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Network on Water Technology in Asia and Pacific

# National Urban Water Supply Project, Indonesia

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## Summary

National Urban Water Supply Project (NUWSP), Indonesia is a project that provides financial and technical support in the implementation of the National Urban Water Supply (NUWAS) Framework initiated by the Central Government of Indonesia. The project aims to reduce the limitations of the urban water supply service providers and Local Governments due to their low capacity in the management, operation and maintenance works of established water supply networks. Plans have also been made to rehabilitate existing water supply systems to their optimum capacity, in order to assist in the achievement of the Government's goal in providing 100% urban water supply coverage by 2019. The project team also worked closely with the Central Government in increasing their technical capacity in policy development, improvement and implementation. The sources of funding include the World Bank, the Central Government (via the public budget) and through Public Private Partnerships established between companies and the Government. The outcome of the project is to be progressively monitored and evaluated, and the lessons-learned applied to the fine tuning of the NUWAS Framework.

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## Acronyms and Abbreviations

| | |
|---|---|
| PDAM | Water supply service providers |
| LG | Local Government |
| NUWSP | National Urban Water Supply Project |
| NUWAS | National Urban Water Supply Framework |
| IBRD | International Bank for Reconstruction and Development (World Bank) |
| APBN | State Revenue and Expenditure Budget (Government of Indonesia) |
| APBD | Regional Expenditure Income (Government of Indonesia) |
| EMSF | Environmental and Social Management Framework |
| BAPPENAS | National Development Planning Agency |
| MoPWH | Ministry of Public Works and Housing |
| MoF | Ministry of Finance |
| MoHA | Ministry of Home Affairs |
| CPMU | Central Project Management Unit |
| CPIU | Central Project Implementation Unit |
| PERPAMSI | Water Supply Association |
| CMC | Central Management Consultant |
| TACT | Technical Assistance and Capacity Building Team |
| CAC | Central Advisory Consultant |
| RMAC | Regional Management Advisory Consultant |
| PPIU | Provincial Project Implementation Unit |
| PC | Provincial Coordinators |
| FA | Field Assistants |
| DPIU | District Project Implementation Unit |
| NRW | Non-revenue water |
| POKJA AMPL | Water and Sanitation National Steering Committee |
| IRR | Internal Rate of Return |
| IPPF | Indigenous Peoples Planning Framework |
| GRM | Grievance Redress Mechanism |

# 1 Introduction

The Republic of Indonesia is a Southeast Asian country comprising of more than 17,000 islands distributed within its borders between the Pacific and the Indian Oceans, making it the biggest archipelago of the world. With more than 260 million people scattered over 6,000 islands, Indonesia ranks the fourth in the world by population accounting for 3.5% of the entire world's population. About half the country's population resides in Java-Madura (in a land area of 132,107 km$^2$), one of five main islands of Indonesia. As shown in Figure 1, the other 4 main islands include Sumatra (473,606 km$^2$), Kalimantan (539,460 km$^2$) which is part of the island of Borneo, Sulawesi (189,216 km$^2$), and Papua (421,981 km$^2$) which is part of New Guinea.


*Figure 1: Map of Indonesia, 1.Java, 2. Sumatra, 3. Bali, 4. Lombok and the Gili Islands, 5. Sumbawa, 6. Komodo and Rinca, 7. Flores, 8. Sumba, 9. Kalimantan, 10. Sulawesi, Capital: Jakarta*

Being an equatorial country, Indonesia experiences two seasons – a wet season between November to March and a dry season between April to October – without any extreme fluctuations in temperature throughout a year. The geological instability of Indonesia is a well-known issue in the world news, due the presence of numerous active volcanoes and the frequent occurrence of earthquakes in the country. The country is also prone to tsunamis, floods, soil erosion, droughts and impacts of climate change. However, even while experiencing constant disasters, Indonesia's population is still growing, with rapid industrialization and urbanization. According to UNDP Human Development Report of 2014, Indonesia's Human Development Index (HDI) considering healthy life, access to knowledge and standard of living is 0.684, positioning it at 108 out of a total 187 countries. Additionally, the nominal gross domestic product (GDP) in Indonesia was US Dollar 3,788 per capita in the year 2018, with about 10.12% of the population living below the poverty line in 2017.

## a Water Resources

In terms of water resources, Indonesia can be considered rich with an estimated 690 $Gm^3$ available in total, while the demand is only 175 $Gm^3$. However, the fresh water available in unevenly distributed as 70% of the water resources are found in Kalimantan and Papua. Indonesia houses 8,000 watersheds in 131 river basins, 29 of which cross provincial boundaries and 5 cross international borders. The average annual rainfall for Indonesia's main islands is approximately 2.350 mm/year. By the year 2016 the water reservoir capacity of Indonesia was 12.56 billion $m^3$, with a 52.55$m^3$ per capita ratio. The Government of Indonesia has plans to increase the capacity to 8.2 billion $m^3$ by 2019 to keep up with the increase in population. Additionally, due to the issues of natural and anthropogenic disaster occurrences in Indonesia, the Government also needs to find sustainable solutions to the impending threats to the water security of the nation.

## b Water Supply

The municipal water supply sources used by Indonesia are protected dug wells (29.2%), borewell (24.1%), and piped water/water utility (PDAM) (19.7%). In urban areas, most households are using borewell (32.9%) and PDAM (28.6%), whereas in rural areas the protected dug well is most common (32.7%). By 2016, the percentage of households in the urban areas of Indonesia with access to improved drinking water sources was 71.14%, while rural households was 68.4%. However, it is important to note that the water supply to the population is geographically uneven to a high degree, which is shown by the piped water supply provided to only 7.5% of the Bangka Belitung Province, while 70.8% is provided to East Kalimantan Province. Although most of the public water supply utilities use raw water from surface water sources like rivers, in the past decade the quality of surface and ground water has been declining due to high levels of pollution from the discharge of untreated wastewater generated by domestic households, industries, mining, agriculture, fish farming, solid waste and other sources. The pollution in addition to the high natural hazard risks has put Indonesia in a predicament when it comes to providing sustainable water supply services to the populace, and the prevention of water-related disasters. Figure 2 presents the investments needed in urban drinking water supply in each province.

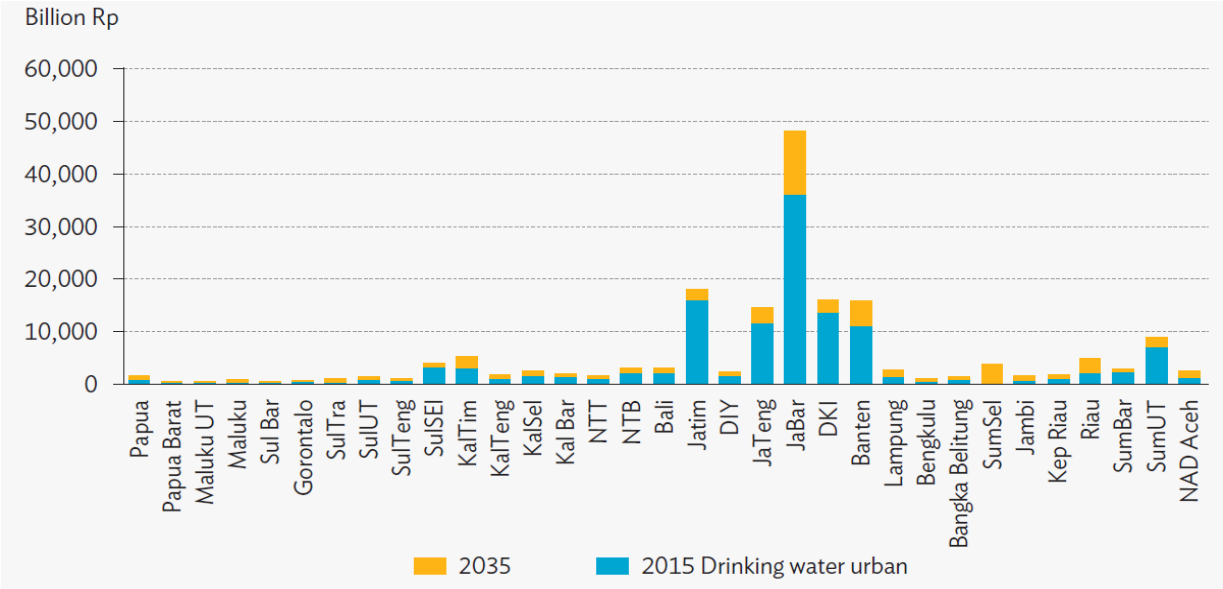



*Figure 2: Investments needed in urban drinking water supply to fill the present and 2035 gap*

## c Institutional Capacity

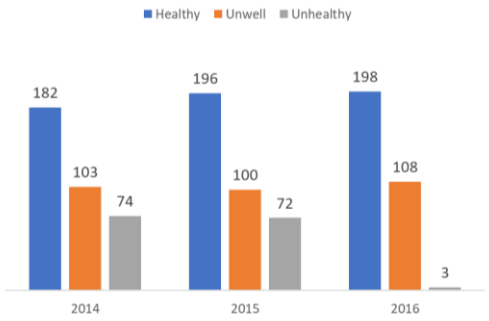
With the population estimated to increase to over 90 million people over the next 20 years, after achieving 100% coverage as planned in the year 2019, the Indonesian water supply services needs to be improved by at least 30 to 50% each consecutive year to keep up with the rapid growth. The main source of financial investment in the development of the water supply sector is the Central Government of Indonesia, with budgets for infrastructure development for regional and rural areas. However, the allocated budget is insufficient to meet the increasing demand of the sector, as even 100 million household connections require at least US Dollar 6 billion of capital investments. Even though there has been an increase in government sectoral initiatives, the investments have failed to cover the improvement of the facilities of service providers themselves, in order to provide the adequate support required by the increase in number of water supply networks.

Additionally, due to shifting of the jurisdiction of water supply services to local government authorities under the decentralization law, the Central Government has been rendered powerless in pushing for the allocation of resources for water supply sectoral programs. Even though the Local Governments have been handed the responsibility of providing services and managing utilities, they are still highly dependent on the central governments funding for water supply projects. This blurry division of authority has created a confusing relationship between the Local and Central Government of Indonesia and has led to the decrease in quality of water supply services to the populace.

## d PDAM Challenges

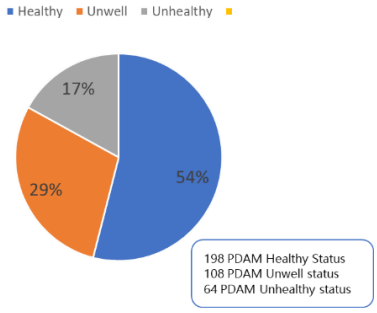
Currently the capacity of PDAMs are insufficient to cope with the degradation of water supply systems and to provide adequate supply in order to adhere to the projected water demand of the growing population. Out of 367 PDAMs that were studied, it was found that only 74 PDAMs were operating at the full design capacity. Most PDAMs were found have multiple production units of an average 100 to 200 L/day capacity as opposed to one main plant of high capacity. Only the urban centers of Indonesia have plants that have a capacity higher than 1000L/d, although they were built as early as the 1980s. The plants that were built later were mostly of low capacity, mainly due to the relative difficulty in getting a water supply license for a plant of capacity higher than 500L/d. Most cities have great difficulties in finding raw water sources to supply water at full capacity and often consider getting bulk water supply from the regional systems.

The large number of small-scale PDAMs in Indonesia of highly fragmented provinces has rendered most of the water supply networks financially and technically infeasible, due to the low economies of scale of small number of connections. In order to counter the economic losses, there have been debt restructuring and swapping programs for water supply utilities that have helped enhance the performance of PDAMs. However, the PDAMs still suffer from low technical capacity to plan and enforce tariffs that can improve commercial benefits and lead to full cost-recovery. In addition to the challenges posed from lack of technical and operational knowledge, PDAMs also have had to face community conflicts arising from inequitable water use, and the continuous trials of natural disaster and climate change risks. PDAM performance in the year 2017 is presented in the following figures.




Source: Audit Kinerja BPPSPAM, 2017

*Figure 3: PDAM performance based on status in 2017*




Source: Audit Kinerja BPPSPAM, 2017

*Figure 4: Percentage of PDAM performance status in 2017*

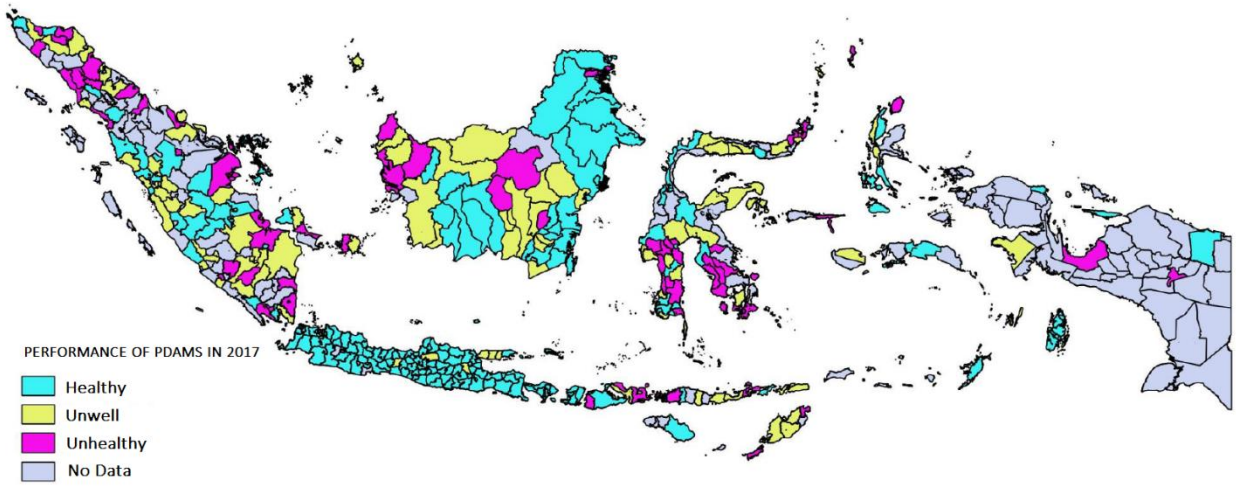
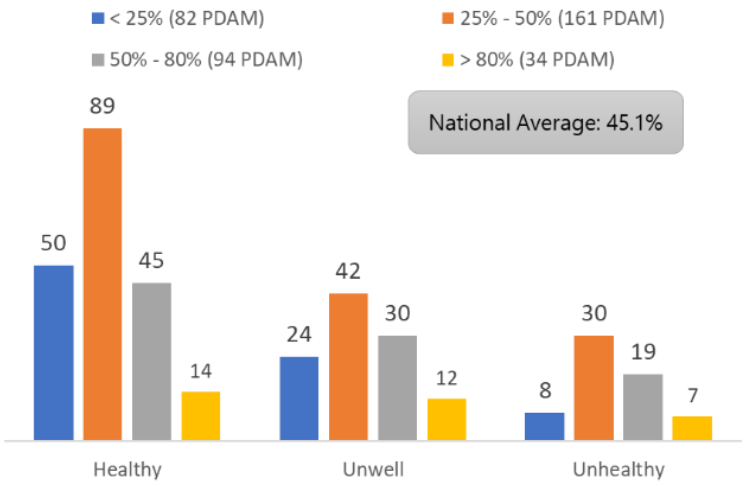



*Figure 5: Geographical distribution of PDAMs, marked according to their performance in 2017*




Source: Audit Kinerja BPPSPAM, 2017

*Figure 6: Amount of PDAMs based on the percentage coverage of service*

### e National Urban Water Supply (NUWAS) Framework

In order to improve the quality of water supply to urban areas, the services of PDAMs and the financial and technical capacity of the Local Governments, the Government of Indonesia has currently developed a basic framework for national urban water supply development. The framework includes a national level strategic plan for the development of the water supply sector, including an encompassing focus on the enhancement of technical and financial capacity of relevant authorities and utilities to achieve specific sectoral targets. It aims to eliminate the inconsistencies between local and central government authorities in their communications with service providers. It also provides existing urban service providers with toolkits to improve their performance and diversify their capacity to recognize and assimilate the facilities to extract the commercial value of water supply services.

## 2 Technical and Technological Brief

The National Urban Water Supply Project (NUWSP) was proposed as a top-up for the budget allocated for the urban water sector by the Government of Indonesia in order to fully achieve the water supply sectoral targets defined in the National Urban Water Supply (NUWAS) Framework. The project aims to assist in the implementation of the principles of the framework and the measurement of their effectiveness by the application of a strategic monitoring and evaluating plan. Focus is also be made on developing the institutional capacity of Local Governments in order to cope with the changes in their mandates due to the decentralization act. Another key aspect of the project is to enhance the efficiency of existing systems, so as to reduce the capital investment that needs to be spent on the establishment of new plants. The key stakeholders of the project is depicted in Figure 7.

Through the improvement of the managerial capacity of Local Governments, the Central Government aims to heighten the water supply services and the accountability of PDAMs and encourage the delivery of sustainable water supply services. The results generated by the monitoring and evaluation of the progress aids in the future development and strengthening of the NUWAS Framework. The Bank's financial assistance helps to bring a consolidated solution to all the issues in water supply by proper routing of funds to the inefficiencies identified in the system; from the quality of services provided to the management of PDAMs.

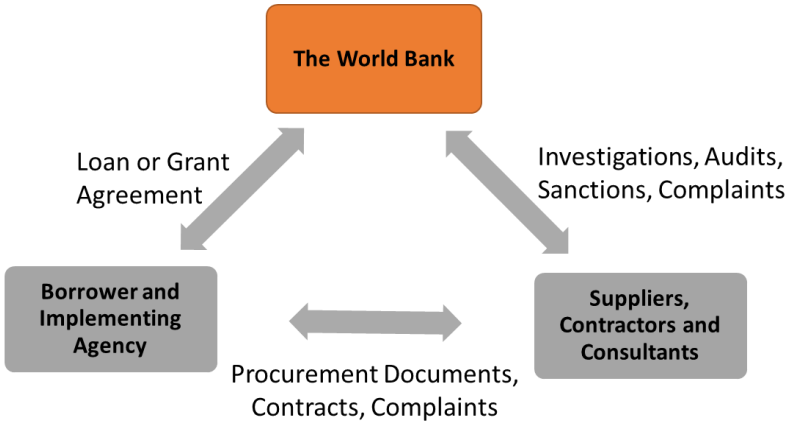



*Figure 7: Key stakeholders of the project and their relationships*

*Table 1: Overview of the National Urban Water Supply Project (NUWSP) of Indonesia (World Bank, 2018)*

| | |
|---|---|
| Approval Date | June 6, 2018 |
| Closing Date | December 31, 2022 |
| Environmental Category | B |
| Borrower | Government of Indonesia |
| Implementing Agency | Directorate General of Human Settlements, Ministry of Public Works and Human Settlements, Central Government of Indonesia, Republic of Indonesia; |
| Total Project Cost | US$ 602.60 million |
| Commitment Amount | US$ 100.00 million |
| Sectors | Water Supply (73%), Water, Sanitation and Waste Management (27%) |
| Themes | Urban & Rural Development, Environment & Natural Resource Management |

## 3 Financial Brief

The National Urban Water Supply Project (NUWSP) is to be co-financed by the International Bank for Reconstruction and Development (World Bank), the Government of Indonesia, and under Public Private Partnerships with various companies of Indonesia. The plan for the distribution of the financial contributions by various sources are described in table 2 below.

*Table 2: Sources of Funding and Financial Plan for the components of NUWSP Program*

| **Project Components** | **Cost (USD Million)** | **IBRD Funds (USD Million)** | **Govt. Funds (USD Million)** | | **Other Funds (USD Million)** | **% IBRD Funds** |
|---|---|---|---|---|---|---|
| | | | **APBN DGHS** | **APBD/ PDAM** | | |
| Component 1: Investment Support for Urban Water Supply Infrastructure Development | 560.0 | 70.0 | 75.0 | 100.0 | 315.0 | 12.5% |
| Component 2: Technical Assistance and Capacity Building for Local Governments and PDAMs | 15.5 | 10.0 | 1.0 | 2.5 | 2.0 | 64.5% |
| Component 3: Advisory and Policy Development Support for Central Government | 6.8 | 5.0 | 1.0 | - | 0.8 | 73.5% |
| Component 4: Program Implementation and Management Support | 20.3 | 15.0 | 3.3 | 2.0 | - | 73.9% |
| **Total** | **602.6** | **100.0** | **80.3** | **104.5** | **317.8** | **16.6%** |

IBRD: International Bank for Reconstruction and Development (World Bank)
APBN: State Revenue and Expenditure Budget (Government of Indonesia)
APBD: Regional Expenditure Income (Government of Indonesia)

The cost for the implementation of the Environmental and Social Management Framework established by World Bank are also to be borne by the project budget. The details of the estimated costs for the main components under the ESMF are in table 3 below.

*Table 3: Budget allocation for the implementation of Environmental and Sociam Management Framework*

| Activity | Estimated Cost (USD) | Source of Financing |
|---|---|---|
| ESMF Socialisation / Dissemination | 150,000 | Project |
| Environmental and Social Assessment (Component 1) | 20,000 | Project |
| Feasibility Study (Component 2B) | 20,000 | Project |

# 4 Project Features

## 4.1 Technical and technological features

### i. Project Team

NUWSP project is divided into two levels of management: management at the central level and management at the regional level (province, district or city) as detailed in figure 8.

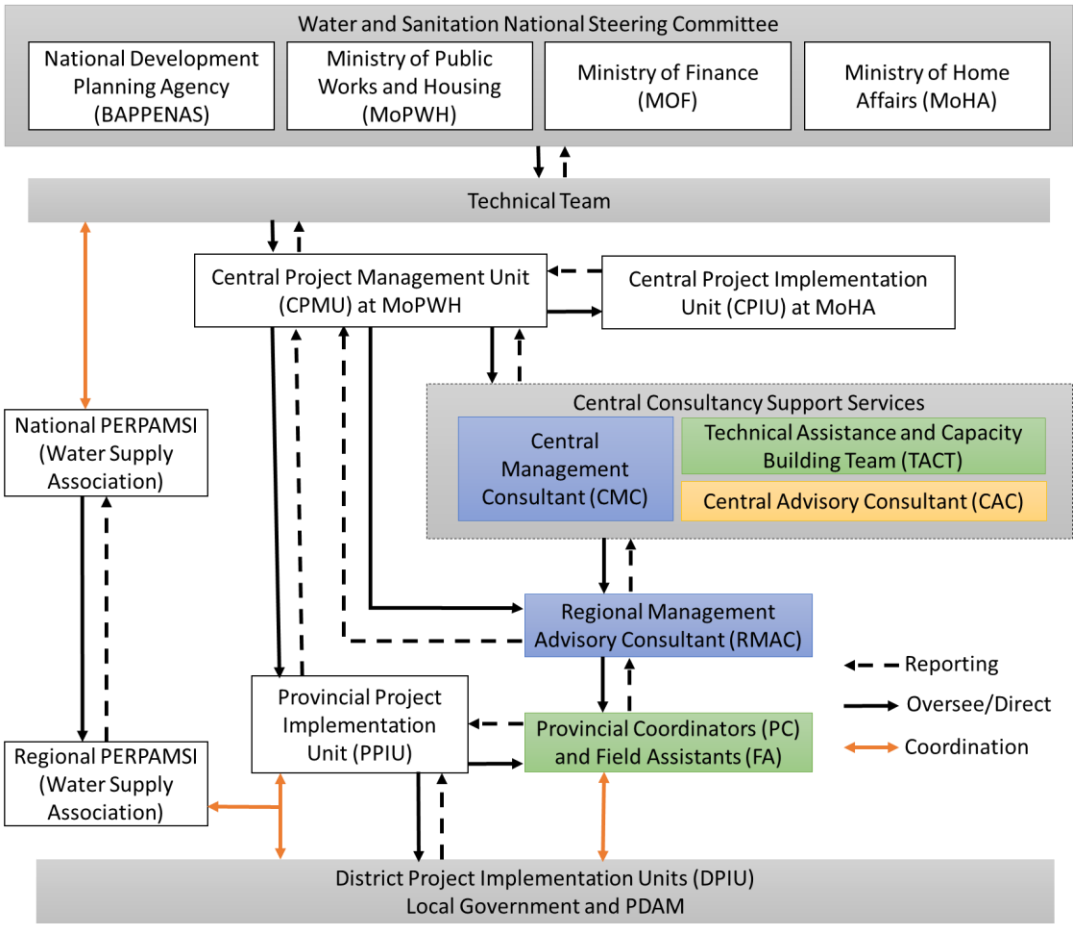



*Figure 8: Project management structure*

The central level is led by the Water and Sanitation National Steering Committee, chaired by The National Development Planning Agency (BAPPENAS) and joined by Ministry of Public Works and Housing (MoPWH), Ministry of Finance and Ministry of Home Affairs (MoHA), with MoPWH as the NUWSP Executing Agency. BAPPENAS ensures alignment of the works with existing policies of the Government, and harmonise the actions and views of the members of the committee and relevant agencies. The CPMU is formed at MoPWH, and the CPIU at MoHA, both coordinating with the Technical Team and other agencies relevant to the project. The CPMU and CPIU is supported by the TACT, PPIU and RMAC in the implementation of various components of the project. TACT assists the CPMU in the evaluation of proposals submitted by LGs or PDAMs under the technical assistance and capacity building component of the project. At the regional level, PPIUs will oversee and coordinate the works of DPIUs, both closely working with representatives of institutions related to the implementation of urban drinking water in regions such as the Perpamsi DPP, and others. At the local level, RAMC oversees PCs that coordinates FAs in assisting LGs and PDAMs in collecting data, reporting, identifying needs and preparing and submitting proposals.

### ii Project Components

**Component 1: Investment Support for Urban Water Supply Infrastructure Development**

This component provides financial assistance to at least 40 LGs or PDAMs of urban areas under grant schemes depending on the services type, capacity or history of performance (detailed in table 4 below). The grants provide technical assistance or capacity building programs to existing water supply networks to optimize their operations and performance. The infrastructure development that will be funded by Component 1 is limited to (i) reduction of non-revenue water (NRW) and leakages; (ii) energy efficiency; (iii) installation of distribution network and new house connections; (iv) water intake development/improvement; (v) rehabilitation/optimization of water treatment plants. The interested PDAMs are required to enter into a legal agreement with their respective LGs, and the performance of the PDAMs will be evaluated by the Central Government.

*Table 4: Types of financial assistance programs and their target groups of PDAMs*

| Regional Capacity Group | PDAM Category | Estimated Project Budget Allocation | Types of Investment Assistance Approaches | | |
|---|---|---|---|---|---|
| | | | Seed Grant | Matching Grant | Performance Based Grants |
| Group 1 | Healthy and sustainable | USD 15 Million | | ✓ | |
| Group 2 | Healthy | | | ✓ | ✓ |
| Group 3 | Potentially Healthy | USD 30 Million | ✓ | ✓ | ✓ |
| Group 4 | Unwell | | ✓ | | ✓ |
| Group 5 | Unhealthy | | ✓ | | |

Seed Grants were allocated for small LGs or PDAMs that provides assistance and support under pre-defined terms and conditions. The scope of seed grants is limited to the reactivation of dormant production units to increase capacity and the maintenance and rehabilitation of existing treatment plants. Matching Grants targets LGs or PDAMs with better performance history, by providing financial assistance through sponsors of local private sources in order to enhance their service quality and efficiency.

Performance Based Grants are to be provided for LGs or PDAMs that are required to achieve sectoral targets that are pre-defined through an agreement with the Government. The LGs or PDAMs that apply for such grants act as project contractors for the Central Government, to complete physical or social performance water supply related service improvement activities using their own finances. Upon completion of the activities, the grant scheme reimburses the investments of the LG or PDAM depending on the quality of performance and compliance with the terms of agreement.

**Component 2: Technical Assistance and Capacity Building for Local Governments and PDAMs**

The second component of the project complement investments made by the Government on the enhancement of the institutional capacity of LGs, PDAMs and other relevant stakeholders in handling the technical, financial, commercial, managerial, human resources and climate and disaster risk resilience aspects of water supply services. Additionally, the project includes the assistance in the preparation of a land use and natural resources plant for Indonesia, to enable sustainable natural resource management and adequate resource recovery. It also offers financial support to further develop capacity building initiatives that the Government has taken up, like the Center of Excellence (CoE) Program, assisting as much as 200 LGs or PDAMs. Furthermore, the Bank will also be providing technical advice to LGs and PDAMs in the development of their operation and financial plans and creation of feasible investment plans, paving the way for the preparation of proposals for potential sponsorship by private parties. A detailed feasibility study for the engineering design of future infrastructure development (for new water treatment plants, transmission networks, water intakes, distribution networks, house connections, etc.) directly related to project is also included in the activities of this component.

**Component 3: Advisory and Policy Development Support for Central Government**

This component involves assistance in further development of the NUWAS framework, and the establishment of additional policies and programs that supports the framework and aid in the implementation process, through the joint work of the CPMU and an Advisory Consultant team. The team works closely with the stakeholders within and outside of the Government that are relevant to the creation of national and regional policies and strategies, implementation guidelines and other facilities of urban water management, mainly the Water and Sanitation National Steering Committee (POKJA AMPL).

**Component 4: Program Implementation and Management Support**

The final component of the project involves the provision of guidance and assistance in project management to various levels of the government (central, provincial and local) that are involved in the project through a Central Management Consultant (CMC) and Regional Management and Advisory Consultants (RCMACs). The consultants will assist the main stakeholders and the CPMU in the evaluation of proposals submitted by LGs or PDAMs, and the overall monitoring of the progress and achievement of objectives of the project. Under this component there will also be a major focus on the evaluation of implementation of NUWAS Framework. The targets of the project are to be achieved in accordance with the timeline detailed in figure 9 below.

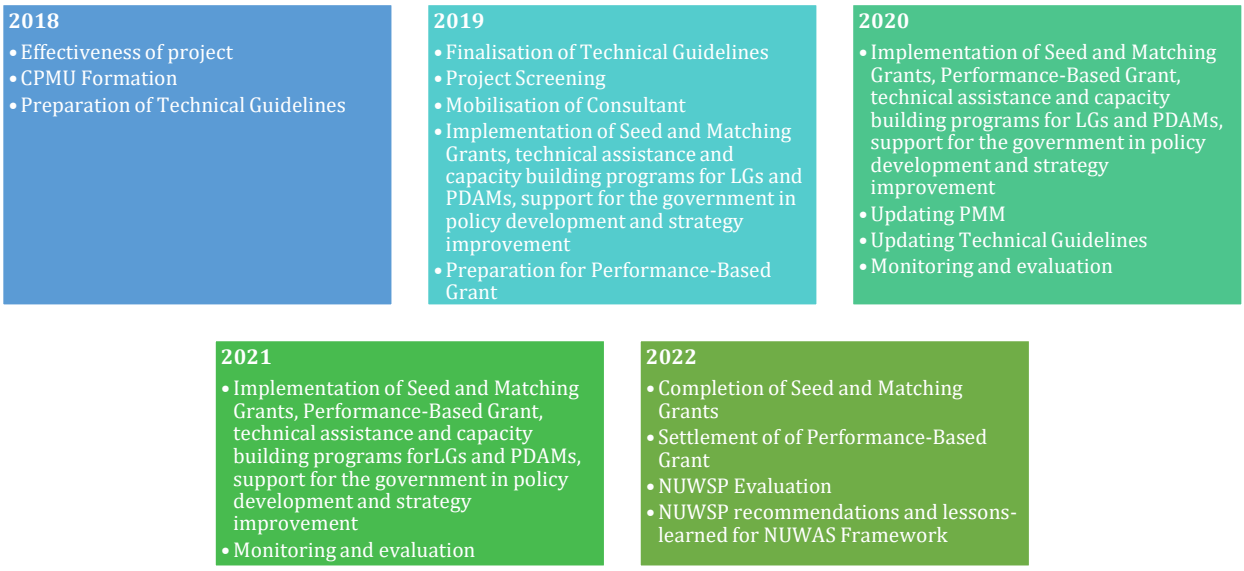



*Figure 9: Project Implementation Plan*

## 4.2 Economic and Financial Features

The NUWSP project aims to increase the existing capacity of LGs and PDAMs, educating and advising them on how to make the urban water supply facilities economically feasible to operate. Many PDAMS currently run on a tariff system that does not incur enough return for proper operation and maintenance works of the relevant water supply system. Technical and managerial capacity building components of the project would enable PDAMs and LGs to practice business strategies that would increase the economic benefits of running a water supply network system, by proper selection of tariff amounts and resource recovery options. The project also assists Central and Local Governments of Indonesia in the adequate distribution of funds for urban water supply and help increase the capacity of the government agencies to incur funds through Public Private Partnerships as well. Higher efficiencies in finance distribution and the availability of financial support from multiple sources enable the Government of Indonesia to properly plan and implement national policies and achieve long term objectives by sector development. A key element of the project is the creation of economically independent urban water supply service providers, that can increase the quality of their services by strengthening their financial and operation plans through the knowledge gained from the assistance of technical experts. This greatly decreases the cost of the Government on subsidizing the services of PDAMs and LGs that are under-performing and increase the funds available for new infrastructure development projects where needed.

The all-encompassing long-term financial plans for the urban water supply sector created from the increased technical capacity of relevant Government agencies reduce wastage of public financial resources. Furthermore, with the strengthening of the institutional and technical capacity of the various levels of the Government, PDAMs and LGs, the project aims to reduce the expenses for hiring of third-party consultants for operational maintenance or management work. The project also aims to reduce the capital cost of establishing new water supply networks in urban regions by the rehabilitation of existing systems. The Internal Rate of Return (IRR) of new development is 6.3%, whereas moderate rehabilitation has an IRR of 63%. Similarly, operation and maintenance of domestic, municipal, and industrial infrastructure has a higher IRR than the development of new resources.

Additionally, if the functional capacity of the existing PDAMs are increased to full optimum capacity, the economies of scale of the services provided can potentially be higher. It has been reported that by the reduction of non-revenue water by even 20% could increase the capacity of PDAMs by 5,328 litres per second. The improved efficiency of the water supply systems can decrease the expenses in operation and maintenance of the PDAMs as well.

### 4.3 Social and Environmental Features

The Environmental and Social Management Framework (ESMF) prepared by World Bank consultants have declared through initial assessments that the components that contribute to the environmental and social factors of the project are Component 1 (Urban Water Supply Infrastructure Development) and Component 2B (Feasibility Study). Procedures for Environmental and Social Management has been established, detailing the steps from the initial screening stage to the final approval stage for all relevant subcomponents of the project. The main implementing unit of the EMSF is CPMU and CPIU assisted by the Safeguard Specialist of the CMC, with other teams also being supported by specialists embedded in their team structure. In order to improve the capacity and understanding of the EMSF, the project also includes the provision of training workshops organized by TACT for all implementing and support teams and involved government agencies/stakeholders.

As the project is to be implemented in areas that are selected during the implementation of the project based on proposals submitted by LGs and PDAMs, the investments of the project is in localized areas that are related to the chosen facilities. Additionally, as the project activities are based in already existing urban areas, there is little to no effect on the natural environment or critical natural habitats. It is however predicted that there may be short-term environmental impacts such as dust, noise and vibration from new construction activities. Potential long-term irreversible and adverse environmental effects such as water resources scarcity due to higher intake, and water pollution and health issues from poor sludge management during the operation of water treatment plants is mitigated by the utilization of existing water supply dam capacities, and the application of proper sludge treatment processes under the stringent requirements of the environmental policies of the Government of Indonesia and the World Bank.

In case of the presence of Physical Cultural Resources (for example archaeological, paleontological, historical, religious or unique natural values) in the areas that are selected, the project has an identification and screening process, with standard clauses for mitigation measures to be included in the relevant construction contracts. Even though the project does not anticipate large-scale land requirement, a Land Acquisition and Policy Framework has been established to prepare for potential cases during the progress of the project. Furthermore, the project has the required instruments to deal with any issues incurred with the presence of any Indigenous Communities in project focus areas, through an Indigenous Peoples Planning Framework (IPPF). Additionally, a Grievance Redress Mechanism (GRM) has been incorporated in the EMSF, assigning responsibility to each level of the PIU including the level of LGs and PDAMs, and providing a platform for stakeholders and the public to communicate their complaints during project implementation.

# 5 Project Benefits

The project improves the quality of life of Indonesians living in the selected urban areas, through the enhancement of access to water supply. The estimated population that directly benefit from the NUWSP project has been quantified at around 1.2 million households or 6 million people, out of which 20% are low income communities. The improved sustainability of the rehabilitated water supply systems is beneficial to the communities in the long-term by providing a reliable source of good quality water of adequate quantity to the people. The ease of access to potable water reduces the amount of time spent by individuals to procure water on a daily basis, allowing more productive use of their time. The higher availability of clean water will also have health and sanitation benefits for the involved communities, and reduce the risk of water-washed diseases, and potential water-related epidemics.

In addition to the benefits to the society, there are multiple advantages for the Central and Local Governments and water supply service providers. The project assists in the implementation of the NUWAS Framework that has been introduced for the development of the urban water sector. It directly aids the LGs and PDAMs to improve the quality of their services and performance. Technical support is also provided for the consolidation and equitable distribution of urban water sector investments from various financing schemes, to achieve the targets defined in the NUWAS Framework. The funds available for the urban water sector will also be increased by sourcing of sponsorship from the private sector of Indonesia, in order to gather the intense capital funding is required for the short- and long-term target achievement. The feedback from the project on its completion assists the Government of Indonesia to further optimize their relevant policies and regulations and fine-tune their action plans.

# 6 Implementation and Status of the Project

The urban cities and districts of Indonesia were categorized and priorities in accordance with an assessment of PDAMs conducted by World Bank in the year 2017. A total of 49 priority PDAMs were identified as potential participants of the project from all the urban areas of Indonesia, and a plan for activity locations was prepared as shown in figure 10 below.

A total of 4 cities and 10 Districts have been selected as recipients of Seed Grants with estimated amounts ranging from USD 2 to 4 million. Additionally, 11 Districts and 24 Cities have been selected for Matching Grants with estimated amounts ranging from USD 130 thousand up to USD 2.3 Million. Performance based grants is to be provided to 7 PDAMs for both reduction of non-revenue water (NRW) and increase in energy efficiency, and 5 PDAMs for only the increase of energy efficiency and 13 PDAMs for reduction of NRW, amounting to a total of 25 PDAMs for the particular type of grant. The distribution of the grants that are to be provided to the PDAMs, depending on their status and performance, is given in Tables 5 and 6 below.

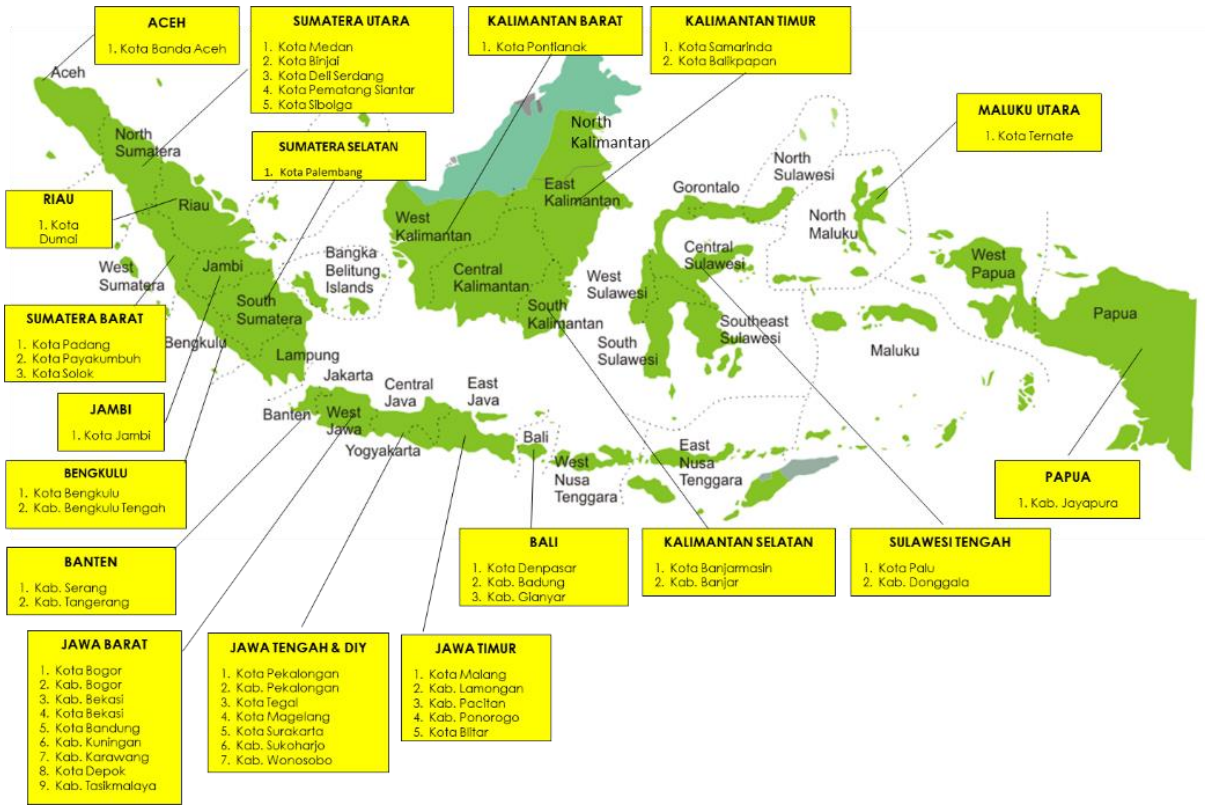



*Figure 20: Location plan for project activity based on preliminary assessment by World Bank in 2017*

*Table 5: Estimated maximum grant amount allocated for PDAMs identified by World Bank in 2017*

| # | Regency / City | Max. Grant Amt. (USD) | | # | Regency / City | Max. Grant Amt. (USD) |
|---|---|---|---|---|---|---|
| **SEED GRANTS** | | | | | | |
| 1 | Binjai City | 2 Million | | 8 | Lamongan District | 2 Million |
| 2 | Deli Serdang Regency | 2 Million | | 9 | Pacitan District | 3 Million |
| 3 | Bengkulu City | 3 Million | | 10 | Ponorogo District | 2 Million |
| 4 | Bengkulu Tengah District | 3 Million | | 11 | Blitar City | 2 Million |
| 5 | Dumai City | 2 Million | | 12 | Banjar District | 4 Million |
| 6 | Pekalongan District | 4 Million | | 13 | Palu District | 3 Million |
| 7 | Sukoharjo District | 4 Million | | 14 | Donggala District | 4 Million |
| **MATCHING GRANTS** | | | | | | |
| 1 | Banda Aceh City | 230,000 | | 19 | Depok City | 580,000 |
| 2 | Medan City | 2,300,000 | | 20 | Bandung City | 460,000 |
| 3 | Pematang Siantar City | 460,000 | | 21 | Pekalongan City | 230,000 |
| 4 | Sibolga City | 460,000 | | 22 | Wonosobo District | 130,000 |
| 5 | Padang City | 460,000 | | 23 | Tegal City | 380,000 |

| | | | | | | |
|---|---|---|---|---|---|---|
| 6 | Payakumbuh City | 460,000 | | 24 | Magelang City | 460,000 |
| 7 | Solok City | 460,000 | | 25 | Surakarta District | 460,000 |
| 8 | Palembang City | 4,150,000 | | 26 | Kota Malang | 460,000 |
| 9 | Jambi City | 460,000 | | 27 | Pontianak City | 460,000 |
| 10 | Serang District | 830,000 | | 28 | Banjarmasin City | 1,385,000 |
| 11 | Tangerang District | 460,000 | | 29 | Samarinda City | 460,000 |
| 12 | Tasikmalaya District | 1,175,000 | | 30 | Balikpapan City | 460,000 |
| 13 | Kuningan District | 340,000 | | 31 | Badung District | 2,300,000 |
| 14 | Karawang District | 675,000 | | 32 | Denpasar City | 460,000 |
| 15 | Bekasi City | 580,000 | | 33 | Gianyar District | 460,000 |
| 16 | Bekasi District | 460,000 | | 34 | Ternate City | 460,000 |
| 17 | Bogor District | 580,000 | | 35 | Jayapura District | 460,000 |
| 18 | Bogor City | 230,000 | | | | |

*Table 6: Estimated areas of grant allocation for PDAMs identified by World Bank in 2017*

| # | District / City | Grant Allocation | |
|---|---|---|---|
| | | **Reduce NRW** | **Energy Efficiency** |
| 1. | Balikpapan City | ✓ | ✓ |
| 2. | Pacitan District | ✓ | ✓ |
| 3. | Laut District | ✓ | ✓ |
| 4. | Binjai City | ✓ | ✓ |
| 5. | Samarinda City | ✓ | ✓ |
| 6. | Lamongan District | ✓ | ✓ |
| 7. | Bengkulu City | ✓ | ✓ |
| 8. | Badung District | | ✓ |
| 9. | Jembrana District | | ✓ |
| 10. | Probolinggo City | | ✓ |
| 11. | Buleleng District | | ✓ |
| 12. | Sukoharjo Disrict | | ✓ |
| 13. | Sukabumi City | ✓ | |

| # | District / City | Grant Allocation | |
|---|---|---|---|
| | | **Reduce NRW** | **Energy Efficiency** |
| 14. | Bitung City | ✓ | |
| 15. | Tegal City | ✓ | |
| 16. | KMakassar City | ✓ | |
| 17. | Bandung City | ✓ | |
| 18. | Semarang City | ✓ | |
| 19. | Banda Aceh City | ✓ | |
| 20. | Blitar City | ✓ | |
| 21. | East Sumba District | ✓ | |
| 22. | Pekalongan City | ✓ | |
| 23. | Bengkulu Tengah District | ✓ | |
| 24. | Sukabumi District | ✓ | |
| 25. | Deli Serdang District | ✓ | |

Since the project was brought into effect in the year 2018, many activities have been conducted in Indonesia for its implementation, in accordance with the project implementation timeline. To strengthen the readiness for the planned NUWSP activities, a workshop on NUWAS and NUWSP Framework Outreach was held from 14th to 15th March 2018. The concerned PDAMs and LGs

participated in the workshop in addition to the project implementation team and relevant stakeholders. In the workshop, information on the NUWAS and NUWSP Frameworks were shared, along with detailed information on the Government's policies and targets in the urban water supply sector, and the application of the project in enhancing the implementation of NUWAS Framework. Information on the funding options and sources (local and foreign) were also disseminated, in addition to the details of the Government's plan to distribute the sector budget to accelerate improvement of drinking water services and fulfillment of minimum water service standards. Figure 11 shows different activities during project execution.

Furthermore, the criteria for the assessment of the project readiness of PDAMs and LGs, and the details of the project components and their targets were shared with the LGs and PDAMs present. The local representatives were also made familiar with the online portal of NUWAS website that includes the self-assessment tools, proposed activity formats and the concepts of the letter of interest. Training and assistance were also provided in project proposal preparation. Additionally, the needs of the Technical Assistance program and Capacity Building by Regional Governments and PDAMs in the framework of implementing NUWSP was identified by the project implementation team, in order to plan for the activities to be carried out in later part of 2019.

During the course of the month of August 2018, a team of World Bank representatives along with the relevant project implementation units visited key PDAMs in Padang City, Payakumbuh City, Bengkulu City and Bengkulu Tengah District, to obtain information on the commitment and readiness of the areas to participate in the NUWSP program.

*Figure 31: Project execution in full swing which commenced in 2018*

In November 2018, discussions were held on the readiness criteria and the preparation of the technical guidelines for the implementation of project activities. An assessment of the preparedness of the LGs and PDAMs was also done during this meeting. The discussions were continued in later meetings in November, to monitor the progress of project readiness fulfilment of target PDAMs. By the end of November 2018, the work of reviewing and amending of proposals that were submitted by PDAMs was initiated, with field visits made by the relevant project implementing units to the respective areas.

Based on the results of the Regional Government and PDAM Readiness Assessment Workshop for the 2019 NUWSP Activities held in September 2018 and Discussion on the Technical Readiness of the Preparation of Criteria in the Implementation of National Urban Water Supply Project (NUWSP) Activities held in November 2018, 24 districts/cities have already been identified to have the potential to participate in NUWSP activities through seed grant, matching grant and performance-based grant schemes. The discussions with the LGs/PDAMs identified as participating in a performance-based grant mechanism are to be carried out individually, with field visits to support the review and decision making. It was noted that there was a need to conduct technical discussions regarding the proposed activities and commitments to fulfill the readiness criteria (RC) with LGs interested in participating in the NUWSP activities and additional meetings were arranged to be held on later dates.

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