **North Sumatera** | | | | | |
| 2 | Kota Medan | Regional Mebidang | 2 | Yes | Yes | |
| 3 | Kota Binjai | Regional Mebidang | 4 | | Yes | Yes |
| 4 | Kota Deli Serdang | Regional Mebidang | 4 | | Yes | Yes |
| 5 | Kota Pematang Siantar | Kota Binaan | 2 | Yes | Yes | |
| 6 | Kota Sibolga | Kota Binaan | 2 | Yes | Yes | |
| 7 | Kota Tebing Tinggi | | 2 | Yes | Yes | |
| | **West Sumatera** | | | | | |
| 8 | Kota Padang | Provincial Capital, PerPres 29 | 2 | Yes | Yes | |
| 9 | Kota Payakumbuh | Kota Binaan, PerPres 29 | 2 | Yes | Yes | |
| 10 | Kota Solok | PerPres 29 | 2 | Yes | Yes | |
| | **Bengkulu** | | | | | |
| 11 | Kota Bengkulu | Regional Bentengkobema | 2 | Yes | Yes | |
| 12 | Kab. Bengkulu Tengah | Regional Bentengkobema | 4 | | Yes | Yes |
| | **Riau** | | | | | |
| 13 | Kota Dumai | Regional Durolis | 5 | | | Yes |
| 14 | Kab. Bengkalis | Regional Durolis | 4 | | Yes | Yes |
| | **South Sumatera** | | | | | |
| 15 | Kota Palembang | Kota Binaan, PerPres 29 | 2 | Yes | Yes | |
| | **Banten** | | | | | |
| 16 | Kab. Serang | PerPres 29 | 3 | Yes | Yes | Yes |
| 17 | Kab. Tangerang | PerPres 29 | 2 | Yes | Yes | |
| | **West Java** | | | | | |
| 18 | Kota Bogor | Kota Binaan | 1 | Yes | | |
| 19 | Kab. Bogor | PerPres 29 | 2 | Yes | Yes | |
| 20 | Kab. Bekasi | PerPres 29 | 2 | Yes | Yes | |
| 21 | Kota Bekasi | PerPres 29 | 2 | Yes | Yes | |
| 22 | Kota Bandung | Kota Binaan, PerPres 29 | 2 | Yes | Yes | |
| 23 | Kab. Kuningan | PerPres 29 | 2 | Yes | Yes | |
| 24 | Kota Depok | PerPres 29 | 2 | Yes | Yes | |
| 25 | Kab. Tasikmalaya | PerPres 29 | 3 | Yes | Yes | Yes |

[23] The list is tentative. The LGs/PDAMs included in the list but do not demonstrate adequate commitment may be replaced with others. The list will be reviewed and updated annually and published in the project's website

[24] Based on data from BPKP's PDAMs' performance audit 2017

| No | Province/Kab/Kota | Remarks | NUWAS Framework Category[24] | Types of Grants | | |
|---|---|---|---|---|---|---|
| | | | | MG | PBG | SG |
| 26 | Kota Sukabumi | | 3 | Yes | Yes | Yes |
| 27 | Kab. Sukabumi | | 2 | Yes | Yes | |
| | **Central Java & DIY** | | | | | |
| 28 | Kota Pekalongan | Regional Petanglong, PerPres 29 | 2 | Yes | Yes | |
| 29 | Kab. Pekalongan | Regional Petanglong | 3 | Yes | Yes | Yes |
| 30 | Kota Tegal | Regional Bregas, PerPres 29 | 2 | Yes | Yes | |
| 31 | Kota Salatiga | | 2 | Yes | Yes | |
| 32 | Kota Magelang | Kota Binaan, PerPres 29 | 2 | Yes | Yes | |
| 33 | Kota Surakarta | Kota Binaan, PerPres 29, Regional Wososukas | 2 | Yes | Yes | |
| 34 | Kab. Sukoharjo | Regional Wososukas, PerPres 29 | 3 | Yes | Yes | Yes |
| 35 | Kab. Wonogiri | Regional Wososukas | 3 | Yes | Yes | Yes |
| 36 | Kota Semarang | | 2 | Yes | Yes | |
| | **East Java** | | | | | |
| 37 | Kota Malang | Kota Binaan, PerPres 29 | 2 | Yes | Yes | |
| 38 | Kab. Lamongan | | 3 | Yes | Yes | Yes |
| 39 | Kab. Pacitan | | 3 | Yes | Yes | Yes |
| 40 | Kab. Ponorogo | | 3 | Yes | Yes | Yes |
| 41 | Kota Blitar | | 5 | | | Yes |
| 42 | Kab. Sidoarjo | | 3 | Yes | Yes | Yes |
| 43 | Kota Probolinggo | | 2 | Yes | Yes | |
| 44 | Kab. Gresik | | 2 | Yes | Yes | |
| | **West Kalimantan** | | | | | |
| 45 | Kota Pontianak | Kota Binaan, PerPres 29 | 2 | Yes | Yes | |
| | **South Kalimantan** | | | | | |
| 46 | Kota Banjarmasin | Kota Binaan, Regional Banjarbakula, PerPres 29 | 2 | Yes | Yes | |
| 47 | Kab. Banjar | Regional Banjarbakula | 2 | Yes | Yes | |
| 48 | Kab. Tanah Laut | | 4 | | Yes | Yes |
| | **East Kalimantan** | | | | | |
| 49 | Kota Samarinda | Kota Binaan, PerPres 29 | 2 | Yes | Yes | |
| 50 | Kota Balikpapan | Kota Binaan, PerPres 29 | 2 | Yes | Yes | |
| | **North Sulawesi** | | | | | |
| 51 | Kota Bitung | | 2 | Yes | Yes | |
| | **Gorontalo** | | | | | |
| 52 | Kota Gorontalo | | 2 | Yes | Yes | |
| 53 | Kab. Gorontalo | | 4 | | Yes | Yes |
| | **Central Sulawesi** | | | | | |
| 54 | Kota Palu | Regional Pasigala | 4 | | Yes | Yes |

| No | Province/Kab/Kota | Remarks | NUWAS Framework Category[24] | Types of Grants | | |
|---|---|---|---|---|---|---|
| | | | | MG | PBG | SG |
| 55 | Kab. Donggala | Regional Pasigala | 3 | Yes | Yes | Yes |
| | **South Sulawesi** | | | | | |
| 56 | Kota Makassar | Regional Maminasata | 2 | Yes | Yes | |
| 57 | Kota Pare-Pare | | 2 | Yes | Yes | |
| | **West Sulawesi** | | | | | |
| 58 | Kab. Mamuju | | 2 | Yes | Yes | |
| | **Bali** | | | | | |
| 59 | Kab. Badung | Regional Bali Selatan, PerPres 29 | 2 | Yes | Yes | |
| 60 | Kota Denpasar | Regional Bali Selatan, PerPres 29 | 2 | Yes | Yes | |
| 61 | Kab. Gianyar | Regional Bali Selatan, PerPres 29 | 2 | Yes | Yes | |
| 62 | Kab. Buleleng | Regional Burana | 1 | Yes | | |
| 63 | Kab. Jembrana | Regional Burana | 2 | Yes | Yes | |
| | **Nusa Tenggara Barat** | | | | | |
| 64 | Kab. Dompu | | 4 | | Yes | Yes |
| | **Nusa Tenggara Timur** | | | | | |
| 65 | Kab. Sumba Timur | | 3 | Yes | Yes | Yes |
| | **North Maluku** | | | | | |
| 66 | Kota Ternate | Kota Binaan, PerPres 29 | 2 | Yes | Yes | |
| | **Papua** | | | | | |
| 67 | Kabupaten Jayapura | Regional Jayatani, PerPres 29 | 2 | Yes | Yes | |
| | | | **TOTAL** | **55** | **63** | **22** |

Note:
MG: Matching Grant
PBG: Performance Based Grant
SG: Seed Grant

Selection of targeted LGs/PDAMs to receive Bank financed investment support for infrastructure development is based on the following priority criteria:

- Cities of PDAM *Binaan* (cities where PDAMs will be encouraged to provide 100% service coverage)
- LGs/PDAMs included in the Regional Water Supply Systems
- LGs/PDAMs already assisted by other donor programs to pursue PerPres 29/2009 mechanism
- The remaining "Sick" PDAMs in Java
- LGs included as Government's strategic development areas (economic special zones, tourisms, connectivity development, etc.)
- PDAMs with Non-Revenue Water rate and energy costs above the national average but demonstrate commitment to improve performance

**ATTACHMENT 3 TO ANNEX 2**

**LONG LIST OF LOCAL GOVERNMENTS TO PARTICIPATE IN NUWSP**

**SUMATERA**

| No. | PROVINCE/KOTA/KABUPATEN | No. | PROVINCE/KOTA/KABUPATEN |
|---|---|---|---|
| | Prov. Banda Aceh | | Prov. Bengkulu |
| 1 | Kota Banda Aceh | 36 | Kota Bengkulu |
| 2 | Kota Langsa | 37 | Kab. Bengkulu Tengah |
| 3. | Kota Sabang | 38 | Kab. Rejang Lebong |
| 4 | Kab. Aceh Besar | 39 | Kab. Bengkulu Selatan |
| 5 | Kab. Aceh Selatan | | Prov. Riau |
| 6 | Kab. Aceh Tengah | 40 | Kota Dumai |
| 7 | Kab. Aceh Barat | 41 | Kota Pekanbaru |
| 8 | Kab. Aceh Tenggara | 42 | Kota Tanjung Pinang |
| 9 | Kab. Aceh Tamiang | 43 | Kab. Kampar |
| | Prov. Sumatera Utara | 44 | Kab. Indragiri Hulu |
| 10 | Kota Medan | | Prov. Bangka Belitung |
| 11 | Kota Binjai | 45 | Kota Pangkal Pinang |
| 12 | Kab. Deli Serdang | 46 | Kab. Bangka |
| 13 | Kab. Karo | 47 | Kab. Belitung |
| 14 | Kab. Nias | | Prov. Jambi |
| 15 | Kota Padang Sidempuan | 48 | Kota Jambi |
| 16 | Kota Pematang Siantar | 49 | Kab. Merangin |
| 17 | Kota Sibolga | 50 | Kab. Kerinci |
| 18 | Kab. Simalungun | 51 | Kab. Batanghari |
| 19 | Kota Tebing Tinggi | 52 | Kab. Bungo |
| 20 | Kab. Tapanuli Utara | | Prov. Sumatera Selatan |
| 21 | Kota Tanjung Balai | 53 | Kota Palembang |
| 22 | Kab. Dairi | 54 | Kota Prabumulih |
| 23 | Kab. Labuhan Batu | 55 | Kota Lubuklinggau |
| 24 | Kab. Langkat | 56 | Kab. Muara Enim |
| 25 | Kab. Asahan | 57 | Kab. Musi Banyuasin |
| | Prov. Sumatera Barat | 58 | Kab. Ogan Komering Ulu |
| 26 | Kota Padang | 59 | Kab. Lahat |
| 27 | Kota Payakumbuh | | Prov. Lampung |
| 28 | Kota Padang Panjang | 60 | Kota Bandar Lampung |
| 29 | Kab. Tanah Datar | 61 | Kab. Lampung Selatan |
| 30 | Kab. Padang Pariaman | 62 | Kab. Pesawaran |
| 31 | Kota Bukit Tinggi | 63 | Kab. Lampung Utara |
| 32 | Kab. Agam | 64 | Kab. Lampung Tengah |
| 33 | Kab. Sijunjung | 65 | Kab. Tanggamus |
| 34 | Kab. Solok | | |
| 35 | Kota Solok | | |

**JAWA**

| No. | PROVINCE/KOTA/KABUPATEN | No. | PROVINCE/KOTA/KABUPATEN |
|---|---|---|---|
| | Prov. Banten | 97 | Kab. Brebes |
| 66 | Kab. Tangerang | 98 | Kota Tegal |
| 67 | Kota Tangerang | 99 | Kota Magelang |
| 68 | Kab. Pandeglang | 100 | Kab. Magelang |
| 69 | Kab. Lebak | 101 | Kota Surakarta |
| | Prov. Jawa Barat | 102 | Kab. Sukoharjo |
| 70 | Kota Bogor | 103 | Kab. Banyumas |
| 71 | Kab. Bogor | 104 | Kab. Cilacap |
| 72 | Kota Depok | 105 | Kab. Kebumen |
| 73 | Kab. Bekasi | 106 | Kab. Purworejo |
| 74 | Kota Bekasi | 107 | Kota Yogyakarta |
| 75 | Kota Sukabumi | 108 | Kab. Sleman |
| 76 | Kota Banjar | 109 | Kab. Boyolali |
| 77 | Kota Cirebon | 110 | Kab. Klaten |
| 78 | Kab. Cirebon | 111 | Kab. Bantul |
| 79 | Kab. Kuningan | 112 | Kab. Pati |
| 80 | Kab. Indramayu | | Prov. Jawa Timur |
| 81 | Kab. Karawang | 113 | Kota Surabaya |
| 82 | Kab. Subang | 114 | Kab. Sidoarjo |
| 83 | Kab. Majalengka | 115 | Kab. Gresik |
| 84 | Kab. Ciamis | 116 | Kab. Probolinggo |
| 85 | Kota Banjar | 117 | Kota Probolinggo |
| 86 | Kab. Bandung | 118 | Kota Malang |
| 87 | Kab. Bandung Barat | 119 | Kab. Malang |
| 88 | Kota Cimahi | 120 | Kab. Lumajang |
| 89 | Kota Bandung | 121 | Kab. Pacitan |
| 90 | Kab. Sumedang | 122 | Kab. Ngawi |
| | Prov. Jawa Tengah & DIY | 123 | Kota Blitar |
| 91 | Kota Semarang | 124 | Kota Batu |
| 92 | Kab. Semarang | 125 | Kab. Tulung Agung |
| 93 | Kota Salatiga | 126 | Kab. Ponorogo |
| 94 | Kota Pekalongan | 127 | Kab. Pasuruan |
| 95 | Kab. Pekalongan | 128 | Kab. Lamongan |
| 96 | Kab. Batang | 129 | Kab. Kediri |

**KALIMANTAN**

| No. | PROVINCE/KOTA/KABUPATEN | No. | PROVINCE/KOTA/KABUPATEN |
|---|---|---|---|
| | Prov. Kalimantan Barat | | Prov. Kalimantan Timur |
| 130 | Kota Pontianak | 138 | Kota Samarinda |
| 131 | Kota Singkawang | 139 | Kota Balikpapan |
| 132 | Kab. Melawi | 140 | Kota Bontang |
| 133 | Kab. Kubu Raya | 141 | Kab. Bulungan |
| | Prov. Kalimantan Selatan | | Prov. Kalimantan Utara |
| 134 | Kota Banjarmasin | 142 | Kota Tarakan |
| 135 | Kota Banjarbaru | | Prov. Kalimantan Tengah |
| 136 | Kab. Banjar | 143 | Kota Palangkaraya |
| 137 | Kab. Hulu Sungai Utara | 144 | Kab. Kapuas |

**SULAWESI**

| No. | PROVINCE/KOTA/KABUPATEN | No. | PROVINCE/KOTA/KABUPATEN |
|---|---|---|---|
| | Prov. Sulawesi Utara | | Prov. Sulawesi Selatan |
| 145 | Kota Bitung | 161 | Kab. Wajo |
| 146 | Kab. Minahasa | 162 | Kab. Bantaeng |
| 147 | Kab. Minahasa Utara | 163 | Kota Makassar |
| 148 | Kota Tomohon | 164 | Kab. Maros |
| 149 | Kab. Bolaang Mongondow | 165 | Kab. Takalar |
| 150 | Kab. Kep. Sangihe | 166 | Kota Pare-Pare |
| | Prov. Gorontalo | 167 | Kab. Gowa |
| 151 | Kota Gorontalo | 168 | Kota Palopo |
| 152 | Kab. Gorontalo | 169 | Kab. Soppeng |
| | Prov. Sulawesi Tengah | 170 | Kab. Jeneponto |
| 153 | Kab. Poso | 171 | Kab. Sidenreng Rappeng |
| 154 | Kota Palu | 172 | Kab. Enrekang |
| 155 | Kab. Banggai | 173 | Kab. Bone |
| 156 | Kab. Donggala | 174 | Kab. Sinjai |
| | Prov. Sulawesi Barat | 175 | Kab. Muna |
| 157 | Kab. Majene | 176 | Kab. Pangkajene |
| 158 | Kab. Mamuju | 177 | Kab. Barru |
| | Prov. Sulawesi Tenggara | 178 | Kab. Bulukumba |
| 159 | Kota Kendari | 179 | Kab. Tana Toraja |
| 160 | Kota Bau Bau | 180 | Kab. Pinrang |

**BALI, NTB AND NTT**

| No. | PROVINCE/KOTA/KABUPATEN | No. | PROVINCE/KOTA/KABUPATEN |
|---|---|---|---|
| | Prov. Bali | | Prov. NTB & NTT |
| 181 | Kab. Badung | 190 | Kota Mataram & Kab. Lombok Barat |
| 182 | Kota Denpasar | 191 | Kab. Lombok Tengah |
| 183 | Kab. Gianyar | 192 | Kab. Lombok Timur |
| 184 | Kab. Tabanan | 193 | Kab. Lombok Utara |
| 185 | Kab. Buleleng | 194 | Kab. Ende |
| 186 | Kab. Jembrana | 195 | Kab. Manggarai |
| 187 | Kab. Karangasem | 196 | Kab. Ngada |
| 188 | Kab. Bangli | 197 | Kab. Manggarai Barat |
| 189 | Kab. Klungkung | 198 | Kota Kupang |

**MALUKU & PAPUA**

| No. | PROVINCE/KOTA/KABUPATEN | No. | PROVINCE/KOTA/KABUPATEN |
|---|---|---|---|
| | Prov. Maluku & Maluku Utara | | Prov. Papua & Papua Barat |
| 199 | Kota Ternate | 202 | Kab. Jayapura |
| 200 | Kab. Maluku Tengah | 203 | Kota Jayapura |
| 201 | Kota Ambon | 204 | Kab. Manokwari |

Note:
The list is tentative and selection will be based on interest and commitments from LGs/PDAMs. The listed cities are selected because they are included in various GOI's Strategic Development Areas (economic special zones, tourisms, connectivity development, etc.) thus will have fast development/urbanization rate.

## Annex 3: Implementation Arrangements

## INDONESIA: National Urban Water Supply Project (P156125)

### Project Institutional and Implementation Arrangements

1. **Collaboration and Coordination.** The existing National Steering Committee for Housing, Settlements, Water and Sanitation (POKJA PPAS), chaired by the Deputy Minister of Regional Development in the Ministry of Planning/National Planning Agency (BAPPENAS) will provide the overall policy guidance during the preparation and implementation of the project. The Steering Committee members consist of Echelon 1 and 2 from BAPPENAS, Ministry of Public Works and Housing, Ministry of Finance and Ministry of Home Affairs. The Steering Committee is also expected to coordinate and consolidate the views of various ministries and agencies in charge of water supply development in the country. On the technical and operational aspect of project implementation, the Steering Committee will be supported by the Technical Team which consists of Echelon 3 and 4 of the same ministries. The Technical Team will coordinate and consolidate views of other relevant stakeholder such as with PERPAMSI (Association of PDAMs), other development partners and other urban water supply programs. Similar structure of POKJA PPAS with more focus on water and sanitation (POKJA AMPL) present at the Provincial and Local Government levels, chaired by BAPPEDA (Local Planning Agency) with members from different Province/LG departments and PDAM.

2. **Project Executing Agency.** Ministry of Public Works and Housing will be the executing or implementing agency for this project. A Central Project Management Unit (CPMU) will be established in the Directorate General Human Settlements (DGHS) of MPWH, with experienced personnel from Directorate of Water Supply Development, Directorate of Integrated Infrastructure for Settlement, and BPPSPAM. The CPMU will manage and coordinate the input of the Technical Team of POKJA AMPL, and Central Project Implementing Unit (CPIU) which will be established in MOHA. The CPMU will be also responsible in coordinating with the CPMU of Water *Hibah* Program to ensure collaboration and synchronization of the project activities with the Water *Hibah* Program. The CPMU will be responsible for procurement and management of all loan-financed contracts for consultants, financial management of loan proceeds, and implementation of environmental and social safeguards in accordance with Bank policies and guidelines. Provincial Project Implementation Unit (PPIUs) will be established at the provincial level to manage provincial coordination as well as in assisting CPMU in oversighting project implementation at the Local Government level.

3. Local Governments and PDAMs will also be involved in the implementation of components 1 and 2. Local Governments and PDAMs are involved in various aspects of the project implementation including leading the preparation of RISPAM (Water Supply Development Master Plan) and PDAMs' Business Plan (BP) and execution of activities defined under the RISPAM and BP. Local Governments and PDAMs will also prepare and enter into Performance Agreement to demonstrate the commitment for participation in the project. Participating LGs will establish District Project Implementation Unit (DPIUs) that will be in charge in managing and implementing all activities at the district/municipality level. The DPIU will be a combination of personnel from LG and PDAM.

4. Division of roles and responsibilities between the different ministries at Central Government and Local Government levels for project implementation is described in summary in the following Table A3.1. A matrix that shows the roles and responsibilities of each implementing agency and its expected outputs aligned to the project component can be found in the Attachment 1 to Annex 3.

**Table A3.1 Role of each Agency in NUWSP**

| Institution | Key Roles |
|---|---|
| BAPPENAS | Overall sector and project coordination, as well as implementation of policy development components |
| DG Human Settlements – Ministry of Public Works and Housing | Executing agency and implementation of infrastructure development, provision of TA/CB components, and overall project implementation and management |
| DG Regional Development and DG Regional Financing – Ministry of Home Affairs | Implementation of institutional development for LGs and PDAMs. |
| Local Governments and PDAMs | Implementation and management of project activities at LG level. |

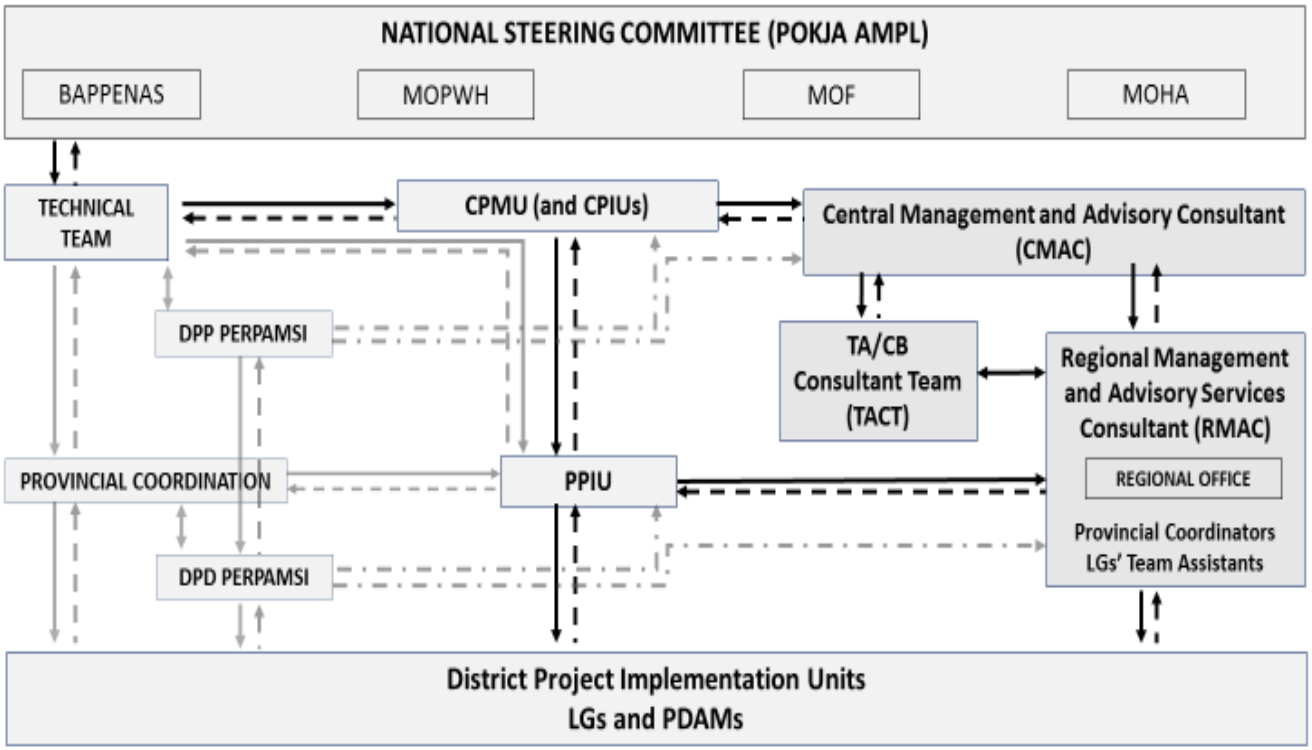
5. **Technical Assistance and Program Management and Implementation Support**. The executing and implementing agencies will be supported by teams of consultancy services as follow:

- A Central Management Consultant (CMC). CMC will be based in Jakarta and will support CPMU and CPIUs in disseminating the project to LGs and PDAMs, monitor and evaluate progress of implementation, conduct verification process and in the overall project management.
- A Central Advisory Team (CAT) will be made up of experienced consultants (this will include but not limited to water supply specialist, financial specialist, institutional development specialist, etc.) who will advise the POKJA AMPL, CPMU and CPIUs on policy and implementation arrangements for urban water supply development to further refine and improve NUWAS Framework.
- A Technical Assistance and Capacity Building Coordination Team (TACT) will be assigned to assist the CPMU for coordination and implementation/delivery of TA/CB programs to LGs and PDAMs, and will work closely with the CoE Program. TACT will be based in Jakarta and will work under coordination of the CMC and will closely collaborate with Regional Management and Advisory Consultants (RMACs). TACT will also provide support to CPMU for coordination and collaboration with other TA/CB programs provided by other development partners, arrangement and implementation of trainings and capacity building programs at national and LG level, as well as in monitoring and evaluation of the impact of TA/CB programs to PDAMs performance improvements. TACT will consist of experts that will support the CoE in reviewing the existing training modules and developing new modules for new training topics. TACT will also have team of specialists that could be deployed to provide technical assistance to LGs/PDAMs as needed. TACT will work closely and coordinate with RMACs.

- Two Regional Management and Advisory Consultants (RMACs) will be assigned to support implementing agencies at provincial and LGs' levels. One RMAC will be based in Jakarta providing support to the provinces located in Sumatera, Java and Kalimantan. One RMAC will be based in Makassar providing support for the provinces in the eastern area (Sulawesi, Bali, Nusa Tenggara, Maluku and Papua). RMACs will be supported by Provincial Coordinators (PCs) which will be supported by Field Assistants (FAs). PCs will support PPIUs in managing provincial coordination, oversighting project implementation at the LG level, as well as consolidating data and information from LGs/PDAMs to be submitted to the RMACs and CMAC. FAs will work at LG level to provide support to LGs and PDAMs under coordination of PCs. Each FA will consist of one water supply engineer and one financial analyst. RMACs will work closely with TACT to arrange and implement trainings and capacity building programs at the region/province levels.

6. The diagram below summarizes the institutional and implementation arrangements for NUWSP.

**Figure A3.1 NUWSP Institutional and Implementation Arrangement**




Command line ————————
Reporting line - - - - - - - - -
Coordination line - · - · - · - · -

**Project Implementation Process**

7. The project implementation will follow a phased approach that will ensure buy-in from LGs and PDAMs to participate and benefit from this project. The initial phase of planning and capacity building will start simultaneously in all 40 cities to be financed by Component 1, in order to ensure that by the end of Year 1, at least 20 cities will have their Self-Assessment completed, proposals developed, and Performance Agreement between LG and PDAM established (with targets and indicators). In 2017, the project will support: (i) baseline data collection and verification in cities where NUWAS Proposal Package[25] has already been prepared and reviewed; and (ii) provision of technical assistance to LGs/PDAMs for the preparation or review of NUWAS proposal package. The CPMU is currently developing the ToRs for consultancy services for this project and it is expected that by utilizing advance procurement scheme, key consultant teams could be mobilized as soon as the Loan is effective.

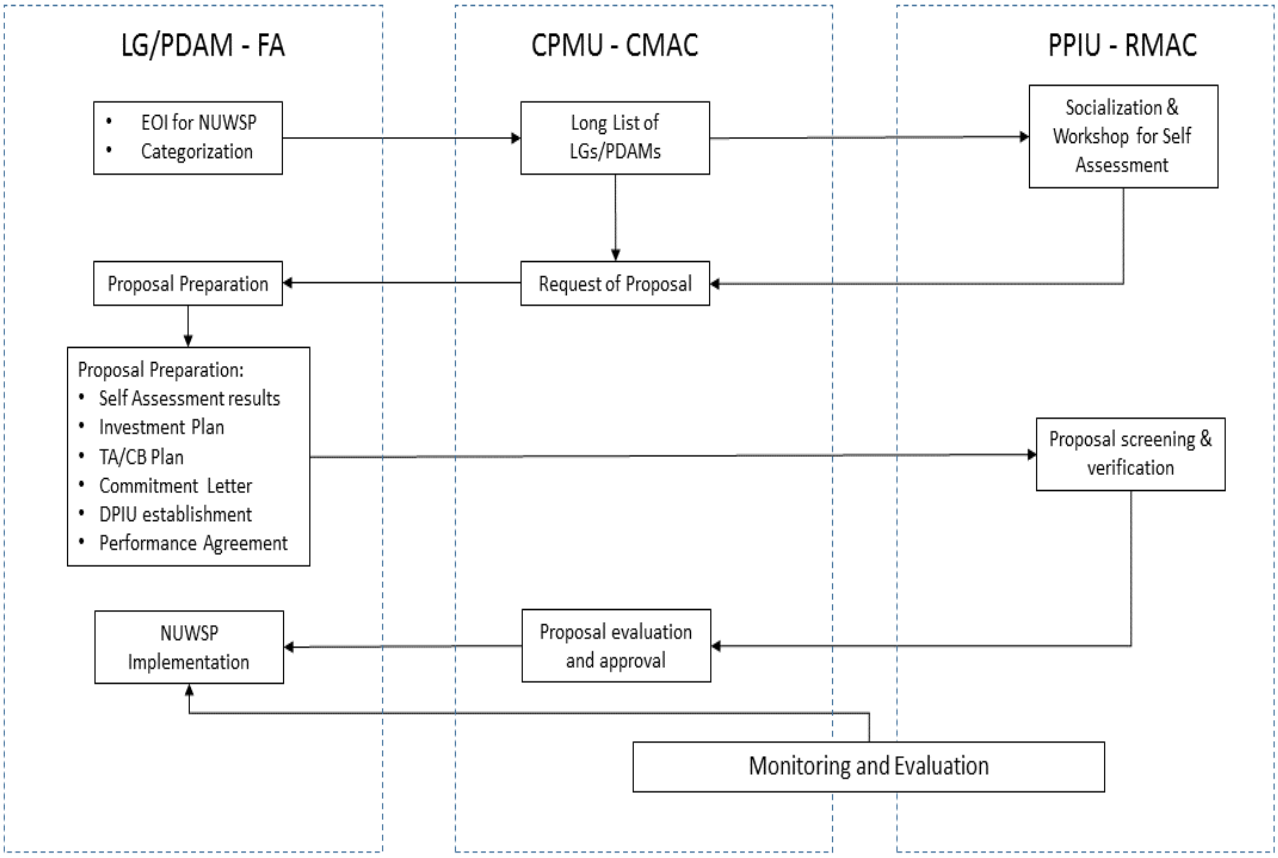
8. The project will collaborate and work closely with the on-going Government's program (namely Center of Excellence) and other donor's program (namely USAID/IUWASH Plus and DFAT/KIAT) in providing TA/CB to LGs and PDAMs.

9. At the city level, the city governments and PDAMs will prepare or finalize their NUWSP Proposal Package. It is expected that within the first six months after the Bank Board approval, 20 cities will have completed NUWSP Proposal Package, identified infrastructure investments to be implemented, and will have baseline data collection and verification completed. Activities under Component 1 for these cities are expected to start in as early as Q3 fiscal year 2019 (to meet eligibility criteria for Component 1b – Matching Grant: transaction of non-public financing approved after June 30, 2017). There will be two periods when LGs and PDAMs can submit request for verification and payment for reimbursement, i.e. in the second quarter and fourth quarter of calendar year, allowing PDAMs to obtain audited financial statements and performance report. Simultaneously, there will be two windows for LGs/PDAMs to submit their NUWSP Proposal Package i.e. the first and third quarter of each calendar year. The cycle will continue for the next cities in the following years. Gradually all of the subset 40 cities will complete their submission of NUWSP Proposal Package in 2018 onwards and their infrastructure investments to be financed by the project is expected to be completed in 2021. In summary, during the project period, there will be simultaneous activities across the 200 participating cities with different levels of progress, i.e. participation in TA/CB programs, preparation of NUWSP Proposal Package, implementation, verification for reimbursement, and monitoring and evaluation of the PDAMs' performance.

10. The project process can be captured in the following diagram:

[25] NUWAS Proposal Package consists of: Expression of Interest and Commitment Letter, completed Self Assessment form, copy of RISPAM, copy of PDAM's Business Plan, investment proposal with identified targets and funding sources; capacity building and technical assistance plan, and draft Performance Agreement with key performance indicators.

**Figure A3.2 Project Implementation Process**




**Financial Management, Disbursements and Procurement**

***Financial Management***

11. **Budgeting**. The project will follow the existing Government budgeting system. In Indonesia, financing arrangements for Bank project implemented by Central Government Agencies are governed by integrated budget or DIPA. Source of financing for project activities, including financing percentage, are detailed in DIPA and strictly followed. As such, project activities identified to be financed by the Bank will be at 100%, inclusive of taxes. The budget will be included in the DGHS' budget documents (DIPA). CPMU in DGHS is expected to work closely with the planning bureau to ensure timely issuance of DIPA for Seed Grant and Matching Grant in DIPA of DGHS. CPMU and CPIU at MOHA should also ensure that counterpart funding from Local Governments are also included in budget planning documents and APBD of the participating LGs. Periodic coordination with all stakeholders of the project should be initiated by CPMU to monitor project implementation. This arrangement should be reflected in PMM.

12. **Internal Controls.** The main expenditures of the project will be construction of infrastructure to be operated and managed by PDAMs. Article 44 of Law No. 1/2004 (Treasury Law) indicated that owner of assets has the responsibility to take good care of assets under its

responsibility. Furthermore, Government Regulation No. 27/2004, article 22 indicated that assets should be used in-line with roles and duties of the unit who claim responsibility of the assets. FY2016 audit report of MPWH indicated that MPWH still has assets utilized by LGs. These assets were initially meant to be transferred to LGs, but after some time are still recognized as MPWH assets. To ensure that the abovementioned problem will not occur in the project, there should be clear mechanism to transfer assets constructed/procured by DGHS (through Matching Grant and Seed Grant) to participating LGs/PDAMs at the latest a year after such construction completed. The agreed assets transfer mechanism should be reflected in the PMM and in the financing agreement between DGHS and participating LGs/PDAMs.

13. Monitoring and Evaluation. PPIUs (with support from Regional Management and Advisory Consultant) are responsible to monitor the progress of sub projects implementation in LG level and report regularly to CPMU. Additionally, the existing mechanism of PDAMs' performance evaluation by BPKP should be continued.

14. All of the above arrangements will be reflected in the project PMM.

15. **Internal Audit Arrangements.** CPMU will ensure (through compliance audit) that Inspectorate General MPWH will do internal audit on the project. MPWH inspectorate unit internal audit report related to the project will be shared with the Bank.

16. **Accounting and Reporting.** The project implementation will follow Government Accounting System. The accounting system records all project transaction in the Government Accounting System and produces monthly financial reports. CPMU in DGHS, with support from PPIUs, will be responsible to prepare the quarterly Interim Financial Report (IFR) submission to the Bank. IFR will be submitted in an agreed format on a quarterly basis as part of the project reports within 45 days after the end of the reporting period to the Bank through Ministry of Finance. CPMU will appoint staff who will be responsible for IFR submission. Simple guidelines on IFR preparation will be part of the PMM.

17. **Flow of Funds**. The agreed annual budget for the project will be allocated in DGHS' DIPA. There will be project agreement between DGHS and participating LGs. Each participating LG will also establish financing or project agreement with its PDAM. In general, the project will use the advance method, the flow of funds is as follow:

a) Designated Account (DA) will be open in Central Bank under the name of Ministry of Finance.
b) CPMU will submit a request for an advance to the Bank through MOF.
c) The Bank will transfer initial deposit (advance) to DA based on request (using IFR format which include projection of project needs for the 6 months' period).
d) CPMU, CPIU and PPIUs then will process payment through KPPN (Treasury Office) in-line with Government system from the DA to contractors/consultants account for the rest of the transactions.
e) Additional transfer can be made based on request (using IFR format which include projection of project needs for the 6 months' period).

GOI may opt for the direct payment method, where instead of transferring the funds to the DA, the Bank transfers the funds directly to contractor/consultant accounts. The flow of funds arrangement will be described in more detail in the PMM.

18. Two flow of funds mechanisms will be used for this project, i.e. flow of fund mechanism for Matching Grants and Seed Grants (of which DGHS will implement subproject activities utilizing their existing mechanism) and flow of fund mechanism for Performance Based Grants which will refer to the existing Water *Hibah* mechanism (using on-granting mechanism). The proposed flow of funds mechanisms are shown in the following diagrams.

**Figure A3.3 Flow of Funds Mechanism for Seed Grants and Matching Grants**

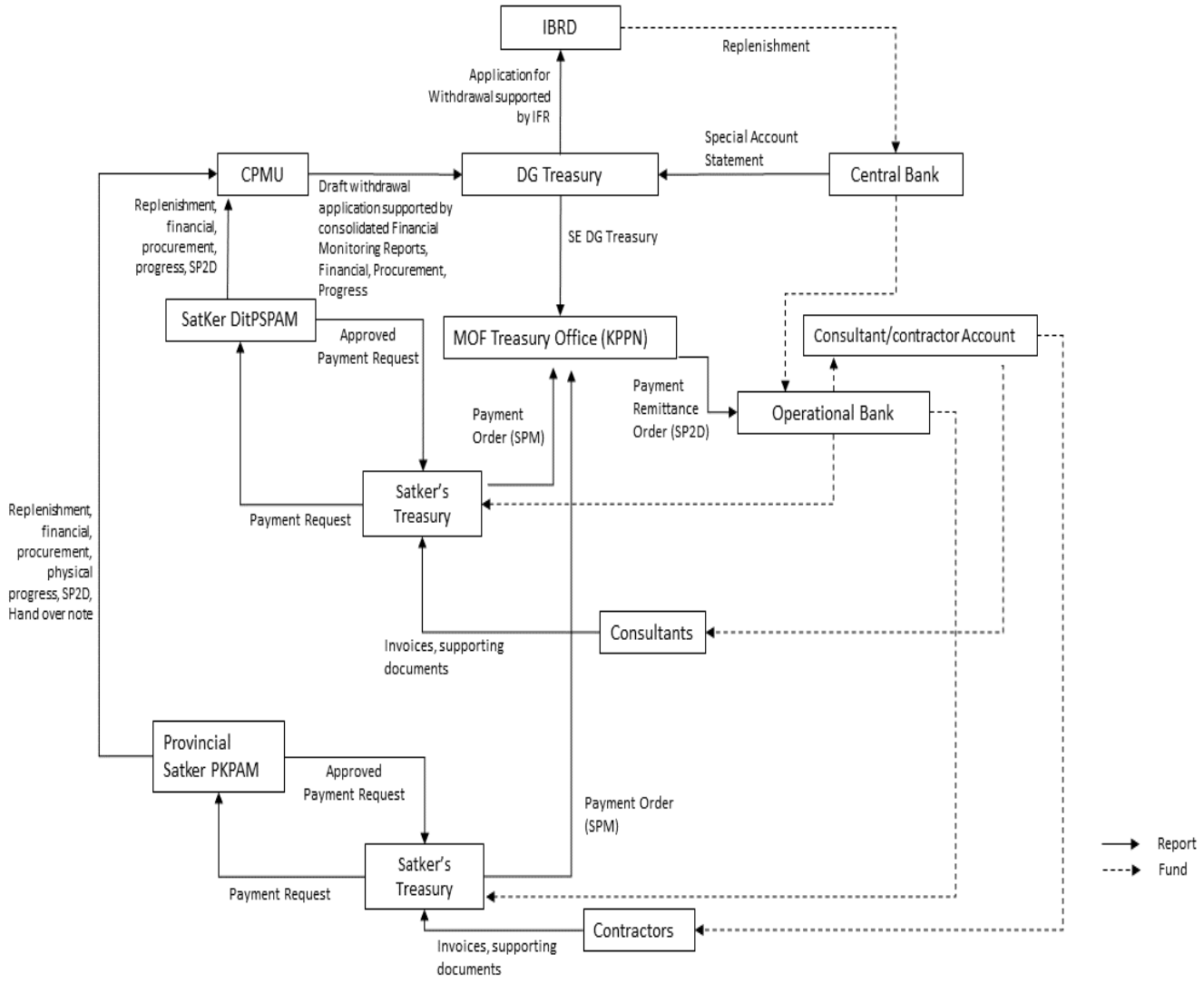
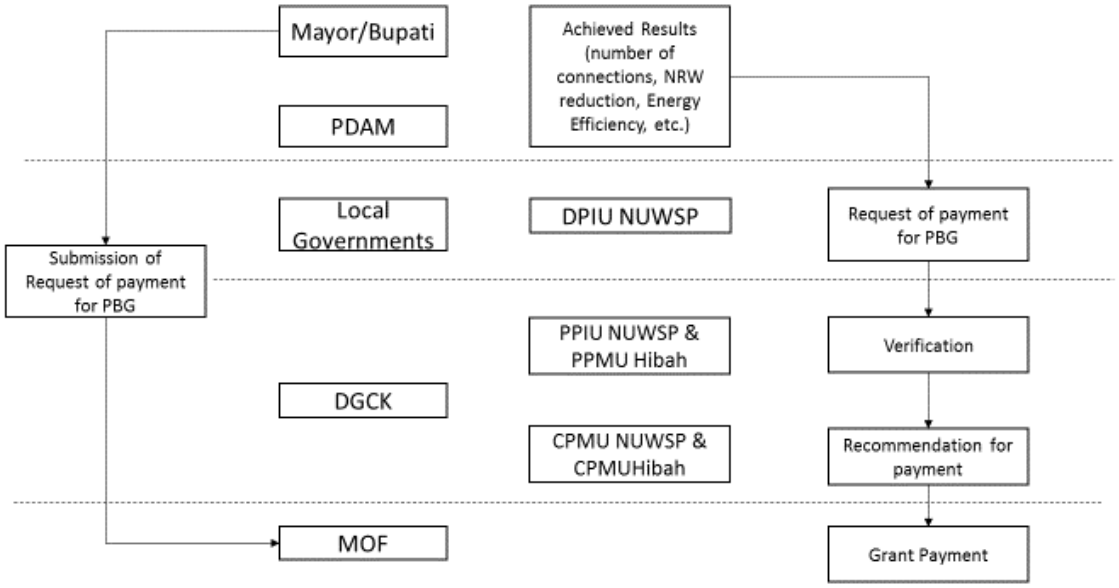


**Figure A3.4 Flow of Funds for Performance Based Grants (on-granting mechanism)**




19. **Disbursement Arrangements.** The applicable disbursement methods are Advance and Reimbursement. A Designated Account (DA) denominated in US dollars will be opened in the Bank Indonesia (Central Bank) under the name of Ministry of Finance. The DA will be a segregated account with fluctuated ceiling. The DA will be used for financing eligible expenditures from this Loan. Payments from the DA will follow the Government's arrangement and will be reflected in the PMM and agreed with the Bank. Applications for the replenishment of the DA advance may be submitted through quarterly IFR which consists of report on the use of the DA funds, supported by: (i) list of payments for contracts under Bank's prior review and records evidencing such expenditures, or (ii) Statement of Expenditures (SOEs) for all other expenses; and (iii) DA reconciliation statement.

**Table A3.2 Disbursement Table**

| Category | Amount of the Loan Allocated (expressed in USD) | Percentage of Expenditures to be financed (inclusive of Taxes) |
|---|---|---|
| (1) Seed Grants, Matching Grants and Performance Based Grants under Parts 1(a), 1(b) and 1(c) of the Project | 70,000,000 | 100% of Grant amount disbursed |
| (2) Goods, works, incremental operating costs, non-consulting services, consultants' services and Training and Workshops for Parts 2, 3 and 4 the Project | 30,000,000 | 100% |
| **TOTAL AMOUNT** | **100,000,000** | |

20. **External Audit Arrangements.** The Loan will be subjected to external audit. Each audit will cover a period of one fiscal year of the recipient. The audit ToR will need to be discussed and approved by the Bank. Audit Reports will be furnished to the Bank by not later than six months after the end of the fiscal year concerned and shall be made available to the public. The audit will be conducted in accordance with audit terms of reference acceptable to the Bank and agreed by negotiation. CPMU will make the annual project audit reports available on its website.

21. **Supervision Plan.** Risk-based supervision of project financial management will be conducted. This will involve desk supervision, including review of IFRs and audit reports and field visits. Financial management supervision plan to be conducted every 6 months together with the task team as part of the project implementation support.

*Procurement*

22. **Applicable Procurement Procedures -** All procurement under the project shall be carried out in accordance with the World Bank's "Guidelines: Procurement under IBRD Loans and IDA Credits" dated January 2011 (revised July 2014), and "Guidelines: Selection and Employment of Consultants by World Bank Borrowers" dated January 2011 (revised July 2014); and the provisions stipulated in the Loan Agreement. The "Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants", dated July 1, 2016, shall also apply to the project. It is only for procurement of Goods, Works and Non-consulting services under the National Competitive Bidding (NCB) method, that Government's procurement regulations may be followed subject to complying with the improvements listed in the NCB Annex of the Loan Agreement. In such case if there is any conflict between the Government's procurement regulations and the Bank's Procurement Guidelines, the Bank's Procurement Guidelines shall prevail.

23. **Scope of the Project procurement** - The bulk of the procurement spend under the project in terms of cumulative value will be under Component 1 of the Project for mainly procurement of civil works to support the urban water supply infrastructure development which will be carried out by the Procurement Service Units (ULPs) in *Satuan Kerja Pengembangan Sistem Penyediaan Air Minum* (Satker PSPAM) of MPWH in each province. The individual civil works and goods contracts are however expected to be of simple nature and small value below the ICB thresholds and will mostly be procured under the NCB method and some under Shopping method. Under Components 2, 3 & 4, selection of consultants is expected to include (i) Central Management Consultant (CMC) to support CPMU and CPIUs in project implementation; (ii) Central Advisory Team (CAT) to support the POKJA PPAS, CPMU, and CPIUs on policy and implementation arrangements for urban water supply development; (iii) Technical assistance and Capacity Building coordination team (TACT) to assist CPMU for coordination and implementation/delivery of TA/CB programs to LGs and PDAMs; and two regional management and advisory consultants (RMACs) to support implementing agencies at provincial and district/municipality's level. The procurement process for selection of consultants will be carried out by CPMU under DG Human Settlements/MPWH mostly following the QCBS method.

24. **Procurement Plan –** The procurement plan will provide the basis for use of the procurement and selection methods and the Bank's review requirements for each contract package

which will be consistent with the Bank's standard thresholds based on the project procurement risk. The procurement plan for the first 18 months has been finalized by CPMU and approved by the Bank.

25. **Use of e-procurement system** - The Government's SPSE e-procurement may only be used for procurement of Goods, Works and Non-consultant services under the NCB method and applying the harmonized NCB standard bidding documents agreed by the Bank and issued by LKPP. Furthermore, the modified LPSE e-procurement system of the Ministry of Public Works and Housing (MPWH) may be used for selection of consultant firms under the Quality and Cost Based Selection method and applying the Bank's standard Request for Proposal document, adjusted satisfactory to the Bank for use in MPWH's LPSE system. The Government's SPSE e-procurement or MPWH's LPSE e-procurement system shall not be used for procurement of Goods, Works and non-consultant services under International Competitive Bidding (ICB) method, nor for selection of consultants under any other method except QCBS. Until such time that the modifications of these e-procurement systems have been completed by LKPP/MPWH acceptable to the Bank, which will be confirmed through the Bank's written no objection, procurement under the above-stated methods shall be carried out through non-electronic process with manual issuance of invitation for bids and receipt of bids.

26. **Procurement Risks and Mitigation measures** – The CPMU under DG Human Settlements/MPWH, which will be responsible for carrying out the selection of consultants under the Project and also for overall management and coordination of the Project, has experience in the Bank's Procurement procedures through several Bank financed projects. However, Satker PSPAMs, which will be responsible for procurement of infrastructure has limited experience in Bank financed contracts. There are risks of delays in the procurement processes due to capacity issues, cumbersome internal approval processes in Government, and insistence to follow the Government's procurement regulations instead of the Bank's Procurement/Consultant Guidelines that are required to govern procurement under the project. There are also significant integrity risks, such as collusion, fraud, corruption, unauthorized subletting of works to other firms, particularly in similar civil works contracts, due to the weak governance environment, as recently evidenced in another Bank-financed water sector project implemented by MPWH. Based on detailed procurement capacity assessment of the implementing agencies, key procurement risks and mitigation measures proposed are as under:

**Table A3.3 Procurement Risks and Mitigation Measures**

| No. | Description of Procurement Risk | Mitigation |
|---|---|---|
| 1. | Procedural non-compliance and integrity risks due to:<br><br>(i) implementing agencies' undue insistence to follow the Government's Procurement procedures instead of the Bank's Procurement and Consultants Guidelines which govern procurement under the project. | (i) In addition to the reference of Procurement and Consultants Guidelines in the Loan Agreement, Project Operations Manual will be prepared which will specifically state that (a) the Bank's Procurement and Consultants Guidelines govern all procurement under the Project, (b) |

| No. | Description of Procurement Risk | Mitigation |
|---|---|---|
| | (ii) breach of integrity in the procurement and contract implementation because of collusion, fraud, corruption, unauthorized subletting of contracts, etc. | it is only in case of NCB procurement that the Government's Procurement Regulations may be followed subject to the improvements listed in the NCB Annex of the Financing Agreement, and (c) in case of conflict, the Bank's Guidelines shall prevail.<br><br>(ii) CPMU, with support of its consultants, will prior review and provide no objections to all contracts procured at the provincial and local levels by the Satker PSPAMs, including checking for red flags for fraud and corruption, to ensure compliance with the Bank's Procurement and Consultant Guidelines. The Bank will periodically provide training to CPMU and its consultants. CPMU will also systematically collect data, monitor and report procurement performance of the Satker PSPAMs and the overall project as part of its responsibility for management and coordination of the project.<br><br>(iii) Since most of the civil works contracts will fall below the Bank's prior review threshold and will be subject to ex-post review, the Bank's will also further strengthen its own oversight of procurement by carrying out procurement ex-post review as part of project supervision.<br><br>(iv) The Bank will take appropriate remedial action in cases of serious non-compliance. |
| 4. | Procurement delays due to:<br><br>(i) Weak capacity of Satker PSPAM of MPWH in the provinces for carrying out the procurement of civil works and goods because of limited experience in the Bank's Procurement procedures<br><br>(ii) cumbersome internal process in Government; slow decision making, and absence of | (i) CPMU with support of consultants shall provide regular procurement training to PSPAM and also CPMU's own staff. The Bank will periodically provide training to CPMU and its consultants at before the start of the project and during project implementation.<br><br>(ii) Project Operations Manual and its technical instructions will include detailed procurement procedures which will be widely |

| No. | Description of Procurement Risk | Mitigation |
|---|---|---|
| | monitoring mechanism in Government | disseminated to all project staff. Procurement Plan will be developed with realistic schedules and the planned and actual timelines will be recorded and monitored through the Bank's Systematic Tracking of Exchanges in Procurement (STEP) system which will be required under the Project. Procurement performance under the project, including timeliness, will be systematically monitored and reported by CPMU as part of its responsibility for management and coordination. In addition to monitoring by CPMU, the Bank team will closely monitor progress. |
| | (iii) delay in preparation of technical requirements, designs, TORs, without which the procurement process cannot be started. | (iii) The preparation of technical requirements and TORs has been started and the progress will be monitored by the Bank's technical team. The key consultant contracts will be procured under advance procurement with the target that the contracts expected during the first year of project implementation are ready for signature by project effectiveness. |

***Environmental and Social (including safeguards)***

27. The project will be implemented by CPMU at the DG Human Settlements, MPWH, which will be responsible for the daily operation of all Project activities, including supervising project reporting, developing activity and annual summary reports. Along with its management and fiduciary responsibilities for the Project, the CPMU will be in charge of ensuring safeguards implementation, compliance, monitoring and reporting. The CPMU will prepare regular reports that will also cover safeguards implementation. That will be done no less than twice a year.

28. The CPMU will ensure that the ESMF is adopted by CPIUs, PPIUs and DPIUs (all relevant stakeholders of the project). At the central level, the CPMU and CPIUs will be supported by the Safeguards Specialist of the CMC (Central Management Consultant) in monitoring and oversighting implementation of ESMF while the TACT (Technical Assistance and Capacity Building Team) will assist CPMU in organizing and arrangement of safeguards training activities. To support PPIUs, the two RMACs will also have safeguards specialists embedded at their team. At the local government level and to assist DPIUs, the Technical Specialist of the Field Assistant Team will be responsible to provide safeguard support to the DPIUs.

29. The World Bank will review and approve the output of Component 2b and safeguards documents related to Component 1 to ensure that they comply with World Bank safeguards policies principles, objectives and requirements as covered in the ESMF. The project is expected to generate positive impacts from the provision of wider access to clean water services through better access to efficient, equitable and sustainable clean water services. The positive impacts include: (i) improved quantity and quality of safe water supply access, (ii) reduced incidents of water borne diseases, and (iii) more convenient access to clean and safe water at home allowing more productive time for adults and more time for children to learn and play.

30. The proposed investments would primarily affect only localized areas at or around the sites of facilities subject to physical works. Environmental and social impacts mainly result from activities around construction, rehabilitation and operation of existing water treatment plants facilities and their auxiliaries, which could range from construction/rehabilitation activities of water intake, operations of treatment plants, etc. The potential temporary environmental and social impacts could be on water pollution and health issues from poor sludge management, water resource scarcity due to increased water intake/demand at a certain period of construction and rehabilitation, impacts and risks associated with leakage and spills of chlorine and other chemicals, temporary disturbances on access to house/shop/office, temporary relocation of street vendors, temporary closure of roads and/or traffic disruption, dust, vibration and noise during pipe installation works. These impacts are temporary and can be localized and mitigated, thus the project is unlikely to have significant irreversible adverse and cumulative environmental impacts that as sensitive, diverse or unprecedented.

**Environmental Assessment (EA) OP 4.01**

31. The project is unlikely to have significant irreversible adverse environmental impacts that are sensitive, diverse or unprecedented. The impacts are typical from construction activities under Component 1. Activities under Component 1 will focus on improving efficiency of the existing piped water supply systems through reduction of non-revenue water, improved energy efficiency and expansion of services by installing new distribution network and household connections, as well as upgrading or rehabilitation of existing treatment plants and transmission lines. At least 40 cities will be selected to receive Bank fund for this component. Under this component, the Bank will not provide direct financing for construction of new water sources, new water intake and transmission line, and new water treatment plants. The Bank will indirectly provide support to construction of new systems (i.e. new water intake, transmission line and WTPs) through provision of TA and incentive mechanism (through provision of Matching Grants) to encourage eligible LGs/PDAMs to access non-public funding sources to finance construction of these new systems. The Matching Grants will be also earmarked only for activities that will improve operation efficiency (only for distribution network expansion, purchase of meters and equipment for NRW management and energy efficiency activities). The constructions of the new water intake, transmission and WTP to be funded by other financiers are beyond the scope of the project and implementation will be most likely after project period. However, the Bank will provide Technical Assistance (TA) support (under Component 2b) to LGs/PDAMs in preparing the bankable proposals for these investments which include facilitation of good quality Feasibility Studies. This TA will be provided only to LGs/PDAMs eligible to obtain Matching Grant as per categorization under the NUWAS Framework explained in Annex 2. There will be also additional criteria of selection to ensure that LGs/PDAMs have adequate capacity to manage and operate the new assets.

The criteria for selecting participating districts will be agreed upon during project preparation. The typical criteria for selection will include several aspects on operation and financial performance of the PDAM. Operation aspects will include for example Non-Revenue Water (NRW) and optimization of idle capacity of production, while financial aspects will include for example tariff determination (whether it is in full-cost recovery rate), billing collection rate, and operating costs ratio. LGs/PDAMs will be allowed to build new WTPs only when there is limited idle production capacity but demand is still high, and the PDAM has adequate capacity to manage their asset and has efficient operation as demonstrated by low NRW, good operating ratio, etc. The Bank's Interim Guidelines on the Application of Safeguard Policies to Technical Assistance (TA) Activities in Bank Financed Projects and Trust Funds Administered by the Bank (January 2014) will be the reference for this TA support. The project will cover urban areas in selected districts and municipalities countrywide. However, the exact locations for subproject of infrastructure investments have not been defined up to project preparation. An Environmental and Social Management Framework (ESMF) has been prepared to provide a framework to guide the environmental and social screening, assessment, and management of subproject activities' potential impacts. When the information is available, these subprojects will be screened according to the ESMF and the safeguards instrument will be prepared accordingly as safeguard instrument for the project. Screening mechanism will ensure that no physical works will be undertaken that could affect protected and/or vulnerable natural habitats, or would involve significant conversion or degradation of critical forest areas or natural habitat or critical natural habitats as defined under the policy. Furthermore, as sub-projects are identified, the necessary institutional capacity building and associated sub-project preparation activities should be undertaken during project implementation according to the procedures specified in the ESMF.

**Indigenous People (IP) OP4.10**

32. Most of the construction of main infrastructure facilities and their auxiliaries, including water intake, treatment plants and distribution networks under Component 1 and as the result of TA activities under Component 2b will mainly take place in urban/peri-urban areas. However, in the provinces in Kalimantan, Sulawesi, Bali, NTB, NTT, Maluku, Maluku Utara, Papua, and Papua Barat, IPs may be present in urban/peri-urban areas. The presence of IPs can be identified only during project implementation. When the proposed subproject has identified the subproject site, screening to identify the presence of IP will be carried out by the project using EGiMap tools (World Bank IPs Screening Study in 2010). On a more positive side of equation, IPs may become beneficiaries of the project if PDAMs expand their service coverage beyond urban areas, although the likelihood is also small. A stand-alone Indigenous Peoples Plan (IPP) will be needed and prepared based on community-wide free, prior and informed consultation if the proposed subproject will affect IP communities. Communities must maintain the right to state freely their views on whether they broadly support the project activity or want to benefit provided by the project or not. An IPPF that provides guidelines to screen IP presence and prepare IPP has been prepared as part of the ESMF.

**Physical Cultural Resources OP/BP 4.11**

33. It is highly unlikely that the selected sites will have an impact on PCR as they will be located in the existing areas that already constructed, no large construction and excavation activities are expected. However, since the project locations are yet to be defined, hence the likely activities affecting archeological, paleontological, historical, religious, or unique natural values

would be identified during the screening process in the ESMF. The chance find procedure and mitigation measures for PCR has been included in the ESMF and the standard appropriate clauses regarding the procedures to be followed in the event of chance finds of significant artifacts will be also included in construction contracts

**Involuntary Resettlement OP/BP 4.12**

34. The project does not anticipate large-scale land acquisition as most physical construction activities will be carried out in the existing areas belongs to LGs/PDAMs. However, relatively small land acquisition outside of PDAM or LG owned land may be required for construction of new water supply infrastructure facilities. Since the size of the needed land is mostly less than 1 Ha, PDAM/LG will do direct purchase based on business to business mechanism. Indonesian Regulations allows direct purchase for land acquisition less than 5 Ha. However, licensed appraiser must assess the value of affected assets. The previous Urban Water Supply and Sanitation Project (UWSS), which has similarities with this proposed project in term of type and scale of activities has shown that no significant impact raised due to land acquisition. In the event that land acquisition is foreseen, the borrower prepares a Land Acquisition and Resettlement Policy Framework (LARPF) and once project/sub-project sites have been identified, as the size is mostly less than one Ha, a stand-alone Land Acquisition and Resettlement Action Plan (LARAP) will be needed. The mitigation plan of the subproject will be prepared based on community-wide consultation. Given that the land acquisition process for the NUWS Project is small impact and the number of Project Affected Person (PAP) of subproject less than 200 people, less than 10% of household productive assets are affected and/or does not involve physical relocation, an Abbreviated LARAP is required.

35. The LARPF was prepared to mitigate any impacts due to land acquisition activities and incorporated in the ESMF. Draft ESMF has been disclosed in the DG Human Settlements website and public consultation was conducted in March 8, 2017 in Jakarta. The Final ESMF has been disclosed in DGHS' website and Bank's websites on October 2, 2017

36. A monitoring and evaluation mechanism needs to be utilized and socialized to enhance open access to information and at the same time encourage civic participation in the oversight of their respective LGs/PDAMs.

37. A Grievance Redress Mechanism (GRM) has been incorporated in the ESMF with the responsible units/individuals being set up/assigned both under CPMU, PPIUs and DPIUs.

*Monitoring & Evaluation*

38. **Monitoring**. The project will develop a web-based MIS that will be used to monitor project implementation progress, as well as progress of performance improvement of participating LGs/PDAMs. The LGs Field Assistants will work with LGs and PDAMs to input the data within the MIS. Main source of data will be from the existing PDAM's and LG's reporting mechanism (i.e. PDAM's monthly, quarterly, annual reports, audited Financial Report, and audited Performance Report). Data will be verified and analyzed for further action by the Provincial Coordinators and Data Management/MIS Specialists at the RMAC. The CMC will monitor and

supervise the RMACs team to ensure that MIS data is regularly and accurately updated, and verification procedure are performed.

39. **Evaluation**. The overall objectives of the evaluation are to examine project performance, to document good practices and lessons learnt to be utilized to further improved the NUWAS Framework. Qualitative and survey methods will be used for evaluations studies and reviews for mid-term and final evaluation.

*Role of Partners (if applicable)*

40. Partnership Arrangements. The Government has agreed to use a national umbrella platform for development of urban water supply program that will allow collaboration and better coordination among different stakeholders. The DG Human Settlements and Bappenas will coordinate the arrangement of donors using the National Urban Water Supply Framework. Within the World Bank's perspective, this project is part of a series of complementary ongoing and proposed lending engagements in the pipeline – including the Regional Water Supply Project (RWSP), National Slum Upgrading Program (NSUP), PAMSIMAS, the Regional Infrastructure Development Fund (RIDF) and the Local Government and Decentralization Project (LGDP), as well as a set of advisory engagements to provide support to Indonesia in accelerating achievement of universal access to water supply and sanitation.

**Attachment 1 to Annex 3**

**Matrix of Roles and Responsibilities of each Implementing Agency and Expected Outputs Aligned to Project Component**

| Implementing Agency | Roles and Responsibilities | Expected Outputs |
|---|---|---|
| BAPPENAS | Chair of National POKJA PPAS<br><br>Lead preparation/development of urban water sector policies, strategies and programs.<br><br>Lead coordination for planning, implementation, monitoring and evaluation of urban water sector development programs.<br><br>Prepare/develop strategies and policy directives for water sector development financing. | National Urban Water Supply Framework is operationalized (Component 3)<br><br>Key guidelines on sector financing and utility reform developed and adopted (Component 3) |
| DG Human Settlements (MPWH) | As Executing Agency (CPMU), responsible for the overall implementation and management of NUWSP to contribute to the achievement of urban water supply development targets.<br><br>Implementation and management of NUWSP to achieve project objectives as per results framework indicators.<br><br>Provide investment support, technical assistance and guidance for urban water supply infrastructure development.<br><br>Project monitoring and evaluation. | Overall project outputs of all components, in collaboration with other implementing agencies. |
| BPPSPAM | Provide guidance and support PDAMs' performance improvement.<br><br>Development of implementing guidelines, policies and standard operating procedures that could be utilized by PDAMs in achieving urban water supply targets.<br><br>Facilitation support and technical assistance to PDAMs in identification of investment needs and suitable funding sources as per PDAM's performance/capacity<br><br>Monitoring and evaluation of PDAMs' performance | PDAMs participate in TA/CB programs (Component 2)<br><br>PDAM with significant performance improvement and move up to the next category (Component 2)<br><br>PDAMs develop/update business plan for investment (Component 2)<br><br>PDAMs with improved cost coverage ratio and achieve full cost recovery tariff (Component 2) |

| | | |
|---|---|---|
| | | PDAMs with improved customer satisfaction (Component 2) |
| CPIU MOHA (DG Regional Development and DG Regional Financing) | Provide guidance and support to LGs to ensure inclusion of urban water supply development in LG's development and budget plan.<br><br>Encourage LGs to increase financing support to PDAMs.<br><br>Facilitation support and technical assistance to LGs in identification of investment needs and suitable funding sources to achieve urban water supply targets as per LG's and PDAM's capacity.<br><br>Monitoring, evaluation and enforcement of implementation of MOHA's regulations on water tariff and subsidy. | LGs with improved financing support to PDAMs (Component 1)<br><br>LGs and PDAMs receive the matching grant as a result of leveraging non-public financing (Component 1)<br><br>LGs participate in TA/CB programs (Component 2)<br><br>PDAMs with improved cost coverage ratio and achieve full cost recovery tariff (Component 2) |

## Annex 4: Economic and Financial Analysis

## INDONESIA: National Urban Water Supply Project (P156125)

### Introduction

1. The objective of the NUWS Project is to improve the performance of Central Government and selected Local Governments (LGs) and PDAMs to provide urban water supply services, and to contribute to the expansion of access to safe water amongst the communities served by the selected PDAMs. The project development objective will be accomplished through: (i) improving and increasing access to sustainable piped water services in selected main urban areas by strengthening PDAMs, (ii) improving capacity of LGs and leveraging Local Government resources towards urban water supply investments, and (iii) improving Central Government's policy and strategy making, development programming and M&E (including sector oversight) capacity to improve investment targeting and improving the effectiveness of investments.

2. The World Bank will support US$100 million for NUWSP. It covers four sub-components as shown on Table A4.1. Component 1 is Investment Support for Urban Water Supply Infrastructure, which estimated cost accounts for US$560 million, of which IBRD is US$70 million. Component 2 of NUWSP will provide Technical Assistance and Capacity Building for Local Governments and PDAMs (estimated cost US$13.50 million, of which IBRD is US$10.00 millions). Component 3 is Advisory and Policy Development Support for Central Government. Estimated cost for Component 3 is US$6.80 million, of which IBRD is US$5.00 million. For component 4, Program Implementation and Management Support will cost US$22.30 million, of which IBRD is US$15.00 million.

**Table A4.1. NUWSP Budget**

| Project Components | IBRD's Investment (in millions) |
|---|---|
| Component 1 | 70.0 |
| Component 2 | 10.0 |
| Component 3 | 5.0 |
| Component 4 | 15.0 |

### Economic Analysis

3. Economic analysis for this project is prepared based on data from 28 PDAMs which will be included among the 40 PDAMs to be supported through Component 1. Data from these 28 PDAMs is relatively adequate to provide basis for the economic analysis[26]. By 2015, these 28 PDAMs have been serving a total of around 12 million people through about 2.4 million household connections. Based on their own estimation, to achieve 100 percent coverage, they will have to

[26] Cost structure for the economic analysis was divided into investment and operation & maintenance costs. Investment cost will be equal to the whole NUWAS' investment cost (i.e. US$100 million); whereas the operation & maintenance cost is set to be at 5 percent of investment cost. Detailed engineering design for the investment subprojects will be prepared and finalized during implementation.

have an accumulative new connection of around 900,000 until end of 2019. For this analysis, the number is projected to reach 400,000 new customers in 2019, as shown on Table A4.2.

**Table A4.2. Population Served by PDAMs (thousand, people)**

| No | Province | Regency/city | 2016 | 2017 | 2018 | 2019 |
|---|---|---|---|---|---|---|
| **1** | Aceh | Kota Banda Aceh | 217 | 220 | 248 | 283 |
| **2** | Sumatera Utara | Kota Medan | 2,171 | 2,228 | 2,308 | 2,360 |
| **3** | Sumatera Utara | Kota Pematangsiantar | 271 | 284 | 297 | 309 |
| **4** | Sumatera Utara | Kota Sibolga | 74 | 79 | 84 | 89 |
| **5** | Sumatera Utara | Kota Tanjungbalai | 99 | 111 | 125 | 139 |
| **6** | Sumatera Utara | Kota Tebing Tinggi | 88 | 105 | 123 | 143 |
| **7** | Sumatera Barat | Kota Payakumbuh | 117 | 117 | 126 | 134 |
| **8** | Sumatera Selatan | Kota Palembang | 1,208 | 1,276 | 1,366 | 1,490 |
| **9** | Jambi | Kota Jambi | 404 | 529 | 652 | 667 |
| **10** | Jawa Barat | Kota Bogor | 944 | 1,064 | 1,220 | 1,376 |
| **11** | Jawa Barat | Kota Cirebon | 302 | 313 | 323 | 356 |
| **12** | Jawa Barat | Kota Depok | 284 | 371 | 506 | 687 |
| **13** | Jawa Barat | Kabupaten Bogor | N.A | N.A | N.A | 1,051 |
| **14** | Jawa Tengah | Kota Surakarta | 366 | 408 | 450 | 523 |
| **15** | Jawa Tengah | Kota Magelang | 88 | 101 | 114 | 127 |
| **16** | Jawa Tengah | Kabupaten Sukoharjo | 161 | 184 | 238 | 348 |
| **17** | Jawa Tengah | Kabupaten Magelang | 294 | 323 | 357 | 420 |
| **18** | Jawa Tengah | Kota Semarang | 1,143 | 1,262 | 1,468 | 1,043 |
| **19** | Jawa Timur | Kota Malang | 638 | 688 | 734 | 778 |
| **20** | Jawa Timur | Kabupaten Gresik | 442 | 499 | 657 | 786 |
| **21** | Jawa Timur | Kabupaten Banyuwangi | 315 | 342 | 389 | 437 |
| **22** | Jawa Timur | Kota Mojokerto | 34 | 46 | 58 | 82 |
| **23** | Kalimantan Barat | Kota Pontianak | 392 | 392 | 456 | 556 |
| **24** | Kalimantan Selatan | Kota Banjarmasin | 683 | 700 | 716 | 731 |
| **25** | Kalimantan Timur | Kota Samarinda | 876 | 955 | 997 | 1,069 |
| **26** | Maluku Utara | Kota Ternate | 142 | 155 | 167 | 180 |
| **27** | Sulawesi Selatan | Kabupaten Bantaeng | 72 | 89 | 105 | 123 |
| **28** | Papua | Kota Jayapura | 187 | 203 | 219 | 236 |
| **Total** | | | 12,013 | 13,041 | 12,013 | 13,041 |

4. There are several economic benefits from NUWSP such as reduction of non-revenue water, time savings to collect water that is not piped, and possibly better health outcomes through piped water. However, for the analysis, only two benefits were quantified: (i) time saving due to accessibility towards PDAM services; and (ii) saved water due to efficiency improvement (less NRW). Moreover, total costs include investment cost and operation & maintenance cost.

5. First, in order to calculate, the first benefit variable, i.e. the value of economic benefit of time spent on collecting water, two variables were utilized: (a) approximate average wage per hour; (b) share of population without an access to PDAM. The data of monthly was extracted from

INDO-DAPOER. Data for the second variable was obtained from classifying population by accessibility towards clean water source and time spent on collecting water from non-PDAM resources, such as retail sales, borehole, protected water well, etc. (see Table A4.4 below for details). The data was gathered from database of *Riset Kesehatan Dasar or RISKESDA* (Basic Health Research), Ministry of Health. Furthermore, to estimate variable (b), we multiplied data from RISKESDA by population without an access to PDAM.

**Table A4.3 Percentage of Population classified by Clean Water Source**

| Water Source | Percentage |
|---|---|
| PDAM | 19.7 |
| Retail sales | 2.1 |
| Borehole | 24.1 |
| Protected Water well | 29.2 |
| Unprotected Water well | 8.2 |
| Protected Springs | 7.5 |
| Unprotected Springs | 3.4 |
| Rainwater Reservoirs | 1.5 |
| River/Lake/Irrigation | 4.3 |

*Source: RISKESDA, 2014*

6. According to RISKESDA database, water sources for more than a half of population in Indonesia are borehole and protected water well. Almost 20 percent of population in Indonesia has access to PDAMs' water. In addition, people with an access to PDAM water but buying in through retailer accounted for two percent of population. The rest of 25 percent population of Indonesia collects water from unprotected water well, springs (protected and unprotected), rainwater reservoir, and surface water (such as river and lake). In terms of time spent on collecting water, majority of people in Indonesia spend less than six minutes. However, 1.3 percent of populations in Indonesia must spend 30 minutes or more to collect water. For this analysis, the time classification used for collecting water was two minutes (for less than six minutes), 10 minutes (for 6-30 minutes), 30 minutes (for 31-60 minutes), and 60 minutes (for more than 60 minutes) as shown on Table A4.4 below.

**Table A4.4 Percentage of Population classified by Time Spent on Collecting Water**

| Time for collecting water (in minute) | Percentage |
|---|---|
| <6 | 81.7 |
| 6-30 | 17.0 |
| 31-60 | 1.0 |
| >60 | 0.3 |

*Source: RISKESDA, 2014*

7. The Program aims to improve efficiency of water-service delivery which can be measured through several variables: NRW level, energy efficiency, number of connections, and Full Cost Recovery ratio. In cost-benefit analysis, the improvement of PDAMs' efficiency is merely portrayed by reduction of non-revenue water (NRW). In 2016, PDAMs' level of NRW is

approximately 30 percent. The number is projected to decline towards 25 percent by 2019 as shown on Table A4.5. We estimated economic benefit using NRW where the amount of water saved (due to NRW reduction) was multiplied by average tariff, used as a proxy for the value of water.

**Table A4.5 PDAMs' Non-revenue Water (NRW) (in percent)**

| No | Regency/city | Province | 2016 | 2017 | 2018 | 2019 |
|---|---|---|---|---|---|---|
| 1 | Kota Banda Aceh | Aceh | 0.40 | 0.35 | 0.30 | 0.25 |
| 2 | Kota Medan | Sumatera Utara | 0.22 | 0.22 | 0.22 | 0.22 |
| 3 | Kota Pematangsiantar | Sumatera Utara | 0.29 | 0.28 | 0.27 | 0.26 |
| 4 | Kota Sibolga | Sumatera Utara | 0.22 | 0.22 | 0.22 | 0.22 |
| 5 | Kota Tanjungbalai | Sumatera Utara | 0.22 | 0.22 | 0.22 | 0.22 |
| 6 | Kota Tebing Tinggi | Sumatera Utara | 0.26 | 0.24 | 0.22 | 0.20 |
| 7 | Kota Payakumbuh | Sumatera Barat | 0.22 | 0.22 | 0.22 | 0.22 |
| 8 | Kota Palembang | Sumatera Selatan | 0.23 | 0.23 | 0.23 | 0.23 |
| 9 | Kota Jambi | Jambi | 0.40 | 0.35 | 0.30 | 0.25 |
| 10 | Kota Bogor | Jawa Barat | 0.22 | 0.22 | 0.22 | 0.22 |
| 11 | Kota Cirebon | Jawa Barat | 0.37 | 0.35 | 0.33 | 0.31 |
| 12 | Kota Depok | Jawa Barat | 0.28 | 0.27 | 0.26 | 0.25 |
| 13 | Kabupaten Bogor | Jawa Barat | N.A | N.A | N.A | N.A |
| 14 | Kota Surakarta | Jawa Tengah | 0.34 | 0.30 | 0.30 | 0.28 |
| 15 | Kota Magelang | Jawa Tengah | 0.40 | 0.38 | 0.36 | 0.34 |
| 16 | Kabupaten Sukoharjo | Jawa Tengah | 0.28 | 0.27 | 0.26 | 0.25 |
| 17 | Kabupaten Magelang | Jawa Tengah | 0.43 | 0.40 | 0.38 | 0.36 |
| 18 | Kota Semarang | Jawa Tengah | 0.42 | 0.39 | 0.36 | 0.33 |
| 19 | Kota Malang | Jawa Timur | 0.25 | 0.22 | 0.20 | 0.18 |
| 20 | Kabupaten Gresik | Jawa Timur | 0.25 | 0.24 | 0.24 | 0.23 |
| 21 | Kabupaten Banyuwangi | Jawa Timur | 0.22 | 0.22 | 0.22 | 0.22 |
| 22 | Kota Mojokerto | Jawa Timur | 0.51 | 0.50 | 0.49 | 0.48 |
| 23 | Kota Pontianak | Kalimantan Barat | 0.25 | 0.23 | 0.21 | 0.20 |
| 24 | Kota Banjarmasin | Kalimantan Selatan | 0.25 | 0.24 | 0.23 | 0.22 |
| 25 | Kota Samarinda | Kalimantan Timur | 0.22 | 0.22 | 0.22 | 0.22 |
| 26 | Kota Ternate | Maluku Utara | 0.32 | 0.30 | 0.28 | 0.26 |
| 27 | Kabupaten Bantaeng | Sulawesi Selatan | 0.33 | 0.31 | 0.29 | 0.27 |
| 28 | Kota Jayapura | Papua | 0.22 | 0.22 | 0.22 | 0.22 |

8. **Cost Benefit Analysis**. The net present value (NPV) and Economic Internal Rate of return (EIRR) are estimated variable that are taken into account when assessing the feasibility of a program. The net present value (NPV) is a monetary estimate, in today's term, of net benefits (gap of total benefit and total cost) over the life of program throughout years. A program with positive and higher NPV will be viewed as favorable. For NUWAS Program, the NPV was calculated over period of 15 years (2017-2031). The discount rate used was 10 percent given reasonable estimates of the full lifetime costs and benefits associated with the program. An IRR is considered as equal to at least the opportunity cost of capital at 10 percent, which results in zero NPV. The results of cost-benefit analysis are summarized in Table A4.6 below. The benefits are time saving and NRW

reduction, while the costs are investment cost and cost of operation and maintenance. The NPV of NUWAS Program over 15 years, at the 10 percent discount rate, is estimated at US$64,206,487; and economic internal rate of return (EIRR) is at 28.1 percent. The positive NPV and positive gap of EIRR to discount rate used implies that this Program is economically feasible.

**Table A4.6 Net Economic Benefits of NUWSP (in US$)**

| Year | Total Benefit | Total Cost | Net Benefit |
|---|---|---|---|
| 2017 | - | 26,439,250 | (26,439,250) |
| 2018 | 11,224,830 | 26,439,250 | (15,214,420) |
| 2019 | 12,789,462 | 26,439,250 | (13,649,788) |
| 2020 | 32,396,217 | 26,439,250 | 5,956,967 |
| 2021 | 48,464,333 | 2,878,500 | 45,585,833 |
| 2022 | 12,537,112 | 1,439,250 | 11,097,862 |
| 2023 | 33,413,131 | 1,439,250 | 31,973,881 |
| 2024 | 36,587,642 | 1,439,250 | 35,148,392 |
| 2025 | 42,264,628 | 1,439,250 | 40,825,378 |
| 2026 | 14,234,093 | 2,878,500 | 11,355,593 |
| 2027 | 12,155,306 | 1,439,250 | 10,716,056 |
| 2028 | 13,328,826 | 1,439,250 | 11,889,576 |
| 2029 | 13,197,839 | 1,439,250 | 11,758,589 |
| 2030 | 14,470,180 | 1,439,250 | 13,030,930 |
| 2031 | 16,287,475 | 1,439,250 | 14,848,225 |
| **Discount Rate** | | | 10.0% |
| **NPV** | | | 64,206,487 |
| **EIRR** | | | 28.1% |

9. **Switching Analysis.** The switching analysis of net benefit of the Program was analyzed with respect to two key variables: (i) a change in coverage (number of beneficiaries) of the Program; and (ii) a change in operation and maintenance cost (O&M). The results of sensitivity analysis are showed in Table A4.7 below. The first analysis assumes that there is a decline in coverage of the Program that the number of beneficiaries is less than as expected; in this case the Program can cover only 80 percent of beneficiaries from the target. The second scenario assumes that there is an increase in total cost of 30 percent due to an increase in investment cost and O&M cost. The results of two scenarios related to NPV and EIRR reveal that the overall net benefits are insensitive to change in number of beneficiaries and increasing total cost, reflected by the positive NPV and the EIRR, which is still higher than that of discount rate. The EIRR for case 1 and case 2 illustrated are 20.3 percent and 27.0 percent, respectively. The main conclusion implied from this analysis, therefore, is that the program is economically feasible given change in important variable in two scenarios.

**Table A4.7 Switching Analysis of NUWSP**

| Sensitivity Analysis | Change | NPV | EIRR |
|---|---|---|---|
| Case 1: Coverage (beneficiaries) | -20% | 35,357,114 | 20.3% |
| Case 2: O&M Cost | +30% | 60,487,806 | 27.0% |

**Financial Analysis**

10. For financial analysis, detail review of financial performance of two PDAMs (PDAM Jayapura in Papua Province and PDAM Kota Payakumbuh in West Sumatera Province) was conducted to see the potential financial impact of the project to the PDAM. These two PDAMs have complete financial data, including financial statements and investment plans. These two PDAMs represent the different conditions and characteristics of PDAMs to be supported by Bank's investments under this project.

11. PDAM Jayapura in the Province of Papua is owned by two Local Governments namely District and Municipality of Jayapura with 60 and 40 percent share, respectively. In 2015, this PDAM was categorized as financially healthy PDAM as per performance audit from BPKP with service coverage 58% of total population. Total number of customers is currently at 29,221 with potential additional 2,600 connections in 2017.

12. PDAM Tirta Dharma of Payakumbuh Municipality in West Sumatera Province is also categorized as a financially healthy PDAM. These PDAM is one of the PDAM "Binaan" with already very high service coverage (more than 95%) and is encouraged to reach 100%. Since 2014, the average tariff has been set to above the cost of water production. Therefore, it is considered as a full cost recovery business.

13. Assessment of Key Financial Statements. Both PDAMs have been relatively small in terms of asset size, with a modest total asset of IDR 65.79 billion (Jayapura) and IDR 30.74billion (Payakumbuh) in 2014. Financial condition of the two PDAMs is summarized in Table A4.8 below.

**Table A4.8 Key Financial Summary of PDAM Jayapura and City of Payakumbuh**

| Description | Jayapura | | Payakumbuh | |
|---|---|---|---|---|
| **Fiscal Year (Audited)** | **FY2013** | **FY2014** | **FY2013** | **FY2014** |
| **Income Statement (IDR Million)** | | | | |
| Revenue | 41,699.17 | 44,558.13 | 18,704.32 | 20,531.15 |
| Operating Expenses | 38,943.73 | 43,728.65 | 16,303.56 | 18,603.06 |
| Profit Before Tax | 2,755.44 | 829.48 | 2,400.76 | 1,928.09 |
| Tax Income | N.A | N.A | 590.66 | 597.07 |
| Net Profit | 2,755.44 | 829.48 | 1,810.10 | 1,331.02 |
| | | | | |

| Description | Jayapura | | Payakumbuh | |
|---|---|---|---|---|
| **Fiscal Year (Audited)** | **FY2013** | **FY2014** | **FY2013** | **FY2014** |
| **Balance Sheet (IDR Billion)** | | | | |
| Total Assets | 58,648.96 | 65,792.66 | 32,868.04 | 30,747.91 |
| Total Equity | 22,009.17 | 27,339.42 | 31,006.81 | 30,235.93 |
| Total Liabilities | 36,639.79 | 38,453.24 | 1,861.23 | 511.98 |
| **Key Financial Ratios** | | | | |
| Return on Assets | 4.70% | 1.26% | 5.51% | 4.33% |
| Return on Equity | 12.52% | 3.03% | 5.84% | 4.40% |
| Cash Ratio | 0.14 | 0.21 | 1.98 | 6.95 |
| Leverage Ratio (Capital Adequacy) | 2.66 | 2.41 | 1.06 | 1.02 |

*Note: During 2013 and 2014, PDAM Jayapura experienced fiscal loss that exempts them from liability to pay income taxes.*

**Key Inferences**

14. **Income and Expenses.** Similar to other PDAMs which will be covered under the project, the main source of income is contributed from services they provide by selling water, with an increase of around 8 to 13 percent from IDR 41bn (FY2013) to IDR 44bn (FY2014) for Jayapura and IDR 18bn (FY2013) to IDR 20bn (FY2014) for Payakumbuh. The three major contributors to the operating expenses are the salaries, operational and depreciation. Although both PDAMs experienced net profits during FY2013-2014, the figures were at decreasing rate as a cause of either decreasing revenue or increasing operating expenses.

15. **Equity**. As Local Government's owned enterprises, most PDAMs receive equity contribution as a form of financial support from their owner. The equity contribution is usually provided to cover the budget deficit. PDAMs serving two or more LGs usually also receive equity injection from the Provincial Government. PDAM Jayapura receives constant injection from the Provincial Government, District and City of Jayapura. The Provincial Government supported the entity with around IDR 15.47bn during FY2013-2014. Meanwhile, District of Jayapura, as a major shareholder, injected IDR 29bn in FY2013 and IDR 31bn in FY2014. Moreover, City of Jayapura put their equity equals to IDR 4bn in FY2013 and IDR 7bn in FY2014. Unlike Jayapura, PDAM Payakumbuh only received capital injection from the District Government. PDAM Payakumbuh is one of the water supply companies that does not request to the Ministry of Finance to write-off its debt. As of 2014, they were no longer exposed to long-term debt.

16. **Cash and Financial Leverage Ratios.** The total assets to total capital ratio decreased in both PDAMs during FY2013-2014 from 2.66 to 2.14 (Jayapura) and from 1.06 to 1.02 (Payakumbuh). For the case of Jayapura, the number means that over one half of a company's assets are financed by equity. Whereas for Payakumbuh, almost all company's assets are financed by equity and not by debt. Furthermore, cash ratio or a company's total cash and cash equivalents to its current liabilities for Jayapura was 0.21 (FY2014) and for Paykumbuh was 6.95 (FY2014). Ratios greater than one demonstrate PDAM's ability to cover its current debt, but ratios that are too high might indicate that the PDAM is not allocating enough resources to expand and improve their services and grow their business.

17. **Return Ratios.** After tax-profit divided by total assets gives a return on assets (ROA) of 1.26 percent for Jayapura (FY2014) and 4.33 percent for Payakumbuh (FY2014). This tells us that in 2014 Jayapura earned 1.26 percent profit on the resources it owned. As for Payakumbuh, they earned 4.33 percent profit from the resources they owned. As shown, the ROAs for both PDAMs went down in FY2014. As for the Return on Equity, it tells us that Jayapura generated a 3.03 percent profit on every rupiah invested in 2014; whereas, Payakumbuh generated a 4.4 percent profit. Similar to ROA, the 2014 figures decreased compared to 2013.

## Annex 5: MAP

**INDONESIA: National Urban Water Supply Project (P156125)**