

USAID Water and Development Country Plan for Indonesia

I. Executive Summary

Although Indonesia is nearing middle-income status, it is still plagued by poor water and sanitation conditions, with large portions of the population lacking access to improved water and appropriate sanitation. The Government of Indonesia (GOI) has recognized this challenge and has set ambitious targets to achieve universal access for both water and sanitation by 2019.

However, financing to reach these targets is insufficient and significant barriers exist, particularly for sanitation. USAID is among a small group of donors working in partnership with the GOI to improve access to clean water and improved sanitation.

Under this water country plan and in alignment with the Global Water Strategy (GWS) and the USAID Agency Plan, USAID will continue its strategic partnership with Indonesia in the water and sanitation sector with a focus on the urban poor, ensuring that these communities can access more affordable and equitable—as well as increasingly higher quality—water and sanitation services. Investments will build on USAID comparative advantages that have demonstrated impacts in leveraging the GOI infrastructure funding for a transformative potential in the provision of access to water and sanitation for all Indonesian people. USAID will continue to apply the gender sensitive and mainstreaming strategy to ensure that women as key users and beneficiaries of water, sanitation, and hygiene (WASH) are empowered to participate in and benefit from WASH-related decision-making. The USAID activities will result in increased demand for improved water services and safely managed sanitation services, improved local capacity to provide such services, and critical governance and finance functions strengthened to form the enabling environment upon which sustainable sector development depends. These activities support USAID’s Agency-specific Plan objectives to increase access to sustainable water and sanitation services, to strengthen water sector governance and institutions, and to improve water resources management.

II. Introduction

Indonesia is a USAID priority country for WASH assistance, resulting in approximately 2.8 million people gaining access to an improved water source and 288,000 people gaining access to an improved sanitation facility from 2010 to 2015.¹ Despite these successes and other impressive development gains, Indonesian ranks last among Association of South East Asian Nations in terms of providing access to improved sanitation in its urban areas and second to last in terms of providing access to piped water services. Demographic trends indicate that all of Indonesia’s future projected population growth will occur in urban areas, which are growing at a rate of 2.60 percent versus -0.40 percent in rural areas. Thus, poor access to water and sanitation will continue to plague Indonesia unless a serious focus on addressing this problem in urban areas is taken.

Indonesia’s inadequate access to improved water and sanitation results in serious health and

¹ USAID. 2010-2014. Safeguarding the World's Water: USAID Report of Water Sector Activities FY 2010–2014. USAID Water Office.

economic impacts. The Ministry of Health estimates that diarrheal disease is the cause of 31 percent of mortality in infants under 1 year of age, and WHO attributes 11 percent of under-5 child mortality in Indonesia to diarrheal disease, resulting in an estimated 120,000 deaths each year.² It is also reflected in the nation's high prevalence of stunting (39 percent),³ which is associated with repeated bouts of diarrhea. Poor sanitation leads to a 2.3 percent loss of GDP each year due in part to increased health care costs, degraded water resources, and losses in tourism revenue.⁴ While poor access to water and sanitation affects the entire nation, the poor suffer disproportionately. The urban poor often pay 10–30 times more for poor quality water, which can represent more than 20 percent of their income compared to the average household which only pays 4 percent.⁵ This economic burden increases when higher costs for health care are needed to address waterborne diseases and their impacts are factored in.

Improved water and sanitation access in Indonesia is underpinned by readily available water resources. However, Indonesia's changing precipitation patterns, population growth, and unsustainable use driven by agriculture, have resulted in parts of Indonesia, especially heavily populated Java, facing water scarcity. With tropical climate in two seasons, wet and dry, Indonesia has unbalanced fresh water availability. Java, around 7 percent of total Indonesia's land area, is home to 65 percent of its total population while it has only 6 percent of Indonesia's total available fresh water.⁶ In addition, nationwide, only approximately 30 percent of the groundwater resources are consumable. The prospect of a rapidly increasing urban population without access to basic services, including water supply and sanitation, when paired with increasingly scarce water resources, represents an important threat to the nation's stability and, consequently, the ability of the U.S. to conduct business with this critical trading partner. USAID will support innovative water and sanitation activities in Indonesia and partner with the GOI to help transform how it allocates and leverages its own resources to increase access to water supply and sanitation for the poorest and most vulnerable population.

III. Government of Indonesia (GOI) Water Objectives

Indonesia has exceeded its 2015 Millennium Development Goal (MDG) target for sustainable access to safe drinking water (68.9 percent), but is not on track to meet its MDG target for sustainable access to improved sanitation facilities (62.4 percent). As of 2014, 85 percent of the population had access to safe drinking water, whereas only 59 percent of the population had access to improved sanitation facilities. GOI has ambitious post-MDG water and sanitation targets (called the "100-0-100" targets), which aim to provide 100 percent of the population with access to safe drinking water, eliminate all slums areas, and reach 100 percent of the population with access to improved sanitation by 2019. Under the 100-0-100 program, specific service levels are to be met by the end of 2019 in urban areas: 60 percent of the population with access to piped water and 40 percent to non-piped water, 85 percent of the population with access to on-site sanitation facilities, and 15 percent to centralized systems or sewerage. Achieving universal

² Riskesdas, Indonesian Ministry of Health, 2007.

³ WHO Nutrition Landscape Information System: Indonesia, who.int/nutrition/landscape/report.aspx?iso=IDN

⁴ Economic Impacts of Sanitation in Indonesia, World Bank water and Sanitation Programme, 2008.

⁵ Monitoring Affordability of Water and Sanitation Services after 2015, Submitted to UN High Commission for Human Rights, 2012.

⁶ R&D Centre of DG Water Resources (2010)

access by 2019 requires investment of more than \$4.7 billion per year for water supply and \$2.8 billion per year for sanitation, a four and half and seven and a half-fold increase respectively from current levels of investment.⁷

IV. Government of Indonesia's Current and Planned Strategies and Approaches to Water and Sanitation

The government's main mechanism for delivering water services to communities, particularly municipal, is through local government-owned water utilities or PDAMs. PDAMs provide water to households and businesses through piped connections and can finance their operations to full cost recovery by setting tariffs and managing operational costs. Currently there are 385 PDAMs in Indonesia and nearly 50 percent of them fall under the "less satisfactory to critical" performance category.⁸

The GOI is aware that in order to achieve the 100-0-100 target, raw water resources must be better managed. The GOI plans to develop comprehensive Water Safety Plans to ensure the delivery of safe water to households throughout the entire supply network and incorporate future demands for water use. The plans include a risk-management analysis of the upstream catchment area of the raw water source, the PDAM water treatment plant, and its pipe distribution network, until the point of use of the water at the community level.

The Indonesian sanitation sector is a very different story. Until the mid-2000s, most GOI institutions and local governments viewed sanitation as a household issue, and as a consequence, public investment has been negligible. When households did invest in toilets, septic tanks were missing or substandard and fecal sludge was released directly to the environment. Access to sewerage systems and sewerage treatment in urban areas is still very low, covering only about 1 percent of the urban population.⁹ The majority of cities and districts have no single institution with the experience and mandate to lead sanitation planning and implementation and have divided responsibility for managing drainage, solid waste, and sanitation services among various departments.

V. Challenges and Opportunities in the Sector

Demographic: The challenges of providing sustainable WASH services are particularly acute in the context of Indonesia's rapid urbanization and decentralization. Indonesia's rate of urbanization is the fastest of any major economy in East and South Asia. Indonesia's Water Investment Road Map 2011–2014 illustrates declining urban water supply coverage, at a rate of about 2.2 percent per year, during the very same period that experienced an increase in the number of household piped connections managed by PDAMs, from 5.2 million in 2000 to 8.8

⁷ The World Bank Water and Sanitation Program (WSP). 2015. Water Supply and Sanitation in Indonesia: Turning Finance into Services for the Future. <https://www.wsp.org/sites/wsp.org/files/publications/WSP-Indonesia-WSS-Turning-Finance-into-Service-for-the-Future.pdf>

⁸ Supporting Agency for the Development of the Drinking Water Supply System (BPPSPAM)'s Performance Evaluation Report, 2013

⁹ Urban Sanitation Development Program (2012) National Sanitation Demand Assessment, Draft Report, November 2012

million in 2013.

Finance, Governance, Civil Society, and the Private Sector: Historically, public investment in the sector has been low. However, the last few years have seen significant GOI infrastructure investments although these investments are insufficient to meet the GOI's 100-0-100 targets in the sector. Critically, GOI investments have not been made with the complementary "software" investments, and many cities and districts lack budgets, capacity, staff, and technical capabilities to adequately manage and maintain the infrastructure. The challenges facing PDAMs are mainly related to financial solvency, technical/operational capacity, water resources management, and service coverage. More than 70 percent of PDAMs apply tariffs that are too low to recover cost. In addition, 21 percent of PDAMs suffered high non-revenue water of above 40 percent. In sanitation, recent GOI initiatives have included programs designed to target the urban poor with cost-effective sanitation technologies such as communal septic tanks and shared facilities. This highly subsidized infrastructure component limits the ability to scale up these solutions. Citizen and civil society involvement is a key aspect for effective water supply and sanitation planning and development, yet GOI institutions lack mechanisms to ensure this engagement. To date, private sector engagement has focused on corporate social responsibility and led to an increase in the number of multinational and local companies participating in construction of healthy latrines, sanitation microcredit, and the construction of infiltration ponds. There is significant opportunity to engage the private sector in the provision of sanitation services, from latrine construction to sludge vacuuming.

Gender and social inclusion: Women and girls are most often the primary users, providers, and managers of water and household hygiene, although traditionally they are not empowered to make these decisions because of financial or social barriers. Increased access to safe water, sanitation, and hygiene will contribute to significant health improvement and security of women, girls, and their families. To avert gender-based violence against women and girls, the design and implementation need to better recognize and accommodate gender implications and ensure that both men and women are involved in the design and implementation of water and sanitation services. Involvement of men and women is positively correlated with improved sustainability, transparency, and management, as well as increased school enrollment and retention of girls where there are water and sanitation services.¹⁰

Environmental, hydrologic and climatic trends: Climate change, deforestation, rising demands of burgeoning populations, and an expanding agricultural sector have exacerbated the problem of diminishing freshwater supplies for irrigation, drinking water, and industrial uses.¹¹ The flow of once vibrant rivers has fallen sharply while groundwater levels are increasingly contaminated and continue to plummet, with utilities and private citizens focused on drilling ever deeper in a perpetual race to the bottom. Floods, landslides, and droughts have damaged water supply facilities and infrastructure, as well as disrupted water utility services.¹²

¹⁰ WSP (2010). Gender in Water and Sanitation.

¹¹ Indonesia Country Report, Climate Variability and Climate Changes and Their Implication, Ministry of Environment, 2007.

¹² Indonesia Third National Communication, Perdinan, Faqih et al., 2017; Climate Variability and Climate Change Scenario in Indonesia. Ratag, 2007; Indonesia Climate Change Sectoral Roadmap (ICCSR), Synthesis Report, Bappenas, 2010.

VI. USAID/Indonesia Country Plan for Water

In Indonesia, USAID aims to support the GOI to increase access to improved water and sanitation services and improve key hygiene behaviors for the urban poor and vulnerable, contributing to the GOI's 100-0-100 target for universal coverage for water and sanitation. The key outcomes of USAID's investments in Indonesia are 1) increased household level hygiene behaviors and use of water and sanitation services; 2) improved technical, operational, and financial performance of PDAM and local government institutions that regulate, oversee and deliver water and sanitation services; and 3) strengthened governance and finance functions of WASH service providers that form the enabling environment upon which sustainable sector development depends, with beneficiaries from the bottom 40 percent of the wealth distribution specifically targeted. To address challenges with governance and institutional capacity, USAID/Indonesia's technical assistance approach in the sector complements and leverages this GOI investment as it improves the planning, management, implementation, community demand for, and ultimate sustainability of these infrastructure investments.

In terms of water supply, USAID's efforts will focus on scaling up tested approaches to strengthening PDAMs' ability to deliver water services and expand access to the poor. USAID/Indonesia WASH activities will also encourage policy changes at the national and local water catchment area level that advance water safety plans as a tool to improve and ensure the delivery of safe water to households throughout the entire supply network, covering quality and quantity of raw water source to tap, continuity of the supplies, and affordability, while also addressing resilience from climate change and disaster risk. Much more effort is needed for sanitation through supporting cities in sanitation planning, establishing and or strengthening the institutional foundation for designing and implementing sanitation priorities, and carrying out operational research to test new and lower cost approaches for helping poor households and communities adopt better sanitation, and sludge collection and treatment practices. The USAID/Indonesia WASH assisted cities have become working laboratories for developing and testing new approaches of the urban sanitation framework for safely managed sanitation services, and from this experience USAID is developing lessons learned that can be shared for scaling up.

USAID activities focus on cities and districts in the eight provinces of North Sumatra, West Java, Central Java, East Java, South Sulawesi, North Maluku, and Papua, as well as two special areas of DKI Jakarta and Tangerang District that were selected due to their population dynamics, poverty rates, and low access to services. Criteria informing municipal site selection include the ability to build on past USAID successes, high poverty density, low access to WASH services, high local government commitment, and the existence of a civil society engaged in WASH issues.

Figure 1. Main Mechanisms

Title/Partner	Duration	Mechanism	Program Cycle
Indonesia Urban Water, Sanitation and Hygiene, <i>Penyehatan Lingkungan Untuk Semua</i> (IUWASH-PLUS)	2016 – 2021	Contract	Awarded, currently in first year of implementation
APIK, <i>Adaptasi Perubahan Iklim dan Ketangguhan</i>	2015 – 2020	Contract	Awarded, currently in second year of implementation
Trust Fund with World Bank–National Urban Water Supply Program	2017 – 2020	Trust Fund	Awarded
Follow-up	2021 – 2022	TBD	Planning

Expected results: Overall, these activities are estimated to provide more than one million Indonesians with basic or safely managed water supplies (500,000 of which must be from the poorest 40 percent of the population), and help 500,000 Indonesians gain access to basic or safely managed sanitation (all from the poorest 40 percent of the population) by 2021.

The Indonesia Country Plan is costed based on prior year resources still available for programming, the FY 2017 estimated allocation of \$6.1 million, and the FY 2018 President’s Budget Request of \$7.0 million.

Other USG and USAID-funded USG activities: The U.S. Department of Interior, Bureau of Reclamation is helping to build the capacity of GOI on dam safety through training on guidelines, inspections, and operations and management of cascade dams. The U.S. Department of Interior, International Technical Assistance Program is working together with USAID to strengthen Indonesia’s national parks through technical assistance to the GOI on protected area management, with an emphasis on hydrological restoration and freshwater resources management in peat lands.