COLLABORATION FOR RECOVERY AND RESILIENCE THROUGH BETTER WASH ACCESS FOR ALL
A COMPENDIUM OF WASH BEST PRACTICES IN INDONESIA
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A COMPENDIUM OF WASH BEST PRACTICES IN INDONESIA
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# Abbreviations and Acronyms

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<th>Definition</th>
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<td>APBD</td>
<td>Regional Revenue and Budget Expenditure (Anggaran Pendapatan dan Belanja Daerah)</td>
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<td>APBN</td>
<td>National Development Budget &amp; Expenditure (Anggaran Pendapatan dan Belanja Nasional)</td>
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<tr>
<td>BAZNAS</td>
<td>National Board of Zakat (Badan Amil Zakat Nasional)</td>
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<td>BDS</td>
<td>Business Development Services</td>
</tr>
<tr>
<td>BOS</td>
<td>School Operational Support Funds (Bantuan Operasional Sekolah)</td>
</tr>
<tr>
<td>BOT</td>
<td>Build, Operate, Transfer</td>
</tr>
<tr>
<td>BPBD</td>
<td>Provincial Disaster Management Agency (Badan Penanggulangan Bencana Daerah)</td>
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<tr>
<td>BPKP</td>
<td>State Audit Board (Badan Pengawasan Keuangan dan Pembangunan)</td>
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<tr>
<td>BUMDes</td>
<td>Village Business Unit (Badan Usaha Milik Desa)</td>
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<tr>
<td>BUMN</td>
<td>State-owned enterprises (Badan Usaha Milik Negara)</td>
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<tr>
<td>CLTS</td>
<td>Community-Led Total Sanitation or STBM</td>
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<tr>
<td>CPMU</td>
<td>Central Project Management Unit</td>
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<td>CSR</td>
<td>Corporate social responsibility</td>
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<td>CSS</td>
<td>Communal sanitation system</td>
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<tr>
<td>CTDC</td>
<td>Community Training and Demonstration Centre</td>
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<tr>
<td>CVAAP</td>
<td>Climate Vulnerability Assessment and Action Plan</td>
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<td>DESA-DESI</td>
<td>Climate Healthy Village Movement program (Desa Sehat Iklim)</td>
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<td>DFAT</td>
<td>Australian Department of Foreign Aid and Trade</td>
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<td>EE</td>
<td>Energy efficiency</td>
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<td>EHRA</td>
<td>Environmental Health Risk Assessment</td>
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<td>EMIS</td>
<td>Educational Management Information System</td>
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<td>FIT</td>
<td>Fit for School</td>
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<td>GEDSI</td>
<td>Gender, Disability, and Social Inclusion</td>
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<td>GESI</td>
<td>Gender equality and social inclusion</td>
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<td>GIZ</td>
<td>Gesellschaft für Internationale Zusammenarbeit</td>
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<td>GoI</td>
<td>Government of Indonesia</td>
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<td>HAKLI</td>
<td>Indonesian Association of Environmental Health (Himpunan Ahli Kesehatan Lingkungan Indonesia)</td>
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<td>HAL</td>
<td>Wastewater Grant (Hibah Air Limbah)</td>
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<td>HAMBK</td>
<td>Output-based Drinking Water Grants (Hibah Air Minum Berbasis Kinerja)</td>
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<td>HBCC</td>
<td>Hygiene &amp; Behaviour Change Coalition</td>
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<td>HCF</td>
<td>Healthcare Facilities</td>
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<td>HWWS</td>
<td>Handwashing with soap</td>
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<td>IDR</td>
<td>Indonesian Rupiah</td>
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<tr>
<td>IEC</td>
<td>Information, Education and Communication</td>
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<tr>
<td>IPAL</td>
<td>Wastewater Treatment Plant (Instalasi Pengolahan Air Limbah)</td>
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<tr>
<td>IPC</td>
<td>Infection prevention and control</td>
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<tr>
<td>IPLT</td>
<td>Sludge Treatment Plant (Instalasi Pengolahan Limbah Tinja)</td>
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<tr>
<td>ITS</td>
<td>Sepuluh Nopember Institute of Technology (Institut Teknologi Sepuluh Nopember)</td>
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<td>IUWASH PLUS</td>
<td>Indonesia Urban Water, Sanitation and Hygiene Penyehatan Lingkungan untuk Semua project</td>
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<tr>
<td>JMP</td>
<td>Joint Monitoring Programme</td>
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<tr>
<td>Acronym</td>
<td>Description</td>
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<td>SKAM RT</td>
<td>Household Drinking Water Quality Survey <em>(Survei Kualitas Air Minum Rumah Tangga)</em></td>
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<td>SMEs</td>
<td>Small and Medium Enterprises</td>
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<td>SMS</td>
<td>Short Message Service</td>
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<tr>
<td>SOPs</td>
<td>Standard Operating Procedures</td>
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<tr>
<td>SPAL</td>
<td>Wastewater Treatment Plant <em>(Saluran Pembuangan Air Limbah)</em></td>
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<td>SPALD</td>
<td>Communal Domestic Waste Water Treatment <em>(Sistem Pengelolaan Air Limbah Domestik)</em></td>
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<td>SPAM</td>
<td>Drinking Water Supply System <em>(Sistem Penyediaan Air Minum)</em></td>
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<td>SPAM Umbulan</td>
<td>Umbulan Regional Drinking Water Supply System project</td>
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<tr>
<td>SSK</td>
<td>City/District Sanitation Strategy <em>(Strategi Sanitasi Kota)</em></td>
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<tr>
<td>STBM</td>
<td>Community-based Total Sanitation <em>(Sanitasi Total Berbasis Masyarakat)</em></td>
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<td>STH</td>
<td>Soil Transmitted Helminth</td>
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<td>ToT</td>
<td>Training of Trainers</td>
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<td>TPA</td>
<td>Landfill <em>(Tempat Pemrosesan Akhir)</em></td>
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<td>UKS</td>
<td>School Health Unit <em>(Usaha Kesehatan Sekolah)</em></td>
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<td>UNICEF</td>
<td>United Nations Children’s Fund</td>
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<td>USAID</td>
<td>United States Agency for International Development</td>
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<tr>
<td>USD</td>
<td>United States Dollar</td>
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<tr>
<td>VGF</td>
<td>Viability Gap Fund</td>
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<tr>
<td>WASH</td>
<td>Water, Sanitation, and Hygiene</td>
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<tr>
<td>WASH FIT</td>
<td>Water, Sanitation and Hygiene Facility Improvement Tool</td>
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<td>WHO</td>
<td>World Health Organization</td>
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<td>WinS</td>
<td>WASH in Schools</td>
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<tr>
<td>Wi</td>
<td>Wahana Visi Indonesia</td>
</tr>
<tr>
<td>YDKK</td>
<td>Yayasan Dana Kemanusiaan Kompas</td>
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<td>YPCII</td>
<td>Yayasan Pembangunan Citra Insan Indonesia</td>
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<td>ZIS</td>
<td>Zakat, Infaq, Sodaqoh funds</td>
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<td>ZISWAF</td>
<td>Zakat, Infaq, Sodaqoh, and Wakaf</td>
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FOREWORD
Deputy Minister of Infrastructure
Ministry of Development Planning/National Planning Agency (Bappenas)

Access to safe Water, sanitation, and hygiene (WASH) services in communities, schools, and healthcare facilities is fundamental to ensuring human rights and dignity, particularly for women and girls disproportionately affected by poor WASH access. WASH sector development has tremendous benefits for society’s health and environment, leading to our nation’s overall productivity and welfare. Thus, WASH is key to child and public health as well as the overall socio-economic development.

The Republic of Indonesia is highly committed to providing safe and adequate WASH services for all Indonesians. As articulated in the National Mid-Term Development Plan (RPJMN) 2020-2024, Indonesia aims to provide 90% of the population with access to improved sanitation; 15% of households with access to safely managed sanitation; 100% of households with access to improved drinking water; 30% of households have access to the piped-water network, and zero open defecation by 2024. Recent government and partners’ efforts to develop a Sustainable Development Goal (SDG) - 6 plan coupled with various roadmaps, setting clear visions and targets by 2030 further reaffirm strong government and WASH sector commitment to accelerate WASH service provision and eliminate inequalities in WASH access in Indonesia.

While there has been significant progress in access to WASH in the last two decades, challenges remain in achieving WASH services for all. Climate change negatively impacts WASH services in Indonesia, affecting water availability, damaging infrastructure, and polluting the environment. Without integrating WASH interventions with adaptation actions, climate change will further degrade social welfare and increase inequality in Indonesia. Since early 2020, Indonesia has faced a health and economic crisis due to the COVID-19 pandemic, when the demand for water in domestic and public places increased, including regular handwashing with soap to prevent COVID-19 transmission. Strengthening the WASH sector and enhancing WASH access will support sustainable health and economic recovery from COVID-19 crises and improve the nation’s resilience to future pandemics and climate change.

This Compendium of WASH best practices includes 32 good case studies that have been implemented by national and sub-national Government authorities with support from various WASH development partners across Indonesia to accelerate SDG 6 progress. I am hopeful that this Compendium of best practices serves as an inspiration, and that it can be used as a resource for WASH sector professionals not only in Indonesia but also globally to accelerate SDG 6 progress, leaving no one behind.

Deputy Minister of Infrastructure
Minister of Development Planning/Head of National Planning Agency
Ir. Josaphat Rizal Pramana, MSc.
Indonesia has made significant progress since 2000 in enabling access to improved water and sanitation to over 110 million and 140 million people, respectively. Indonesia has significantly reduced its open defecation prevalence by one fifth (from 31% in 2000 to 6% in 2021). These improvements largely contributed to a substantial decline in diarrhoeal mortality and morbidity rate in Indonesia, which is critical for early childhood development. The significant progress was made possible through Government’s leadership and close collaboration with the development partners, initiating various interventions and innovations to accelerate WASH coverage in Indonesia.

Despite substantial progress in access to basic WASH services in Indonesia since 2000, access to higher service standard or safely managed WASH services as per the Sustainable Development Goal definition, has seen limited progress. To fully realise the health benefits of basic WASH access, more progress is required in provision of safely managed water and sanitation services, including expanding coverage of hand hygiene facilities and improving hygiene practices. Equitable WASH access also remains a challenge with wide disparities between provinces and between rich and poorer households in Indonesia, with poorer women/girls facing the brunt of low WASH access. There is an urgent need to move towards transformative WASH approaches and accelerate higher levels of WASH service provisions for all in Indonesia, while eliminating inequalities in WASH access. Despite a number of promising and innovative WASH interventions being implemented across Indonesia, limited efforts have been made to document these efforts and lessons learned for cross-learning and scaling up best practices in Indonesia and beyond.

This first-of-its kind compendium is a collection of WASH best practices sourced across Indonesia, with preselected six thematic areas, namely, health and economic recovery; climate resilience; alternative financing; private sector engagement; monitoring; and innovation. This compendium presents innovative, collaborative and collective actions that contribute to the achievement of SDG 6 in Indonesia.

Briefly, selected topics are summarised below:

- **“Health and Economic Recovery”** covers stories and efforts, aiming at addressing COVID-19 pandemic challenges. The section captures hygiene behaviour changes in schools, disability inclusions in promoting handwashing with soap, enhancing COVID-19 prevention behaviour via a comprehensive hygiene campaign mainstreaming menstrual hygiene management to improve school sanitation practices, WASH in Schools programming and water and sanitation for health facility improvement tool (WASH FIT) piloting.

- **“Climate Resilience”** section features WASH mitigation and adaptation approaches, including climate vulnerability assessment and action plan development, reduction of greenhouse gas emission through composting of sludge, mainstreaming climate resilience into the health and WASH sector through the Climate Healthy Village Movement, and mainstreaming climate resilience into local government sanitation planning.

- **“Alternative Financing”** outlines different financial mechanisms to address equity issues and support both local government and low-income households for WASH access. This covers Islamic charity fund (Zakat) use for WASH among the poor, matching grant initiative for water utilities, instalment financing scheme for low-income communities for piped water access, output-based grants for water utilities, grant programmes for centralised safely managed sanitation systems, and WASH microfinancing for the poor.
• “Private Sector Engagement” section features efforts to leverage private sectors resources and expertise to accelerate WASH service provision in different settings. This includes Public – Private Partnership in Handwashing with Soap (PPP-HWWS) supporting children to return to school with COVID-19 safe school kits, philanthropic resource mobilisation for WASH through private sector partnership, market-based sanitation programme, Corporate Social Responsibility (CSR) resource mobilization for rural WASH and nutrition programmes, and PPP for drinking water supply systems.

• “Monitoring” covers initiatives to strengthen national SDG 6 monitoring to track progress of safely managed drinking water and on-site sanitation as well as to apply digital-based monitoring systems to inform sub-national government WASH planning.

• “Innovations” section include a wide range of innovative WASH approaches featuring floating latrine provision as part of flood responses, unleashing the power of innovation to address WASH challenges through INCUBITS (WASH innovation hub), mobile sludge management solutions for communal sanitation in challenging areas, integration of Gender Equality and Social Inclusion (GESI) in urban WASH programmes as well as sanitation infrastructure projects, Provincial WASH working group-led emergency response for development-humanitarian nexus, and communal water master meter programme to provide drinking water access in slum areas.

We would like to express our deepest gratitude to the line ministries and development partners for sharing these case studies and details of the programme required to document the best practices. The role of the Compendium Selection Committee, which comprises line ministries and WASH Partners, was essential in objectively selecting and finalizing the case studies in this document.

Our gratitude is extended to the Compendium Development Team from the Directorate of Housing and Settlement - Bappenas and WASH Team in UNICEF Indonesia for conceptualizing and managing the development process of this compendium. We sincerely acknowledge the efforts made by Sacha Amaruzaman, national UNICEF consultant engaged on documentation and compilation of the WASH best practices.

We sincerely hope these case studies will inspire the WASH sector practitioners to experiment more innovative approaches and solutions and help Indonesia realise its SDG-6 targets.
ACKNOWLEDGEMENT

All case studies and necessary data, information, photos, and visual aids were provided by the government and WASH sector partner organisations including Bappenas, Ministry of Health, Ministry of Public Works and Housing, UNICEF, GIZ, HAKLI NTT, Jejaring AMPL, KIAT-DFAT, MITRA SAMYA, SNV, USAID, NUWSP World Bank, Wahana Visi Indonesia, Water.org, WHO, YKMI and YPCI.

This publication would not have been possible without the contributions made by the following Case Study Selection Committee Members who went through rigorous and objective case study selection processes: Anang Muchlis, Dades Prinandes, Juliana Lestari, Mira Dian Ekawati, and Tiara (Directorate of Drinking Water - Ministry of Public Works and Housing), Marsaulina FM. Pasaribu, Mahardiani Kusumaningrum, Nandia Gresita, Saskia A. Putri and Indah Alfira (Directorate of Sanitation - Ministry of Public Works and Housing), Ni Nengah Yustina Tutuanita (Directorate of Environmental Health - Ministry of Health), Maraita Listyasari and Muhammad Zainal (UNICEF), Widya Setyowati and Fenny Rum (DFAT Australia), Trigeany Linggoatmodjo (USAID), Agustini Raintung (Jejaring AMPL/YPCI), and Aldi Surianingrat and Kiki Tazkiyah (Water.org).

Further inputs on the case studies were provided by Alifah Lestari and Team (USAID IUWASH PLUS), Alizar Anwar and Team (NUWSP World Bank), Maria J Adrijanti and Team (Wahana Visi Indonesia), Rigil Munajat and Team (GIZ), Saniya Niska, Lena G. Saptalena, Annisa P. Putri (SNV), and Rostia La Ode Pado (UNICEF). Initial proofread of the case studies was provided by Sue Cavill.

Finally, the Compendium conceptualization and development processes were led by the following key contributors: Tri Dewi Virgiyanti, Nur Aisyah Nasution, Adila Muthi Yasyfa, and Nadia Sitompul (Directorate of Housing and Settlement- Bappenas), and Kannan Nadar, Mitsunori Odagiri, and Annisa Anindita (UNICEF Indonesia).

This publication was partly financed by the Australian Government, which is highly appreciated.

CITATION

INTRODUCTION

A WASH ARTISAN DRILLING A TUBEWELL.
Water, Sanitation, and Hygiene (WASH) services are a basic necessity for all. Adequate WASH service is also critical for achieving Sustainable Development Goal (SDG) 6 on clean water and sanitation and other SDG targets, including health, economic growth, poverty alleviation, equality, and climate adaptation.

The Government of Indonesia (GoI) is committed to provide sustainable and safely managed WASH services to all its citizens. In the National Mid-Term Development Plan 2020-2024, the GoI plans to reach 90% of the population with access to improved sanitation; 15% households with access to safely managed sanitation; 100% households with access to improved drinking water; 30% households have access to the piped-water network, and zero open defecation by 2024. However, in 2021, the National Statistical Bureau recorded that only 80.3% of the population had access to improved sanitation, 7.3% of households had access to safely managed sanitation, and 5.6% of the population (about 15.2 million people) still practiced open defecation. This situation indicates an urgent need for acceleration if Indonesia is to reach its ambitious WASH targets.

Ensuring that all Indonesians (about 270 million people) have access to safe WASH services across all the islands of the archipelago, is a challenge. More than half of Indonesia’s population live in urban areas. As the climate changes and the cities and peri-urban areas become ever more crowded, inadequate WASH infrastructure will not be able to support Indonesia’s growing urban population. Provision of safe WASH services and the adoption of hygiene behaviours practices became even more critical during the global COVID-19 pandemic. In the coming years, sustainable WASH services will become more crucial than ever to support health and economic recovery as well as climate adaptation and mitigation actions.

Progress on WASH in Indonesia has always relied on collaboration and cooperation with various actors. Indonesia needs continued commitment and contributions from all stakeholders to further strengthen the WASH sector and accelerate WASH coverage. In Indonesia’s WASH sector, service deliveries and interventions are implemented through collective approaches involving stakeholders at the national and sub-national level, comprising the governments, non-governmental organisations, civil society, and private sector, among others. The sub-national governments and local WASH stakeholders, particularly community groups and services providers, play a major role in improving and maintaining the sustainability of WASH services and nurturing innovation. To support WASH development at the sub-national level, the national government and partners have a significant role in ensuring local WASH actors have sufficient capacity and enabling conditions to deliver WASH services and achieve their target.

The Compendium was developed through the collective contributions of the national and local WASH networks, involving various government and non-governmental organisations. The case studies highlight progress in improving the access and delivery of safe WASH services, with best practices from government and development partners on six major themes: health and economic recovery, climate resilience, alternative financing, innovation, monitoring, and private sector engagement.

CASE STUDY SELECTION PROCESS

This section summarises the case study selection process for the compendium. Initially, the Compendium Team (Directorate of Housing and Settlement - National Planning Agency (Bappenas) and UNICEF called for information from the WASH development partners and received 144 WASH best practice case studies submitted by 25 institutions.

In parallel, a Compendium Selection Committee was established, consisting of representatives from line ministries (Bappenas, Ministries of Health, Ministries of Public Works) and partners (UNICEF, WASH Network/Jejaring AMPL, Water.org, USAID IUWASH PLUS, and KIAT-DFAT). The Selection Committee was tasked to review and select the final case studies of WASH best practices for the compendium.

After an initial list was compiled, the Selection Committee scored the case studies. The scoring of each best practice was based on five criteria, namely relevance, innovativeness, replicability, impact, and sustainability, with the maximum assigned score of 50 per case study (10 for each criterion).

The top scoring case studies were presented and discussed in a Selection Committee meeting. To improve the representativeness, additional case studies were suggested by the committee members for the compendium. Bappenas then led the data collection process in which the partners provided detailed information regarding their WASH initiative that became the case studies.
CASE STUDIES SELECTION PROCESS FOR THE COMPENDIUM

**SCORING**
(15-22 MARCH 2022)

- Selection committee member provided score for each case based on 5 criteria
- Each case was reviewed by two committee members

**FINAL DISCUSSION ON CASE STUDIES**
(24 MARCH 2022)

Selected 50 cases and cross-cutting topics

**SUBMISSION OF DETAILED CASE STUDIES**
(25 MARCH - 10 APRIL 2022)

MAP OF THE CASE STUDY PROVINCES IN INDONESIA (IN RED)
HEALTH & ECONOMIC RECOVERY

HEALTH WORKERS PROMOTING HANDWASHING WITH SOAP IN A LOCAL HEALTH CENTRE.
BACKGROUND

The COVID-19 pandemic forced governments of Indonesia to close schools to reduce the risk of disease transmission. Breaking the chain of transmission is critical, especially in environments such as schools, where children and teachers spend most of their time. Disruption to school attendance has massive impacts on the life of children, families and communities, and eventually consequences for economies and the entire society.

Through the Hygiene and Behaviour Change Support Coalition (HBCC) project, GIZ-HBCC supported the Ministry of Education, Culture, Research and Technology for safe re-opening of schools, particularly to improve the conditions for personal and environmental hygiene in schools to comply with SDG basic service standards and global recommendation to prevent COVID-19 transmission.

This collaboration focuses on providing a package of supporting measures for pandemic preparedness and response (PPR) to limit and prevent the spread of COVID-19 in schools.

The supporting measures includes the provision of:

1. Portable handwashing facilities -WASHaLOT 3.0;
2. Sanitary and hygiene equipment;
3. Information, education and communication (IEC) materials such as handbooks, posters, stickers and hygiene checklist. The provision of these supporting measures aims to improve hand hygiene in schools, including access to handwashing facilities with water and soap, encourage handwashing routines, and trigger handwashing at critical times.
Interventions were conceptualised for the School Health Unit (Usaha Kesehatan Sekolah/UKS) by translating global recommendations and national implementation guidelines on the prevention and control of COVID-19 infection in schools into a clear and actionable format for day-to-day school operations. Interventions were also implemented within the guiding principles of simplicity, sustainability, scalability and a system-oriented approach. Simultaneously, actions were based on the best evidence and were cost-effective.

To guide implementation and allow for further improvement, management support tools such as location-based checklists and digital application for school managers, and related training materials (e.g., handbooks, videos, and online courses) for principals, teachers and cleaners were developed.

Knowledge management and sharing of tools, lessons and insights on relevant platforms has complemented activities to benefit schools, governments, development partners and other institutions. Alignment among partners in the WASH landscape in schools and mainstreaming of messages avoided overlapping and conflicting statements.

**Interventions’ Guiding Principles**

**Simplicity**
- Interventions are simple and evidence based

**Sustainability**
- Independence from external funding

**Scalability**
- Applied lean programme management

**System-Oriented**
- Mobilizing resources and utilising existing structures of education sector

**Interventions through the School Health Unit (Usaha Kesehatan Sekolah/UKS)**

Implementing the interventions’ guiding principles, the project utilises the existing UKS. UKS has a strategic role in preventing outbreaks and disease transmission among students and school members, especially during the COVID-19 pandemic, by applying clean and healthy behaviour in daily life. In its implementation, UKS carries out the following principles - known as UKS Trias:

1. Health Education: through activities to increase knowledge in intra-curricular, co-curricular and extra-curricular activities and habituation of clean and healthy behaviour
2. Health Services: through disease prevention such as immunization and taking medicine for threadworms
3. Healthy School Environment Development: by equipping clean and healthy behaviour infrastructure facilities, including clean water, toilets, handwashing facilities, trash cans, and drainage channels
RESULTS

The information, education and communication materials have been distributed to 20,560 elementary schools in 514 districts, reaching more than 3.3 million students throughout the country.

In addition, the team has spearheaded a video production project on implementing PPR/safe school reopening. The video was launched at the School Health Unit (UKS) Training of Trainers (ToT) as a national reference material in 780 schools in 52 districts. All materials are also available online and can be accessed through the Ministry of Education, Culture, Research and Technology’s official website.

ENABLING FACTORS

1. The interventions are simple, evidence-based and equipped with guidelines to facilitate implementation, including clear templates that allow school principals and teachers to run the programme with minimal supervision.
2. Ministry of Education, Culture, Research and Technology has a significant role in leading the implementation of the project, while GIZ provides capacity building and technical assistance to the national and subnational stakeholders.
3. The interventions cover the costs of initial start-ups and technical assistance to national and local government partners in establishing appropriate budget lines and financing mechanisms for sustainable funding.
4. The project management is integrated into existing structures in the education sector, including the UKS, to facilitate implementation and scale-up of hygiene promotion in schools.

REPLICATION AND UP-SCALING

The model schools in both districts are catalysts for the improvement process and are now guiding the remaining schools in Batubara and Timor Tengah Selatan. The 20 pilot schools have formed digital communities of practice where they share experiences and tips. Representatives from the pilot schools have also been invited to participate in face-to-face training organised by local education office to present best practices from their safe school reopening initiatives to other schools that are hesitant to continue face-to-face learning.

RELEVANT LINKS AND PUBLICATIONS (SOME OF THE REFERENCES ARE IN BAHASA INDONESIA)

- Video on the PPR/safe-school opening [http://ditpsd.kemdikbud.go.id/hal/usaha-kesehatan-sekolah](http://ditpsd.kemdikbud.go.id/hal/usaha-kesehatan-sekolah)
- For more information, please contact Shaliha Anistia (shaliha.anistia@giz.de) or email to giz-indonesien@giz.de
**BACKGROUND**

The 2030 Sustainable Development Goals mandated “Leave No One Behind” in the achievement of all development goals. The inclusion of vulnerable and marginalised groups in water, sanitation, and hygiene (WASH) services, including people with disabilities became even more essential to prevent the spread of the COVID-19 pandemic. Before the pandemic, those groups already had limited access to WASH services. COVID-19 has exacerbated their vulnerability through various restrictions and mobility limitations.

In the effort to prevent COVID-19 through hygiene behaviour change promotion, SNV Netherlands, through the Hygiene and Behaviour Change Coalition (HBCC) programme, took steps to improve access to hygiene facilities for handwashing (including access to supporting facilities such as water and soap) and key messages to promote behaviour change, including vulnerable groups as a target audience. The programme aims to increase access and improve the handwashing with soap behaviour in 10 regions across Java and West Nusa Tenggara Islands. It applies disability inclusion principle throughout the phases of the handwashing with soap campaign.

**APPROACH**

The project implemented evidence-based interventions to improve personal and environmental hygiene for reducing the spread of COVID-19 through 3 key activities:

1. Public awareness raising through mass media campaigns. The campaign was preceded by a formative research to develop the social behaviour change communication strategy. The strategy includes the promotion of key message: “getting our life back from COVID-19” by practicing the PASSWORD: hand, face, space,
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surface, representing 4 main preventive measures of COVID-19. The communication materials were equipped with disability inclusion features, including local and sign language translation.

2. Digital media campaigns through interactive websites and social media. On interactive website (https://tanggapcovid.id), people are invited to act by sharing their pictures of washing hands with soap on their social media accounts.

3. Behaviour change programme and partnership at scales. In collaboration with local governments and non-government partners, the programme carries out various capacity building activities and distributes handwashing with soap stations designed using disability inclusion principles. The capacity building activities include training for teachers, health and public facility staff and janitors to carry out hygiene promotion and implement the hygiene protocols to prevent COVID-19.

Disability Inclusion Mainstreaming in All Stages of the Programme

The programme engaged people with disabilities according to the disability inclusion principles. In the planning and design stage, people with disabilities were actively involved as interviewers and analysts in the formative research to explore their hygiene behaviour change needs and potential challenges. They were also involved in the campaign design and trial process, including in developing key behaviour change messages; Information, Education, and Communication (IEC) materials, and designing handwashing with soap facilities with universal design principles.

In the campaign phase, people with disabilities were involved as extension workers and trainers in the counseling, training, and awareness-raising sessions. They also carried out the advocacy to local government stakeholders for improving access to sanitation and hygiene for people with disabilities.

In the monitoring and evaluation stage, the Verification Teams included people with disabilities, women, and children’s groups. Using the disability inclusion and gender equity, disability, and social inclusion (GEDSI) principles, these groups regularly assess the accessibility of handwashing with soap and behaviour change promotion in health and public facilities, providing regular feedback to the facility managers. Throughout the knowledge management and training process people with disabilities were involved in developing the IEC learning and campaign materials, making the formats accessible for people with different impairments.

HANDWASHING FACILITIES WAS DESIGNED TO ACCOMMODATE PEOPLE WITH DISABILITIES.
RESULTS

The programme covers 101 primary schools, 50 healthcare facilities, 68 local markets, and transportation hubs in the targeted regions. The campaign has reached more than 25 million people, including women, children, youth, and people with disabilities. Through the collaboration with local government and local facility managers, the programme has improved the capacity of the local teachers, health and public facilities staff and janitors to implement hygiene protocol to prevent COVID-19.

The programme was able to secure local funding for capacity building and campaign replication in public facilities outside the programme’s assistance. The programme also succeeded in bridging discussion and advocacy between non-governmental partners, especially between the organisations of persons with disabilities and the local WASH Working Group (Pokja AMPL and Pokja PPAS) at the district and city level.

ENABLING FACTORS

- Alignment of the vision and objectives of the programme with governments’ agenda particularly on disability inclusion in preventing the spread of COVID-19
- Strong commitment from local government and non-government partners to achieve programme objectives
- Innovative strategies that complement existing local government strategies.

REPLICATION AND UP-SCALING

- Assessing the potential for integration and replication of the programme through the local development budget
- Training of trainers (capacity strengthening) and active involvement of the local government staff and non-government partners will continue the effort
- Local government has provided written commitment of financial resources for sustainability and replication.

RELEVANT LINKS AND PUBLICATIONS (SOME OF THE REFERENCES ARE IN BAHASA INDONESIA)

- https://snv.org/project/hygiene-and-behaviour-change-coalition-hbcc
- https://snv.org/update/handwashing-stations-schools-reinvented
- For more information, please contact: Saniya Niska (sniska@snv.org) or visit https://snv.org/contact
ENHANCING COVID-19 PREVENTION BEHAVIOURS THROUGH A COMPREHENSIVE HYGIENE CAMPAIGN
PARTNERSHIP WITH NON-CONVENTIONAL ACTORS TO ACCELERATE HYGIENE PROMOTION IN RESOURCE-LIMITED SITUATION

IMPLEMENTING ORGANISATION(S) & PARTNERS
• Provincial WASH Working Group (Pokja AMPL) of West Nusa Tenggara Province
• District WASH Working Groups of North Lombok District, and East Lombok Districts
• Yayasan Kemanusiaan Madani Indonesia (YKMI)
• UNICEF Office of West Nusa Tenggara
• Local government offices, including Planning Office, Health Office, Education Office, Disaster Management Office, and Social Office at the province and district level
• Religious leaders
• Telkomsel – a mobile service provider
• Teachers and school students, sanitarians, community, and religious leaders, and Posyandu cadres.

LOCATION
East Lombok and North Lombok districts, West Nusa Tenggara (Indonesian: Nusa Tenggara Barat, NTB) Province

PERIOD OF IMPLEMENTATION
May – December 2020

BACKGROUND

With the lack of adequate capacity and resources to detect and prevent COVID-19 transmission in the province, more than 5 million people in West Nusa Tenggara (Nusa Tenggara Barat - NTB) Province was at risk of undetected COVID-19 transmission. As of 27 December 2020, the number of COVID-19 patients in NTB Province was recorded at 5,524. As an island province, the lack of adequate preventive measures has negatively impacted the health, economy, and overall development progress in NTB.

In response to the pandemic, the Government of Indonesia had decided to close the country’s entry points and limit community activities, including in West Nusa Tenggara province. The closing led to an economic downturn and forced the government to reallocate the Regional Revenue and Budget Expenditure (Anggaran Pendapatan dan Belanja Daerah - APBD) of the NTB Province.

Handwashing with soap at critical times is an effective, easy, and affordable method to prevent the spread of COVID-19. However, the hygiene behaviour practice in NTB Province is still far from ideal. In 2018, BPS recorded that less than half (46.5%) of the population in NTB practice handwashing regularly. The Clean and Healthy Life Behaviour programme (Perilaku Hidup Bersih dan Sehat – PHBS) has been part of public education in the province since 1996, endorsed by the local sanitarians and health staff at the local health care and public facilities. However, communities in NTB have not yet widely adopted the PHBS practices.

Realizing the urgency of improving the populations’ handwashing with soap behaviour to limit the spread of COVID19, Pokja AMPL, the WASH Working Group of NTB Province, and partners initiated a series of activities to:
HEALTH & ECONOMIC RECOVERY

- Raise community awareness to practice handwashing with soap (HWWS) at critical times and provide handwashing facilities in schools, healthcare centres, and public facilities
- Improve the capacity and skills of local governments in planning and implementing supportive policies related to WASH.

This case study demonstrates the successful effort by local government to coordinate and optimise their limited resources, leveraging new partnerships with religious leaders and private sector (i.e. telecommunication company), in response to the COVID-19 pandemic in NTB. More specifically, the case study reports ways to effectively reach people through various hygiene messaging channels during the COVID-19 pandemic.

APPROACH

Through collaboration and intensive coordination with Pokja AMPL and stakeholders at the province and district level, Pokja AMPL NTB engaged various stakeholders to accelerate hygiene messaging through various channels:

- Virtual training on Covid-19 emergency response for Pokja AMPL, Provincial and District Health Office staff, sanitarians, teachers, and religious leaders in the province;
- Behaviour change campaigns to convey health promotion messages and distribution of soap and hygiene supplies by religious leaders, health promotion staff, sanitarians, and local healthcare (Posyandu) cadres as well as women, youth, and other community leaders;
- Hygiene messaging via (1) religious leaders in Mosques, (2) a mobile car by healthcare staff, and (3) mobile phone text messaging (short message service, SMS)
- Talk shows on the local radio and television promoting proper hand hygiene practices;
- Production of an educational video about HWWS and ending open defecation for a mass media campaign (for national and local TVs)
- Technical assistance for disinfection in schools, health centres, and public facilities;
- Installation and management of Hand Washing facilities in 50 local healthcare facilities (Pusat Kesehatan Masyarakat - Puskesmas), 165 public facilities, and 70 schools across NTB;
- Development of a CLTS module (Sanitasi Total Berbasis Masyarakat or STBM, a modified community-led total sanitation approach in Indonesia context) for NTB Province to address safe handling and disposal of COVID-19 prevention related waste.

Innovative Campaign: The Use of an SMS Blast

As the COVID-19 continues to affect public health, it is essential to remind the public on proper practices to prevent virus transmission. An SMS blast enables information to be sent to groups of people quickly and conveniently. In collaboration with Telkomsel, a national telecommunication provider, the initiative utilised SMS blast, managed by sanitarians and cadres to disseminate information on COVID-19 to most of the NTB citizens including those who do not have smartphones and are social media illiterate.
HEALTH & ECONOMIC RECOVERY

RESULTS

Within the seven months of implementation, the initiative contributes to:

- North Lombok was the first district in NTB Province to achieve the COVID-19 green alert (safe) status;
- Improved coordination of WASH Cluster through the Pokja AMPL of NTB. The forum continues to grow with more local development partners and champions joining such as YKMI, Mitra Samya, Transform, Plan, YMP, and PKBI NTB;
- 220 cadres conducted door to door education in 110 villages in 3 districts/cities in Nusa Tenggara on PHBS practices (including handwashing) and provided 2,000 hygiene packages to vulnerable families.

ENABLING FACTORS

- Strong coordination, collaboration, and partnership among the local government offices, CSOs (civil society organisations) and private sector under Pokja AMPL.
- Supporting policies and regulations have been developed in response to COVID-19 to promote Handwashing with soap.
- Influential figures who are close to the community (such as the governor’s wife and religious leaders) have been effective in accelerating action and awareness raising.

REPLICATION AND UP-SCALING

- Continue to engage religious leaders for their capacity building about other WASH issues such as open defecation and safe water.
- Document and share the lessons learned with national religious organisation as well as other provinces to scale up the approach.
- Capacity strengthening of the district-level WASH Working Groups (Pokja AMPL or Pokja PPAS) in NTB province will continue.

RELEVANT LINKS AND PUBLICATIONS (SOME OF THE REFERENCES ARE IN BAHASA INDONESIA)

- For more information, please contact: Tatang Husainai (tatanghusaini@ykmi-id.org) or email to support@ykmi-id.org
MAINSTREAMING
MENSTRUAL HYGIENE MANAGEMENT
TO IMPROVE SCHOOL SANITATION PRACTICES

IMPLEMENTING ORGANISATION(S) & PARTNERS

• SNV Netherlands Development Organisation
• National WASH in Schools Technical Working Group (with UNICEF and GIZ)
• Youth with Sanitation Concern (YSC)
• START Community and Bidan Bergerak
• Ministry of Education, Culture, Research and Technology (for public schools) and Ministry of Religious Affairs (for madrasahs)
• Local WASH (Water Sanitation and Hygiene) in schools’ stakeholders, including the local governments and school and madrasah facility managers

LOCATION

• Bandar Lampung and Metro, Lampung Province
• Tasikmalaya, West Java Province

PERIOD OF IMPLEMENTATION

2018 – 2022

BACKGROUND

In 2021, the Ministry of Education and Culture recorded that 81% of schools in Indonesia already have access to clean water, 74% have access to sanitation, and 42% have access to hygiene (handwashing with soap - HWWS). However, only 29% of schools have access to all three WASH services. Across Indonesia, safe sanitation in schools, particularly for girls and women, is still considered a significant challenge.

Menstrual Hygiene Management (MHM) is a critical part of school sanitation. It closely relates to the access to water, sanitation, and hygiene in the school environment where students spend most of their time. Ideally, schools should provide all the MHM supporting facilities, such as the Information, Education, and Communication (IEC) materials and hygiene promotion activities, clean water, sex-segregated sanitation facilities, closed bin, and handwashing facilities for MHM practices. Unfortunately, as menstruation is still considered a taboo and private matter, WASH facilities in schools have not yet addressed the unique needs of girls and women.

The lack of safe sanitation in schools is particularly noteworthy in Bandar Lampung, Metro, and Tasikmalaya, where there has been no significant progress in access to school sanitation services since 2018. In the three cities, the latest survey in 2021 showed that the sanitation facilities in schools are still underutilised and have not yet integrated the MHM into their sanitation services. In addition, 91% of educational facilities have not provided handwashing facilities, and only 36% of the schools have practiced desludging.

The project aims to provide technical assistance and improve the awareness and capacity of the national stakeholders and school facility managers regarding the importance of MHM as an integral part of sanitation in schools. The project has been supporting the mainstreaming of MHM at the national and local level.
HEALTH & ECONOMIC RECOVERY

APPROACH

At the national level, through the WASH in Schools Technical Working Group, SNV collaborated with UNICEF and GIZ to provide technical assistance to key ministries and local government agencies for WASH in schools. The Technical Working Group facilitates the development of an enabling environment for sanitation in schools through gender-sensitive and inclusive school policy planning, globally aligned national monitoring mechanisms, and local government capacity strengthening on school sanitation that integrates MHM.

At the local level, the initiative has facilitated the capacity strengthening of the city governments and stakeholders regarding WASH and MHM in schools using both top-down and bottom-up approaches. The top-down approach focuses on improving the capacity of local governments and partners in behaviour change communication, provision of facilities, governance, sustainable financing, treatment/reuse/safe disposal, and monitoring and evaluation. The bottom-up approach was applied after the capacity strengthening process: the initiative facilitated local governments and partners to work independently to initiate WASH in schools and MHM activities, share good practices, and advocate for sustainability and scaling-up.

OKE MEN (Menstruation Education Storytelling)

To improve knowledge of MHM in schools, the project collaborated with YSC & START Community in Lampung to develop a menstruation education storytelling initiative called OKE MEN (Opera Edukasi Menstruasi), which combines hand-puppet storytelling, sharing session by health workers, and physical demonstration on hygiene practice. The play tells a story about girls’ menstrual experiences, including the symptoms and required hygiene behaviour during the menstrual period. The puppet play was also designed to stimulate understanding and empathy from boys regarding the girls’ menstrual situation. Group discussions are held after the play to encourage the students to share their views about the MHM and school sanitation.
HEALTH & ECONOMIC RECOVERY

RESULTS

In the last 5 years, the project has contributed to:

- Development of school/madrasah sanitation profiles, road maps, guidelines for sanitation and hygiene facility options as well as monitoring at the national level
- Capacity strengthening of local governments and schools/madrasahs to manage and improve the access and quality of WASH in schools and MHM in the project sites
- Distribution of the educational comic book for students to increase their knowledge on MHM, in collaboration with UNICEF that developed the comic books.

ENABLING FACTORS

- Shared commitment between ministries and partners to improve the quality of WASH in schools and MHM in schools
- Open discussion, collaboration, and knowledge-experience sharing between governments and stakeholders regarding WASH in schools and MHM in schools
- Budget allocation support from the Ministry of Education, Culture, Research and Technology, through the National Fiscal Budget for Education (Dana Alokasi Khusus or DAK Pendidikan)
- Regular technical assistance for the local WASH in schools’ stakeholders, including the local governments, school and madrasah facility managers, and the NGO partners.

REPLICATION AND UP-SCALING

- Advocacy to integrate MHM and school sanitation into urban sanitation policies and regulations at the city and provincial levels, which ensure school sanitation policies will be supported with the local budget after the project ends
- Equipping local governments and relevant stakeholders with the capacity and skills means they can initiate MHM and sanitation in schools independently
- Pilot models for MHM and school sanitation have been developed that can be adopted, improved, and replicated at city scale by local government, and school and madrasahs managers.

GUIDELINES FOR SANITATION IN SCHOOLS AND MADRASAHS, INCLUDING MHM

RELEVANT LINKS AND PUBLICATIONS (SOME OF THE REFERENCES ARE IN BAHASA INDONESIA)

- News Article (2020) Start Community from Lampung combines Sanitation and Social Education
- News Article (2020) Improving the Awareness of Menstrual Hygiene Management with YSC
- For more information, please contact: Saniya Niska (sniska@snv.org) or visit https://snv.org/contact
PROMOTING AND STRENGTHENING WASH IN SCHOOLS (WINS)
FIT FOR SCHOOL PROGRAMME

IMPLEMENTING ORGANISATION(S) & PARTNERS
- Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ),
- Provincial Education Office of West Java (Phase I and Phase II)
- SEAMEO RECFON (Regional Center for Food and Nutrition of the South East Asian Ministers of Education Organisation Phase III)
- UNICEF
- SNV Netherlands Development Organisation
- Ministry of Education, Culture, Research and Technology (MoECRT), and the Ministry of Religious affairs (MoRA)

LOCATION
- 2012-2018: Bandung, Indramayu
- 2019-2022: Klaten, Cirebon, and Cimahi

PERIOD OF IMPLEMENTATION
The programme has been implemented in three (3) phases:
- Phase I: February 2012 to November 2015
- Phase II: November 2015 to November 2018
- Phase III: November 2018 to November 2022

BACKGROUND
Poor child hygiene leads to various childhood diseases, such as soil-transmitted helminth (STH) infection, dental caries, diarrhoea, respiratory tract infection and malnutrition, which affect educational outcomes. About 32% of elementary school children in Indonesia suffer from STH infections, and 86% of 6 year old children have dental caries. Improved hygiene practices are key to preventing the transmission of these diseases.

School is the primary public institution where students, teachers, and community members gather, closely interact, and share common spaces. Children and teachers spend most of their time in school, particularly before the COVID-19 pandemic. Within that setting, the risk of infectious disease transmission at school is high. Meanwhile, school is also an important place for children to learn and acquire essential life skills, including the healthy habits of practising hygienic behaviour.

To strengthen WASH services in schools, particularly hygiene practices, GIZ has implemented the Fit for School (FIT) Programme in Indonesia for a decade. FIT objectives are twofold: to improve students’ hygiene behaviour, especially handwashing with soap (HWWS), toothbrushing, and to emphasise the importance of improving environmental sanitation.

FIT started in 2012 in 12 model schools in Bandung City and Indramayu districts. The second phase was carried out from 2016 to 2018 to scale up the programme across Bandung City and establish monitoring system for WASH in School (WinS).

In 2018, the FIT programme in Indonesia entered its third phase under a collaboration with the SEAMEO RECFON to strengthen the link and synergies between school sanitation and nutrition. Through this collaboration, the programme supports the development of models for the integrated school-based management of WASH and nutrition programmes in schools.

HEALTH & ECONOMIC RECOVERY

PENGGUNAAN SAAT PANDEMI:
2 ORANG PER WASHaLOT 3.0

REKOMENDASI
KEMENTERIAN
Manual
**APPROACH**

FIT activities are based on the four Fit for School Principles: simplicity, sustainability, scalability, and systems thinking. Intervention packages need to be evidence-based, effective, and affordable. At the same time, they need to be simple and feasible to be implemented and managed in the school context without overburdening school staff.

FIT avoids monetary incentives as this often leads to the collapse of activities when external funding ends. Fostering functional monitoring systems is crucial to informing programme management at all levels as well as to track, incentivise, and identify progress.

FIT Approach requires school-based management to implement simple evidence-based interventions, through the routine practice of daily group hygiene activities, including HWWS and toothbrushing, as well as biannual deworming. In addition, FIT also collaborates with school stakeholders to improve access to - and the management of - WASH facilities in schools. Through the combination of hygiene behaviour change and WASH services facility in schools, the key determinants of child health are addressed.

**RESULTS**

- The evaluation of the first phase showed that FIT had contributed to: increased number of infrastructure and access to water and soap in schools; higher proportion of clean toilets among the model schools; and 20-38% cases of dental caries in the intervention study were prevented, with contribution from the programme intervention. The FIT intervention was replicated in more than 600 schools in 6 provinces, through collaboration with the national stakeholders.

- Various innovation such as the design and piloting of portable handwashing facility (WASHaLOT 3.0)

At the national level, through various collaborative efforts, including with UNICEF and SNV through the HWWS Coalition, FIT has contributed to the development of:

- An additional 24 school-based sanitation and hygiene behaviour indicators were integrated into the Education Basic Data (DAPODIK) managed by the MoECRT, and in the Educational Management Information System (EMIS) of the MoRA.

- A Guideline of Handwashing with Soap (HWWS) Facility Options, to support the Ministry of Education, Culture, Research and Technology

- School Sanitation Profiles, which became the advocacy tools for funding school sanitation through the National Special Allocation

- The school-based sanitation dashboard, which monitor the contribution of educational sector in the SDGs achievement, especially through WinS activities.
HEALTH & ECONOMIC RECOVERY

ENABLING FACTORS

- The active involvement of school principals, trustees, and the Education Office at sub-districts, district/city, and provincial levels, as well as the MoECRT are the essential enabling factors to achieve the school sanitation standard.
- Collaboration with various stakeholders at the national and local level including UNICEF, SNV, and the HWWS-Coalition.

REPLICATION AND UP-SCALING

- To ensure sustainability, the government, specifically the Ministry of Education and the local Education Office, have led the initiative.
- FIT continues to support the MoECRT and MoRA in achieving the WinS agenda in Indonesia.
- Learning materials have been designed for self-learning by all school stakeholders, thus schools and regions outside FIT programme areas can replicate the approach without direct technical assistance.

RELEVANT LINKS AND PUBLICATIONS (SOME OF THE REFERENCES ARE IN BAHASA INDONESIA)

- FIT resources website for Wash in School
- For more information, please contact Rigil (rigil.munajat@giz.de) or email to giz-indonesien@giz.de
ACCELERATING WASH SERVICES IN PRIMARY HEALTH CARE FACILITIES
PILOTING THE WASH FIT APPROACH FOR IMPROVING WASH IN PUSKESMAS

IMPLEMENTING ORGANISATION(S) & PARTNERS
• UNICEF
• WHO
• Ministry of Health
• Relevant Provincial and District Health Offices

LOCATION
WASH FIT pilot was implemented in five provinces: Papua, East Nusa Tenggara, West Nusa Tenggara, South Sulawesi, and Aceh

PERIOD OF IMPLEMENTATION
October 2020 to Early 2021

BACKGROUND
Improved water, sanitation, and hygiene (WASH) in healthcare facilities (HCFs) is key to ensuring proper infection prevention and control (IPC) measures. This is all the more important during the pandemic, as lack of proper WASH access could limit IPC measures to contain the virus.

The Government of Indonesia (GoI) has committed to improving WASH in HCFs, as demonstrated by its pledge to increase investments in policy, infrastructure, and capacity building at the 2020 World Health Assembly. Along with strong national leadership and coordination to improve WASH in HCFs, good data is crucial to direct resources and actions.

The GoI has made substantial progress in improving WASH services in health care over the last decade. The national Healthcare Facilities Survey (Riset Fasilitas Kesehatan or Rifaskes) revealed that 15% of the community Primary Health Care Centres (Puskesmas) did not have 24-hour availability of water services - a significant decrease from the 38% level in 2011.

However, a recent survey in 2021 also revealed that less than 10% of HCFs had access to functional handwashing facilities with soap available at both points of care and toilets. Another recent study from the Ministry of Health (MoH) and UNICEF highlighted under-investment in WASH facilities in the Puskesmas, with approximately USD 350 million needed to provide basic WASH services for all Puskesmas in Indonesia.

The situation indicates the need to build capacity and sustain WASH programmes in HCFs, particularly in Puskesmas, as the primary point for the community to access health services. To have more robust data regarding WASH situation in the Puskesmas setting, UNICEF collaborated with WHO and the MoH in piloting the Water and Sanitation for Health Facility Improvement Tools (WASH FIT) in five provinces across Indonesia.
WASH FIT is a risk-based management approach to improve quality of care through the assessment of seven domains in HCFs, namely water, sanitation, hand hygiene, waste management, environmental cleaning and disinfection, energy and power, and management. WASH FIT includes indicators on gender and disability such as safe and clean maternity wards or disability-friendly toilets.

To assess WASH conditions across seven domains, WASH FIT results were categorised based on levels of achievements as measured by the scoring system in each domain. Each domain was grouped into three categories, namely “good,” “fair” and “poor”.

The pilot implementation of WASH FIT was carried out through the following activities:

1. National Training of Trainer (ToT) programme on WASH FIT
   In November 2020, the ToT was led by WHO and MoH, with participants and resource persons including UNICEF and Food for the Hungry Indonesia. The training covered the WASH FIT methodology including assessment, WASH technical aspects, advocacy and action plan development, and methods to enhance climate resilience in HCF.

2. Sub-national training on the WASH FIT
   Following the national training, WASH FIT pilot team consisting of UNICEF, WHO, and the MoH, held the orientation workshops for the Provincial and District Health Offices and other relevant stakeholders. The workshops also provided opportunity for discussion with the subnational actors on how to adapt the indicators to the local context. The pilot team then rolled out the training in the five provinces.

3. Implementing the WASH FIT Approach
   The process involved assembling subnational WASH FIT pilot team that that comprised of provincial and districts/cities health officers, local professional associations, and academia. In future the WASH FIT team can be established at the Puskesmas level, involving relevant grass-root stakeholders and the community.

4. Workshops on WASH FIT
   The WASH FIT pilot team then presented and validated the findings of the WASH FIT assessment in workshops with key stakeholders including the head of Puskesmas, sanitarians, health personnel, technical directors, public officials, and community health associations. The areas for improvement are prioritised in a progressive improvement plan.

5. Action plan implementation
   Following the assessment, Puskesmas go on to develop action plans to improve WASH in the HCF. The improvement plan includes short, medium-, and long-term plans, with UNICEF and WHO guiding the local government and Puskesmas to produce detailed costed plans that can be regularly updated by Puskesmas every year.

A Snapshot of WASH FIT Pilot Assessment Results

The overall results demonstrated that there are substantial challenges in the sanitation domain where just 31% of Puskesmas met the criteria for a “good” rating. Similarly, few Puskesmas achieved a “good” rating for medical waste (38%) and management domains (38%). Overall across all domains, just half of Puskesmas were classified as “good” based on WASH FIT assessment.
RESULTS

The pilot has demonstrated that the WASH FIT assessment has the potential to assess and enhance current levels of WASH in Puskesmas. The data and analysis have provided insights to improve WASH in HCF and equipped decision makers with evidence on how WASH in HCF design and implementation may best be tailored to existing Ministry of Health guidance, policies, and programming.

Following the national WASH FIT ToT (2020), the GoI set targets on WASH in Puskesmas, including:

1. Developing policy, a roadmap, and guideline on WASH in Puskesmas
2. Building national capacity at the provincial, district and Puskesmas level
3. Scale up and implementation of WASH in Puskesmas using the WASH FIT approach
4. Strengthening monitoring data on WASH in Puskesmas.

ENABLING FACTORS

- The political, financial, and technical commitment from the government at the national and sub-national levels has facilitated the success of the WASH FIT pilot initiative.
- Puskesmas leadership implemented the WASH FIT assessment and developed action plans to improve WASH services at the facility level.
- Technical assistance by development partners, such as UNICEF and WHO, as well as the technical support from the local WASH FIT assessment team.

REPLICATION AND UP-SCALING

- The WASH FIT approach has been piloted in over 300 facilities with a plan to scale up to reach all facilities.
- Puskesmas data from the pilot phase have been translated into actionable insights for district-level decision makers and healthcare facility leaders.
- UNICEF, WHO and government are using experiences from piloting phase to support improvements in these Puskesmas.
- UNICEF and WHO will also facilitate inter-province and peer-to-peer learning to scale up the WASH FIT in additional HCFs in Indonesia.

RELEVANT LINKS AND PUBLICATIONS (SOME OF THE REFERENCES ARE IN BAHASA INDONESIA)

- UNICEF (in-press) Learning Note: Improving water, sanitation, and hygiene in primary care health facilities during the COVID-19 pandemic in Indonesia
- WHO (2020) WHO strengthens WASH in health care facilities through Water and Sanitation for Health Facility Improvement Tool (WASH FIT)
- For more information, please visit UNICEF and WHO websites or email to UNICEF Jakarta (jakarta@unicef.org) or WHO Indonesia (sewhoindonesia@who.int)
CLIMATE RESILIENCE
SUSTAINING LOCAL ADAPTATION THROUGH CLIMATE VULNERABILITY ASSESSMENT AND ACTION PLAN (CVAAP) AND THE CONSTRUCTION OF INFILTRATION PONDS FOR SPRING CONSERVATION

IMPLEMENTING ORGANISATION(S) & PARTNERS
USAID IUWASH PLUS
(Indonesia Urban Water, Sanitation and Hygiene Penyehatan Lingkungan untuk Semua)

<table>
<thead>
<tr>
<th>Climate Vulnerability Assessment and Action Plan</th>
<th>Infiltration well construction</th>
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<td>• Local governments</td>
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<tr>
<td>• Local community groups</td>
<td>• Municipal drinking water utilities</td>
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LOCATION
14 districts/cities with degrading spring as the water sources of public drinking water services: Medan City; Pematangsiantar City; Bogor District; Bogor City; Salatiga City; Magelang City; Magelang District; Malang City; Batu City; Probolinggo District; Lumajang District; Bantaeng District; Bulukumba District; and Ternate City.

PERIOD OF IMPLEMENTATION
October 2017 - February 2022

BACKGROUND
Sustainable water resource management ensures continuous availability of raw water supply for domestic and industrial use. One of the biggest challenges to improve access to safely managed drinking water is the degradation of water sources. The degradation of water sources, particularly springs and groundwater sources, will lead to further deterioration of water quality and quantity, which both limits water supply and makes water less suitable for drinking.

Across Indonesia, the amount of degraded water sources utilised for public drinking water services continues to increase. Two main main factors exacerbate the degradation of water sources in Indonesia:

1. Land-use change, driven by population growth, means groundwater recharge occurs at a slower rate than groundwater utilisation. This reduces groundwater availability over time.
2. Climate change is shifting seasonal patterns: longer rainy or dry season that cause more floods in rainy season or longer water scarcity in dry season. In some districts, these changes have reduced water availability of springs.

This situation has impacted the raw water supply of Municipal Drinking Water Utilities (Perusahaan Daerah Air Minum – PDAM) in districts and cities across Indonesia: when PDAMs experience raw water scarcity, they cannot optimally provide safely-managed drinking water services for the local population.
CLIMATE RESILIENCE

This case study reports on activities designed to retain and improve public drinking water sources through groundwater conservation practices. Conducting a Climate Vulnerability Assessment and Action Plan (CVAAP) can support better understanding of the vulnerability of springs and can inform efforts to conserve water sources and support local climate adaptation. To complement the CVAAP, the project also facilitates the construction of infiltration ponds to recharge and recover local water sources for PDAM.

APPROACH

The project approach is as follows:

1. Technical assistance to local governments and PDAM staff for developing and conducting Climate Vulnerability Assessment and Action Plan (CVAAP) for spring conservation in their area
2. Training for local governments and community groups on construction, operation and maintenance of infiltration ponds
3. Facilitating the construction of infiltration ponds
4. Advocacy to the chief of the local government (Mayor) to endorse the established CVAAP
5. Facilitating policy formulation to support CVAAP implementation at the subnational level.

RESULTS

The notable outputs and outcomes from the CVAAP process and the construction of infiltration ponds are as follows:

- The 14 CVAAPs facilitated by the programme have been officially endorsed and adopted by local governments in their regional water conservation planning and development processes. At the end of the USAID IUWASH PLUS programme, two districts had formally adopted the CVAAP as the local government regulation, and six other districts/cities were in the process of enacting their CVAAP as the local government regulations.
- The infiltration ponds have contributed to the increasing discharge rate in the targeted springs. For example, since the infiltration ponds were constructed, the flow rate of Ake Ga’ale Spring in Ternate City has increased from 75 liter/second in 2017 to 85 liter/second in mid-2019. In Salatiga City, the debit of Senjoyo Spring, the major water source for PDAM in Salatiga, has increased from 800 liter/second in 2015 to 1,100 liter/second in 2019.
- In total, 769 infiltration ponds were constructed through the programme, funded by both the project and through external funding. The programme directly facilitated the construction of 210 infiltration ponds (15 ponds in each district/city). It stimulated the construction of an additional 559 infiltration ponds funded by PDAMs, local government budgets and the private sector.
- The programme has successfully attracted private sector funding for constructing infiltration ponds, including from Bank BNI Salatiga, IAIN Salatiga, Bank Indonesia representative of North Maluku Province, BPBD, Regional Banking Consultative Body (BMPD), PT Laneige, and BPRS Bahari Berkesan.
CLIMATE RESILIENCE

THE 4 STAGES OF FACILITATING INFILTRATION POND CONSTRUCTION

MULTI-STAKEHOLDER INVOLVEMENT
Ensure all stakeholders are involved at every stage

CAPACITY BUILDING ON INFILTRATION POND CONSTRUCTION
Institutional and technical capacity strengthening of the KSPAMS and community groups

DESIGN AND CONSTRUCTION
Design and construction of infiltration ponds based on established technical standards

OPERATION AND MAINTENANCE
Ensuring continuous operation to optimise water infiltration

ENABLING FACTORS

1. Stakeholders acknowledge that the degradation of water sources and decreasing water supply is an urgent matter that needs to be immediately addressed
2. The local impacts of climate change are being felt more frequently
3. Local governments strongly support the CVAAP as it aligns with their need to comply with and contribute to national targets on WASH and climate, including the Minimum Service Standard for Drinking Water and Sanitation (SPM), National Mid-Term Development Plan 2020-2024 (RPJMN 2020-2024), and Sustainable Development Goals.

REPLICATION AND UP-SCALING

USAID IUWASH PLUS has met with relevant line ministries to discuss the infiltration ponds initiative. As a result, the Directorate of Territorial Water and Mangrove Rehabilitation (in the Ministry of Environment and Forestry) will include the construction of infiltration ponds in their future development programmes.

RELEVANT LINKS AND PUBLICATIONS (SOME OF THE REFERENCES ARE IN BAHASA INDONESIA)

- USAID Indonesia Urban Water, Sanitation and Hygiene Penyehatan Lingkungan untuk Semua (IUWASH plus) (2020) [in Bahasa Indonesia]
- For more information, please contact: Trigeany Linggoatmodjo (tlinggoatmodjo@usaid.gov) or visit https://www.iuwashplus.or.id
BACKGROUND

Properly treated processed faecal sludge can be safely used as compost which is high in nutrients to fertilise the plants. A mechanical composting method can provide safe, consistently low-emission fertilisers processed from the dried faecal sludge in the plant.

However, the majority of sludge treatment plants (Instalasi Pengolahan Lumpur Tinja – IPLT) in Indonesia use the processed sludge to cover the top of waste landfill (Tempat Pembuangan Akhir – TPA), particularly if the IPLT and TPA are located in the same location. However, if the IPLT is located far from the landfill/TPA, transporting the processed sludge from the IPLT to TPA will be costly and inefficient.

This situation was found in Singkup where the IPLT in Tasikmalaya City, West Java Province, is located far from the city landfill. In Singkup IPLT, the processed sludge accumulates in the Sludge Drying Bed (SDB), causing a bottleneck that reduces the sludge treatment speed. The accumulated processed faecal sludge in the SDB of Singkup IPLT also emits high levels of greenhouse gases, particularly methane (CH₄), which affects the health and vulnerability risks of nearby communities.

The local communities living around the plant regularly collect the processed sludge from the IPLT to fertilise their plants. However they do not use any safety precautions to protect them from harmful pathogens and bacteria in the partially treated sludge. Singkup IPLT operators often don’t have sufficient knowledge or training on the sludge composting treatment.

SNV, Singkup IPLT, and corresponding Tasikmalaya City’s local government line agency (Public Works Office) are collaborating on piloting a rapid mechanical composting project, to produce the co-compost from the processed sludge from the IPLT combined with other suitable organic waste through a more efficient process than the natural composting method. This pilot project started in January 2021 and is scheduled to be finished in December 2022.
APPRAOCH

The rapid mechanical composting process produces co-compost, an organic soil conditioner made from the processed sludge from the IPLT combined with other suitable organic waste from Tasikmalaya City. To stimulate the circular economy process from this initiative, the project also carried out:

1. **Market research**
   Involving a series of surveys to the government and non-government stakeholders

2. **Initiate the Rapid Mechanical Composting Project**
   SNV purchased the BCM-100 GEC composting machine from Malaysia and carried out a series of trials to find the optimum waste combination (processed sludge and other waste) to produce compost that meets government-standards

3. **Compost utilisation experiment on the non-food crops**
   Variations of processed composts were tested on non-food plants in the greenhouse built in Singkup IPLT. Plant growth is being regularly monitored according to five parameters

RESULTS

The preliminary results of the trials are as follow:

- The processed sludge from IPLT can be mixed with other waste to produce co-compost with a high level of nutrients for plants and is safe for human health.
- Soil-conditioning trials with the co-compost result in shoot growth up to three months faster than the non-co-compost plants. The co-composted plants have more leaves, with greener and brighter colours compared to the control plants.
- The rapid composting technology significantly reduces compost production time to 36 hours, compared to weeks or months when using natural composting.

The rapid mechanical composting will also generate the following benefits:

- Significantly reduced sludge accumulation in the sludge drying bed of Singkup IPLT, Tasikmalaya, because the processed sludge can be turned into co-compost within 36 hours
- Protect public health from harmful pathogens, such as worm (helminth) eggs, *E. coli* bacteria, salmonella, and shigella, particularly the processed sludge collector around the IPLT
- Significantly reduced the greenhouse gas emissions generated from the processed sludge accumulation.
- Increased awareness and capacity of IPLT operators on the health and climate impact of the incomplete processing of the sludge
- Economic, social and environmental impacts from the reuse of the processed sludge as the co-compost.

TARGETED BENEFICIARIES

Based on market research the stakeholders are the targeted primary user of the composted fertiliser from Singkup IPLT:

- Tasikmalaya City Government, including the Public Works, Environmental, Health, Agriculture, Park, and Cooperative and SME Offices
- Farmer Groups Association and the local farmers around the IPLT
- Bonsai growers and entrepreneurs associations
- Siliwangi University, Tasikmalaya
- Urban farming practitioners
ENABLING FACTORS

The following are enabling factors that enables the pilot implementation:

- IPLT operators have shown a high level of motivation and interest in support of the pilot project
- SNV’s technical assistance has supported IPLT operators with funding, technology, skilled labour, and capacity building
- SNV’s advocacy to Tasikmalaya City Government led to the reutilisation of faecal waste being included in the local WASH policy, integrated with the Tasikmalaya City Sanitation Roadmap.

REPLICATION AND UP-SCALING

Planning for replication and scale-up in Tasikmalaya City will likely be conducted in September 2022, after completing the energy consumption efficiency trial phase whereby renewable energy is being used to reduce energy consumption for co-compost production.

RELEVANT LINKS AND PUBLICATIONS (SOME OF THE REFERENCES ARE IN BAHASA INDONESIA)

- For more information, please contact: Lena Ganda Saptalena. SNV Senior WASH Specialist: lsaptalena@snv.org or visit https://snv.org/contact
Climate change and extreme weather affect health determinants, such as the availability of sufficient and nutritious food, safe housing, and safe drinking water and sanitation services. Vulnerable groups are at a higher risk of experiencing adverse health conditions due to climate change and increased exposure to water-related natural disasters and water-borne diseases. In addition, climate hazards will further aggravate access to water, sanitation, and hygiene (WASH) services, adversely impacting the most vulnerable.

To increase the national and local capacity to prevent and manage health impacts due to climate change, the Government of Indonesia (GoI) is mainstreaming climate adaptation and mitigation actions into health and WASH sectors at the national and local level.

At the national level, in 2019, the Ministry of Health and WHO developed the National Action Plan - Adaptation to Climate Change in the Health Sector (Rencana Aksi Nasional Adaptasi Perubahan Iklim RAN – APIK), under the Ministerial Regulation No. 1018 of 2011 regarding the Health Sector Adaptation Strategy to the Impact of Climate Change. RAN-APIK integrates climate change risks into health policies and programmes, emphasizing climate-sensitive diseases. The Action Plan aims to increase national capacity by building a resilient health system that is ready to adapt to climate change. The improved capacity includes ensuring the readiness and resilience of infrastructure and services, including WASH, waste management, and renewable energy in health care facilities in the face of climate change and extreme weather.

To develop the adaptive capacity at the village and community level, the GoI has launched the Climate Healthy Village Movement (Gerakan Desa Sehat).
Iklim - DESA-DESI). DESA-DESI is a national programme to facilitate and encourage local stakeholders in taking adaptation actions to climate change impacts within the health sector. DESA-DESI aims to improve environmental cleanliness and healthy behaviour (Perilaku Hidup Bersih dan Sehat - PHBS) of the communities to prevent potential health problems due to climate change.

To support the GoI in implementing RAN-APIK and DESA-DESI, WHO collaborated with the Ministry of Health to develop the technical implementation guidelines for mainstreaming climate resilience into health sectors.

The guideline is designed for local health workers, sanitarian, health programme managers, and local development partners to increase their understanding of the vulnerability and risks of climate change to local health and hygiene conditions. The guideline also provides step-by-step measures to facilitate the local community in developing local adaptation solutions for the climate-related health risks.

**APPRAOCH**

To prepare for the implementation of RAN-APIK, the Ministry of Health has conducted a Training of Trainers at the national level using the modules and curriculum developed for the local health workers in facilitating climate adaptation in health sector.

The DESA-DESI initiative uses a participatory approach that encourages communities to propose adaptation and mitigation solutions relevant to the local context. For example, a village with long drought history could consider installing water-saving technologies or growing crops that do not require too much water so that the village can conserve water.

By following the six implementation steps (see the infographic below), the community can determine adaptation options by simulating climate factors with climate sensitive diseases, such as malaria and diarrhoea, and their relation to the availability of safe and climate-resilient water and sanitation.

DESA-DESI also includes basic preparedness measures for responding the climate-related health emergencies, which includes the protocol to ensure access to clean water and food supplies and the mobilisation of trained midwives and public health workers in the event of disasters.

The implementation of DESA-DESI applies three main principles:

1. **Participatory**: Implementation of DESA-DESI ensures participation of all stakeholders throughout the process: decision making, planning, implementation, monitoring, evaluation, and utilisation of the results from their activities.

2. **Community as a leader**: The initiative facilitates capacity strengthening and participation of the community to identify the changes in climate and seasonal patterns that may affect their health and livelihood, and to define the potential adaptation actions and local solutions with the available resources.

3. **Shared learning of good practices**: The initiative facilitates capacity strengthening and encourages the dissemination of lessons from various successful climate change adaptation activities. Through the co-learning process, DESA-DESI facilitates the replication of good practices to other areas, with adjustments to meet local conditions, needs, and resources owned by the local community.

**SIX STEPS OF IMPLEMENTATION FOR RAN APIK AND DESA-DESI**

1. **Identification of Climate Change Impacts**
2. **Establishing Vulnerability and Risk Assessment Indicators**
3. **Mapping Vulnerabilities and Risks of Climate Change**
4. **Interpreting the Results of the Vulnerability and Risk Analysis**
5. **Formulating Local Adaptation Options**
6. **Empowering Communities in Climate Change Adaptation Actions**
RESULTS

RAN-APIK and DESA-DESI are concrete actions from the GoI to build resilience against the impacts of climate change. Adaptive capacity will help the community and other actors to determine locally appropriate adaptation solutions in addressing the impact of climate change. To help determine the local risks and formulate relevant adaptation solutions, the Ministry of Health has produced the vulnerability, exposure, and risks map for use by the local community to determine their own health vulnerability status (https://apikkemkes.id).

As the RAN-APIK and DESA-DESI are still in the piloting phase, the GoI expects they will improve the adaptive capacity and resilience of local community and health care providers to the health impact of climate-change.

ENABLING FACTORS

- Strong commitment from the Ministry of Health to mainstream climate change into health issues, including WASH.
- The RAN-APIK (National Action Plan - Adaptation to Climate Change in the Health Sector) 2020-2025 has become the guideline for the Ministry of Health in achieving a climate-resilient health sector, including WASH.

REPLICATION AND UP-SCALING

The GoI and WHO will be piloting the DESA-DESI implementation in five provinces (DKI Jakarta, Central Java, Riau, DKI Jakarta, and Jambi) between 2022-2023.

RELEVANT LINKS AND PUBLICATIONS (SOME OF THE REFERENCES ARE IN BAHASA INDONESIA)

- WHO (2021) Meningkatkan ketangguhan masyarakat dalam menghadapi perubahan iklim
- For further information, please contact: Itsnaeni Abbas (abbasits@who.int) or email to sewhoindonesia@who.int
Mainstreaming Climate, Disaster, GEDSI, and COVID-19 Responses into Local Sanitation Development Agenda

Implementing Organisation(s) & Partners
- Provincial WASH Working Group (Pokja PPAS) of West Nusa Tenggara (NTB) Province
- UNICEF representative office of West Nusa Tenggara (NTB) and East Nusa Tenggara (NTT) Provinces
- Lembaga Studi Partisipasi, Ekonomi & Demokrasi - Mitra Samya NTB

Location
East Lombok District and West Sumbawa District, NTB Province

Period of Implementation
July to December 2021

Background
Within Indonesia’s decentralised system, the provision of basic services including sanitation are mandated to the Local Government. The district and city governments are mandated to develop a district/city-level Sanitation Strategy or SSK (Strategi Sanitasi Kabupaten/Kota). SSK is an official planning document that comprises of medium-term strategic plan for sanitation that must be aligned with the five-years Regional Medium-term Development Plan (RPJMD) at the city/district level.

The Government of NTB has set the target of access to improved sanitation at 84% by 2024, 11% of which is the safely managed sanitation. Although NTB Province achieved the target for improved sanitation in 2019 with 90% access to improved sanitation the achievement of safely managed sanitation is off-track at just 5%. East Lombok, one of the districts in NTB, commits to support the achievement of the provincial target by setting its own target at 82% and 8% for improved sanitation access and safely managed sanitation respectively. However, until recently, the achievement of access to improved sanitation remains at 76%, including 2% for the safely managed sanitation.

Across the province, there are several challenges to closing the gap for the sanitation target in NTB, particularly in East Lombok. Firstly, domestic waste problems are compounded by population growth. Secondly, there was a lack of shared vision, strategy, and stakeholder awareness to improve the access to safely managed sanitation. Thirdly, there is a lack of comprehensive sanitation planning system or “environmental-friendly sanitation”.

In NTB Province, WASH is an essential sector that is threatened by climate change. Due to extreme weather, there are frequent droughts, wildfires, and many coastlines experience flooding and coastal degradation. The Seroja Cyclone that affected NTB Province in early 2021 led the Provincial stakeholders to realise the importance of sanitation in emergencies. WASH development in NTB Province must respond to those concerns, while, preventing disease transmission during the COVID-19 pandemic.

Sanitation strategic planning provided an opportunity to have a holistic look at improving sanitation across the province and districts. The Provincial WASH Working Group (Pokja PPAS) of NTB has collaborated with UNICEF and Mitra Samya, a local NGO, to update the district-level SSK with the integration of various sanitation-related issues. The initiative was implemented in two districts: East Lombok District and West Sumbawa District. The aim of the SSK update was to mainstream four cross-cutting issues into the sanitation sector, namely the climate resilience, GEDSI (Gender Equality, Disability and Social Inclusion), disaster management, and COVID-19.
CLIMATE RESILIENCE

APPROACH

The SSK in East Lombok District and West Sumbawa District was updated through multiple steps, starting with raising awareness on the urgency to mainstream climate, GEDSI, disaster management, and COVID-19 into the sanitation sector; conduct situational analysis and progress mapping of the sanitation development; formulation of sanitation development scenarios; consolidation meetings for sanitation budgeting and marketing; and finalization.

The integration of climate resilient and GEDSI issues were carried out through:

1. Internalization of the urgency to mainstream four issues into sanitation sector planning. The process was carried out through consultations and discussions with WASH and four-related stakeholders, to develop a mutual understanding on the relation between sanitation and climate, GEDSI, disaster, and COVID-19 pandemic.

2. Data collection and analysis
   - The SSK updating team, which consists of the Provincial and District PPAS, Mitra Samya, and UNICEF, collected key data regarding climate, sanitation, and GEDSI, from the relevant stakeholders. Interviews were conducted with key persons from relevant institutions, including private sector, community leaders, and other key community members.
   - The Team carried out an Environmental Health Risk Assessment (EHRA) to analyse various sanitation elements, including: the Sanitation Risk Index (IRS), water sources, domestic wastewater, waste; water puddles, and Clean and Healthy Hygiene Behaviour (PHBS). This activity resulted in the Sanitation Risk Index and a sanitation profile for the two districts.
   - In addition to EHRA, the Team also analysed four related issues: climate resilience, disaster management, GEDSI, and COVID-19.
   - The team assessed the sanitation profile in each district, using an institutional analysis; waste policy mapping; stakeholder mapping, and; communication channel analysis.

3. Scenario development for the new SSK was carried out using the Strength, Weakness, Opportunities and Threat (SWOT) method, and the team established sanitation zoning for each district.

4. Consolidation meetings on sanitation budgeting and marketing, which aimed to build consensus and support towards the SSK programme, through the contribution of funding and engaging stakeholders in programme activities to support local sanitation development in the district.
RESULTS

The activity has resulted in:

1. Two updated SSK documents for East Lombok and West Lombok Districts, which integrated GEDSI, disaster management, climate change, and COVID-19 issues and responses as part of their sanitation development strategies.

2. GEDSI, disaster management, climate change, and COVID-19 issues were mainstreamed in the official sanitation strategy and became an effective advocacy tool that influenced the local policies as follows:
   - Review of the Governor’s Decree of the Provincial Housing and Settlement Working Group in NTB Province to include disaster-related management issues, such as the Regional Disaster Management Agency (BPBD), the Office of Social Affairs, and the COVID-19 Taskforce.
   - The process to mainstream four issues into the SSK document has become a lesson for NTB Government in developing other integrated policy documents.

3. The updated SSK document is a reference for the formulation of the upcoming NTB Provincial Mid-Term Development Plan (RPJP) regarding the environmental-friendly sanitation approach.

ENABLING FACTORS

- Consistent advocacy to the relevant stakeholders to raise awareness regarding the importance of integrating climate, GEDSI, disaster management, and COVID-19 prevention agenda into sanitation policy and programme.
- Capacity building of the WASH Working Group members in the initial phase, provided by Mitra Samya and UNICEF.
- Intensive coordination with relevant stakeholders on the four cross-cutting issues have made consensus building and synchronization of perspectives possible.

REPLICATION AND UP-SCALING

To sustain and replicate the best practices in NTB:

- Advocacy for mainstreaming these four issues into SSK in another eight district/cities in NTB Province as well as at the national level.
- Capacity building on the integrated SSK for the district/cities WASH Working Group facilitators and other Working Group members in NTB Provinces.
- Advocacy for policy and budgeting are more sensitive to GEDSI, disaster management, climate change, and COVID-19 issues; and
- Adopting the penta helix model for partnerships on WASH in emergency responses.

RELEVANT LINKS AND PUBLICATIONS (SOME OF THE REFERENCES ARE IN BAHASA INDONESIA)

- Persiapan Penyusunan Strategi Sanitasi Kota Lombok Timur 2021
- Rapat Koordinasi penyusunan indicator Strategi Sanitasi Kota
- For more information, please contact Mitra Samya (www.mitrasamya.com) or UNICEF Jakarta (jakarta@unicef.org)
INNOVATION
INNOVATION

WASH IN EMERGENCIES
FLOATING LATRINE PROVISION
DURING THE KAPUAS AND
MELAWI RIVER FLOODS

BACKGROUND

Limited access to sanitation facilities is one of the major WASH issues for the local communities in Sintang, Sekadau and Melawi districts of West Kalimantan Province. Many villages in those districts are located close to the Kapuas and Melawi rivers and are located in high water table areas (the groundwater is less than 100 cm from the surface), making the use of safely managed sanitation a challenge.

Although a number of households in these districts have built private or communal toilets, people might also use a simple floating latrine, called a Lanting. The Lanting consists of a superstructure and floor built over the river and their excreta falls directly, or via a chute, into the water below.

Between October 2021 and February 2022, unusually heavy rains resulted in prolonged flooding of the Kapuas and Melawi rivers in West Kalimantan Province, submerging 24 sub-districts in Melawi, Sintang, and Sekadau, and affecting more than 24,000 households. Flood-damaged sanitation facilities and/or difficulty in accessing sanitation facilities exposed the community to diarrhoea, skin diseases, and other infectious diseases.

As part of the flood emergency response, Wahana Visi Indonesia (WVI) facilitated the affected communities to upgrade their Lanting by equipping it with a swan-neck pan connector and a temporary floating holding tank made from old plastic drums. During the emergency, the community added chlorine to the bottom area of the drum to minimise E. coli contamination.

Between January and February 2022, the temporary holding tanks were replaced with Bio-septic tanks, increasing the storage capacity of the latrine and using bacteria to break down the waste in the septic tank.

IMPLEMENTING ORGANISATION(S) & PARTNERS

- Wahana Visi Indonesia
- District Health Offices in Sintang, Melawi, and Sekadau
- The flood-affected communities

LOCATION

Sintang District, Melawi District, and Sekadau District – West Kalimantan Provinces

PERIOD OF IMPLEMENTATION

December 2021 – February 2022

LANTING (SIMPLE FLOATING LATRINE) IN KAPUAS AND MELAWI RIVERS
INNOVATION

APPROACH

1. The flood emergency response involved active collaboration between WVI, the local community and village governments in the affected area. The WVI team closely coordinated and consulted with the District Health Offices during the implementation of the flood response.

2. Community needs assessment and direct observation were used to identify local needs and problems, as well as the opportunities for solutions.

3. Locally appropriate technologies provide options for safe sanitation on the riverbanks and in flooded areas.

RESULTS

At the end of February 2022, 14 upgraded floating toilets had been installed, serving 350 residents. In addition to the upgraded floating latrines, WVI also facilitated the community to construct Gentong Mas, a local sanitation technologies in wetland area, for 350 residents.

In the short-term, the flood emergency response aims to help affected residents to access safe sanitation facilities, especially children, women, and other vulnerable groups. As the local community use the river as their primary water source, the improved sanitation facilities will improve human and environmental health in Melawi and Kapuas Rivers including by reducing E. coli levels over the long-term. As such, the upgraded floating toilet will contribute to reducing the prevalence of stunting in the affected villages through improved water quality and reducing diarrhoeal disease.
ENABLING FACTORS

- Active community participation was partly a result of previous Community Led Total Sanitation or STBM (*Sanitasi Total Berbasis Masyarakat* – a modification of CLTS in Indonesian context) triggering initiatives by the District Health Office and WVI in the area
- Community needs assessment identify the actual problems faced by communities and provide an opportunity for community, government, and facilitators to discuss these needs and co-develop solutions
- Locally appropriate technology designs are available to provide safe sanitation facilities for communities living on the riverbanks and in flooded areas.

REPLICATION AND UP-SCALING

District and village governments will continue to roll out the upgraded floating latrine model to other flood-affected areas using various sources of financing including the village fund, district budget, community budget, corporate social responsibility, and donations.

WVI continues its advocacy and support for mainstreaming the best practice, so that the upgraded floating latrine design can be applied to the other flood-affected villages and settlements around the riverbanks. High river transportation costs is one of the major challenges to replicate the upgraded floating latrine model to the flood-affected villages and other riverbank communities.

At the local level, the initiative has facilitated the communities to establish Latrine Operator Groups to maintain the sustainability of each latrine.

RELEVANT LINKS AND PUBLICATIONS (SOME OF THE REFERENCES ARE IN BAHASA INDONESIA)

- Wahana Visi Indonesia: https://wahanavisi.org
- For more information, please contact Sigid Cahyono (sigid_cahyono@wvi.org) or email to comms.indonesia@wvi.or.id
INNOVATION

INCUBITS (WASH INNOVATION HUB)
UNLEASHING THE POWER OF INNOVATION TO ADDRESS WASH CHALLENGES

IMPLEMENTING ORGANISATION(S) & PARTNERS

- UNICEF
- ITS (Sepuluh Nopember Institute of Technology)
- Kementerian PUPR (Ministry of Public Works and Housing)
- BRIN (National Research and Innovation Agency)

LOCATION
National

PERIOD OF IMPLEMENTATION
September 2021 - June 2022

BACKGROUND

The Covid-19 pandemic has negatively affected social health and welfare in Indonesia, as many people lost their livelihood, productivity, and lives during the outbreak. The Covid-19 pandemic also affected water, sanitation and hygiene (WASH) services delivery, potentially hindering the achievement of Sustainable Development Goal Target 6 and national WASH development targets in Indonesia.

Investment in the WASH sector will provide multiple health, economic, and environmental benefits, which could support the recovery from the impacts of the Covid-19 pandemic. The investment of USD 1 in Indonesia’s sanitation sector will provide a return of USD 5.5, and the drinking water sector will generate a return of USD 2.

To achieve these gains there is a need to promote and connect with WASH entrepreneurs and innovators at various levels to stimulate smart investment in the WASH sector. However, many local WASH innovations still do not receive sufficient support for upscaling, including the technical capacity and funding required to improve, promote, and replicate innovations at scale. To address this issue, Indonesia has initiated a number of initiatives to stimulate WASH entrepreneurship and innovation, including digital platforms.

In expanding the collaboration outreach and stimulating more innovation, the Government of Indonesia, with UNICEF and ITS, has launched INCUBITS (https://incubits.org), a digital platform that provides a hub to connect WASH innovators and start-up companies with various stakeholders, such as government, NGOs, the University, private sectors, and other potential donors and investors.

INCUBITS targets young innovators (students or fresh graduates), NGOs, small or medium enterprises, and other organisations or individuals with innovative ideas to solve various challenges and issues in the WASH sector. The platform is one of the efforts aimed at stimulating more innovation in WASH service delivery that is much needed in accelerating the health and economic recovery following the COVID-19 pandemic.
INCUBITS provides a digital hub that connects potential WASH innovators and entrepreneurs at the local level with the financial and technical resources available at the national and global levels. The selected proposals from the WASH start-ups and innovators are guided and funded to realise their concept ideas into real solutions for addressing various problems and challenges in WASH services delivery.

WASH innovators are encouraged to submit their programmes, ideas and innovations to solve the following four major WASH challenges:

1. **Access to Water**: Addressing water scarcity, water supply delivery, household water contamination, and water saving behaviour.
2. **Access to Sanitation**: Addressing safe sanitation practices, business models for sanitation marketing, inclusive sanitation facilities, micro-finance in sanitation financing, and sanitation resource recovery for circular economy.
3. **Access to Hygiene**: Addressing access to handwashing facilities, inclusive hygiene facilities, improved hygiene behaviour, and hygiene facilities supply in rural and remote areas.
4. **Access to WASH during emergencies**: Addressing WASH in emergency kits and safe and clean drinking water in emergencies.

INCUBITS is designed into seven stages, starting with a call for proposal, proposal selection to the business matching Stages.
Results

Since the first round of the INCUBITS programme, almost 100 start-up innovators have submitted proposals. Fifteen submissions were shortlisted and the innovators participated in a pitching process sharing their innovation with a review team comprising of government partners (Ministry of Public Works and Housing and National Research and Innovation Agency, known as Brin), UNICEF, ITS, angel investors, private companies and the Australian Department of Foreign Affairs and Trade (DFAT). Following the pitching process, six innovations were selected for the incubation process, which is currently ongoing. These six innovations address challenges around water security and safety, climate resilient sanitation and energy recovery from fecal sludge for circular the economy. These innovations include novel groundwater recharge methods, drinking water filters, climate resilient septic tank fecal sludge treatment system for energy recovery.

The key support from INCUBITS include:

- Intense coaching and mentoring programme by private sector, universities and relevant experts to help improve their products and shape marketing strategies
- Access to analytical facilities such as national laboratories and analytical measurement equipment to support product performance measurements
- Networking to leverage additional resources to support pilot and scaling-up (e.g. resources from government and angel investors)
- Increased job opportunities and economic development.

The key supports and form of collaboration provided by INCUBITS are detailed in the table.

Enabling Factors

The enabling factors that support INCUBITS implementation are:

- Evolved start-up ecosystem including digital infrastructure in Indonesia
- Strong collaboration between the Government, ITS, UNICEF and the private sector
- Stakeholders demonstrate a willingness to replicate and upscale local innovation to improve WASH services delivery
- Support to innovators to develop their ideas through the collaboration of various stakeholders within the INCUBITS ecosystem.

<table>
<thead>
<tr>
<th>SUPPORT</th>
<th>COLLABORATION</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial</td>
<td>Donor</td>
<td>Private sector can bequeth a certain amount of money, to support a humanitarian cause through their CSR programme</td>
</tr>
<tr>
<td>Mentorship</td>
<td>In their effort to increase reputation and/or brand value, private sectors can grant money for social awareness and reputation in exchange: this can be done through INCUBITS’s media channels and partners</td>
<td></td>
</tr>
<tr>
<td>Investment</td>
<td>Through an act of endorsement or contract, private sectors can arrange an investment or business opportunity with the innovator.</td>
<td></td>
</tr>
<tr>
<td>Non-Financial</td>
<td>Mentorship &amp; Technical Inputs</td>
<td>Leverage a range of corporate assets including their employee skills &amp; business acumen and partner networks to drive social change, collaborate by providing infrastructure backbone (e.g., access to R&amp;D facility), partnership.</td>
</tr>
<tr>
<td>Networking</td>
<td>Connection to their own association &amp; partner networks, consultation to expert, company’s own social innovation to develop.</td>
<td></td>
</tr>
<tr>
<td>Products</td>
<td>Commitment to provide the necessities or resource in the case of emergency response, adopting viable innovation to support human disaster relief</td>
<td></td>
</tr>
</tbody>
</table>

Relevant Links and Publications (Some of the References are in Bahasa Indonesia)

- INCUBITS website: [https://incubits.org](https://incubits.org)
- For more information, please contact: UNICEF Jakarta ([jakarta@unicef.org](mailto:jakarta@unicef.org))
MOBILE SLUDGE DEWATERING UNITS
SLUDGE MANAGEMENT SOLUTIONS FOR COMMUNAL SANITATION IN CHALLENGING AREAS

IMPLEMENTING ORGANISATION(S) & PARTNERS
- USAID IUWASH PLUS
- Directorate of Sanitation - Ministry of Public Works and Housing
- BTS Wiyung - Ministry of Public Works and Housing
- ITS Tekno
- Domestic Wastewater operators in Malang and Gresik
- Community-based sanitation facility operators (KPP) in pilot settlement areas

LOCATION
Malang City and Gresik District, East Java Province

PERIOD OF IMPLEMENTATION
October 2019 – December 2021

BACKGROUND
The communal sanitation system (SPALDT Permukiman) is being installed across cities and districts to improve safe sanitation practices in settlement areas. However, the treatment processes in the settlement area do not include sludge treatment: instead, sludge processing is done in Septage Treatment Plants or IPLT (Instalasi Pengolahan Lumpur Tinja). The sludge will be transported by vacuum truck to the IPLT periodically at least every two years.

Many SPALDT facilities are located in densely populated areas and/or challenging locations in which to provide desludging services, such as on river banks or in areas with extreme elevation. Lack of accessibility to reach communal sanitation system (CSS) sites can cause sludge transport and treatment in the IPLT to not be completed. As a result, the service coverage from the CSS facilities in challenging locations limits the achievement of safely managed sanitation practices, as sludge accumulation from those facilities remains untreated. In addition, sludge accumulation reduces the efficiency of treatment processes in the CSS itself.

To realise safe sanitation practices for all, USAID IUWASH PLUS with ITS Tekno and partners have developed the sludge dewatering unit as a solution for CSS facilities in less accessible areas. The application of sludge dewatering units help ensure the completion of the sanitation-chain cycle through proper sludge treatment in the IPLT so that SPALDT service coverage in those locations can achieve safe sanitation practices. The sludge dewatering unit was piloted in Malang City and Gresik District of East Java Provinces.

PUBLIC SLUDGE DEWATERING VEHICLE
**INNOVATION**

**APPROACH**

USAID IUWASH PLUS partnered with ITS Tekno to develop sludge dewatering units that are able to access challenging locations in Malang City and Gresik District. ITS Tekno is the business subsidiary of Sepuluh November Institute of Technology, the University in Surabaya, East Java.

The team developed three types of dewatering units: a stationary unit (a permanent station), a mobile unit, and a suction pump that can be moved to less accessible locations. Each unit was named after a knight from the classic Hindu-Javanese epic tale the Mahabharata:

- **SADEWA** – Sanitasi Aman dengan DEWAtering unit (Stationer Unit)
  
  Safely managed sanitation (achieved) with (the help of) dewatering unit

- **NAKULA** – layaNaKrUsial menjangkaU SPALDT PermukimAn (Mobile Unit)
  
  Crucial service to reach out to decentralised wastewater treatment

- **PUSAKA** – Pompa Untuk Sanitasi Aman berKelAnjutan (Trailer Vacuum Pump)
  
  Pump for Safely managed and sustainable sanitation

The USAID IUWASH PLUS team and ITS Tekno coordinated with the Public Work Offices in Malang and Gresik to determine the best locations to pilot the dewatering units. For field implementation, the team partnered with the local CSS operator (also known as KPP – Kelompok Pengguna dan Pemanfaat) provides them with a training on how to operate and maintain the dewatering units.

The results from pilot initiatives were disseminated through collaboration with the Directorate of Sanitation - the Ministry of Public Work and Housing, while further technological refinement was carried out with BTS Wiyung, a sanitation technology training agency under Ministry of Public Work and Housing.

**RESULTS**

The outputs from the pilot project are:

- The initiative succeeded in developing technological solutions for improving off-site sanitation sludge management in challenging locations. The pump trailer unit (PUSAKA) provides a solution to address sludge suction constraints in areas of extreme elevation.
- Improved safe sanitation coverage in the cities/districts of the pilot project.
- The Domestic Wastewater Operators in Malang and Gresik now able to utilise the sludge dewatering unit in challenging locations of both cities.
INNOVATION

ENABLING FACTORS

Some of the enabling factors of this activity are:

- Malang City and Gresik District already have active Domestic Wastewater Operators.
- The expertise of ITS Tekno in developing the sludge dewatering unit as part of community services actions from the university, and the contribution from BTS Wiyung to further improve dewatering unit design.
- Active roles of the KPP members in the pilot areas to operate and maintain the sludge dewatering unit in their areas.

REPLICATION AND UP-SCALING

USAID IUWASH PLUS and ITS Tekno coordinated with BTS Wiyung of the Ministry of Public Works and Housing for the replication plan.

RELEVANT LINKS AND PUBLICATIONS (SOME OF THE REFERENCES ARE IN BAHASA INDONESIA)

- IUWASH (2021) Compilation of Dewatering Unit videos
- IUWASH (2021) Peluncuran Opsi Teknologi Pengeringan Lumpur di Daerah Menantang Kota Malang dan Kabupaten Gresik
- For more information, please contact Trigeany Linggoatmodjo (tlinggoatmodjo@usaid.gov) or visit https://www.iuwashplus.or.id
# MAINSTREAMING GENDER EQUALITY AND SOCIAL INCLUSION (GESI) IN URBAN WASH PROGRAMMES
LESSONS FROM LAMPUUNG AND WEST JAVA

## BACKGROUND

Sustainable Development Goal 6 and Indonesia’s National Mid-Term Development Plan (RPJMN) 2020-2024 have mandated the drinking water and sanitation development for all, by leaving no one behind and providing specific attention to the needs of women, girls, and other vulnerable groups. Government and development partners have issued and promoted various regulations and guidelines to implement gender-sensitive and inclusive development programmes.

Currently, 3 in 10 people in Indonesia lack access to safely managed drinking water services, and 6 in 10 lack access to safely managed sanitation. Moreover, the development of drinking water and sanitation in Indonesia has not incorporated gender equality and social inclusion (GESI) aspects in some or all its implementation stages.

In Bandar Lampung, Metro, and Tasikmalaya cities, SNV found that the construction of drinking water and sanitation in households, educational facilities, and health facilities, have not integrated a GESI perspectives.

Applying inclusive principles throughout the water, sanitation, and hygiene (WASH) delivery stages, means that WASH facilities and services can accommodate the needs of the entire community and become more sustainable. On the other hand, leaving the GESI perspective out will make already vulnerable groups more marginalised and increase their risks of exposure to infectious diseases from the lack of access to WASH services.

Apart from the programme implementation process, the WASH programme design and monitoring process have often not fully involved users throughout the process, particularly the vulnerable groups. In addition, the lack of user accountability mechanism for service managers to improve the quality and quantity of access to drinking water, sanitation, and hygiene make matters more complicated.

This initiative aims to increase the participation of women and vulnerable groups in the decision-making process to address the lack of representation of vulnerable groups in WASH services delivery. This objective is achieved through involving the vulnerable groups throughout the programme design, implementation, and monitoring stages.

The initiative target the beneficiaries as follows: WASH Working Groups (Pokja AMPL) and the Behavioural Change Communication Task Force (Pokja KPP of the local government), as well as the schools, madrasahs, healthcare centres, and non-government WASH partners in the three targeted cities.

## IMPLEMENTING ORGANISATION(S) & PARTNERS

- SNV Netherlands Development Organisation
- Yayasan Konservasi Way Seputh (YKWS)
- Local Governments in Tasikmalaya, Bandar Lampung, and Metro Cities

## LOCATION

- Tasikmalaya City in West Java Province
- Bandar Lampung City and Metro City in Lampung Province

## PERIOD OF IMPLEMENTATION

June 2021 – September 2022
INNOVATION

APPROACH

GESI is a rights-based approach that introduces gender and socially inclusive structural changes into WASH service delivery systems. These changes are complemented by targeted interventions to vulnerable groups to strengthen their voice, networks, and leadership in the political and spheres of WASH decision-making.

GESI approach are implemented in six WASH spheres, which consists of behaviour change communication; provision of safe and affordable sanitation services; sanitation governance; sustainable financing; safe treatment/disposal/reuse; and monitoring & evaluation.

The initiative mainstreams GESI through:

- Developing communication strategies that focus on reaching vulnerable groups, with accessible Information, Education, and Communication (IEC) materials targeting this audience
- Developing financing methods that are accessible to low-income groups
- Integrating GESI messages through the advocacy of city regulation and into the urban sanitation strategy documents (Strategi Sanitasi Kota or SSK, a city level sanitation masterplan document)
- Incorporating the participation of vulnerable groups in monitoring the programme indicators at the household, educational facilities, and health facilities

RESULTS

The project contributes to:

- Establishing city and municipal GESI forums. The forums consist of government officials and partners such as vulnerable groups, healthcare centres, media, academics, etc.
- Modifying the WASH FIT (Facility Improvement Tool) indicators to integrate social accountability by adding GESI indicators, community/facility users’ perceptions, local government perceptions, and health workers’ perceptions on healthcare centres services. WASH FIT is a monitoring toolkit for improving WASH services in healthcare facilities developed by UNICEF (United Nations Children’s Fund) and WHO (World Health Organisation).

9 WASH FORUMS WERE ESTABLISHED IN CITIES AND MUNICIPALITIES AND ENDORSED BY THE CITY AND MUNICIPALITY DECREE

14 HEALTHCARE FACILITIES (PUSAT KESEHATAN MASYARAKAT - PUSKESMAS) IN THE THREE CITIES HAVE IMPLEMENTED THEIR WASH FIT ASSESSMENT INTEGRATING THE MUTUALLY AGREED GESI INDICATORS
ENABLING FACTORS

- Strong commitment from vulnerable groups to participate throughout the process
- Representatives of vulnerable group’s interaction with the healthcare facility managers and collaboration through the Forum
- A municipality decree provides the legal basis for the WASH forum at the municipal level in Bandar Lampung and Metro
- Stakeholders signed a commitment charter at the beginning of the project, to ensure the active involvement of stakeholders throughout the process in Bandar Lampung and Metro
- Strong commitment from City Health Office in Tasikmalaya to supervise the WASH FIT implementation and to embed the assessment tools to the existing tools within Health Offices (Accreditation system).

REPLICATION AND UP-SCALING

To ensure the sustainability of the project, SNV has:

- Improved the capacity and skills of local governments to continue the integration of GESI in the WASH programme
- Assisted local governments in preparing strategic documents with a GESI perspective, such as the KPP strategy, regional regulations, roadmaps, and others
- Advocated that the local Health Office continue the use of WASH FIT as an integral instrument for healthcare facilities (Puskesmas) in mentoring and assessing the quality of services which embedded in the accreditation system process
- Advocated that Bappeda allocates budget for replicating WASH FIT implementation in 7 other healthcare facilities (Puskesmas) in Metro City.

RELEVANT LINKS AND PUBLICATIONS (SOME OF THE REFERENCES ARE IN BAHASA INDONESIA)

- Further information, contact Annisa Putri (aputri@snv.org) or visit https://snv.org/contact
MAINSTREAMING GENDER EQUALITY AND SOCIAL INCLUSION (GESI) IN SANITATION INFRASTRUCTURE PROJECT

THE INCLUSIVE COMMUNITY EMPOWERMENT FOR SANITATION (PERINTIS) PROGRAMME

IMPLEMENTING ORGANISATION(S) & PARTNERS

- KIAT – Indonesia-Australia Partnership for Infrastructure
- Ministry of Public Works and Housing and Bappenas (National Planning Agency)
- Palembang City Public Works Office; Health Office, Disaster and Fire Department, and water utility
- Local universities, vocation schools, and training providers (Muhammadiyah University, Sriwijaya State Polytechnic, Vocation High School 2, LPK Darussalam, LPK Al Qadi
- Palembang Red-Cross (PMI), Women Crisis Centre, and Women’s Groups and Disabled People’s Organisations

LOCATION

Palembang City, South Sumatera

PERIOD OF IMPLEMENTATION

August 2021 - August 2022

BACKGROUND

The lack of safely managed sanitation undermines public health and safety. Ensuring safe sanitation is particularly critical in densely populated cities, as the urban community has higher risk of exposure to fecal contamination and disease.

Although the Government of Indonesia has set the target to provide 90% access to sanitation - including 15% safely managed sanitation by the end of 2024 - only less than one percent of Indonesian citizens are connected to a sewered sanitation system.

Palembang City, one of the two metropolitan cities on Sumatra Island, experiences a lack of safely managed sanitation. Across the riparian city, leaks from septic tanks and raw sewage directly enters the river, polluting the water and environment. The Palembang City Sanitation Project (PCSP) aims to address this through a collaboration of the Indonesia-Australia Partnership for Infrastructure (KIAT), Government of Indonesia and the Palembang City Government.

Experience shows that social marketing alone cannot ensure universal awareness and acceptance in the community. Active involvement of women and marginalised groups, including people with disabilities, is also needed so that all groups gain awareness of the benefits of the project. Thus, a novel approach to working with vulnerable communities within the PCSP is needed.

Pemberdayaan Masyarakat Inklusif Untuk Sanitasi (PERINTIS) is a 12-month pilot activity focused on trialing a gender-sensitive, inclusive, and sustainable approach to skills training in sanitation sector. This GESI mainstreaming pilot initiative is aimed to accelerate the PCSP progress through improved community awareness and acceptance.
PERINTIS trials a gender-sensitive, inclusive, and sustainable approach to skills training in the sanitation sector. It aims to increase access to job opportunities for women, people with disabilities and unemployed youths, and work with communities in areas benefiting from the PCSP.

PERINTIS supports PCSP in its efforts to achieve high rates of good quality household connections. Training and awareness raising of community members, specifically marginalised women, persons with a disability and out-of-work youth, has helped to socialize the benefits of making good quality household connections.

The pilot had three main components:

1. **Community engagement and skills training.**
   The intervention focuses on training and equipping women, people with disabilities and unemployed youths in the PCSP areas with job readiness skills. Trainings were conducted at the PERINTIS-initiated Community Training and Demonstration Centre (CTDC), complemented with field visit and practices at the community level. To date, PERINTIS has piloted three trainings on inclusive basic sanitation, first aid and fire preparedness, and waste recycling and composting.

2. **Engagement of government partners, industry, CSOs and employers.**
   The intervention focuses on engaging sanitation-related employers. PERINTIS also established a working group with members from the PCSP-related local government offices, also including local universities and schools, and women groups and Disabled People’s Organisations, among others. The working group aims to synchronise and integrate the gender and social inclusion agenda within all KIAT projects activities in Palembang City.

3. **Governance, performance, and learning.**
   The intervention focuses on ensuring sustainability and adoption of the model. The approach is done through CTDC, a demonstration facility of PERINTIS for others to replicate. Demonstration units include household connections to the wastewater treatment plant and other demonstration units related to sanitation and environmental health. CTDC also provides training materials and a video production centre to support online or remote education learning.
To date, the outputs of the pilot initiative are as follows:

- 276 people (30% male, 66% female, 1% male with a disability and 3% females with disabilities) from 5 PCSP municipalities (Kelurahan) have been trained on inclusive basic sanitation and the first aid and disaster preparedness.
- A local waste bank has been established in one PCSP municipality, following the waste recycling training.
- One of the participants trained on first aid and disaster preparedness has been recruited by Palembang Red Cross.

Two enabling factors contributed to the preliminary success of PERINTIS: Firstly, the continuous support from the local governments, and, secondly, the establishment of the multi-stakeholder working group to support PERINTIS implementation. Both factors have created an enabling environment that fosters discussions and conversations around GESI and how to mainstream it into the sanitation sector.

KIAT is currently evaluating the implementation of the pilot project for the possibility of up-scaling.

RELEVANT LINKS AND PUBLICATIONS (SOME OF THE REFERENCES ARE IN BAHASA INDONESIA)

- For more information, please contact Rahmi Yetri Kasri (rahmi.kasri@kiat.or.id) or email to informasi@kiat.or.id
WASH WORKING GROUP-LED EMERGENCY RESPONSE FOR DEVELOPMENT-HUMANITARIAN NEXUS
INTEGRATING 5W DATA BASE FOR REAL-TIME EMERGENCY RESPONSES AND COVID-19 PREVENTION DURING SEROJA CYCLONE DISASTER

IMPLEMENTING ORGANISATION(S) & PARTNERS

- Provincial WASH Working Group (Pokja AMPL) of East Nusa Tenggara (NTT)
- NTT WASH Cluster members in NTT Province and the 22 districts/cities, including: the local government offices; NGOs (non governmental organisations) and CSOs (civil society organisations); universities; Red Cross; Faith-Based Organisations; police and army; disaster risk reduction forums; and COVID-19 tasks forces, among others.
- The Indonesian Association of Environmental Health (HAKLI) NTT
- UNICEF

LOCATION

East Nusa Tenggara (NTT) Province

PERIOD OF IMPLEMENTATION

February 2020 to December 2021

BACKGROUND

Water, Sanitation, and Hygiene (WASH) development is included as a priority in East Nusa Tenggara (NTT) Province’s Development Agenda. Mirroring the national target, the Provincial Mid Term Development Plan (RPJMD) aims for 100% of access to improved water and adequate sanitation in 2023. In 2021, access to improved water and adequate sanitation in NTT was 81% and 65%, respectively. Thus, NTT province must accelerate efforts to meet the targets in both the national and regional development plans.

Between 2020 and 2022, NTT was severely affected by a series of disaster events that negatively impacted the Province, including the Seroja tropical cyclone in early 2021. Seroja Cyclone has destroyed various public facilities, including WASH facilities. People lost their homes and were evacuated to public shelters with limited WASH services. At the same time, the COVID-19 pandemic worsened with the rise of the Delta variant.

Ensuring the availability and adequacy of WASH services during an emergency response is critical to protect the evacuated residents from the risks of infectious diseases and COVID-19 transmission in emergency shelters, while humanitarian and development efforts need to be more effectively connected. Furthermore, healthcare and frontline workers in the emergency responses must be equipped with the skills to support the displaced people, prevent COVID-19 transmission, and support WASH partners to coordinate aid distribution in the shelters.

Responding to those needs and building on recommendations of a UNICEF commissioned systematic assessment of WASH in Emergency sector in Indonesia, the Provincial WASH Working Group (Pokja AMPL), that is responsible for regular WASH programming and coordination in NTT partnered with UNICEF and HAKLI to led an emergency response under the NTT WASH Cluster coordination platform. NTT WASH Cluster encourages coordination to ensure the Seroja emergency mechanism would ensure WASH interventions are placed among the primary priorities. Furthermore, the WASH Cluster facilitates
coordination between WASH partners involved in the emergency responses and preventing the unequal or duplicated distribution of the aid by developing a WASH 5W dashboard for real-time responses.

**APPROACH**

The WASH Cluster for emergency response in NTT carried out three key activities:

1. Placing the provincial WASH Working Group as the WASH Cluster lead to ensure WASH emergency interventions will be led by key WASH sector partners and continued beyond the emergency response period.
2. Strengthening coordination mechanisms for timely needs and gap assessment, and monitoring of emergency responses among partners through weekly coordination meetings for the Seroja Tropical Cycle emergency response. The meeting participants include the NGOs and government agencies involved in the evacuation and aid distribution response. As part of monitoring efforts, a WASH 5W dashboard was developed in which the data and information from the meeting was integrated with the Disaster Management Station and COVID-19 Task Force. The integration of Seroja Disaster and COVID-19 responses through WASH 5 dashboard aims to provide quick responses according to the need of water and sanitation at the shelters and COVID-19 isolation areas. Moreover, the monitoring system was further strengthened by incorporating WASH access data in communities and other critical settings to help inform regular WASH programming going forward.
3. Developing WASH implementation strategies with the Disaster Management Station of NTT and the Evacuation Management Cluster of NTT; and
4. Building capacities Community-Led Total Sanitation (CLTS, or STBM in Bahasa Indonesia) for emergency setting for health and frontline workers (i.e., sanitarians) by the WASH Cluster, together with development partners.

Under the leadership of Pokja AMPL NTT, and with active involvement of the members, such as the Provincial Disaster Management Agency (BPBD), Social Affairs Office, Health Office, and Public Works and Housing Office, the WASH Cluster formulated an effective strategy for improving WASH services during disaster responses. The WASH Cluster also engaged other non-government actors, CSOs, and the private sector, to contribute to WASH services for the emergency responses.

NTT WASH Cluster was supported by UNICEF and HAKLI to adopt the 5W Format (Who, What, Where, Whom, When) for the Seroja emergency response database. During the Seroja response, the 5W Format was used to register, monitor, and evaluate the daily disaster response and COVID-19 prevention activities of partners and workers in the evacuation shelters. Using this system, Pokja AMPL NTT and UNICEF, as the primary data managers of the NTT WASH Cluster, could process, analyse, and immediately share the results with the Disaster Management Station and COVID-19 Task Force in real-time.
RESULTS

The NTT WASH Cluster has demonstrated its effectiveness as a coordination mechanism for government and NGOs, largely due to strong leadership of the WASH Working Group. The WASH Cluster also supported the evidence-based emergency responses through regular 5W Format reporting with its data visualization for actions. Notably, leveraging the WASH Working Group coordination capacities, partners actively contributed to 5W Format reporting, which is not the case in many emergency situations in Indonesia, reaffirming the value of the WASH Working Group to be the WASH Cluster lead. The dashboard has been maintained even after the emergency response ended, enabling partners to continue WASH interventions in vulnerable areas.

The WASH Cluster has also successfully leveraged private sector resources via the NTT CSR (Corporate Social Responsibility) forum to contribute to disaster recovery and COVID-19 prevention in NTT. Many state-owned enterprises (BUMN), banks, and local companies supported the recovery and construction of WASH facilities in Flores, Timor, and Sumba Districts.

NTT WASH Cluster also strengthened the provincial regulation and policy related to WASH in emergencies, such as:

- NTT Governor’s Decree on the Provincial Pokja AMPL has been revised with the addition of disaster-related government offices, such as the BPBD and Social Affairs. The Decree also included the COVID-19 Task Force and Red Cross as the Pokja AMPL member. The revised policy emphasised that the WASH sector and emergency responses become an integral aspect.
- A draft of the Governor’s Regulation on disaster responsive WASH, which is currently still under review in the Legal Bureau of NTT Province; and
- Integrating emergency response and COVID-19 pandemic protocol into the District/Cities Sanitation Strategy or SSK (the district/city-level sanitation action plan) in East Flores and East Sumba Districts.

ENABLING FACTORS

- The WASH Cluster coordination training, in which the AMPL Working Group members in NTT province and 22 districts/cities and other WASH-related partners participated, strengthened coordination between stakeholders.
- Existing regulation on the coordination and division of roles between government and partners for disaster management in NTT province (Governor’s Decree No. 216/2021), which provides a stronger legal basis for WASH Cluster activities; and
- Capacity building on CLTS in emergency settings and 5W Database for the frontline workers, which supports evidence-based coordination and responses.

REPLICATION AND UP-SCALING

Based on the experience in disaster management and COVID-19 control coordination in NTT Province, several strategies have been formulated to sustain the WASH Cluster including:

- Training on WASH Cluster coordination for sub-province Pokja AMPL in 22 districts/cities in NTT Provinces
- Activating the WASH Cluster in 22 districts/cities
- Developing the WASH Contingency Plan in emergency settings for NTT province
- Strengthening the management information system for emergency response with 5W Database and training the sub-province Pokja AMPL in 22 districts/cities on it.

In terms of scaling up, the lessons learned should be used as a basis for advocacy to replicate this approach across 34 provinces. Efforts have been initiated in UNICEF supported provinces in Indonesia.

RELEVANT LINKS AND PUBLICATIONS (SOME OF THE REFERENCES ARE IN BAHASA INDONESIA)

- Air untuk Martha: [https://www.youtube.com/watch?v=9Lr6JGIxaPA](https://www.youtube.com/watch?v=9Lr6JGIxaPA)
- For more information, please contact: UNICEF Jakarta ([jakarta@unicef.org](mailto:jakarta@unicef.org))
IMPROVING ACCESS TO DRINKING WATER THROUGH MASTER METER PROGRAMME IN THE SLUM AREA

IMPLEMENTING ORGANISATION(S) & PARTNERS
- Ministry of Public Works and Housing and BAPPENAS
- USAID IUWASH PLUS - The Indonesia Urban Resilient Water, Sanitation, and Hygiene Activity (USAID IUWASH Tangguh)
- Water Utility Companies (PDAM) in the targeted cities/district
- Local community operator groups (KSM)
- Private sector companies

LOCATION
The programme was implemented in 35 districts/cities in 8 provinces, including North Sumatera, West Java, Central Java, East Java, South Sulawesi, Maluku, North Maluku, Papua, and 2 special areas in DKI Jakarta and Tangerang District.

PERIOD OF IMPLEMENTATION
2016 - Present

BACKGROUND
Indonesia still faces serious challenges in providing access to quality drinking water, particularly for low income communities in urban areas. Data from national surveys illustrate that households in the bottom 40% of the population (B40) have the lowest rates of coverage in urban areas in terms of access to piped water. While 89% of the country has access to safe drinking water, surveys show that 46% of the urban population relies on bottled or refilled galloon water, thereby creating a significant financial burden for the poor as they struggle to meet household water needs by purchasing the much more expensive jerry can. The district/city water utility (PDAM) cannot provide household connections for the community living in informal settlements without land ownership rights.

In collaboration with the district/city water utility in eight provinces, USAID IUWASH Plus has promoted the establishment of a communal water supply system called Master Meter. The Master Meter aims to increase access to piped drinking water for low income communities (B40 households) by:
- Providing alternative services to informal/illegal settlements which are usually located in slum areas.
- Providing alternative services for unsuitable locations according to the water utility service’s technical standards, such as houses in narrow alleys, irregular houses, non-permanent/semi-permanent housing conditions, both in formal and informal areas.
- Providing alternative services for locations where water utilities are concerned about water loss, water theft, and payment problems.
- Providing an alternative for low-income communities to pay for water usage monthly.
Approach

A Master Meter can serve 80 to 100 households. To make this system work, the roles of the partners are as follows:

1. Water Utility that owns the main pipeline connections is responsible for distributing water to the Master Meter equipment.
2. The local community is responsible for distributing water from the Master Meter equipment to the respective houses. Based on the recording of water usage through the Master Meter equipment, the community will pay the water bill collectively to PDAM.

Installation of the Master Meter includes the following steps:

1. **Community preparation:** site selection, identified facilitators, community planning and establishment of local community-based organisation as the operator group (Kelompok Swadaya Masyarakat/KSM);
2. **Master meter system planning:** technical and budget preparation for communication and outreach activities;
3. **Procurement of goods:** procurement of piping and its accessories;
4. **Construction before main meter:** the construction of the main meter piping system and accessories
5. **Construction after main meter:** the construction of piping system and accessories that connect to each household
6. **Operation and maintenance of the piping equipment** that connects to the main meter is the responsibility of the water utility company, while the piping equipment that connects the main meter to each household is the responsibility of KSM.
RESULTS

The Master Meter programme significantly increases access to drinking water by reducing the expenses of the low-income communities. A survey in Sidoarjo District indicated that prior to using the master meter, low-income households had to pay IDR50,000-IDR75,000 per m3 of drinking water. After using the Master Meter system, the cost of clean water drops to IDR2,800 per m3.

In Surabaya, the Surabaya City Water Utility has been implementing the IUWASH PLUS Master Meter system since 2018, targeting 1,200 house connections for 6,000 people. To provide the initial costs, the Water Utility collaborated with the private sectors, including Coca Cola Foundation, Yayasan Pundi SCTV, and Feinege. In March 2019, approximately 1,600 people in Surabaya had utilised the water supply from the Master Meter programme.

In February 2021, the master meter programme commenced in Medan City, with support from the Coca Cola Foundation. In this collaboration, USAID IUWASH PLUS provided training to the implementing partner, Perkumpulan Arta Jaya, to improve the community capacity on WASH. Community activities included the formation of a local community operator group (Kelompok Swadaya Masyarakat - KSM) that will manage and operate the Master Meter system. As of March 2021, 4 out of 6 KSMs have been formed and an estimated 6 master meter system will be built and provide benefit to around 3,825 urban poor through 400 house connections.

ENABLING FACTORS

- Strong collaboration between partners, particularly the water utility companies and KSMs, the local operator groups
- Support in securing funding assistance through microfinance schemes for low-income households

REPLICATION AND UP-SCALING

The Master Meter approach will be replicated in the next USAID IUWASH programme called IUWASH Tangguh.

RELEVANT LINKS AND PUBLICATIONS (SOME OF THE REFERENCES ARE IN BAHASA INDONESIA)

- USAID IUWASH PLUS (2019) Master Meter to Increase Access to Water Supply for Low Income Community
- USAID IUWASH PLUS (2020) Panduan Layanan Sambungan Master Meter
- For more information, contact: Trigeany Linggoatmodjo (tlinggoatmodjo@usaid.gov) or visit https://www.iuwashplus.or.id
ALTERNATIVE FINANCING

UPDATING HOUSEHOLD MICROFINANCING RECORDS FOR WASH FACILITIES
## ALTERNATIVE FINANCING

### ZAKAT, INFAQ, AND SADAQAH (ZIS) FUNDS

Mobilising Alms Fund for Financing WASH Services in Indonesia

<table>
<thead>
<tr>
<th>LOCATION</th>
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<tbody>
<tr>
<td>National scale with pilots in a number of provinces, including West Nusa Tenggara, Aceh, Riau Island, Banten, West Java, Central Java, Central Sulawesi, Papua, and South Sumatra Provinces.</td>
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<tr>
<th>PERIOD OF IMPLEMENTATION</th>
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<td>2016 - present</td>
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### IMPLEMENTING ORGANISATION(S) & PARTNERS

- BAZNAS (National Board of Zakat)
- Badan Wakaf Indonesia (Indonesia Wakaf Board)
- Other Zakat Amil institutions (Lembaga Amil-Zakat)
- BAPPENAS (Indonesia National Planning Agency)
- UNICEF
- WASH Working Group (Pokja AMPL/PPAS) at the national and subnational level

### BACKGROUND

In the last decade, Islamic alms (a religious obligation for better-off Muslims) have emerged as an alternative way for Islamic societies to finance drinking water and sanitation services for the poor in Indonesia. Alms include Zakat, Infaq (donation) and Sedekah (charity), which are collectively known as ZIS funds.

As the country with the largest Muslim population globally, Zakat funds represent a high financing opportunity in Indonesia. The annual Zakat funding in Indonesia is estimated to reach about 400 billion IDR (about 27.8 million USD). Zakat funds are collected by Amil-Zakat Agencies (Lembaga Amil Zakat - LAZ). LAZ manage and channel the Zakat Funds to the poor and marginalised groups that meet the Zakat beneficiary criteria with the aim to improve their quality of life and welfare.

Indonesia has a national target of 90% of households with access to basic sanitation and all populations with access to drinking water by 2024. The financing gap is one of the most significant barriers to ensuring safe drinking water and sanitation provision in Indonesia. The Mid Term Development Plan 2020-2024 (RPJMN 2020-2024) estimates that the financing gap for achieving the 2024 targets reaches 3.1 billion USD (67.4 trillion IDR) for drinking water and 4.6 billion USD (45.6 Trillion IDR) for sanitation. With such immense gap, Zakat or ZIS funds can play a crucial role in financing the development of safe drinking water and sanitation facilities. Improving the sanitation and drinking water access for those vulnerable families will contribute to the elimination of open defecation and positively impact the economy, health, stunting reduction, and environment.
**APPROACH**

Approaches for mainstreaming ZIS funds as an alternative mechanism for WASH financing in Indonesia include:

- **The Indonesian Islamic Leader Council (Majelis Ulama Indonesia - MUI), through their regulation Fatwa MUI 1/2015, officially endorse the utilise of the ZISWAF (Zakat, Infaq, Sodaqoh, and Wakaf) funds in the provisioning of safe water and sanitation facilities for the poor.**

- **Indonesian government and partners, such as BAZNAS, UNICEF, and other LAZ institutions work together to support the promotion and mainstreaming of ZIS as a WASH financing scheme.**

- **Advocacy to the provinces and districts for promoting ZIS financing in WASH facilities for poor people at the grassroots level. Advocacy not only targets the subnational government, but also involves the regional WASH Working Group (Pokja AMPL or Pokja PPAS), and the subnational Zakat Board (BAZNAS and LAZ).**

- **National government and donors have provided technical assistance to BAZNAS, regional governments, and other Zakat agencies, in mobilising ZIS funds at the subnational level to provide poor households with access improved sanitation facilities.**

**RESULTS**

The results from ZIS mainstreaming efforts in the WASH sector include:

- **Between 2011-2019, LAZ-Harfa (a local ZIS institution) has constructed more than 10,600 latrines for poor households in Banten Province.**

- **Through UNICEF’s advocacy efforts, BAZNAS has developed a WASH programme called BAZNAS-BASNO (zero open defecation) and allocated Zakat funds to support 561 poor households to build a toilet.**

- **In 2019, BAZNAS has developed an Index for Sustainability of Clean Water and Sanitation (BI-WAS) as a guideline for ZIS disbursement to the targeted beneficiaries.**

- **In 2021, BAZNAS, in collaboration with BAPPENAS, MUI, and UNICEF, developed a Technical Guideline for ZIS utilisation in providing safe water and sanitation services.**

**ZIS Fund utilisation**

Up until 2020, it was estimated that approximately USD 88,000 ZIS funds have been allocated for financing WASH facilities in Indonesia through pilot initiatives in West Nusa Tenggara, South Sumatra, Banten, and Central Java Provinces. This is probably an under-estimate since there is currently no proper monitoring system on the use of ZIS funds for WASH financing in Indonesia.

**BI-WAS INDEX FOR DETERMINING ZIS WASH BENEFICIARIES**

The BAZNAS Index for Sustainability of Clean Water and Sanitation (BI-WAS) measures the condition of WASH services and practices and can be used as the basis for determining the beneficiaries of ZIS in WASH services. BI-WAS consists of four dimensions: water facilities, sanitation facilities, hygiene, and behaviour. Each dimension includes several variables for more detailed measurement, with a total of 15 variables from the four dimensions.
ALTERNATIVE FINANCING

ENABLING FACTORS

Some enabling factors in mainstreaming the ZIS funds for WASH financing are:

1. In Indonesia, about 230 million people, or 86% of the population, are Muslims. As such, there is huge potential for sourcing Zakat Funds to finance the WASH services.
2. MUI has officially endorsed utilizing ZIS funds to construct clean water and sanitation facilities that target low-income groups.
3. BAZNAS, the largest Zakat fund organisation, and other Amil-Zakat institutions in Indonesia have a strong commitment to supporting the WASH sector, particularly for providing WASH services to low-income households.
4. Strong support from the national government and WASH development partners, including UNICEF.
5. The multi-sectoral WASH Working Group is developing Zakat schemes for WASH financing at the regional level and ensuring that Zakat disbursement is aligned with local WASH development targets.

REPLICATION AND UP-SCALING

Operational guidelines are now available to guide Amil-Zakat institutions across Indonesia to use ZIS funds for financing WASH facilities. Examples include the BI-WAS Index and the Technical Guideline for ZIS utilisation in the Provisioning of Safe Water and Sanitation Services. The GoI is currently consolidating the monitoring system to record the progress and achievement of ZIS fund utilisation for WASH financing.

RELEVANT LINKS AND PUBLICATIONS (SOME OF THE REFERENCES ARE IN BAHASA INDONESIA)

- Pokja PPAS (2021) Diseminasi Buku Panduan Teknis Pendayagunaan ZIS untuk Layanan Air Minum dan Sanitasi: https://www.youtube.com/watch?v=HbsfsdeVclQ
- For more information contact: UNICEF Jakarta (jakarta@unicef.org)
ALTERNATIVE FINANCING

MATCHING GRANT INCENTIVES FOR WATER UTILITY BUDGETING
IMPROVING LOCAL WATER UTILITY PERFORMANCE THROUGH INCENTIVES FOR NON-PUBLIC FUNDING

IMPLEMENTING ORGANISATION(S) & PARTNERS
- Ministry of Public Works and Housing (Kementerian PUPR)
- National Urban Water Supply Project (NUWSP) - World Bank
- Bappenas, Water.org, PERPAMSI, USAID IUWASH PLUS, BPPSPAM, and KIAT, among others

LOCATION
National programme targeting the regional water utilities (Perusahaan Daerah Air Minum – PDAM):
- City Water Utility in Palembang, Medan, Semarang, Padang, Bandung, Depok, Bekasi, Mataram, and Pontianak
- District Water Utility in Gowa, Gresik, Sragen, Bogor, Bandung, Lombok Barat, and Tangerang

PERIOD OF IMPLEMENTATION
2020 - present

BACKGROUND
The piped water supply in Indonesia serves less than 21% of households across the nation. A financing gap of 3.1 billion USD (67.4 trillion IDR) is one of the major barriers to cities/districts water utilities supporting safe drinking water access for all by 2024. The majority of water utilities are highly dependent on public funding. Lack of public funds to finance the drinking water sector at the national and regional level contributes to only 60% of the cities/districts water utilities (Perusahaan Daerah Air Minum – PDAM) have a healthy budget performance.

More innovative investment is needed so that local water utilities are able to improve their performance and expand their services to the broader population. Non-public or government funds can enhance water utility financing through the involvement of the private sector, banks, financing agencies, and other available domestic financing mechanisms.

To reducing the gap, the GoI through the National Urban Water Supply Project (NUWSP) has developed a Matching Grant Incentive Scheme for the local government and water utilities that succeed to acquire non-public funding, such as bank loans, Business to Business investment schemes, and Public-Private Partnerships to expand and improve drinking water services.

The Matching Grant Incentive targets the local governments and water utilities that need investment financing and already have sufficient capacity to utilise non-public funds. This scheme promotes and strengthens private sector involvement in cities/districts water supply financing; so that national public funds can be allocated and prioritised for the regions with the lowest capacity and in the utmost need of support for improved water supply services.
ALTERNATIVE FINANCING

APPROACH

The Matching Grant Incentive is disbursed to local government and water utilities through the construction of physical facilities, valued at 30% of the obtained non-public funds with a maximum value of 5 million USD.

The stakeholders in this initiative are:

1. the national Government of Indonesia (GoI) through NUWSP as the programme supervisor and incentive providers;
2. the local governments and water utilities as the programme implementer; and
3. the private sector from banking, financing companies, and other investors as the provider of the non-public funds.

NUWSP collaborates with WASH partners to prepare and facilitate the targeted actors at the local level to access non-public funds. The World Bank provides the technical assistances to the GoI through the Central Project Management Unit (CPMU) of the NUWSP.

Various development partners, such as Water.org, PERPAMSI, USAID IUWASH PLUS, and BPPSPAM, have provided technical assistance to the targeted local government and water utilities in preparing their capacity and feasibility to access non-public loans and receive the Matching-Grant Incentive.

RESULTS

In November 2020, PDAM Tirta Musi (Palembang City Water Utility) signed the Credit Loan Agreement with the Development Bank of South Sumatra and Bangka Belitung. PDAM Tirta Musi is utilizing the 90 billion IDR loan to finance the construction of a drinking water supply system (SPAM) in Karang Anyar 2 and will repay the loan within a ten year period.

By the end of 2021, seven local water utilities, including Palembang, Gowa, Bogor, Semarang, Gresik, and Sragen, had raised 116 million USD of non-public funds.

The Matching Grant helps enhance the capacity of local governments and water utilities in utilizing the non-public funds for service expansion and quality improvement. The improved water utility capacity is expected to improve their budget performance, accelerating the provision of piped water supply services for universal access by 2024.

The utilisation of non-public funds for expansion to non-domestic customers, such as industrial and commercials, brings additional income opportunities for the water utilities. The local governments and water utilities can use the acquired extra income to subsidise public services targeting the community and low-income households.
ENABLING FACTORS

The enabling factors for the Matching Grant Incentives include:

1. Intensive programme outreach through advocacy and socialization, targeting regional governments and water utilities.
2. Technical assistance provided by WASH development partners to local government and water utilities to enable them to access non-public funds and increase their eligibility for incentives.

REPLICATION AND UP-SCALING

The GoI in collaboration with, and support from, the World Bank and development partners, will continue the Matching Grant Incentive programme to support regional governments and water utilities to improve their performance.

RELEVANT LINKS AND PUBLICATIONS (SOME OF THE REFERENCES ARE IN BAHASA INDONESIA)

- NUWSP website link http://labsque.com/nuwas/
- For more information, please contact the CPMU NUWSP (cpmunuwsp@gmail.com)
ALTERNATIVE FINANCING

IMPROVING HOUSE CONNECTIONS FOR LOW-INCOME COMMUNITIES
EMPOWERING WATER UTILITY IN INSTALLMENT FINANCING SCHEMES FOR PIPED SERVICES

IMPLEMENTING ORGANISATION(S) & PARTNERS
• Water.org
• Bappenas
• Water utility in Batang, Jepara, Kendal, and Boyolali Districts
• Indonesia Water Utility Association (PERPAMSI)

LOCATION
Central Java (pilot project in four districts), West Java, East Java, and Jogyakarta Provinces (capacity building for Water Utility)

PERIOD OF IMPLEMENTATION
2016 - present

BACKGROUND

The Government of Indonesia targets 10 million new piped water household connections by 2024. The regional water utility (Perusahaan Daerah Air Minum – PDAM) plays a key role in expanding their services in districts and cities to achieve the national target. Household access to safe drinking water and safe sanitation correlates with higher socio-economic welfare and better quality of life. However, the national coverage of piped water household connections from the water utility is only around 29%.

At the end of 2021, Indonesia’s poverty rate was recorded at 9.7%, equivalent to 26.5 million people. Many households in this group depend on non-piped water sources that are often more costly and less safe than piped sources. The average monthly income of these households ranges from 2 to 2.5 million Indonesian Rupiah (IDR) (140 to 175 United States Dollars, USD), while installing a new house connection from the water utility costs around 1.5 to 2.5 million IDR (110-175 million USD). Consequently, low-income households cannot afford a piped water connections to their house and continue to pay more to access water services.

The regional water utility was mostly focused on marketing new connection services to more profitable commercial water users. Low-income households are less likely to be prioritised by the water utility due to their lower capacity to pay, meaning less profitability. Moreover, local water utility do not often have an affordable financing scheme for low-income households to access piped-water services.

Thus, there is a significant market opportunity to expand new connections to low-income households, which could be profitable with an appropriate financing scheme. Expanding house connections to low-income households will support the achievement of the national drinking water target, as more people can access piped water services and increase the service coverage of water utility.

To support the provision of connections for low-income households, Water.org has provided technical assistance in developing loan schemes for low-income households to access piped house connections. Through collaboration with the local water utility in Kendal, Boyolali, Batang, and Jepara districts, the project has initiated pilot schemes for financing new connections for low-income households. The project also collaborated with PERPAMSI, Indonesian Water Utility Association, to prepare water utility for marketing house connections targeting low-income households using the instalment financing mechanism.
ALTERNATIVE FINANCING

APPROACH

The project involved four key interventions as follows:

1. **A pilot project with the water utility in Kendal, Boyolali, Batang, and Jepara districts**
   - The pilot project focused on increasing staff capacity and securing the budget for marketing and financing new connections to the low-income households. The loan was designed for a 6 to 12 months period, in which the low-income households can have more affordable options without paying high installation costs upfront. The pilot intervention provides the water utility in four districts with technical assistance on:
     - Developing marketing and financial management strategies for low-income households
     - Developing an instalment financing product, through cooperation with the micro-finance institutions or self-funded from the water utility budget
     - Verification of house connections to ensure the connection functionality and customer satisfaction

2. **Capacity Strengthening for broader water utility**
   - The project collaborated with PERPAMSI to produce capacity building materials and secured funding to carry out a series of capacity building activities for the staff of 20 water utilities from West Java, Central Java, East Java, and Jogjakarta. The training for water utility staff included: developing marketing strategies, mapping potential customers, management and operation, and developing of product financing schemes for the low-income households.

3. **A strategic mapping for selecting the water utility**
   - Following capacity building with PERPAMSI, the project identified the local water utilities with high potential for partnerships, by evaluating their capacity and needs to develop the loan scheme for low-income households. Through a thorough due diligence process, the mapping resulted in the selection of local water utilities that will integrate the financing of water services for low-income households into their operation.

4. **Development of financing scheme targeting low-income households**
   - Water.org worked with the selected water utilities in building the required infrastructure to offer a new house connection financing scheme for low-income households and improve operations and services to existing customers.

RESULTS

- 25 out of 30 selected water utilities (PDAM) from the strategic mapping have developed instalment financing schemes for new house connection targeting low-income households.
- More than 55,000 new house connections were made using the instalment financing scheme, serving more than 220,000 beneficiaries from low-income groups and accounting for more than IDR 70.3 billion (about 4.8 million USD) in capital mobilisation.
- The low-income households using the instalment scheme reported a high-level of satisfaction in terms of water quality, water tariffs, water taste, water pressure, and availability of water services hours.
- More water utilities across Indonesia have started to develop instalment financing schemes and marketing for low-income households.
ALTERNATIVE FINANCING

ENABLING FACTORS

- The increasing commitment from water utility’s to marketing house connections to low-income households
- Increasing capacity of water utility staff in marketing and delivering water services to low-income households, due to project capacity building and technical assistance
- The involvement of the head of districts and cities to increase the service coverage of water utility for all, including for the low-income communities, in their regions.

REPLICATION AND UP-SCALING

- Collaboration with PERPAMSI to develop guideline modules on marketing strategy, financing scheme development, access to funding, and portfolio management to support financing new connections for low-income households.
- Collaboration with the NUWSP-World Bank to scale up the water utility financing and marketing strategies for low-income households in other regions.

RELEVANT LINKS AND PUBLICATIONS (SOME OF THE REFERENCES ARE IN BAHASA INDONESIA)

- PERPAMSI (2020) Perpamsi dan Waterorg lanjutkan program untuk bantu BUMD Air Minum
- For more information, please contact: Dwinita (dwulandini@water.org) or visit https://water.org/contact-us/
**PERFORMANCE-BASED GRANTS FOR IMPROVING DRINKING WATER ACCESS**

**IMPROVING THE EFFICIENCY OF LOCAL WATER UTILITY OPERATION**

**IMPLEMENTING ORGANISATION(S) & PARTNERS**
- Ministry of Public Works and Housing
- Ministry of Finance
- Local government and local water utility
- State Audit Board and Independent Auditor
- World Bank through NUWSP (National Urban Water Supply Project)

**LOCATION**
National, for all local governments and water utility that meets grant requirements
- Phase 1: Bogor district, Sukoharjo, and Magelang
- Phase 2 (preparation): Karawang, Depok, Magelang, Pematang Siantar, Sragen, Bantaeng, Surakarta, Gresik, Samarinda, Jogjakarta, Tebing Tinggi, and Barru

**PERIOD OF IMPLEMENTATION**
2018 - present

**BACKGROUND**
Inefficient operation is one of the factors affecting the performance of many local governments’ owned water utility (PDAMs), as indicated by the high rate of non-revenue water (NRW) and high energy costs for service operation. With limited water resources and public funding, water utilities in cities and districts must optimise their production capacity before making large-scale investments.

The output-based grant for drinking water programme or HAMBK (Hibah Air Minum Berbasis Kinerja) provides incentives from the central government to local governments to support their water utilities to improve operational efficiency through NRW reduction and energy efficiency (EE) improvement. The incentive grants are provided through loans and grants from international development partners.

The HAMBK programme aims to stimulate the local governments to improve the performance of their water utility enterprises. Better asset management and more efficient operation will improve the overall performance so that the water utility can provide optimum drinking water services to broader community.
ALTERNATIVE FINANCING

APPROACH

The grants will be provided to the local water utilities after their activities to improve EE and reduce the NRW are completed. Based on the results of the two activities, the central government, represented by the Central Project Management Unit or CPMU from the Ministry of Public Works and Housing, will determine incentive amount that will be transferred to the local governments.

The output-based grant aimed at local governments and water utility with high NRW and low energy efficiency. To be eligible for the grant, the local government must have sufficient fiscal capacity as the pre-financing requirement for implementing the NRW reduction and EE improvement measures.

The grant mobilises the government and non-government partners in providing technical assistance to the local water utility. Technical assistance is required to ensure the eligibility of the water utility to receive the grant, such as in preparing the feasibility studies and ensuring the activities are implemented based on the standard operational procedures. The activities consist of installing master meters with data logger, baseline provision, and the verification of water volume being supplied and used.

The project utilises the Self-Assessment Toolkit (SAT) to assess the eligibility of the local governments and water utility, which consists of five indicators: water utility performance category based on the audit from BPKP (State Audit Board), which consists of: water utility service coverage; operational and human resources performance; financial performance, and: local government eligibility, as indicated by the local plan for drinking water services and fiscal capacity.

RESULT

Decreasing NRW and increasing EE will improve the management and operational performance as well as the revenue of the water utility. Additional water supply from NRW reduction can help expand services and delay the urgency to invest in new water sources and build new production units.

The output-based incentive encourages local governments to allocate more funding to improve the performance of water utilities. The result-based approach ensures that the investments are effective and on target.

Drinking-Water Grant Programme for Water Supply System

The GoI and development partners utilise various grants schemes to improve the local water utility capacity to provide and expand safe drinking water services, such as through the national drinking water programme. The drinking water grant or HAM (Water Hibah) programme is an output-based grant for local governments that contribute to improving the access of low-income community to drinking water services. This grant scheme is implemented by the Ministry of Public Works and Housing with support from Bappenas and the Ministry of Finance.

To be eligible for this grant, the local government must provide a list of potential beneficiaries from low-income groups and the local water utility must meet the idle capacity requirement. The GoI has allocated 900 billion IDR (Indonesian Rupiah) for this grant from the National Fiscal Budget in 2022. In addition, 154 cities and 99 districts have stated their interest in participating in the programme.
Collaboration with the Development Partners

The IUWASH PLUS-SECO programme assists several water enterprises and local governments in preparing feasibility studies to participate in the grant scheme. Technical assistance has improved their capacity in implementing the output-based grant programmes.

In addition to the World Bank Loan, the HAMBK grant incentives are also being implemented by KIAT (Kerjasama Indonesia-Australia) with funding from the grant provided by the Australian Government.

Enabling factors for the operation of HAMBK grants are:

- Improved grant procedures as reflected in the more detailed technical guidelines.
- Programme socialization to more local government/BUMD Drinking Water.
- Technical assistance provided by the development partners to improve the capacity of local governments and water utility to enable their eligibility to receive the grant.

Repllication and up-scaling

The demonstrated impact of NRW reduction and EE improvement on local water utility performance will encourage others to replicate the activities. The programme aims to replicate the scheme with funds from central government funds and other sources.

Relevant Links and Publications (some of the references are in Bahasa Indonesia)

- For more information, please contact CPMU HAMBK (hibah.ambk@gmail.com)
## Mainstreaming Centralised Systems for Improved Access to Safely Managed Sanitation

**Grant Programmes for Sanitation (sAlig) and Wastewater (HAL)**

### Implementing Organisation(s) & Partners
- Ministry of Public Works and Housing
- Bappenas (Ministry of National Development Planning)
- Ministry of Finance
- KIAT (Indonesia-Australia Partnership for Infrastructure)
- Cities and district governments

### Location
- National level, targeting local governments
  - sAlig: 46 districts/cities (phase 1) and 53 districts/cities (phase II)
  - HAL: 4 districts/cities (phase 1) and 4 districts/cities (phase II)

### Period of Implementation
- sAlig: 2012 to 2021
- HAL: 2013 to 2022

### Background

More than two-thirds of Indonesia’s population still use on-site sanitation systems that pose critical risks to human health and the environment and inhibit the effort to increase access to safely managed sanitation. Centralised sewage and communal wastewater treatment systems are crucial to address these challenges to achieve sanitation targets.

In Indonesia, centralised wastewater management or off-site systems have only been installed in a limited number of regencies/cities, where wastewater treatment plants (IPAL) have been built on a small-scale (less than 100 household connections). Only 15 districts/cities have built wastewater treatment plants at the municipal-scale (more than 5,000 household connections).

To achieve the national target of 90% households with sanitation access, including 15% households with safely managed sanitation by 2024, the Government of Indonesia (Gol) continues to mobilise various financing sources, including foreign grants and loans. The Gol has collaborated with the Australian Government on two grant programmes to increase the active role of local governments in developing centralised sanitation systems across cities and districts:

1. **The sAlig** (Australia-Indonesia Infrastructure Grants for Sanitation) programme for the construction of the community-scale centralised domestic wastewater treatment plant or IPALD Skala Permukiman (*Instalasi Pengolahan Air Limbah Domestik*) as well as city-scale wastewater household connections (*Sambungan Rumah Air Limbah Domestik*), and;
2. **The HAL** (Hibah Air Limbah or Wastewater Grant) programme for the construction of domestic wastewater household connections that will be connected to the existing city-scale wastewater treatment plant (*Sambungan Rumah Air Limbah Domestik*).
The grant programmes aim to improve safely managed sanitation services by providing incentives for local governments to expand the services of centralised domestic wastewater management system (Sistem Pengelolaan Air Limbah Domestik Skala Terpusat). The grants help to bridge the financial gap faced by the national and local governments affecting their ability to expand the centralised wastewater system and improve safe sanitation access.

The centralised system will enhance domestic wastewater treatment services through household connections and reduce the risk of contamination from on-site systems. Improved sanitation management will benefit the public and environmental health in the districts and cities.

**APPROACH**

In the initial selection process, both sAIIG and HAL grants only target the cities and districts that have developed a City Sanitation Strategy or SSK (Strategi Sanitation Kota) to ensure that the centralised system is aligned with local government policies. Cities must propose the area of service of the centralised wastewater plant, with a minimum service coverage of 150 residents per hectare.

The grant programmes select the grantee based on their financing commitments to provide land for sanitation facility construction, carry out the detailed engineering design, and establish the local facility management institutions for managing the IPALD and SPALD. In addition, the local government grantee is required to develop a Risk Management Action Plan and Gender, Disability, and Social Inclusion Action (GEDSI) Plan for the operation of the centralised system.

Both programmes also provide technical assistance and capacity building for the local government staff, the facility management institutions, and other local actors involved in programme implementation. Technical and administrative assistance is provided throughout the programme activities, supported by the national and local consultants funded from the central government budget and grants. Various technical and operational guidelines were developed to support the local governments in implementing the programmes.

The programmes utilise various promotional media, including social media, community radio, video, and posters, to encourage the community to shift from on-site sanitation to centralised sanitation systems. The programme applies gender-responsive social marketing principles in promoting the centralised system to the targeted community.

**RESULTS**

By the end of 2021, the sAIIG had been disbursed to 66 districts and cities, with a total of 35,000 household connections to the centralised IPALD. Meanwhile, the HAL programme has been implemented in 6 districts and cities, connecting 17,000 household connections with the SPALD. The local government investment in, and local budget allocation, to the centralised sanitation system has also increased due to the grant programmes.

The utilisation of centralised system contributes to the public health improvement through the reduction of WASH related diseases. For example, before the wastewater treatment facility construction in 2019, diarrhoea cases in Surakarta City were recorded at 12,122 cases and following the construction of the centralised system diarrhoea cases decreased to 8,552 cases in 2020, while dengue fever cases were down from 169 cases in 2019 to 73 cases in 2020. Centralised systems reduce the leakage of wastewater and contamination of the groundwater sources, improving environmental health and the quality of life of the cities and district residents.
ENABLING FACTORS

1. Strong commitment from the local government to undertake the preparatory process, including preparing a Letter of Interest, SSK and DED documents, developing the GEDSI and Risk Management Action Plans, initial financing, and support for local institutions, amongst other examples.
2. Technical support from the CPMU and consultants to the local government
3. Bi-weekly meeting as part of an intensive monitoring and evaluation process.

REPLICATION AND UP-SCALING

The sAIII and HAL Programmes ended in 2021 and 2022 respectively, but are now being replicated in a new programme called “Mainstreaming sAIII and HAL”. The programme will be funded by the central government to expand the services of centralised wastewater management system. With DFAT support, the new programme includes technical assistance to a new set of cities and districts to prepare them for accessing the grants, to achieve the safely managed sanitation services target by 2024.

RELEVANT LINKS AND PUBLICATIONS (SOME OF THE REFERENCES ARE IN BAHASA INDONESIA)

- For more information, please contact Tofikurochman (Tofikurochman.Achmad@KIAT.or.id) or email to informasi@kiat.or.id
ALTERNATIVE FINANCING

AFFORDABLE DOMESTIC WASH FACILITIES FOR ALL
WASH MICROFINANCING SCHEME FOR LOW-INCOME COMMUNITIES

IMPLEMENTING ORGANISATION(S) & PARTNERS

• Water.org
• More than 20 microfinance institution (MFI) partners
• Local water utilities
• Local WASH service providers

LOCATION

Nation-wide

PERIOD OF IMPLEMENTATION

2014 – present

BACKGROUND

The Mid-term Development Plan 2020-2024 (RPJMN 2020-2024) estimates that the financing gap for achieving the 2024 drinking water and sanitation targets reaches more than 11.7 trillion Indonesian Rupiah (IDR) or reaching 7.7 billion United States Dollars (USD). The Government of Indonesia (GoI) mobilises resources to improve national coverage of drinking water and sanitation, but the affordability for low-income groups is still an issue.

Due to the financial barriers, most the poor households in Indonesia still do not have adequate drinking water and sanitation facilities at home. The average monthly income of the low-income families in Indonesia ranges from 2 to 2.5 million IDR140 to 175 USD. This particular group is considered vulnerable since their income is above the eligibility line to receive cash assistance from the government, while at the same time, their income most likely will not be sufficient for investment in domestic WASH facilities.

Low-income households are classified as a micro-segment market under the financing system. Access to microcredit is essential for these households to sustain their day-to-day cash flow, commonly sourced from micro, small and medium enterprises (SMEs) and daily labour activities. However, MFIs, including banks, cooperatives, or ventures, need to be convinced of the need for financing products to serve the demand for WASH. Microcredit schemes would enable low-income families (especially those in the 3rd to 6th decile) to take loans and instalments to build WASH facilities at home while maintaining cash flow for their basic daily needs.
To provide low-income households with financing options for constructing domestic WASH facilities, Water.org delivers a combination of technical assistance and advocacy to the stakeholders. The interventions comprise:

- Providing technical assistance and stimulus funding to support MFIs in developing the financing products;
- Strengthening demand by encouraging the target market, low-income communities to join the WASH micro-credit scheme;
- Training on WASH financing and monitoring and evaluation for the MFI field staff; and
- Monitoring and evaluation to ensure the WASH facilities financed through the scheme meet technical standards.

The microcredit scheme products have been designed for various WASH technologies so that low-income communities with affordable and most suitable WASH services. The options include financing schemes for drinking water facilities, such as artesian wells, dug well, water pumps, piped connections (SR) from a water utility, and water filters. For sanitation facilities, the financing product includes micro-credit schemes to construct basic toilets and septic tanks.

To be eligible for WASH microcredit, the low-income client must submit a loan application to the MFIs partner. Once accepted, the funds will be transferred to the suppliers (construction agency/builder, plumber, PDAM, etc.) to begin the construction or renovation needed by the clients.

This approach has attracted private financing to the WASH sector, decreasing the dependency on public financing. However, since MFIs must generate an acceptable profit, the microcredit schemes are not suitable for the 20% of poorest households (1st-2nd welfare decile).

The WASH micro-credit schemes has resulted in:

- More than 20 MFIs have developed affordable microcredit schemes for low-income groups while still being profitable.
- 370,000 households have accessed the scheme to improve their water and sanitation facilities, with total loans of 1 billion IDR (Indonesian Rupiah) having been rolled out, benefiting more than 1.5 million Indonesian people.
- A dialogue has been initiated on the role of MFIs in WASH financing between stakeholders at the national and local levels.
- Engaging financial institutions to participate in WASH financing and hence attracting more investors to engage. This has led to awareness-raising of WASH financing opportunities in the financial market, including among foreign investors.
- Development of learning toolkits and Learning Management System (LMS) videos to support training on how to develop WASH financing products.

The 2019 evaluation found a positive impact on the welfare of the 2,900 households that participated in WASH microcredit schemes, including:

- Significant improvement in the Joint Monitoring Programme (JMP) sanitation service ladders index and household satisfaction taking the WASH microcredit.
- WASH microcredit has significantly improved household productivity, as represented by an increase in household income, income per capita, and expenditure per capita indicators.
- Related to health status, reduction in health-related spending varied among WASH microcredit clients.
ENABLING FACTORS

- Strong support and commitment from the MFIs boards involved.
- Partnerships with MFIs focuses on micro-segments of the market and has broad coverage that reaches remote areas where the potential for WASH micro-financing is high.
- Provision of effective marketing tools to generate the WASH demand.
- During the COVID-19 pandemic, there has been greater awareness of water and sanitation to maintain hygiene levels in the household, thus increasing the demand for WASH financing products.
- Technical assistance and advocacy for MFIs to develop WASH financing products.

REPLICATION AND UP-SCALING

- There are plans to broaden the partnership, with more MFIs offering WASH microcredit.
- Water.Org continues the advocacy targeting local government to offer incentive schemes for MFIs (e.g., marginal subsidy or revolving fund) to enable them to expand the initiative.

RELEVANT LINKS AND PUBLICATIONS (SOME OF THE REFERENCES ARE IN BAHASA INDONESIA)

- Water.org website: https://water.org
- Kompas.com (2022) Pentingnya akses air minum dan sanitasi layak untuk warga miskin
- Suarabanyuurip.com (2022) Komida berikan program pembiayaan sanitasi warga miskin
- For more information, please contact Kiki Tazkiyah (ktazkiyah@water.org) or visit https://water.org/contact-us/
PRIVATE SECTOR ENGAGEMENT

SIGNING CEREMONY FOR FINANCING DRINKING WATER INFRASTRUCTURE THROUGH A PUBLIC-PRIVATE PARTNERSHIP.
Access to water, sanitation, and hygiene (WASH) in schools is essential to provide a safe, clean and healthy school environment for children. During the COVID-19 pandemic, adequate WASH services in schools became a basic standard to ensure that children can safely continue their education in school.

However, a national WASH in schools study at the beginning of pandemic showed that 84 percent of schools, or 44 million children, lacked access to one of the crucial water, sanitation, or hygiene elements whilst at school. Furthermore, the study showed that almost 60 percent of schools lacked access to functional handwashing stations with water and soap. Similarly, only 27 percent of madrasahs (Islamic curricula schools) have access to basic WASH facilities. Only 56 percent of madrasahs in Indonesia have access to at least one handwashing facility on the premises.

Since the pandemic started, schools have been proactive in improving WASH conditions. The Government of Indonesia (GoI) mandated that a minimum condition for reopening schools in October 2021 was the availability of basic WASH facilities, especially handwashing. Many schools used their School Operation Funds (Dana Bantuan Sekolah - BOS) to ensure that basic handwashing facilities are in place and hygiene supplies - such as soaps, hand sanitisers, and tissues - are available. However, many schools in Indonesia still do not have sufficient budget to provide and maintain handwashing facilities.

To complement the GoI’s efforts, the Public-Private Partnership for Handwashing With Soaps (PPP-HWWS) initiated the development and distribution of COVID-19 safe school kit to support the safe reopening of schools and madrasahs across eleven provinces in Indonesia.

The initiative was co-ordinated by the Directorate of Environmental Health - Ministry of Health and UNICEF, with involvement from the PPP-HWWS members including GIZ and hygiene companies (such as Wings Group, PZ Cussons, and Unilever). This initiative also involved the line ministries and local governments in selecting and distributing the COVID-19 safe schools kits to those schools in most need.
PRIVATE SECTOR ENGAGEMENT

APPRAOCH

A COVID-19 safe school kit consists of the essential supplies for hygiene and infection, prevention, and control (IPC), such as soap and handwashing liquid, hand sanitisers, and disinfectant solution, sufficient to cover a student’s hygiene needs for at least one month. Depending on the resources available, the a COVID-19 safe school kit might also contain education materials on health and hygiene behaviours as well as on COVID-19 prevention.

The key stages in the initiative include:

- Members of the PPP-HWWS came up with the idea of the COVID-19 safe school kits containing essential hygiene supplies, such as soap, sanitisers, and disinfectant.
- In parallel, hygiene companies (Unilever Indonesia, Wings Group Indonesia, and PZ Cussons Indonesia) pooled a month’s supply of HWWS products to donate to schools.
- Coordination between the line ministries, provincial and district governments, and UNICEF to identify the provinces and schools or madrasahs requiring HWWS support.
- Distribution of COVID-19 safe school kits to all selected locations, with technical and financial support from GIZ, UNICEF, and the private companies.

RESULTS

Where schools lacked the financial resources to procure the IPC supplies that would enable them to implement the COVID-19 protocols, these were provided by the PPP-HWWS coalition, blended financing, the private sector and development partners.

More than 15,000 schools and madrasahs received COVID-19 safe school kits in October 2021 alone, covering more than 1 million children in eleven provinces. These were donated by the companies involved in the PPP-HWWS. These kits have helped to prevent COVID-19 transmission in schools.

Public-Private Partnership for Handwashing with Soap

The national Public Private Partnership for Handwashing with Soap (PPP-HWSS) coalition was formed in 2020 to foster a collaborative partnerships among public and private sector actors to improve access to HWWS facilities and promote handwashing behaviour change across all key settings such as communities, schools, health care facilities and public places.

The PPP-HWWS members include the Ministry of Health, UNICEF, Unilever Indonesia, Wings Group Indonesia, PT Cussons, Reckitt Benckiser, Adaro, Astra International, Johnson & Johnson, Trakindo, USAID, National Board of Zakat (BAZNAS), DAAI TV Network, Lions Club, GIZ, SNV, Save the Children and Mercy Corps.

HWWS ACTIVITY IN SCHOOLS
PRIVATE SECTOR ENGAGEMENT

ENABLING FACTORS

The main enabling factors for this initiative are:

- The multi-stakeholder collaboration platform, PPP-HWWS, promotes action in strengthening handwashing with soap and related hygiene behaviours
- Institutional support from the national government (Ministry of Health and line ministries) and regional governments in selecting the targeted schools in need and distributing the kits accordingly
- Technical support from development partners (UNICEF and GIZ) including in conceptualising and distributing the safe school kits in their respective intervention areas
- Through a blended financing mechanism the private sectors donated their products (such as soap, disinfectants, and hand sanitisers) for the HWWS kits, and shared the distribution costs with GIZ, UNICEF and the government.

REPLICATION AND UP-SCALING

The experience in implementing this initiative provides a valuable model for the provision of WASH services in emergencies, specifically in terms of technical coordination and the mechanism for blended financing for hygiene (HWWS). This is also a good example of a coalition coming together to address a broader societal need (safe resumption of schools) going beyond their usual mandate.

RELEVANT LINKS AND PUBLICATIONS (SOME OF THE REFERENCES ARE IN BAHASA INDONESIA)

- UNICEF (2021) PPP for Handwashing supports one million children with COVID-19 Safe School Kits
- For more information, please contact: jakarta@unicef.org
PRIVATE SECTOR ENGAGEMENT

PARTNERSHIPS WITH THE PRIVATE SECTOR IN WASH SERVICES
MOBILISING PHILANTHROPIC RESOURCES FOR WATER, SANITATION, AND HYGIENE

BACKGROUND

While most Indonesian households have access to improved drinking water (90.7%) and sanitation (86%), there are more than 20 million people that still do not have access to safe drinking water, and about 15 million people who practice open defecation.

Indonesia has set targets to provide 100% access to drinking water, including 30% with piped connections and 90% with access to improved sanitation - including 15% with safely managed sanitation by 2024. Achieving these targets will require support from - and collaboration with - partners, including the private sector at the national and local level.

The private sector is a strategic partner with resources that could make a significant development impact - both through philanthropy and corporate social responsibility (CSR) initiatives. Private companies in industrial districts and cities across Indonesia typically engage in philanthropic activities. However, the involvement of the private sector in local WASH development is still limited, as WASH is not always considered a local development priority.

CSR and philanthropy are often perceived as similar, but a significant difference distinguishes them. Both activities involve donating or providing resources, however, CSR requires more thorough involvement from private sector companies to drive the transformational and societal change, while philanthropy activities are often carried out by simply donating resources to support worthy causes. This story summarises the experience of IUWASH PLUS in building partnerships with the private sector in supporting WASH services for low-income groups through the philanthropic activities.
PRIVATE SECTOR ENGAGEMENT

APPROACH

Through the Philanthropy Project, USAID IUWASH PLUS developed partnerships with the private sector based on common vision, interests, goals, and principles. The project builds these partnerships through the following stages:

1. Developing an initial partnership concept as the modality for approaching potential partners
2. Reaching out to potential partners and exploring opportunities for collaboration.
3. Implementing the partnership with the private sector
4. Monitoring and evaluation to continuously review and improve the partnership with private sector partners
5. Expansion of the partnership through various knowledge management activities intended to promote the partnership, and develop an enabling environment to maintain the sustainability of the partnership

In parallel to the process above, USAID IUWASH PLUS conducted advocacy and capacity building activities for local governments and local CSR forums to develop a shared vision in improving WASH access for low-income groups.

RESULTS

Utilizing private sector funding, USAID IUWASH PLUS facilitated philanthropic activities to improving local WASH access in the following locations:

- **East Java Province:**
  In Surabaya City, the project collaborated with PT Laneige and YPP SCTV Indosiar to implement the Master Meter Programme, which provides drinking water access to low-income communities. In addition, the project collaborated with Kompas Humanitarian Fund Foundation (YDKK) to improve sanitation facilities in Malang City.

STAGES OF BUILDING A PARTNERSHIP WITH THE PRIVATE SECTOR TO IMPROVE WASH ACCESS
PRIVATE SECTOR ENGAGEMENT

ESTABLISHMENT OF FOUR PRIVATE SECTOR PHILANTHROPIST PARTNERS: PT LANEIGE, YPP SCTV INDOSIAR, KOMPAS HUMANITARIAN FUND FOUNDATION (YDKK), AND APERSI

MORE THAN 1 BILLION IDR ALLOCATED TO IMPROVING LOCAL WASH ACCESS FOR LOW-INCOME COMMUNITIES

- Central Java Province:
  In Central Java, the project collaborated with the YDKK to build a master meter system to increase low-income communities access to drinking water services in Surakarta City. In addition, the project built improved toilets in Magelang District.

- Banten Province:
  In collaboration with APERSI, the Indonesian Housing and Settlement Developers, and PAMSIMAS – a national drinking water programme, the philanthropy programme built communal water supply systems (SPAM) and improved toilets for low-income families in Tangerang District.

- North Maluku Province:
  The project collaborated with PT Laneige to construct infiltration ponds for ground water conservation in Ternate.

The immediate impacts from the philanthropy partnership include:

- Four private philanthropists, namely PT Laneige, YPP SCTV Indosiar, Kompas/YDKK Humanitarian Fund Foundation and APERSI were involved in the in four provinces.
- A total of IDR 1,003,625,000 was provided to build safe sanitation facilities for 72 families (510 people) and safe drinking water facilities for 138 families (615 people), as well as the construction of 86 infiltration wells.

- The Regional Office of APERSI in Banten connected 20 households to a communal water supply system and to two individual septic tanks in Tangerang District. Around 100 low-income community members have benefitted from this partnership.

ENABLING FACTORS

Enabling factors that supported the implementation of philanthropy programmes are:

- Strong commitment from the private sector partners to support water and sanitation development
- Strong commitment from the local governments in fulfilling the RPJMN and translating SDGs (Sustainable Development Goal) targets into local policies and actions.

REPLICATION AND UP-SCALING

The philanthropy programme has initiated the development of “Rumah Bersama CSR (Corporate Social Responsibility)” an initiative that provides a platform for private companies and relevant stakeholders to improve access to WASH services by sharing their knowledge, experience, and values.

RELEVANT LINKS AND PUBLICATIONS (SOME OF THE REFERENCES ARE IN BAHASA INDONESIA)

- USAID IUWASH-PLUS: [https://www.iuwashplus.or.id](https://www.iuwashplus.or.id)
- IUWASH-PLUS (2021) Panduan Membangun Kemitraan untuk Peningkatan Akses Air Minum, Sanitasi, dan Higiene
- For more information, please contact Trigeany Linggoatmodjo (linggoatmodjo@usaid.gov) or visit [https://www.iuwashplus.or.id](https://www.iuwashplus.or.id)
PRIVATE SECTOR ENGAGEMENT

MARKET-BASED SANITATION PROGRAMME (PASAR)
ACCELERATION OF SAFE SANITATION ACCESS THROUGH SANITATION BUSINESS MODELS

IMPLEMENTING ORGANISATION(S) & PARTNERS
- USAID IUWASH PLUS
- Bappenas
- Ministry of Home Affairs
- Sanitation entrepreneurs and business development service providers (BDS)
- BUMDes (Village Business Unit or Badan Usaha Milik Desa)
- Local Micro-Finance Institutions (MFIs)
- Local governments

LOCATION
The market-based sanitation programme (PASAR) was implemented in 14 districts/cities as follow: Lumajang, Malang, Probolinggo, Makasar, Barru, Ternate City, Jayapura City, Jayapura, Magelang, Sukoharjo, Tangerang, Bogor, Medan City, and Deli Serdang.

PERIOD OF IMPLEMENTATION
May 2018 – February 2022

BACKGROUND

Despite the considerable progress in increasing access to WASH, Indonesia still faces a significant challenge in achieving safely managed sanitation access to all, particularly at the household level. The Health and Economic Survey in 2020 shows that 6.2% of the population still practice open defecation. In urban areas, 2.4% of households practise open defecation, and 7.6% of urban households use unsafe toilets without latrine facilities.

The GoI estimates that the funding required to provide access to safely managed sanitation for all by 2024 is 140 trillion IDR (Indonesian Rupiah) or about 10.1 billion USD (United States Dollar). The public funding currently available is 80.8 trillion IDR, leaving a huge gap of about 60 trillion IDR (about 3.1 billion USD) for sanitation. An innovative financing approach is required to cover the enormous financial gap for safely managed sanitation services, which involves collaboration between various parties, including the community and households.

An IUWASH study (2017) showed that the potential market share for toilets and impermeable septic tanks was 23% of urban households, 64% of households for impermeable septic tanks, and 98.5% for scheduled desludging. Thus there are opportunities to improve safely managed sanitation by promoting local entrepreneurship through market-based sanitation.

Seizing the opportunity, USAID IUWASH PLUS initiated the Market-based Sanitation Programme (PASAR, which means market in Bahasa Indonesia). PASAR aims to accelerate the improvement in sanitation access by encouraging community investment through market-based sanitation. The objective will be achieved through enhancing collaboration between the government and the private sectors (sanitation entrepreneurs, financial service providers, and entrepreneurship mentoring providers/business development services) to improve access to safe sanitation.
PRIVATE SECTOR ENGAGEMENT

POTENTIAL MARKET FOR SANITATION

APPROACH

PASAR focuses on creating a safe sanitation market that generates the community demand and ensures supply can meet the demand. To do so, PASAR facilitates the capacity strengthening of the local sanitation entrepreneurs.

The programme collaborated with local governments to map the sanitation facility ownership in their authority area, which became the basis for determining the potential sanitation market and sanitation grant distribution area. Settlement areas with low sanitation facility ownership and extreme poverty rates will be prioritised as the target area for sanitation marketing grants.

To facilitate the low-income households in owning safe sanitation facilities, PASAR collaborated with local MFIs to provide loans for safe latrine construction. The MFIs were assisted to develop affordable sanitation micro-credit schemes and promoting and marketing their sanitation financing products to low-income communities.

The market-based sanitation approach was implemented through six stages as follows:

1. Identify priority locations based on a mapping of sanitation ownership and poverty rates
2. Data collection on the available sanitation business networks in priority locations
3. Determine the target market and the type of sanitation entrepreneur using sanitation market simulation
4. Develop a capacity building plan for selected business models
5. Involve business development services (BDS) to support local sanitation entrepreneurs
6. Monitor and evaluate progress

Sanitation Business Models

At least seven sanitation business models were developed through the market-based facilitation from the programme:

1. Sanitation entrepreneurs directly sell their products and services to households
2. Sanitation entrepreneurs sell their products and services through sanitation cadres and hire artisans for construction services
3. Cadres handle the marketing and promotions and collaborate with entrepreneurs, who build the sanitation facilities
4. Sanitation waste bank, in which waste deposited by the customer will be weighed and valued with a sum of money and the payment used to build sanitation facilities
5. Cadres collaborate with rotating savings and credit association (Arisan) to finance the construction of sanitation facilities for the Arisan members
6. Village Business Unit or BUMDes (Badan Usaha Milik Desa) market sanitation products and collaborate with artisans who construct sanitation facility
7. Financial institutions (banks/micro-finance) work together with cadres for marketing and with artisans to construct sanitation facilities
PRIVATE SECTOR ENGAGEMENT

GENERATED 100+
LOCAL SANITATION ENTREPRENEURS IN
14 CITIES/DISTRICTS

FACILITATED 10 SANITATION BUSINESS
DEVELOPMENT SERVICES (BDS) PROVIDERS
SOLD 5,600 TOILETS AND/OR
IMPERMEABLE SEPTIC TANKS

RESULTS

The immediate outputs of the PASAR programme are:

1. Assistance to more than 100 sanitation entrepreneurs
2. Strengthened the capacity of ten BDS to support sanitation business
3. A total of 5,654 toilets or impermeable septic tanks were sold, and 5,654 households (which is still increasing following project completion) have access to improved sanitation
4. Improving the rural economy through Village Business Units in sanitation businesses.

ENABLING FACTORS

- National regulation and target on safe sanitation enables the project to grab local government support
- Development of key messages for marketing and promoting safely managed sanitation specifically adjusted for diverse targets groups (local government, MFI, sanitation entrepreneurs, and community), which helped to improve the demand and participation
- Financing through microcredit supports market-based sanitation by improving the affordability of sanitation facilities to low-income groups.

REPLICATION AND UP-SCALING

To ensure sustainability, the following steps have been taken:

- Networks have been developed among entrepreneurs, between entrepreneurs and BDS, and between the government, entrepreneurs and BDS
- Collaboration initiated between entrepreneurs and community groups and cadres that promote sanitation
- Collaboration with the Ministry of Home Affairs to develop guidelines on segmentation for optimizing financing for achieving local wastewater MSS
- Collaboration with the Financial Services Authority (OJK) and Ministry of Finance to strengthen microfinance sources
- Conducting national dialogues on sanitation business, bringing together sanitation entrepreneurs, BDS, MFIs and the government.

RELEVANT LINKS AND PUBLICATIONS (SOME OF THE REFERENCES ARE IN BAHASA INDONESIA)

- IUWASH PLUS (2021) A Guideline for Smart Subsidy in Implementing Market-Based Sanitation
- IUWASH PLUS (2021) Sanitasi Berbasis Pasar mendukung Percepatan Peningkatan Akses Sanitasi
- For more information, contact: Trigeany Linggoatmodjo (tlinggoatmodjo@usaid.gov) or visit https://www.iuwashplus.or.id
PRIVATE SECTOR ENGAGEMENT

INTEGRATING WASH AND NUTRITION INTERVENTIONS
MOBILISING CSR RESOURCES FOR RURAL WASH AND NUTRITION DEVELOPMENT

IMPLEMENTING ORGANISATION(S) & PARTNERS
- Yayasan Pembangunan Citra Insan Indonesia (YPCII)
- PT Tirta Investama – Subang Plant
- KPSPAMS – the community water and sanitation facility operator group in the village
- Village Government, Primary Healthcare Facilities (Puskesmas), Health Cadres, Community Water and Sanitation Facility Operator (KPSPAMS) and NGO (non-governmental organisations) in Subang Districts

LOCATION
Three villages (Darmaga, Pasanggrahan, and Sindangsari) located around the Mineral Water Company Plant in Subang District, West Java Province

PERIOD OF IMPLEMENTATION
July 2017 to December 2021

BACKGROUND
The private sector is a strategic partner with resources that could make a significant development impact. In local Water, Sanitation, and Hygiene (WASH) development in Indonesia, there is the potential to mobilise private sector resources through Corporate Social Responsibility (CSR) and philanthropy activities. In terms of regulation, the Government of Indonesia (GoI) requires a company with water intake permit (SIPA – Surat Izin Pengambilan Air) to allocate 15% of their groundwater debit limit to meet the daily basic water needs of local communities in the surrounding of the water sources.

Access to clean and safe water remains a challenge in Subang District of West Java Province. Further, even though local leaders have declared it as an “Open Defecation Free” District, hygiene and sanitation facilities were still in need of improvement for proper use. At the community and household level, the lack of hygiene behaviour practices and waste management (e.g., dispose garbage irresponsibly, trash burning) could worsen public health.

WASH problems can still be found in the villages around the industrial plants in Subang, including the Tirta Investama (Aqua), which produces packaged mineral water. In addition, infants and children in the villages around the plant experience nutrition issues. The low access to proper drinking water and poor environmental sanitation will increase the risks of infectious diseases, especially diarrhoea, worms, and malaria to those children. The infectious diseases correlate with chronic malnutrition, particularly in the first 1000 days of life, that will hamper children’s growth and development and eventually lead to stunting.

With industries around those villages, stakeholders in Subang District can mobilise resources to improve the health, social, and economic welfare of the local community, including infants and children. Responding to the needs, Yayasan Pembangunan Citra Insan Indonesia (YPCII) collaborated with Tirta Investama (Aqua-Danone) Plant, the village governments, and local NGOs in Subang to develop an integrated WASH-Nutrition programme.
PRIVATE SECTOR ENGAGEMENT

APPROACH

The programme has facilitated improved access to drinking water and sanitation, household waste management, and Infant and Young Child Nutrition (IYCN or PMBA - Pemberian Makanan Bayi dan Anak) practices to the local communities in three villages (Darmaga, Pasanggrahan, and Sindangsari villages) located around the plant.

The programme applies community empowerment principles, in which the community was facilitated to contribute their own resources to improve the WASH and nutrition situation. YPCII facilitated the empowerment process, while Aqua supported the funding of drinking water facilities construction and community training. The community contributed to in-kind and in-cash resources throughout the construction process.

DRINKING WATER FACILITY DEVELOPMENT

The construction of drinking water facilities was initiated through the participatory needs assessment with the village community, to ensure the programme intervention would meet beneficiaries’ needs. The programme then facilitated the establishment of the community-based drinking water and sanitation facility operator groups or KPSPAMS, the village technical team to lead the construction of drinking water facilities in each village and carry out the operation and maintenance (O&M) of the activities. The construction work was mostly carried out by the community and KPSPAMS members, while experts provided on-the-job training for KSPAMS members for skilled construction work. Thus, the village KPSPAMSs acquire the capacity to carry out the O&M of the drinking water facilities.

After the construction was completed, local water users are required to pay a monthly fee based on their water consumption, the amount of which is mutually agreed by the user and the village KPSPAMS. Each village government enacted the KSPAMS as the village business unit through an official Village Decree, so that the unit can be eligible for charging fees from village water users and receive support from the village fund in managing the facilities.

INFANT AND YOUNG CHILD NUTRITION

To promote hygiene behaviour change related to WASH and nutrition intake, the project collaborated with various actors in the villages, including the village government, health cadres (Posyandu and PKK), youth forum (Karang Taruna), and the local leaders. The religious and community leaders were actively involved in the promotion and education activities related to IYCN, including in the nutrition counselling, developing menu for child feeding activities, cooking class, and waste management.

The programme also carried out various capacity building activities related to nutrition, such as:

- Information, Education, and Communication (IEC) on IYCN or PMBA involving health cadres and mother with and young children through the local Posyandu (Community-based health services)
- Training and demonstration class on preparing balanced-nutrition menus and weaning food for women and mother with infants and young children
- Domestic waste management, through the “My Garbage is My Responsibility” approach
- Home garden use for nutritional plant growing.

RESULTS

The integration of WASH and Nutrition programmes has contributed to:

- Access to increased quality and quantity of water and improved sanitation facilities for at least 9,300 beneficiaries from the three villages.
- Improved performance of KPSPAMS at the village level, by increasing the technical and management capacity of the team to operate and maintain the facilities.
- Strengthen cadres’ capacity in promotion and education skills related to sanitation and nutrition issues, including in designing community mobilisation activities.
- The improvement of drinking water facilities reduced the electricity bill by up to 20% (from IDR (Indonesian Rupiah) 1,000,000 to IDR 800,000), as the new water reservoir means the community no longer need to use the electric pump.
PRIVATE SECTOR ENGAGEMENT

ENABLING FACTORS

The project implementation was strengthened by the following enabling factors:

- Co-development of an official agreement between the project implementer and beneficiaries that explicitly state the benefits, collaboration schemes and role and responsibilities of each party, in which the community is expected to take a pro-active and leading role.
- Involvement of key community leaders and formal institutions at the village level, including BUMDes, Karang Taruna, community and religious leaders.
- Active commitment of the village leaders to encourage synergy and collaboration between key community groups.

REPLICATION AND UP-SCALING

There are plans to replicate this initiative to other nearby villages starting in April 2022.

RELEVANT LINKS AND PUBLICATIONS (SOME OF THE REFERENCES ARE IN BAHASA INDONESIA)

- For more information, please visit www.ypcii.org or email to admin@ypcii.org
**PRIVATE SECTOR ENGAGEMENT**

**PUBLIC-PRIVATE PARTNERSHIPS FOR DRINKING WATER SUPPLY SYSTEM**  
WATER SUPPLY FOR 5 DISTRICTS/CITIES FROM SPAM UMBULAN

**IMPLEMENTING ORGANISATION(S) & PARTNERS**
- Ministry of Public Works and Housing
- Ministry of Finance
- Provincial government of East Java Province
- Local governments in Pasuruan City, Pasuruan District, Sidoarjo, Surabaya, and Gresik of East Java Province
- East Java Water Utility Association (PDAB)
- Water utility (PDAM) in Pasuruan City, Pasuruan District, Sidoarjo, Surabaya, and Gresik
- Private sector (Sarana Multi Infrastruktur, Penjaminan Infrastruktur Indonesia, Meta Adhya Tirta Umbulan, and Bangun Cipta Kontraktor)

**LOCATION**
Five districts/cities in East Java Provinces: Surabaya, Pasuruan District, Pasuruan City, Sidoarjo, and Gresik

**PERIOD OF IMPLEMENTATION**
2016 – 2021 (construction), up to 2045 (operation and transfer)

**BACKGROUND**

Limited public funding is one major challenge to scale up household water connections in Indonesia for improving safe drinking water access. The financial gap to provide safe drinking water access for all by 2024 is enormous, with a shortfall of around 3.1 billion USD (United States Dollars) or 67.4 trillion IDR (Indonesian Rupiah). The lack of public funds means more innovative investment is needed to finance the drinking water sector.

To complement the public financing of drinking water supply, the Government of Indonesia (GoI) is mobilising large-scale private investment through Public-Private Partnerships (PPP). In 2015, the GoI issued a regulation on The Cooperation of the Government and Business Entity (Kerjasama Pemerintah dan Badan Usaha - KPBU) to finance large infrastructure projects, including drinking water and sanitation infrastructures.

Umbulan is the largest spring in Java Island, located in Pasuruan District, East Java. The raw water flow capacity of Umbulan is reaching up to 5,000 litre/second, but the local water utilities had not fully utilised the springs potential. Only two water utilities in Pasuruan districts and Surabaya cities utilised Umbulan raw water, with the flowing rate of 173 l/s and 100 l/s of respectively. The local community used a small portion of Umbulan water for domestic and irrigation, but most of raw water from Umbulan Spring went straight to the sea and had not been optimally used.

At the same time, development and urbanization increases the need for reliable drinking water supply in East Java Province. There is an urgency to utilise the untapped potential of Umbulan Spring as a regional raw water source for Pasuruan District and City and their neighbouring regions in Surabaya, Sidoarjo, and Gresik.

In 2016, GoI initiated the Umbulan Regional Drinking Water Supply System (SPAM Umbulan) project, the first in Indonesia to be financed through a PPP.
PRIVATE SECTOR ENGAGEMENT

scheme, with a total funding of 2.05 trillion IDR or about 139 million USD.

The SPAM Umbulan project showcases PPP schemes in infrastructure, and in 2017 was enacted as one of the National Strategic Projects (Proyek Strategis Nasional). The Umbulan SPAM facilities construction was completed in 2021 and is currently operational.

APPROACH

The SPAM Umbulan project involves the cooperation between the national government of Indonesia, provincial governments of East Java Province, and district governments and water utilities in the five districts/cities of East Java with the private sector. The PPP scheme was financed through funding from the national government, provincial government, and private funds.

Umbulan drinking water supply system (SPAM Umbulan) is designed with a 4,000 l/s water flow capacity. After construction, the raw water from Umbulan SPAM facilities will be distributed to supply the water utilities in Surabaya (1,000 l/s), Pasuruan District (410 l/s), Pasuruan City (110 l/s), Sidoarjo (1,200 l/s), and Gresik (1,000 l/s). Such capacity will be realised by constructing the SPAM Umbulan facilities, including a production plant at the Umbulan Spring, the 93-kilometers-long transmission network system with 16 offtake systems from Umbulan Spring to Gresik District.

In the project, the provincial government cooperated with local governments to develop the Build, Operate, Transfer (BOT) agreement with two private investors and contractors: Meta Adhya Tirta Umbulan (MATU) and Bangun Cipta Contractor (BCC). After 25 years of operation, the private investors must return all those assets to the East Java Provincial Government.

MATU and BCC are responsible for financing, planning, constructing, and managing the SPAM Umbulan facility, including the production plant, the 97 km transmission pipe, and the 16 offtake systems. To minimise risk, the national government provides bank guarantees for the investors through two state-owned infrastructure financing companies, Sarana Multi Infrastruktur (SMI) and Penjaminan Infrastruktur Indonesia (PII).

Given the extremely high investment cost, the water utility must charge a higher tariff to recover costs and ensure project feasibility. The national government provides the Viability Gap Fund (VGF) of up to 49% of the water tariff to subsidise the district/cities water utility. The district/city governments cooperate with the provincial water utility association (PDAB) to supervise and ensure the water utility (PDAM) in their region charge affordable water tariffs and reduce the VGF subsidy. To speed up the process, the national government through the Ministry of Public Works and Housing provide incentives to the water utility for improved operational performance.
In 2021, President Joko Widodo officially commissioned the SPAM Umbulan facility. SPAM Umbulan is now one of Indonesia’s biggest regional drinking water supply systems. SPAM Umbulan has a capacity of 4,000 litres/second, but on commissioning, the plant had only utilised 900 litres/second. Under the leadership of Provincial Government of East Java and support from the Ministry of Public Works and Housing, SPAM Umbulan will increase its operation to utilise its optimum flow rate capacity.

Currently, SPAM Umbulan provides drinking water to about 1.6 million inhabitants of Pasuruan District, Pasuruan City, Sidoarjo, Surabaya, and Gresik districts, channelled through 320,000 piped connections. The project has pioneered Public-Private Partnerships for regional drinking water supply infrastructure in Indonesia.

**Enabling Factors**

- The availability of legal basis and procedural mechanism for PPP infrastructure, provided by the Presidential Regulation 38/2015.
- Strong national, sub-national, and local support for the project, including enacting the SPAM Umbulan project as a national strategic project.
- Technical and financial support from the national government to strengthen the local government and water utilities, which resulted in the feasibility of the project.
- The BOT scheme is attractive for local government and private sector.

**Replication and Up-scaling**

The SPAM Umbulan is one of Indonesia’s best practices on regional drinking water supply development and become a showcase for implementing the Public-Private Partnerships for water infrastructure in Indonesia. The scheme becomes a benchmark for the development of new drinking water supply system through the PPP schemes.
MONITORING

DRINKING WATER QUALITY MEASUREMENT PREPARATION.
**THE FIRST NATIONAL SURVEY ON HOUSEHOLD DRINKING WATER QUALITY IN INDONESIA**

**ESTABLISHING SDG-6 BASELINE FOR SAFELY MANAGED DRINKING WATER**

### IMPLEMENTING ORGANISATION(S) & PARTNERS

- Centre of Community Health Efforts, Research & Development Authority - Ministry of Health
- Directorate of Environmental Health – Ministry of Health
- Ministry of National Development Planning/ National Planning Agency (Bappenas)
- WHO
- UNICEF
- WHO/UNICEF Joint Monitoring Programme (JMP)

### LOCATION

The study was conducted in all 34 provinces of Indonesia

### PERIOD OF IMPLEMENTATION

January – December 2020

### BACKGROUND

About 90% of households in Indonesia have access to improved drinking water sources - a notable achievement for an island country with 270 million people. However, high accessibility does not always guarantee that households enjoy safe drinking water services. Providing safe drinking water for all is critical to avail the expected health benefits from WASH services delivery. Primary challenges to accelerating safely-managed drinking water provision in Indonesia lie in the lack of reliable water quality data at the national level and the absence of drinking water quality monitoring systems at the sub-national level.

At the national level, the limited reliability of data means that government and service providers face significant challenges in formulating appropriate interventions to ensure safe drinking water services. Previous drinking water quality surveys were conducted through rapid assessment in a few districts and provinces, which resulted in limited representativeness of water quality data for national level planning and monitoring.

Sustainable Development Goal (SDG) Target 6.1 requires that countries monitor the proportion of their population using safely managed drinking water services. In 2020, Indonesia initiated a national assessment of household drinking water quality - the first-ever national drinking water quality survey in Indonesia. The national survey (Survey Kualitas Air Minum Rumah Tangga or SKAM RT) is a critical initiative to establish an SDG baseline in Indonesia and inform plans to accelerate safely managed drinking water access.

**THE WATER QUALITY SURVEY PROCESS**
Key findings of the National Survey on Household Drinking Water Quality 2020

The study found that almost 70% of household drinking water sources showed signs of faecal contamination, which contributes to the spread of diarrhoeal disease, one of leading causes of under-five mortality in Indonesia. This resulted in 12% safely managed drinking water coverage, which is the first national safely managed drinking water baseline in Indonesia. Among drinking water sources tested, piped water showed better water quality, although the coverage is still limited to 13%.

SAFELY MANAGED DRINKING WATER SERVICE LADDER
(METADATA SDG NATIONAL INDONESIA)

SAFELY MANAGED DRINKING WATER ROADMAP

APPROACH

The national survey utilised the census block sample provided by the National Statistic Bureau (Badan Pusat Statistik – BPS), with a total sample of 25,000 households across all provinces in Indonesia.

RESULTS

The national survey has resulted in informing policy decisions as follows:

- The key findings have been used in high-level advocacy for mainstreaming the safely managed drinking water agenda at the national level, including the endorsement and implementation of the Safely Managed Drinking Water Roadmap as well as to strengthen the water quality monitoring system (Pengawasan Kualitas Air Minum – PKAM)
- The survey method has become the basis for developing an evidence-based surveillance system of drinking water quality at the household level
- The data is being used by local governments as the baseline for planning, delivering, and monitoring safely managed drinking water services at the sub-national level.
- The survey results are being utilised as the basis for awareness raising and campaigns on safe water and sanitation, including the first-ever Indonesia safely managed sanitation campaign, launched by UNICEF in February 2022. Generating solid evidence base was critical for the success of this campaign. In addition, findings have informed the development and dissemination of Information, Education and Communication (IEC) materials to encourage households to adopt safe behaviours on household water treatment and safe handling and storage of water.
ENABLING FACTORS

Implementing the drinking water quality survey in thousands of households across Indonesia’s islands was challenging. However, the national survey was successfully conducted due to:

- Strong collaboration between line ministries and partners to prepare and implement the survey, including in the technical preparation and budgeting phase
- Field support from committed and well-trained sanitarians in collecting drinking water quality data.

REPLICATION AND UP-SCALING

Based on the SKAM-RT tools and models, the Ministry of Health and Bappenas are planning to conduct a national water quality survey every 5 years, as the surveillance system for drinking water quality at the household level in all provinces in Indonesia.

The Drinking Water Surveillance in five provinces in 2021 had adopted the SKAM-RT sampling and assessment method. The assessments will help track progress in access to safely managed water services, while at the same time also help inform priority investments to accelerate access.

RELEVANT LINKS AND PUBLICATIONS (SOME OF THE REFERENCES ARE IN BAHASA INDONESIA)

- Diseminasi Hasil Studi Kualitas Air Minum Rumah Tangga Tahun 2020 https://www.youtube.com/watch?v=XRf6IV5
- For more information, please email to jakarta@unicef.org
ON-SITE SANITATION INSPECTION TOOL
ACCELERATING SAFELY MANAGED SANITATION THROUGH ON-SITE MONITORING AT THE HOUSEHOLD LEVEL

IMPLEMENTING ORGANISATION(S) & PARTNERS

- UNICEF
- Ministry of Health
- Ministry of Public Works and Housing
- Health Office - Mataram City
- Health Office - Sumbawa Barat
- University of Indonesia
- Mitra Samya (local NGO)

LOCATION

- West Nusa Tenggara Province: Mataram City and West Sumbawa District
- East Nusa Tenggara Province: Kupang City

PERIOD OF IMPLEMENTATION

November 2021 to May 2022

BACKGROUND

About 71% of Indonesia’s population uses on-site sanitation. Despite progress in improving access to safely managed sanitation and reducing open defecation, poor quality sanitation facilities remain a challenge, posing a critical risk of exposure to faecal contamination. A large majority of what are considered to be ‘septic tanks’ are, in reality, open pits leaching directly into the ground and polluting groundwater and the environment.

Awareness of the adverse health impacts as well as the preventive actions to improve unsafe on-site sanitation practices are lacking, mainly due to the lack of rigorous data. There is a critical data gap regarding the quality, safety, and functionality of on-site sanitation facilities in Indonesia, particularly at the community and regional government level.

A major contributor to this gap is the absence of adequate monitoring tools to capture data on the sanitation conditions on the ground, particularly at the household level. Reliable on-site sanitation data is required as the basis for developing sound plans and policy on safely managed sanitation. Moreover, the data will help track progress on safely managed sanitation delivery at the national and local levels.

Reflecting on the urgency of improving on-site sanitation data in Indonesia, UNICEF in collaboration with Ministry of Health, Ministry of Public Works and Housing, and the University of Indonesia, have developed an on-site sanitation inspection tool to help local sanitarians monitor onsite sanitation facilities and support household action. The tool was piloted with over 500 households in three districts of West and East Nusa Tenggara Provinces, with the support from the local government and local NGOs.

HOUSEHOLD WASH FACILITIES
MONITORING

The on-site sanitation monitoring tool provides rigorous data for well-informed and evidence-based WASH planning. The tool was developed through rigorous consultative processes with line ministries and development partners, including academic partners. The major activities in piloting the on-site sanitation monitoring tools were as follows:

1. Capacity building of sanitarians for the inspection implementation via online and offline trainings between October and November 2021.
2. Production of training modules and instruction videos prior to training, for self-learning by sanitarians on the on-site inspection sanitation tool.
3. On-site sanitation pilot surveys in Kupang City of East Nusa Tenggara, and Mataram City and West Sumbawa District of West Nusa Tenggara. In November 2021, The trained sanitarians visited each household to observe and interview the respondent.
4. Analysis of the field survey data provided insights regarding the feasibility of the tool to support on-site sanitation in Indonesia. The initial results were disseminated to the stakeholders in Mataram from 6 to 7 December 2021.
5. Development of scaling-up strategies with the Ministry of Health, Ministry of Public Works and WHO by disseminating the initial results, lessons learned, and jointly exploring the possibility of integrating the tool into existing WASH data collection mechanisms.

APPROACH

The on-site sanitation monitoring tool provides rigorous data for well-informed and evidence-based WASH planning. The tool was developed through rigorous consultative processes with line ministries and development partners, including academic partners. The major activities in piloting the on-site sanitation monitoring tools were as follow:

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5. Development of scaling-up strategies with the Ministry of Health, Ministry of Public Works and WHO by disseminating the initial results, lessons learned, and jointly exploring the possibility of integrating the tool into existing WASH data collection mechanisms.
MONITORING

RESULTS

Capacity building on the on-site sanitation inspection tool has enhanced the knowledge and understanding of sanitarians enabling them to play a vital role in Indonesia’s journey from open defecation to safely managed sanitation services. The expected outcomes include a cleaner environment, reduced groundwater contamination and reduction of water-borne disease transmission such as diarrhoea, typhoid, and cholera.

The data generated from this tool will enable the local government to prioritise safe sanitation in their planning and budget through an evidence-based decision-making. For example, the pilot survey of over 640 households in West and East Nusa Tenggara revealed that most septic tanks (83%) do not meet government standards due to various challenges in safe septic tank provision. Moreover, a majority of on-site sanitation facilities (55%) appeared to be “uncontained” (i.e. leaching from bottom), releasing human waste to environment and groundwater possibly in an unsafe manner. Given high levels of fecal contamination observed in drinking water source in Indonesia, there is an urgent need to improve on-site sanitation facilities for public health. The local government in the pilot area are now formulating interventions to address the challenges faced by their community to meet the minimum sanitation standards.

The hands-on tools and materials will strengthen the capacity of local environmental health officers (sanitarians) in recognizing the sanitation needs of the local community in order to improve on-site sanitation conditions in communities.

ENABLING FACTORS

The success of piloting the monitoring tool was achieved with contribution from many factors, including

- Motivated sanitarians that are willing to explore and improve the monitoring tool and carry out the survey thoroughly
- Support from and collaboration with the Ministry of Health and other development partners at the national and regional level throughout the piloting process.

REPLICATION AND UP-SCALING

UNICEF, Ministry of Health, and the other relevant parties are currently discussing the possibility of replicating and upscaling the on-site sanitation monitoring tools. Options considered include:

- Adjustment and improvement of the monitoring tool and training materials to support nationwide replication.
- A cloud-based survey app that is integrated with the government database to improve the data management process.
- Integrating the on-site sanitation tool into the national household drinking water quality survey programme.

RELEVANT LINKS AND PUBLICATIONS (SOME OF THE REFERENCES ARE IN BAHASA INDONESIA)

- For more information, please contact: jakarta@unicef.org
MANAGEMENT INFORMATION SYSTEM FOR WASH PROGRAMME MONITORING
A WEB-BASED MONITORING AND EVALUATION SYSTEM IN THE PAMSIMAS PROJECT

IMPLEMENTING ORGANISATION(S) & PARTNERS
• CPMU PAMSIMAS – Ministry of Public Works and Housing (Kementerian PUPR)
• World Bank and the Australian Department of Foreign Aid and Trade (DFAT)

LOCATION
PAMSIMAS is being implemented in 35,900 villages, 408 districts, in 33 provinces

PERIOD OF IMPLEMENTATION
Present

BACKGROUND
The Community-Based Water Supply and Sanitation Programme, or PAMSIMAS, is a national rural water and sanitation programme implemented since 2008 using a community-based approach in more than 30,000 villages across Indonesia.

The massive scale of implementation requires involvement from all actors, from the national level to provincial, district/cities, villages, and local water sanitation facility operator (KPSPAMS). This multi-layered implementation can be challenging as it involves actors with diverse backgrounds, and aligning expectations can be difficult.

Good quality data is crucial to driving sound decision-making and actions to formulate water and sanitation interventions within PAMSIMAS. However, monitoring, evaluating, and reporting at this scale is costly and time-consuming. A monitoring system is required based on information technology, to ensure monitoring and reporting can be implemented in an effective and efficient manner.

In response, the PAMSIMAS Central Project Management Unit (CPMU) has been developing and mainstreaming the use of a web-based management information system (MIS) as the means to improve the monitoring, reporting, and decision-making process in PAMSIMAS. The MIS using information technology is one of the keys to achieving the success of the PAMSIMAS project, with the web-based system continuously being updated and improved.

APPROACH
The Pamsimas Management Information System (MIS, https://pamsimas.pu.go.id/data-aplikasi/) is designed to unify and implement the PAMSIMAS Programme in the field through a data management mechanism that is integrated, open, and accessible to anyone anywhere. PAMSIMAS stakeholders from the national to local level are obliged to use the web-based system to update their activity progress and report their implementation achievements. The MIS is managed by the National Management Consultant under the CPMU.

The MIS compiles and analyses the data submitted based on various categories, including location, time, and results, including which projects are working and halted. The CPMU and other related stakeholders and decision-
makers at different levels can use the results and output from the MIS to monitor, evaluate, and report Pamsimas’ activities.

The MIS is divided into several sub-interfaces, namely: Executive Information System, integrated MIS reporting, data visualisation in a map, contracts, and internal applications for PAMSIMAS stakeholders.

The web-based integrated MIS provides data and applications that make it easier to monitor programmes from the different regions in Indonesia in real-time. The data are structured according to the PAMSIMAS major components: the key performance indicator; financing and procurement; community empowerment; village institutional development; local government institutional development; clean and healthy behaviour change (PHBS Programme); water and sanitation facilities; and monitoring and evaluation.

For transparency, MIS contains the contract documents of the parties involved in the implementation programme, including their rights and obligations in the projects. The webpage provides the immediate response services, connected to the PAMSIMAS mobile app, to stakeholders that need technical assistance. The webpage also provides publications on regulations, guidelines, technical instructions, standard operating procedures (SOPs), and programme socialization materials. All of which can be accessed and downloaded by the project stakeholders.
PAMSIMAS Programme

PAMSIMAS I (2008-2012) and PAMSIMAS II (2013-2015) have succeeded in increasing access to safe drinking water for 10.4 million people and access to adequate sanitation for 10.4 million people in more than 12,000 villages/municipals spreads in 233 districts/cities in 32 provinces in Indonesia. There are approximately 35,900 PAMSIMAS participating villages across 408 cities/districts throughout 33 provinces in Indonesia. The PAMSIMAS project is implemented by the Directorate General of Cipta Karya – Ministry of Public Works and Housing.

RESULTS

PAMSIMAS has adopted MIS, which continues to evolve and develop based on the programme management needs. The implementation of MIS fosters transparency and accountability, two key factors to promote collaboration.

The implementation of MIS enables

- Fast and reliable monitoring, reporting, and supervision process
- Systemic information management for evidence-based decision-making that can be utilised according to the specific needs
- Dissemination and accessibility of all capacity building materials to stakeholders
- Paperless monitoring and evaluation process.

ENABLING FACTORS

- Information technology infrastructure and human resources that extend to the village level
- User-friendly interface and applications for monitoring and reporting for all stakeholders, including the field facilitators
- Provision of the monitoring and reporting infrastructures, such as the required gadgets and apps, as well as guidelines for the field stakeholders.

REPLICATION AND UP-SCALING

PAMSIMAS continues to use and develop the MIS according to the needs of the programme.

RELEVANT LINKS AND PUBLICATIONS (SOME OF THE REFERENCES ARE IN BAHASA INDONESIA)

- Pamsimas website: https://pamsimas.pu.go.id/data-aplikasi/
- For more information, visit https://pamsimas.pu.go.id/profil/kontak-cpmu/ or email to cpmu_pamsimas@yahoo.co.id
APP-BASED MONITORING FOR BETTER WASH PLANNING AND INTERVENTIONS
WASH DATA UPDATING USING OPEN-SOURCE SURVEY APPS IN ENDE DISTRICT

IMPLEMENTING ORGANISATION(S) & PARTNERS
- Wahana Visi Indonesia (WVI)
- District WASH Working Group (Pokja AMPL) and Bappeda (Local Planning Office) Ende
- Village governments in Ende

LOCATION
Ende District – East Nusa Tenggara (NTT - Nusa Tenggara Timur) Province

PERIOD OF IMPLEMENTATION
July 2021 – Sept 2021

BACKGROUND

Good data is essential for robust planning and decision-making. However, limited WASH data availability is a major problem that often hinders the planning and actions in Indonesia.

To improve the sub-national WASH sectoral planning, the local governments in Indonesia are required to develop a WASH Local Action Plan or RAD-AMPL (Rencana Aksi Daerah - Air Minum dan Penyehatan Lingkungan). RAD AMPL is a district/city level action plan for a five year period. The RAD AMPL details the target implementation area, development strategy (such as expansion, development, or maintenance), and drinking water and sanitation facilities budget.

In 2021, Ende District was developing a district WASH Action Plan (RAD AMPL). However, the availability of WASH data limited the RAD AMPL development process. Ende District is located in the volcanic trails on Nusa Tenggara Island. The volcanic geographical characteristics make the household and village-level survey for updating WASH data for RAD AMPL particularly challenging. The WASH data from 930 villages in Ende required updating, and the manual survey will be costly and take a lot of time to survey and analyse. In addition, various local government offices often have overlapping data sets that hinders decision-making process due to competing data for similar data indicators.

Responding to the urgent needs for updating their WASH data, the Government of Ende District, through the WASH Working Group (Pokja AMPL), Bappeda (Local Planning Office), and the village governments, collaborated with WVI (Wahana Visi Indonesia) to implement an app-based survey tool that can facilitate accurate data collection and analysis of WASH data from the 930 villages within a short period.
The project team utilised the open-source survey application called Kobo Toolbox (https://www.kobotoolbox.org) that is free and can be tailored based on the survey needs.

WVI provided technical and financial support for building the capacity of stakeholders to utilise the Kobo Toolbox, enumerators, and logistics, including transportation and internet packages required for the village survey. The stakeholders from district to village level facilitated the data collection process at the household level. The survey was conducted by the trained enumerators between July to September 2021.
MONITORING

RESULTS

The results from the app-based WASH survey in Ende are as follows:

- With the updated WASH data from app-based survey, Ende Government finalised their RAD-AMPL document in November 2021 with more accurate and reliable WASH data.
- The consolidated WASH data from this survey has become a baseline that will be updated regularly by Ende Government.
- Bappeda is the leading Government authority for development planning, and the coordinator of WASH Working Group in Ende. It will continue to manage the updating of the WASH data and use the consolidated data as a cross-sectoral data reference by different local government offices in Ende district.

ENABLING FACTORS

- The app-based survey is much cheaper and faster to conduct than the manual survey, as it eliminates the need for manual data entry. The data analysis can be performed and updated quickly using the app system.
- Although the Kobo toolbox is a web-based system, it can also be used offline. The data can be uploaded once the enumerator has access to an internet connection. This flexibility is very useful as not all regions in Ende have a good internet connection.
- Support from the local government to implement the survey tool.

REPLICATION AND UP-SCALING

- The District Planning Office in Ende has allocated the budget for regular WASH monitoring using the Kobo app-based survey tool. The WASH survey will be carried out annually.
- The app-based survey tool is being replicated in other WVI sites, including Sekadau, Sintang, and Melawi districts in West Kalimantan Provinces, and Nagekeo and Ngada districts in NTT Province.

RELEVANT LINKS AND PUBLICATIONS (SOME OF THE REFERENCES ARE IN BAHASA INDONESIA)

- KoBoToolbox | Data Collection Tools for Challenging Environments
- For more information, please contact Robert Nufninu (robert.nufninu@wvi.org) or email to comms_indonesia@wvi.or.id
THE DETAILS OF THE CASE STUDIES IN THIS COMPENDIUM WERE PROVIDED BY THE FOLLOWING KEY PARTNERS: