



HAND HYGIENE MARKET ASSESSMENT IN INDONESIA



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HAND HYGIENE MARKET ASSESSMENT IN INDONESIA

FOREWORD

MINISTRY OF HEALTH



The COVID-19 pandemic highlighted the stark reality of low hand hygiene coverage across all settings in Indonesia including households and public places such as schools & madrasahs, workplaces, healthcare facilities, markets, and places of public transportation. One in four Indonesians (64 million people) reportedly lacks access to basic handwashing facilities, with wide disparities across regions and between the wealth quintiles. Seventy-one percent of schools (27 million children) in the country do not have access to a combination of basic water, sanitation, and hygiene facilities. Similarly, the presence of Handwashing with soap (HWWS) facilities at critical points of care in primary healthcare facilities is found to be almost negligible. Additionally, the latest data from the national hygiene monitoring system shows that only 50% of public places have functional HWWS stations.

In response to this issue, Indonesia has committed to increasing its efforts by integrating HWWS as one of the main development priorities for the Government of Indonesia and part of the Government of Indonesia's commitment to the 2030 Sustainable Development Goals agenda. Thus, HWWS has been integrated into the national strategy and intervention such as being the second pillar of The Community-Based Total Sanitation Program (STBM), a part of the Healthy Living Community Movement (GERMAS). Also, it has become a concern in various other cross-sectoral programs such as the School Health Program (UKS).

In addition, these efforts are further strengthened by the commitment of thirteen ministries and agencies to jointly achieve the target for access to universal hand hygiene by 2030 during the commemoration of the Global Handwashing Day in 2021. Moreover, the Government of Indonesia has also synergized with the private sector, development partners, academic institutions, and the media in enabling hand hygiene for all. This strong collaboration has created various interventions and programs in terms of HWWS to strengthen the intervention of individual behavior change on a massive scale, as well as provide access to water and CTPS infrastructure.

With UNICEF's support, the Government of Indonesia is developing the national hand hygiene road map to provide clear guidance on achieving hand hygiene for all Indonesians by 2030. The roadmap outlines the targets, strategies, interventions, roles & responsibilities, partnerships and funding needs to realize Indonesia's vision of universal access to hand hygiene. This will require improving access to hand hygiene products and services so that hand-washing activities become easier and more comfortable. At the same time efforts are also needed to improve access to water supplies and hand hygiene infrastructure across Indonesia. Product innovations and business solutions are essential to rapidly scale up hand hygiene using a market-based approach.

To better understand and address the supply and demand side challenges of accessing hand hygiene products and services in Indonesia, the Ministry of Health, supported by UNICEF initiated the market assessment study for hand hygiene products and services in Indonesia. This is the first comprehensive study documenting the current situation of the market landscape for hand hygiene products and services in Indonesia and offers recommendations to strengthen policies and regulations, as well as increasing demand and supply through a market-based approach.

I would like to sincerely thank UNICEF Indonesia for their continued commitment to supporting Gol in advancing the hand hygiene agenda. Our gratitude to the study team and all stakeholders involved namely local governments, private sector, development partners, local producers, and suppliers, particularly those from Greater Jakarta, East Nusa Tenggara, and Papua for their support and contribution to this study.

I hope the study will serve as an important resource for all stakeholders and will encourage further collaboration and contributions towards achieving the universal target of hand hygiene in Indonesia by 2030.

dr. Anas Ma'ruf, M.K.M

Directorate of Environmental Health
Ministry of Health

FOREWORD

UNICEF INDONESIA



Indonesia has made substantial progress in providing access to basic water and basic sanitation to millions of Indonesians since 2000. The progress in access to hand hygiene, however, has been rather limited across all settings such as households, institutions, and public places. Wide disparities in access exist across settings and between regions. Hand washing with soap (HWWS) is widely recognized as one of the most cost-effective measures for preventing the transmission of infectious diseases. COVID19 has further reinforced the efficacy of hand hygiene as a first line of defense against the spread of the virus. Hand hygiene, as a key component of the Infection prevention measures enabled the safe resumption of learning in schools in Indonesia.

HWWS is a key development priority of the Government of Indonesia (GoI) and is the second pillar of the GoI's National Sanitation and Hygiene Programme (STBM – Sanitasi Total Berbasis Masyarakat) and the School Health Program (UKS). Further in 2021, thirteen Ministers committed to universal hand hygiene

access by 2030. Since the beginning of the pandemic in 2020, there has been an increased investment in handwashing infrastructure across all settings, though more prominently in schools. Data from the 2021 WASH in School profile shows a nearly 20% increase in access to handwashing facilities in schools post COVID19.

UNICEF is supporting the GoI's efforts in the development of a national Hand hygiene road map through wide ranging consultations with all key stakeholders. To enable hand hygiene for all, we need individual behaviors to change on a massive scale, but we also need to improve access to the products and services that enable new behaviors by making handwashing easy, convenient, and desirable. This includes access to water supply and physical infrastructure, innovative and affordable handwashing solutions to suit different contexts, and hand hygiene supplies like soap and alcohol-based hand rubs that are both available, affordable, and desirable.

Despite efforts, multiple demand and supply side challenges persist that limit access to hand hygiene products and services **for all**. To better understand and address these issues comprehensively including through market solutions, UNICEF supported GoI, especially the Ministry of Health to conduct a first comprehensive market assessment study for hand hygiene products and services in Indonesia. The report presents the current market landscape for hand hygiene, including the existing value chain, market gaps, innovation landscape, customer preference, and behaviours around hand hygiene in Indonesia.

While the hand hygiene market is projected to grow to \$ 3 billion in value by 2025, there are limited market players offering products in far flung and remote areas. Limited distribution in rural areas, pricing, and unavailability of locally applicable and affordable handwashing infrastructure solutions are key supply-side challenges. Some of the demand-side challenges include lack of funds for buying and maintaining handwashing facilities by communities and institutions, unavailability of basic supplies like water and soap, and lack of space to practice handwashing at critical moments. The study proposes useful recommendations to address critical supply and last-mile challenges, and supportive enabling ecosystem to improve access to **hand hygiene for all**.

Our sincere appreciation to the Team from Intelicap Advisory Services and Spire Research Pvt. Ltd for their meticulous efforts in conducting the study and preparing this document. Our profound gratitude to the Ministry of Health, especially the Directorate of environmental health for their strong leadership and engagement with UNICEF and the study teams throughout the period of this study. We remain indebted to all the key stakeholders who contributed to the study such as the local government officials, private sector representatives, development partners, local manufacturers, and suppliers, specifically from Jabodetabek, East Nusa Tenggara, and Papua.

I hope this study will be an important source of reference for all the relevant stakeholders involved in hand hygiene, as we jointly step up our efforts towards making **hand hygiene for all** Indonesians a reality!

Kannan Nadar
Chief of WASH
UNICEF Indonesia

LIST OF ABBREVIATIONS AND ACRONYMS

ACRONYM	ENGLISH
APAC	Asia Pacific and China
APPSANI	Asosiasi Pengelola dan Pemberdayaan Sanitasi Indonesia (Indonesian Sanitation Management and Empowerment Association)
ASMO	Afghan Social Marketing Organization
BAPPENAS	Kementerian Perencanaan Pembangunan Nasional Republik Indonesia (Ministry of National Development Planning)
BAZNAS	Badan Amil Zakat Nasional (National Zakat agency)
BCC	Behaviour Change Communication
BPS	Badan Pusat Statistik (Statistics Indonesia)
CAGR	Compound Annual Growth Rate
CPG	Consumer Packaged Goods
CSR	Corporate Social Responsibility
DFI	Development Finance Institutions
DHS	Demographic and Health Survey
FBO	Faith-Based Organization
FMCG	Fast-Moving Consumer Goods
GERMAS	Healthy Living Community Movement
GOI	Government of Indonesia
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit (German Society for International Cooperation)
HCD	Human-Centered Design
HCF	Healthcare Facilities
HWWS	Handwashing with Soap
IDR	Indonesian Rupiah
IGO	Intergovernmental Organizations
IMFI	Islamic Micro-Finance institutions
IUWASH PLUS	Indonesia Urban Water, Sanitation and Hygiene Penyehatan Lingkungan untuk Semua (Environmental Health for All)
IUWASH	Indonesia Urban Water, Sanitation and Hygiene
J&J	Johnson & Johnson
JHU	Johns Hopkins University
MCI	Mercy Corps Indonesia
MFI	Micro-Finance Institutions
MHH	Menstrual Health and Hygiene
MNC	Multinational Corporations
MoECRT	Ministry of Education, Culture, Research, and Technology
MOHA	Ministry of Home Affairs
MORA	Ministry of Religious Affairs
MSME	Micro, Small and Medium Enterprises
NGO	Non-Governmental Organization
NTT	Nusa Tenggara Timur (East Nusa Tenggara)
O&M	Operation and Maintenance

P&G	Procter and Gamble
PDAM	Perusahaan Daerah Air Minum (Local Water Company)
PKK	Pemberdayaan Kesejahteraan Keluarga
PMI	Palang Merah Indonesia (Indonesian Red Cross Society)
PPP	Public-Private Partnership
PPP-HWWS	Public-Private Partnership for Handwashing with Soap
PSU	Public-Sector Undertaking
SBM	Swacch Bharat Mission (Clean India Mission)
SHG	Self-Help Groups
SKU	Stock Keeping Unit
SME	Small and Medium Enterprises
SRH	Sexual and Reproductive Health
STBM	Sanitasi Total Berbasis Masyarakat (Community-Led Total Sanitation)
UKS	Unit Kesehatan Sekolah (School Health Unit)
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
USD	US Dollars
WASH	Water, Sanitation and Hygiene
WBG	World Bank Group
WHO	World Health Organization
WVI	World Vision Indonesia

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CONTENTS

Executive Summary	viii		
1. Introduction	1		
1.1. Background	1		
1.2. Understanding hand hygiene in Indonesia	1		
1.3. Policy landscape and key Interventions in Hand Hygiene	3		
1.3.1. Government programs	4		
1.3.2. Programs by other development partners	5		
1.4. Key Demand and Supply Gaps identified from the literature review	6		
1.5. Other approaches to tackle challenges in handwashing	7		
1.5.1. Sanitation Entrepreneurship	7		
1.5.2. Microfinance	8		
1.5.3. Challenges in behaviour change communication (BCC)	11		
2. Market Assessment Study	13		
2.1. Purpose	13		
2.2. Approach and Methodology	13		
2.2.1. Approach	13		
2.2.2. Methodology	15		
2.3. Study areas and locations	15		
2.4. Limitations of the study	15		
3. Market Landscape for hand hygiene and trends	17		
3.1. Key insights: Demand-side	17		
3.1.1. Households	17		
3.1.2. Workplaces	19		
3.1.3. Transport hubs and markets	20		
3.1.4. Schools	22		
3.1.5. Places of worship	24		
3.1.6. Healthcare facilities	25		
3.2. Key insights: Supply-side	27		
3.2.1. Multinational Product Manufacturers	27		
3.2.2. Distributors, Suppliers, and Retailers	33		
3.2.3. Local manufacturers and entrepreneurs (hand hygiene products, HWWS facilities)	36		
3.2.4. Innovators	39		
3.3. Key insights: Ecosystem Enablers	38		
3.3.1. Government: National and Regional	38		
3.3.2. Multilateral/Bi-lateral institutions	39		
3.3.3. Not for Profits/International, Local, Community Based Organizations	40		
4. Recommendations	43		
References	53		
Annexure A	55		
Annexure B	57		
Annexure C	59		



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EXECUTIVE SUMMARY

BACKGROUND

Sound global evidence underscores the importance of handwashing with soap (HWWS) as one of the most effective ways to stop preventable deaths and transmission of diseases caused by contaminated water and unsafe sanitation (Ejemot-Nwadiaro et al., 2021). HWWS is a key development priority for the Government of Indonesia (GOI) and part of the government's commitment to achieving the Sustainable Development Goal 6 (SDG 6) agenda. However, access to handwashing is lacking for nearly 60 million people who do not have appropriate facilities or products to practice handwashing (UNICEF, 2020d). While investments in handwashing infrastructure have increased impressively in schools across the country since the beginning of the pandemic in 2020, such facilities in primary health care centers are still limited (Badan Penelitian dan Pengembangan Kementerian Kesehatan & UNICEF, 2020). In public places such as markets and transportation stations, nearly 44 percent of public places surveyed in the country did not have access to functional handwashing in public places (UNICEF, 2021). Across all settings, handwashing with soap practices is very low (UNICEF, 2021).

PURPOSE OF THE ASSESSMENT

While the GOI along with development partners have implemented several interventions and programs that focus on improving water, sanitation, and hygiene (WASH), multiple demand and supply-side challenges still hamper access to hand hygiene products and services. A few demand-side challenges include a) lack of funds for buying and maintaining handwashing facilities by communities and institutions, b) unavailability of basic supplies like water and soap, and c) lack of space to practice handwashing at critical moments. Other challenges include behavioural determinants which affect handwashing. On the supply side, challenges are present across all levels including a) limited distribution in rural areas, b) pricing, and c) unavailability of locally applicable and affordable handwashing infrastructure solutions. Though the COVID-19 pandemic led to enhanced awareness and efforts towards promoting handwashing

and hand hygiene, some systemic challenges still need to be addressed. The WHO defines hand hygiene as “reducing or inhibiting the growth of microorganisms by the application of an antiseptic hand rub or by performing an antiseptic handwash”, and handwashing is defined as “washing hands with plain or antimicrobial soap and water (WHO, 2009)”.

To address these issues comprehensively and develop market solutions to further strengthen the achievement of the hand hygiene road map in Indonesia, UNICEF commissioned a market assessment study that aimed to provide a detailed assessment of the existing value chain, market gaps, customer preferences, and behaviour related to HWWS and hand hygiene. The outcomes and solutions of this study will help UNICEF and the GOI to design and launch interventions to make the essential resources available through innovative means and create a robust supply chain of essential hand hygiene products.

APPROACH AND METHODS

The assessment undertook a 360-degree approach to assess the gaps and opportunities across three pillars namely: a) demand-side, b) supply-side, and c) ecosystem level. The assessment adopted a mixed-method approach involving analysis of qualitative and quantitative information collated from structured interviews and secondary research (desk review). The findings from these assessments were synthesized to arrive at key gap areas which need to be addressed for ameliorating the hand hygiene ecosystem in Indonesia. The assessment will also do a scoping of the various innovations, market-based models, and social structures that can be included to strengthen the current hand hygiene value chain.

KEY FINDINGS: DEMAND SIDE

INDIVIDUAL HOUSEHOLDS

Limited accessibility of hand hygiene products and HWWS facilities at the household level impacts hand hygiene behaviour.

Access to adequate water has not been reported as a challenge in either urban or rural areas of Indonesia. In terms of the availability of hand hygiene products such as soaps, the preferred stock-keeping units (SKUs) are often missing from rural areas. This demotivates the rural residents from spending higher amounts of money on buying soaps. Moreover, in remote areas retailers are not easily accessible and it takes more than a 15-minute walk to reach them, which negatively affects the motivation of household members to purchase soaps. In addition to these challenges, the lack of dedicated HWWS facilities in the households affects handwashing at critical times.

INSTITUTIONAL PLACES: SCHOOLS

Improved private sector engagement and dedicated funds for regular O&M of HWWS facilities are critical to promoting hand hygiene in schools.

A 2020 study by UNICEF showed that around 40 percent of schools did not have adequate HWWS facilities (Kementerian Pendidikan dan Kebudayaan Republik Indonesia et.al., 2020). After the COVID-19 pandemic, the government and other key stakeholders have prioritized the construction of HWWS facilities and access to hand hygiene in schools. More than 80 percent of schools visited under this market assessment have HWWS facilities and students are also encouraged to wash hands at various times during the day. Even as soaps are available in schools, irregular water supply and the frequent need for refilling water tanks impede the handwashing practice among the children in school.

Funding and operational challenges affect the functionality of available HWWS facilities in schools. Most school administrators reported that the maintenance of HWWS facilities was challenging due to complex and bureaucratic processes for securing funds. It is encouraging to note that many corporate partners, and NGOs have adopted schools and provided HWWS facilities as part of their Corporate Social Responsibility (CSR), however, more innovative ways to engage with the private sector are needed to mitigate the current access gaps.

INSTITUTIONAL PLACES: HEALTHCARE FACILITIES

Healthcare Facilities (HCFs) in rural areas are under-equipped to provide adequate hand hygiene facilities to staff and patients.

The market assessment findings suggest that critical points in the HCFs such as labor rooms did not have a washing sink with running water. Nearly 60 percent of facilities visited did not have an HWWS facility in the doctor's rooms. HCFs were also under-equipped in terms of not having hand sanitizer stations at critical points in the facility such as the doctor's room and delivery rooms. Hand sanitizers were mainly available at the entrance and billing desk within the HCF. The lack of an adequate number of HWWS facilities in common areas such as toilets and eating places within HCFs is a major hindrance in handwashing practice.

PUBLIC PLACES: MARKETS, TRANSPORT HUBS, AND WORKPLACES

The lack of gender-sensitive and inclusive HWWS facilities in public places negatively impacts hand hygiene behaviour.

The Indonesian Ministry of Trade has devised guidelines to install new HWWS facilities and hand sanitizer stations across public facilities. In marketplaces, new outdoor HWWS facilities with water tanks and taps have been observed. Infrastructural constraints such as a lack of space and inability to add plumbing and drainage facilities in new areas for building new HWWS facilities have led to a lower translation of guidelines into on-ground implementation. This has resulted in inadequate practice of handwashing in public places. Moreover, the unavailability of separate washrooms and basins for women and people with disabilities in public places is a major barrier to HWWS for these disadvantaged groups. The lack of funds for operations and maintenance (O&M) of HWWS facilities has also been reported as an issue by many public place managers.

Hand sanitizer stations are installed at the entrances of most institutions. However, it was observed that many are not being used or refilled. The enforcement of their usage has also declined sharply.

Public and private workplaces reported a lack of space and funds to install new HWWS facilities and hence have been mainly dependent on hand sanitizers to meet the increased hand hygiene demands of the workers. It was observed that the workplaces in rural areas have built HWWS facilities outside in the open spaces near their offices. The lack of segregated restrooms for men and women often causes challenges in adhering to handwashing practices.

KEY FINDINGS: SUPPLY SIDE

MULTINATIONAL PRODUCT MANUFACTURERS

Current distribution channels do not have clear visibility of underserved and unserved areas. This needs enhanced private sector engagement to boost the supply chain in unserved and underserved markets.

The market for personal care or handwashing products is worth USD 800 million in Indonesia. It is dominated by major international manufacturers with a market share of around 70 percent. The local and niche product companies address the remaining market. Most of these smaller manufacturers usually cater to local and nearby customers. For hand sanitizers, Indonesia is still a nascent market, and most consumers did not report buying them. It was observed that rural stores usually did not stock them, signifying the lack of demand - they are considered unaffordable or not necessary.

Indonesia's businesses are organized along traditional supply chains, with the full spectrum of agents, distributors, and other intermediaries playing a key role in the distribution and delivery of products. While the distribution channel is well established in the urban market, there are challenges in the rural market. The MNCs are over-dependent on third-party distributors to make the products reachable to the last mile, especially in remote locations. The key challenge to serving the rural and remote markets is the lower penetration of the distributors/agents in the Northern and Western belts of the country. In particular, NTT and Papua have a very limited network of distributors.

The leading private players need to be engaged closely to solve the current supply side gaps and proper distribution mechanisms need to be deployed to address the currently underserved markets.

DISTRIBUTORS, SUPPLIERS, AND RETAILERS

The lack of connectivity and transportation in remote areas and extreme weather conditions disrupt last-mile delivery of the products.

Distributors usually stocked products from multiple companies and supplied products to retailers. In some cases, distributors had sales agents supplying products to rural areas through bikes and vans. Smaller retailers usually had to visit distributors to get their stocks themselves. In the rains, flooding often caused disruptions in supply chains in rural areas. Many shopkeepers were

unable to visit distributors for replenishment which resulted in the unavailability of products for the end customers. Rural shopkeepers shared that it was also hard for them to travel frequently to replenish stocks since it involved significant costs.

LOCAL ENTREPRENEURS AND MANUFACTURERS

Weak market linkages and financial support are key deterrents for local entrepreneurs to scaling their business.

Local entrepreneurs manufacture soaps and HWWS facilities to address the unique needs of their customers. The business for local manufacturers is limited to a particular city or a cluster of villages. There is a lack of networking platforms where local niche manufacturers can communicate or network with other similar entrepreneurs, thus making knowledge or experience sharing a rarity.

Most local entrepreneurs did not see any scope for expanding beyond their current operations due to the lack of an enabling ecosystem. Smaller entrepreneurs do not have access to financial as well as technical support such as building marketing plans to enhance their reach. The absence of a mechanism to seek funds makes it difficult for these entrepreneurs to plan for expansions.

Innovations for HWWS facilities (using locally accessible materials) are available, but not promoted or supported through official channels.

INNOVATORS

The lack of a conducive policy and regulatory environment limits the transfer or scaleup of the innovations in Indonesia. Innovation hubs, accelerators & incubators are needed to nurture start-ups.

Innovations that have the potential to be commercialized and scaled in Indonesia need ecosystem support to establish local sales channels. However, the lack of a conducive policy and regulatory environment inhibits the innovators from entering the Indonesian market. Even local innovations implemented in smaller geographies across Indonesia have found it difficult to scale. The lack of capacity-building and knowledge-sharing platforms to build capacities of founders/innovators in financial, technical, and business areas is one of the major gaps.



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KEY INSIGHTS: ECOSYSTEM ENABLERS

Multiple initiatives have been taken by the Government to promote handwashing among the people in Indonesia. Key national ministries including the Ministry of Tourism, the Ministry of Education, and the Ministry of Trade shared that new guidelines for hand hygiene and COVID protocols for public places have been formulated, however, monitoring the implementation was a challenge due to lack of resources. Sub-national agencies reported that while access to public HWWS facilities was not a major challenge in most regions, their maintenance remained a challenge in most public places. Government stakeholders suggested that better private sector engagement mechanisms were needed to fund and maintain public HWWS facilities.

Multilateral and bilateral institutions shared that promoting innovations and entrepreneurship can help strengthen the supply side issues of hand hygiene. However, the inter-ministerial coordination mechanisms and regulatory mechanisms needed to be strengthened for achieving the results. Innovative financing mechanisms like microfinance were also suggested as a promising tool to enhance access to handwashing infrastructure for vulnerable population in urban slums and rural areas.

At the local level, NGOs have been working closely with the communities to promote hand hygiene through awareness-raising campaigns, designing local solutions for HWWS facilities, and building innovative HWWS facilities. NGOs have contextualized various designs for HWWS facilities that are suitable to local needs. This compendium of designs can be referred for developing localized solutions. However, NGOs reported that localized innovations often find limited uptake due to lack of funding, absence of standardization in designs, and lack of government support.

SUMMARY OF RECOMMENDATIONS

A summary of the recommendations is provided below.

<p>SHORT-TERM RECOMMENDATIONS</p>	<ol style="list-style-type: none"> 1. Strengthen the current Public–Private Partnership for Handwashing with Soap (PPP-HWWS) platform for more active engagement of private companies with government agencies. Private sector and development partners to leverage existing policy guidelines to increase access to HWWS in institutions/public places. 2. Strengthen the innovation ecosystem. Create an enabling environment to build the capacity of Innovators and Start-up organizations to scale indigenous technologies/ products in the local market. 3. Increase demand to stimulate markets for hand hygiene. Repurpose the communication to induce trials and stimulate demand. Curate programs where Faith-based organisations (FBOs) or community opinion leaders can be roped in to disseminate hand hygiene messages to the community through multiple engagement mechanisms. Increased demand will further stimulate the marketers to address the same.
<p>MEDIUM-TERM RECOMMENDATIONS</p>	<ol style="list-style-type: none"> 4. Strengthen the private sector supply chain to bridge the demand-supply gaps. Companies to work with distributors to cover the last mile gaps and achieve 100 percent penetration of hand hygiene products in remote locations. 5. Design and implement PPP models to support installation and O&M of HWWS facilities. HWWS infrastructure can be developed and managed in PPP mode using various revenue models to ensure regular maintenance of the facility. 6. Design innovative financing interventions to scale novel and unique ideas. Design a loan product that addresses the missing middle for enterprises; to grow and scale with the help of financial institutions (FIs) at different stages of their growth. 7. Ideate a social entrepreneurship model to reach the last mile. Existing social structures, grass-root organizations, and other collectives can be leveraged for market activation and delivery of products. The MNCs/distributors can adopt an incentivizing model to enable product penetration through these ‘Service Providers’. 8. Develop and implement a Water, Sanitation, and Hygiene Monitoring Index (WASH MI) that can support the authorities at various levels to take informed decisions and develop appropriate interventions.
<p>LONG-TERM RECOMMENDATIONS</p>	<ol style="list-style-type: none"> 9. Incentivize the local entrepreneurs to establish a reliable supply of products in the currently underserved markets. There is a need to create an enabling environment for the local manufacturers and the medium and small-scale enterprises. To incentivise the suppliers, the government can focus on reducing tariffs/ taxes/ VAT on a selected set of products for local or regional brands.

ABOUT THE REPORT

The report is broadly structured in 2 sections. Section A provides a detailed overview of the study, the rationale, objectives, methodology, and its limitations along with a detailed background of hand hygiene in Indonesia. This section derives its contents based on a desk review of existing literature, and reports found from credible sources. Section B of this report captures the findings from the primary study conducted across the three provinces of East Nusa Tenggara, Papua, and Jakarta. A chapter-wise schematic of the report is provided below.

SECTION A

CHAPTER 1 – INTRODUCTION

This chapter provides an overview of the programs and initiatives to improve HWWS that have been undertaken by key stakeholders in Indonesia. The section also highlights existing gaps and challenges in HWWS in Indonesia based on a secondary literature review.

CHAPTER 2 – APPROACH AND METHODOLOGY

This chapter provides details about the methodology and analytical framework employed by the study. The chapter also includes details on the sampling strategy, the stakeholders covered, and the study plan.

SECTION B

CHAPTER 3 – KEY INSIGHTS

This chapter details the demand-side and supply-side findings. The demand side analysis includes households, workplaces, markets, transport hubs, religious places among others, and the gaps and challenges highlighted by these stakeholders. The supply-side stakeholders include major manufacturers, innovators, suppliers, distributors, and retailers who are involved in the value chain of hand hygiene products in Indonesia. The chapter also includes details about the market scenario and forecasts for the next five years based on market surveys referred to in the study.

CHAPTER 4 – RECOMMENDATIONS

This chapter includes a detailed list of recommendations and next steps based on the findings from the assessment. The recommendations also provide key actionable steps based on their priority.

1

INTRODUCTION

This section provides a background of the Market Assessment study. It also contains the findings from the secondary literature review. The secondary review detailed below was conducted using a literature search on various online sources including PubMed, Google Scholar, and others. The literature review intends to provide a brief overview of the recent efforts at enhancing hand hygiene in Indonesia and highlights the existing gaps in the hand hygiene landscape. The findings from the secondary review were used to inform the design of discussion guides and questionnaires for the key stakeholders included in the study.

1.1. BACKGROUND

Handwashing with soap (HWWS) is the practice of washing hands with clean running water and soap according to the Indonesian Ministry of Health. The Joint monitoring program defines running water as “water that has been used for handwashing but has not been reused”. There is sound global evidence to show that HWWS is one of the most effective ways to stop preventable deaths and transmission of diseases caused by contaminated water and unsafe sanitation (Ejemot-Nwadiaro et al., 2021). Improving equitable access to safe water, sanitation, and hygiene (WASH) services is one of the Sustainable Development Goals (SDG 6) adopted by most countries and is central to achieving all other SDGs mainly those related to ensuring the health and wellbeing of every child (SDG3), equitable and quality education for all children (SDG 4), gender equality and women’s empowerment (SDG5).

In Indonesia, one of the leading causes of mortality amongst children under five years of age is diarrhoea (Ejemot-Nwadiaro et al., 2021). The five key critical moments of handwashing as recommended by health experts including UNICEF and WHO include before, during, and after preparing food; before and after eating food, before and after caring for someone at home who is sick with vomiting or diarrhoea, and after using the toilet (WHO, 2009). Although the importance of handwashing is well known for reducing deaths amongst children, data suggests that very few children practice handwashing with soap after defecating and before and after eating food. One of the major reasons for the same is the lack of access to soap and water in schools and households. A study highlights that around 40 percent of the schools lack access to soap and running water which poses a serious challenge to the health of the children (Kementerian Pendidikan dan Kebudayaan Republik Indonesia et.al., 2020).

The COVID-19 pandemic has added significant importance to the practice of HWWS and has led governments to make efforts to improve and enhance HWWS practice among the people. This has also triggered supply-side interventions and there has been an increase in the hand sanitizers market, though usage at the household level in Indonesia is still low. It is of utmost importance that we understand the barriers that people face while adopting proper practices around hand hygiene in Indonesia.

While HWWS has been a priority of global water and sanitation programs, multiple challenges exist in the pathways to achieving adequate HWWS. These include demand-side challenges such as unaffordable HWWS facilities, unavailability of basic

supplies like water and soap, and a lack of space to practice handwashing at critical moments. Other challenges include behavioural determinants which affect the practice of HWWS. On the supply side, the lack of robust supply chains in remote areas, the absence of culturally acceptable products, limited availability of locally appropriate and affordable hand washing stations are major impediments.

It is critical to deep-dive into these barriers and to understand the supply-side and demand-side factors that impede the uptake of correct hand washing behaviour by the people of Indonesia. In this background, UNICEF in collaboration with the Ministry of Health, GOI commissioned the Market Assessment of Hand hygiene products and services in Indonesia. This assessment aimed to understand the current challenges faced by both demand and supply-side stakeholders of hand hygiene in Indonesia and to provide recommendations for mitigating these challenges. The market assessment adopted a mixed method approach including a secondary review and a primary assessment including in-depth interviews (IDIs) and focus-group discussions with a wide variety of stakeholders.

1.2. UNDERSTANDING HAND HYGIENE IN INDONESIA

According to estimates by the Badan Pusat Statistik (BPS, Statistics Indonesia), nearly 79 percent of people in Indonesia have access to basic handwashing facilities that include access to clean water and soap at home (WHO & UNICEF, 2020; BPS, 2019). A United Nations Children's Fund (UNICEF) study suggests that around 28 percent of urban Indonesians lack access to water and soap at home, severely hampering handwashing habits (UNICEF, 2020c). In terms of public places, UNICEF estimates that nearly 25 percent of the country does not have access to handwashing in public places such as schools, workplaces, health facilities, and public places including transportation hubs, public markets, etc (UNICEF, 2020d).

At the household level, recent regional surveys of rural areas have found significant disparities in the availability of soap and water for handwashing. Other surveys which were conducted in 2020, after the onset of the COVID-19 pandemic, note that even Jakarta had only 73 percent of citizens with access to permanent and sustainable water supplies in public places (Syakriah, 2020). Only 62 percent of Jakarta city residents have tap water access (BPS, 2018). The capital administration has set a target of bringing 82 percent of Jakarta’s citizens on the formal water supply grid by 2023

which is unlikely to be met (Syakriah, 2020). While behavioural interventions can improve the knowledge about HWWS and hand hygiene, multiple studies have found that people do not practice handwashing if an HWWS facility is not available within an average of ten steps of their toilet or their kitchen (White et al., 2020; Hirai et al., 2016). As evident from the above data, the household lacks a regular water supply at the desired proximity hence the translation of HWWS awareness into practicing HWWS is limited.

The table below provides a brief overview of the disparities in water access in some provinces of Indonesia. The data shows a wide disparity in access to improved water sources, especially in eastern provinces like East Nusa Tenggara (NTT) and Papua. Similarly, there is a disparity in handwashing practices, with only 45 percent of people following proper handwashing habits in NTT.

PROVINCE	IMPROVED WATER	PROPER HWWS HABITS	PERCENT POPULATION WITH ACCESS TO PUBLIC HWWS FACILITIES
East Nusa Tenggara	85.40%	45.20%	51.90%
Jakarta	98.80%	54.80%	73.20%
Papua	64.30%	30.40%	35.50%
Data Sources	BPS, 2021	BPS, 2021	Indonesia Basic Health Survey, 2018

In public places, the challenge of washing hands is exacerbated due to the lack of properly maintained HWWS facilities. Multiple NGOs working in the space of hand hygiene in Indonesia, such as Mercy Corps, PLAN Indonesia, and World Vision Indonesia (WVI) reported conducting awareness drives for encouraging people to install HWWS facilities in homes. The NGOs are also working with the local government to build HWWS facilities in the household as well as in public places. The discussion with NGOs suggests that while facilities were built, they were often in an unusable state due to irregular maintenance. The main reason for this was the lack of a transition or handover plan to maintain these facilities after the initial construction.



1.3. POLICY LANDSCAPE AND KEY INTERVENTIONS IN HAND HYGIENE

The GOI along with development partners such as UNICEF, USAID, World Bank, DAI, SNV, and PLAN International among others have conceptualized and implemented several interventions and programs to improve access to WASH services for most of the regions. Within these programs, HH was often a minor component, however, it has now achieved higher importance due to the COVID-19 pandemic. Handwashing was earlier handled by the government and other partners through BCC and awareness campaigns. These efforts have yielded results in terms of awareness and improved behaviours. However, some gaps need to be addressed to ensure universal access and HWWS practice.

A snapshot of the HH programs in Indonesia since 2005 has been presented below.

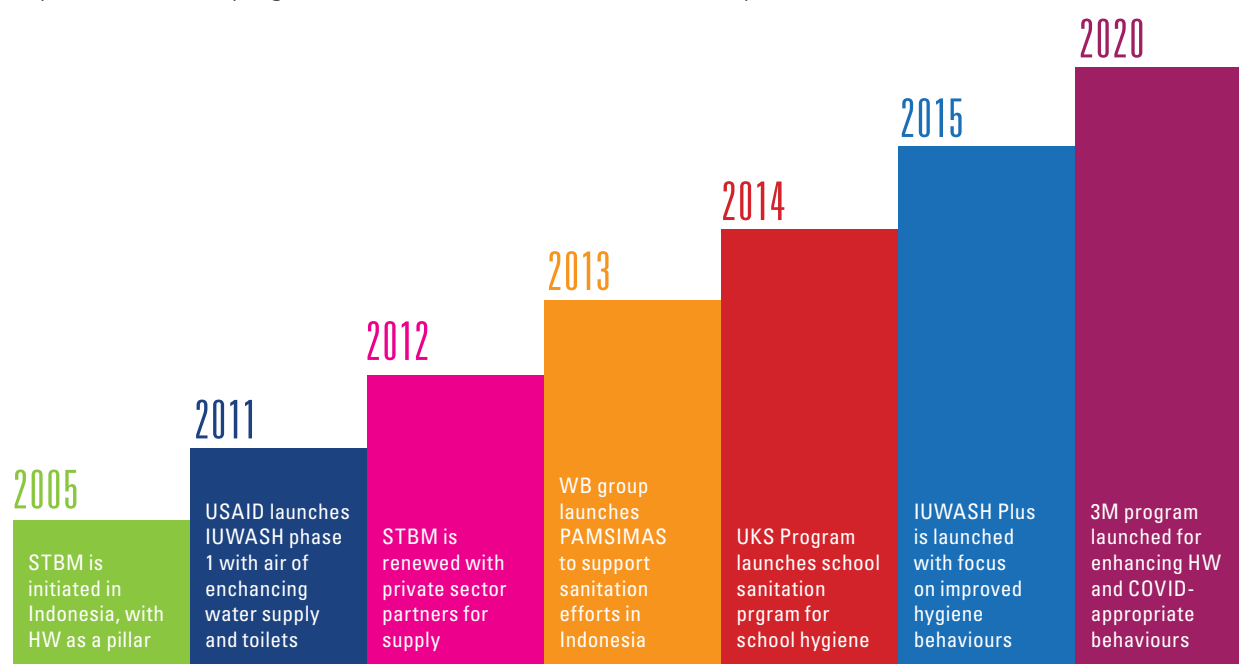


Figure 1: HH Programs in the country since 2005

The COVID-19 pandemic led to a renewed focus and specific guidelines for handwashing. When the pandemic started, the HWWS regulatory framework was strengthened through a Presidential Instruction for improving, complying, and monitoring /the strict guidelines for preventing COVID-19. The instruction directed the Governor, Head of Regency, and Mayor to promote health protocols including handwashing and providing hand sanitizers where relevant. Various ministries have issued various implementation/technical regulations.

The Presidential Regulation (Perpres) No. 18 of 2020 on the National Medium-Term Development Plan (National RPJMN, Cabinet Secretariat of the Republic of Indonesia) 2020–2024 establishes a clear target for sanitation development by:

- ✦ Increasing the proportion of households with access to adequate sanitation to 90 percent (including 15 percent of households that have access to safe sanitation),

- ✦ Reduce the percentage of households with babies in the open to 0 percent.
- ✦ Reduce the number of stunted children due to inadequate sanitation access to less than 10 percent.

However, the regulation did not include HWWS. Similarly, no statement was found regarding the goal of achieving HWWS in the medium-term national development plan for 2020–2024. Similarly, the regional budgets of the Ministry of Home Affairs' regional development guidelines do not include HWWS as a budgeted activity. The HWWS activity hence lacks adequate policy support to drive action from government departments. While inter-ministerial coordination mechanisms have been developed, setting accountability and achievable targets has not been done specifically for HWWS. The national Roadmap for HWWS that is currently being drafted by UNICEF in collaboration with MoH provides some insights on how government ministries aim to synergize their efforts to enhance HWWS and achieve universal HWWS practice.

Some of the key GOI programs and interventions by development partners which focus on the HH agenda are discussed in detail in the following section.

1.3.1. GOVERNMENT PROGRAMS

SANITASI TOTAL BERBASIS MASYARAKAT (STBM) PROGRAM:

Intending to improve the sanitation and hygiene status across the country, the GOI launched the community-led total sanitation (CLTS) approach as a pilot in 2005 under a program called Sanitasi Total Berbasis Masyarakat (STBM). Given the successful implementation, the program was adopted as a national-level strategy to execute improved sanitation and hygiene practices and services. A decentralized approach has been adopted for ground-level implementation in the country. The STBM intervention framework (Figure 2) for program execution summarizes the key activities at various levels.

The five pillars of the STBM program are:

- ‡ Open Defecation Free (ODF) communities
- ‡ Handwashing with soap at critical moments
- ‡ Household water treatment and safe storage of water and food
- ‡ Solid waste management
- ‡ Liquid waste management

PENYEDIAAN AIR MINUM DAN SANITASI BERBASIS MASYARAKAT (PAMSIMAS):

The PAMSIMAS program is a community-driven grant mechanism to communities for developing local water and sanitation infrastructure, providing technical assistance to enhance the role of the community, and creating monitoring systems for better water systems. Now in the third cycle of implementation, the program aims to increase the use of water and sanitation facilities, and improve hygiene behaviours, by expanding and mainstreaming the community-driven approach (World Bank, 2019).

USAHA KESEHATAN SEKOLAH/MADRASAH (UKS/M): SCHOOL HEALTH UNIT

The program is designed to improve the health and consequently, the quality of education and learning achievement of students. The program intends to build a healthy school environment to enable students to experience optimal growth and development. The schools need to fulfill all indicators (health education, health services, fostering a healthy school environment, and UKS/management) in the UKS stratification group (Afkhari et al., 2021).

While the school is provided technical support for implementing these standards, smaller initiatives such as a hygiene and health handbook have been developed for distribution in schools. These handbooks encourage handwashing, hygienic habits including wearing masks, diet, advice related to sports, and physical activity. After COVID-19, the list has also expanded to include social distancing and mask-wearing guidelines (Afkhari et al., 2021). Under the UKS program, SOPs for toilets, menstrual hygiene management, surface cleaning,

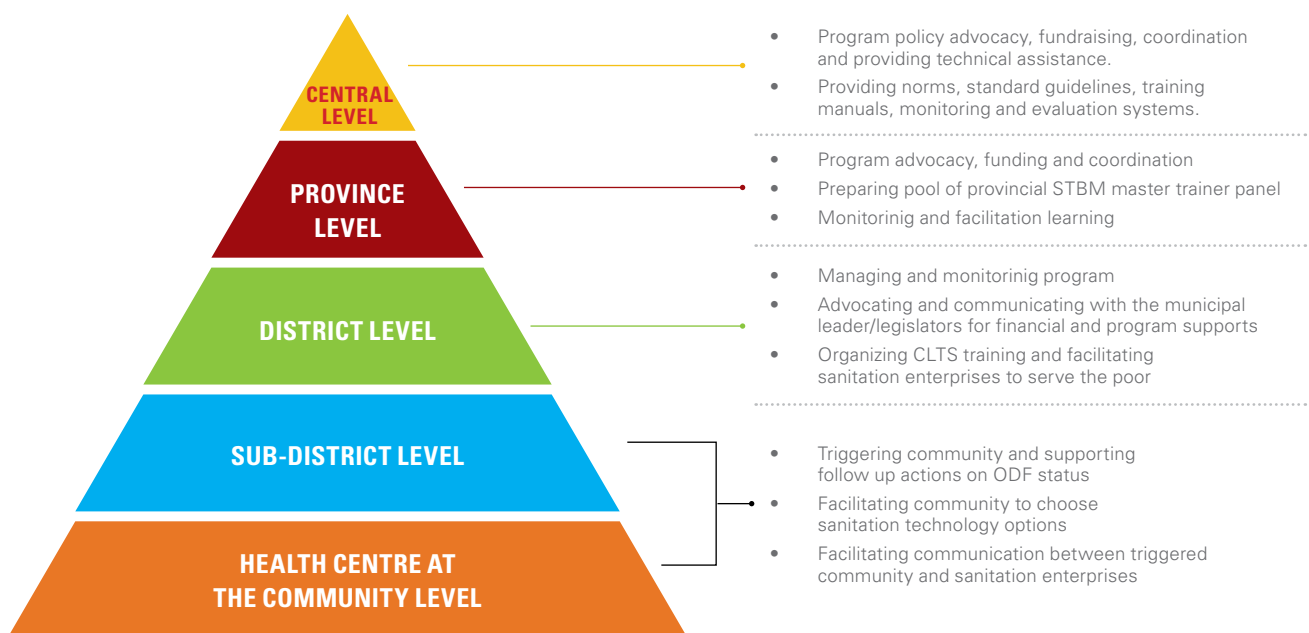


Figure 2: STBM intervention framework (Source: PAMSIMAS website and Intellectap analysis)

and checklists for toilets, classrooms, and school entrances have also been developed to ensure a healthy and hygienic school environment.

HEALTHY LIVING COMMUNITY MOVEMENT (GERMAS)

One of the initiatives launched by the GOI for improving HWWS among others includes a national movement called the Healthy Living Community Movement (GERMAS). One of the GERMAS success indicators is the availability of handwashing facilities with soap.

1.3.2. PROGRAMS BY OTHER DEVELOPMENT PARTNERS

UNICEF

UNICEF supports the GOI to accelerate access to safely managed water supply, sanitation, and hygiene. UNICEF's initiatives encompass a wide variety of programs including access to sanitation, advocacy for improved WASH facilities, and implementing BCC programs at various facilities including schools, and healthcare facilities. UNICEF has initiated engagement with the Sanitation and Water for All, and peer-to-peer learning to support sub-national advocacy.

During the COVID-19 pandemic, UNICEF started volunteer-based monitoring mechanisms for COVID-19 appropriate behaviour including mask-wearing, social distancing, and handwashing in public places through a mobile app. UNICEF is also working with other ecosystem stakeholders to develop a platform called "Incubits"¹ for fostering sanitation-based innovations.

PUBLIC-PRIVATE PARTNERSHIP FOR HAND WASHING WITH SOAP (PPP-HWWS):

The Public-Private Partnership for handwashing with soap (PPP-HWWS) is a national coalition that brings together key government partners, the private sector, and development agencies to promote sustainable HWWS. The coalition was first launched in 2007, and then re-established in a new format in 2020 and has since then worked through multi-pronged strategies to address handwashing (Rafiqah & Blackett, 2008). The partners include:

- ‡ Ministry of Health
- ‡ UNICEF
- ‡ Corporate partners: Unilever, Wings Group Indonesia, PT Cussons, Reckitt Indonesia, Trakindo, Adaro, Astra International, Kao Indonesia
- ‡ NGOs and DFIs: USAID, SNV, Save the Children, GIZ, Mercy Corps,
- ‡ Others: Daai TV Network, Lions Club, and National Board of Zakat (BAZNAS).

The partnership has used multiple strategies to address the lack of handwashing across the country, including:

- ‡ Make hand hygiene available to everyone.
- ‡ Working collaboratively with all stakeholders to improve HWWS practices
- ‡ Ensuring that handwashing promotion and facilities are resilient and sustainable
- ‡ Delivering knowledge of handwashing appropriately.

During the pandemic, in 2020, the PPP-HWWS worked with the private sector to increase access to HWWS in key settings and to conduct messaging across public channels. Also, the producers and manufacturers were encouraged to ideate innovative approaches to improve supply chains and accessible pricing models (UNICEF, 2020a).

INDONESIA URBAN WATER, SANITATION AND HYGIENE (IUWASH) AND IUWASH PLUS

The IUWASH Plus program aims to improve household WASH services for 1.1 million residents, of which 40 percent are from the most vulnerable categories across eight provinces (Overbeek et al., 2016). The IUWASH program mainly focused on improving the sanitation ecosystem including developing better entrepreneurial models for sanitation entrepreneurs, enhancing microfinance opportunities for better demand-side financing, and better coordination among stakeholders to ensure coherent implementation of WASH initiatives (USAID, 2018). USAID worked with 32 local governments across eight provinces including North Sumatra, West Java, Central Java, East Java, South Sulawesi, Maluku, North Maluku, and Papua, and two special areas in DKI Jakarta and Tangerang District.

The handwashing with soap component in the IUWASH program included working with sanitation workers to encourage households to build toilets as well as HWWS facilities. During the early phases of the pandemic in 2020, USAID conducted BCC activities with local NGO partners and supported the construction of nearly 1000 HWWS facilities across Indonesia. USAID also worked with the Puskesmas centres in various places in Indonesia to inculcate awareness among the people about handwashing and having facilities at home. The campaign aimed to educate community members on the technique of proper HWWS, and was conducted through online and offline activities, including the construction of HWWS facilities to be placed in public areas and community houses (USAID, 2018). These efforts have led to the construction of nearly 7000 public HWWS facilities across project areas.

¹ <https://incubits.org/>

1.4. KEY DEMAND AND SUPPLY GAPS IDENTIFIED FROM THE LITERATURE REVIEW

While multiple interventions have been implemented across Indonesia for improving handwashing, access to handwashing products remains a key challenge for many pockets and populations across the country (UNICEF, 2020b). The major challenges in hand hygiene can be categorized across four key domains, access to water, access to soaps, behavioural hurdles, and strategic hurdles which lead to people not washing hands at the desired instances (Karon et al., 2017).

The below illustration summarizes the key challenges in hand hygiene:



Figure 3: Key Gaps in Hand Hygiene

ACCESS TO WATER:

The key challenge for proper handwashing is access to clean water. While 90.7 percent of the population has access to clean water and soap at most points in time, in some provinces such as Papua, the access slips to 64.9 percent, and to nearly non-existent in the highland areas as reported by UNICEF officials during interviews.² In urban areas, Indonesia has provided water through a combined approach of government-owned piped water supply, and a set of designated private providers who provide water through bottled sources. DHS data in Indonesia indicates that piped water is available only in about 13 percent of urban homes and 6 percent of rural homes. Rural areas are still dependent on ground water and wells for water supply.

While Jakarta's low socioeconomic populations have a median monthly income of IDR 3.3 million (USD 233.3), the cost of buying water has severely affected the ability of Indonesians to follow hygiene practices. In areas where private companies supply water, most consumers reported buying water for household uses at a price of around IDR 2,00,000 (USD 14.1) to IDR 3,60,000 (USD 25.5) per month, and most consumers have seen a rise in prices for bottled water at a rate of nearly 240 percent in the past 2-3 years (Syakriah, 2020).

The problem of access to water is a major challenge in many public places as well. World Bank surveys in 2020 showed that nearly 47 percent of schools had no running water or access to soap, mainly due to a lack of clear understanding of the regulations by school administrations, and the lack of supply mechanisms (World Bank, 2020).

ACCESS TO SOAPS:

Access to cleaning products such as soaps (includes bars, liquids gels, strips, etc.), hand rubs, and sanitizers remains unevenly distributed. DHS estimates that nearly 81 percent of the households in the lowest quintile have access to soap and water, while nearly 95 percent of the highest wealth quintiles have access to these (DHS, 2018). However, other sources suggest that access to soap, especially near homes in rural areas remains a challenge. While market-level data for access to soap is unavailable, studies by both the World Bank and USAID note that creating a sustainable supply chain for soaps and cleaning products is necessary for key public places such as schools, religious places, and markets. Even in primary health centres, access to HWWS facilities was absent in nearly two-thirds of primary health

facilities (Odagiri et al., 2018). This has improved to a great extent in 2020, with nearly 99 percent of facilities having access to HWWS facilities at key sites (Badan Penelitian dan Pengembangan Kementerian Kesehatan & UNICEF, 2020).

BEHAVIOURAL FACTORS:

50 percent of the population in Indonesia displayed poor handwashing habits (Purnama & Susanna, 2020). While the communication related to handwashing techniques and demonstrations improved the awareness around correct handwashing practices, the actual application of the same was much lower.

ACCESS TO HWWS INFRASTRUCTURE:

While guidelines have been issued to develop HWWS facilities in public places, the strategies to support relevant ministries and departments to implement those plans are missing. Another area is standardizing supply chains and identifying gaps within them, especially for underserved areas across the public and private sector institutions.

1.5. OTHER APPROACHES TO TACKLE CHALLENGES IN HANDWASHING

1.5.1. SANITATION ENTREPRENEURSHIP

USAID IUWASH AND IUWASH PLUS

Sanitation entrepreneurship has been promoted mainly by two international organizations, PLAN International and USAID IUWASH program in conjunction with the GOI. The first phase of IUWASH had two components including a behavior change campaign combined with private sector engagement. IUWASH conducted training of sanitation entrepreneurs across a few provinces in Indonesia and attempted to create demand for sanitation through sustained behavior change activities (Overbeek et al., 2016). USAID mainly worked with sanitation entrepreneurs to develop toilets and septic tanks, but also encouraged households to build HWWS facilities near the toilets. During the pandemic, in 2020, USAID worked with primary health care centers (called Puskesmas) and rural entrepreneurs to build public HWWS facilities. In some regions, such as Surakarta city and Malang City, USAID sponsored some HWWS facilities and worked with entrepreneurs to build HWWS facilities in households at a subsidized rate. However, the review of the program found that IUWASH PLUS did not have an effective approach to engaging the private sector, due to a lack of staff with private sector engagement expertise (Overbeek et al., 2016). This led to a lack of progress in working with sanitation entrepreneurs.

² BPS Data 2021: <https://www.bps.go.id/indicator/29/854/1/percentage-of-households-by-province-area-type-and-source-of-improved-drinking-water.html>

PLAN INDONESIA: STBM

PLAN Indonesia worked with the STBM program with the support of Australia Aid to create a pool of sanitation entrepreneurs in NTT province. The program targeted five districts including Ende, Kupang, Manggarai Timur, Ngada and Sabu Raijua (PLAN International, 2016). Alongside activities to stimulate sanitation entrepreneurs, the program also provided training for potential entrepreneurs. The training materials covered the basics of STBM techniques to produce sanitation packages for sanitation entrepreneurs (Willetts et al., 2016). Market linkages with local entrepreneurs were also developed mainly for toilet construction, while the thrust on HWWS was only on BCC campaigns and awareness. This has led to high awareness, but the practice remains much lower than desired.

Considering the future development of sanitation entrepreneurship in Indonesia, PLAN provided a set of recommendations including encouraging the government to continue to have a consortium of multiple stakeholders including sanitation entrepreneurs, financiers, local health officials, and others to ensure that the entrepreneurs were supported in their activities. The PLAN program also helped the entrepreneurs form a consortium for ensuring that their challenges and issues were shared within the fraternity and with the government. There is little data available on the success and sustainability of these efforts across the province (Willetts et al., 2016).

Other organizations such as the Mercy Corps and Palang Merah Indonesia (Red Cross Society) have worked with sanitation entrepreneurs to develop HWWS facilities designs costing USD 150 – 300. Designs for these have been standardized and shared with the local entrepreneurs to ensure quality products are manufactured.

1.5.2. MICROFINANCE

At the household level, a lack of affordability for water for about 24 million people, or about 10 percent of the population, and a lack of improved sanitation facilities for 38 million people posed a major challenge. Reports indicate that slum residents in Jakarta needed to spend IDR 3,60,000 (USD 25) a month for accessing safe water either by purchasing bottled water or by paying for piped connections when available (Syakriah, 2020). With around 10 percent of Indonesians living at less than USD 3.20 per day, ensuring adequate financing to buy water at such steep rates poses a major challenge for the underserved (Syakriah, 2020).

The provision of microfinance to poor families can be a potential solution. However, the learnings from past initiatives have shown moderate success, mainly due to the lack of adequate providers, poor regulation, and a lack of focus on the topic by provincial agencies. Some of the key challenges around microfinancing have been discussed in Figure 4.

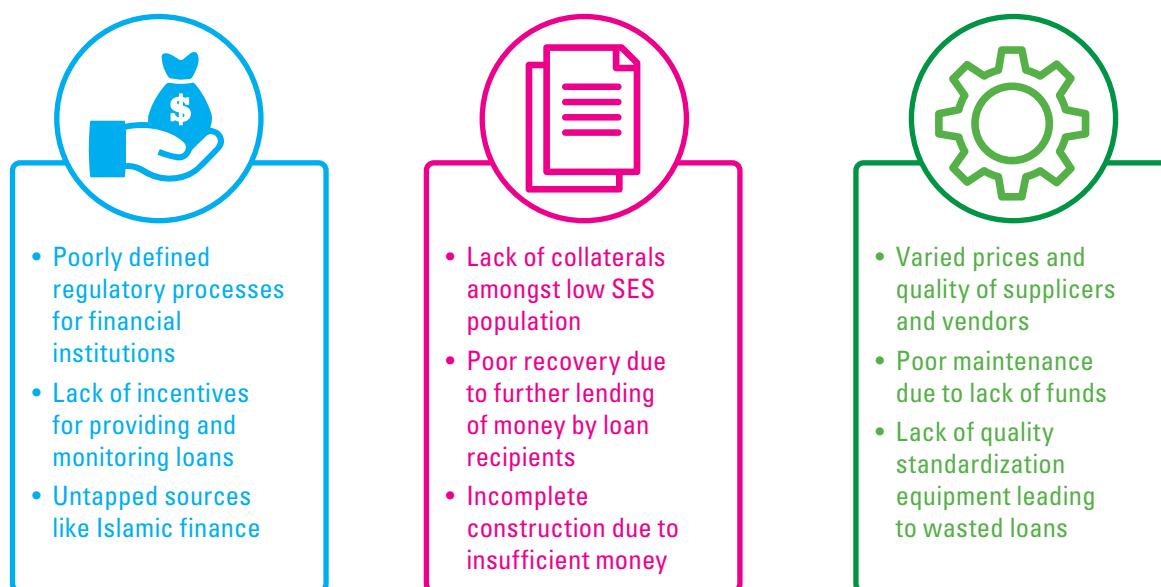


Figure 4: Key Challenge in Sanitation Microfinance

In the secondary assessment, we have also studied a few microfinance initiatives in Indonesia and across the globe. The below section summarizes the key aspects of microfinance interventions in WASH including HWWS.

IUWASH and IUWASH PLUS provided sanitation finance to the bottom 40 percent (B40) of the pyramid in their program areas. Though this financial support was directed at toilet construction, HWWS facilities construction was not supported. The IUWASH program worked with various national agencies such as BAPPENAS, the national development planning agency, and the OJK (finance sector regulator) to devise rules for microfinance related to sanitation. The IUWASH exercise also included an effort to map the market for undertaking client segmentation for targeting either grant-based schemes for the very poor or providing microloans that would have a repayment timeframe for those who could afford it. The evaluation of IUWASH's microfinance components, however, has noted that efforts at providing microfinance were only a moderate success, mainly due to the lack of adequate providers, poor regulation, and a lack of focus on the topic by provincial agencies (Overbeek et al., 2016).

WaterCredit is a program developed by Water.org. The WaterCredit program worked across many LMICs to provide microfinance for water and sanitation-related needs. The program identifies a region where people need access to water and sanitation and partners with selected institutions to provide affordable financing for water and sanitation to families in need. These microfinance partners establish water and sanitation loans in their portfolio of offerings and the WaterCredit program provides technical assistance, connections, and resources to help establish the program. People in need can utilize these small and affordable loans to install a tap or toilet in their homes and access local resources. The WaterCredit program has worked in multiple geographies including Southeast Asia (Philippines, Cambodia, and Indonesia), Latin America (Peru, Brazil), Africa (Uganda, Kenya, Tanzania), India, and Bangladesh. WaterCredit, in Indonesia, has provided loans for building water infrastructure. These credit products offered by WaterCredit can be leveraged for building HWWS facilities.

Islamic microfinance the concept of Islamic finance and microfinance mainly stems from the concept of Zakat or donating to good causes, as well as fulfilling their obligation in creating a just society around them. Sanitation, especially the provision of clean water has been a major initiative in some Islamic countries.



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In Indonesia, Bank Syariah Mandiri has provided microloans to people for a clean water supply (Nugroho, 2014). One challenge was to provide loans to people with no collateral, guarantees, or ability to provide securities through other referees. In such cases, the banks provided water supply equipment through a mechanism called the Murabaha mechanism, in which the customer raised a demand to the bank, the bank procured the equipment/service from a local provider and delivered it to the consumer (Kabir et al., 2021; Nugroho, 2014). The consumer, in turn, had to pay the bank for the service provided in installments. This also prevented the challenge of sub-lending i.e., loan recipients lending some portion of the money to other people (Kabir et al., 2021; Nugroho, 2014).

However, like most other programs, the focus has been on meeting other water and sanitation-related needs including water supply. In some cases, financing has been provided for water treatment and distribution networks. Now that COVID-19 has convinced key ecosystem partners of the need for developing handwashing facilities, this microfinance mechanism can also be leveraged for encouraging people to build HWWS facilities.

IMFIs and implementation organizations such as Muhammadiyah can collaborate to provide end-to-end financing and implementation platform for fulfilling the unmet needs of HWWS facilities in households as well as public places in rural areas.



1.5.3. CHALLENGES IN BEHAVIOR CHANGE COMMUNICATION (BCC)

In Indonesia, BCC programs around HH have been undertaken through multiple channels including social media, local media, and inter-personal communication by frontline workers called Sanitarians.³ Evidence shows that the translation of knowledge dissemination into practice is limited but has nonetheless improved since the pandemic due to sustained messaging. A BPS survey conducted in February 2022 showed that handwashing practice or use of hand sanitizers has increased to 75 percent in comparison to 20 percent in 2016. During the pandemic, UNICEF's real-time monitoring of COVID-19-related hygiene behaviors or 3M including HWWS, mask usage, and social distancing was effective in monitoring the behavior of people in public places and institutes.

Studies and government data on handwashing have shown that the awareness and knowledge about handwashing with soap are high (BPS, 2021). However, the success of BCC interventions on HWWS often depends on the availability of facilities, the ability of people to follow those practices, and the effort needed in maintaining them. Another study in Indonesia found that while water access and knowledge of handwashing were high, the practice was not properly followed if the handwashing facility was more than ten steps from the kitchen or restroom (Hirai et al., 2016). The challenge was especially acute if the facility required repeated refilling of water. The challenges to following handwashing have been affected by supply-side factors like a lack of easy access to water and hand hygiene products. In public places, the sharp rise in demand for HWWS facilities has been inadequately met.

In some major programs such as the IUWASH program, one of the key challenges was that the messaging for HWWS was inconsistently applied. In many cases, the messaging about handwashing was overshadowed by communication about the ill effects of open defecation (Overbeek et al., 2016; USAID, 2018). Even in primary interviews with officials of multinational corporations, local NGO representatives, and other partners, respondents noted that BCC efforts in 2021 were being met with resistance or fatigue due to repeated messaging since the beginning of the pandemic.

SECTION SUMMARY

HWWS is embedded within government programs such as STBM and PAMSIMAS and is further reinforced in the COVID-19 guidelines. For STBM, while handwashing has been one of the five pillars, the focus has mainly been on improving water supply to the underserved regions and eliminating open defecation. The HWWS was at a lower priority level until the pandemic struck. HWWS has been addressed mainly through behavior change campaigns before the pandemic, while support in terms of increasing access to HWWS facilities and products, accelerated only after the pandemic began.

On the demand side, the efforts on BCC have helped in improving the awareness among people around HH, but the same has not translated into practice. This is mainly due to a lack of convenient facilities at home and other settings such as workplaces, transport hubs, and markets. In rural areas, supply gaps for HH products like soaps are an additional challenge. On the supply side, the lack of a coherent framework for sanitation entrepreneurs, the absence of quality standards and the pricing makes the sanitation-related business unreliable for most. Microfinance including tailored products for financing handwashing infrastructure can be a low-cost, easy-to-implement product for major MFIs.

In sum, the government has done well to increase the awareness of HH, the need is now to develop a coherent action plan to synchronize BCC campaigns with sustainable supply initiatives.

³ Sanitarians (also known as Public Health Inspectors or Environmental Health Practitioners) are responsible for implementing actions to protect public health, including administering, and enforcing laws related to environmental health and providing support to minimize occupational health and safety hazards

2

MARKET ASSESSMENT STUDY

2.1. PURPOSE

A holistic assessment of the HH markets has been undertaken to assess the gaps and opportunities across three pillars namely: a) demand-side, b) supply-side, and c) ecosystem level. The purpose of the assessment is to inform policy and programming efforts by the government and key stakeholders to strengthen markets for HH in the country, scale-up innovations, and increase access to appropriate and affordable HH products and services for Indonesia to achieve its SDG 6 goal.

Given that there has been significant work and a sizeable body of information available on the demand side, this market assessment has concentrated on understanding supply-side challenges and opportunities in the ecosystem.

2.2. APPROACH AND METHODOLOGY

2.2.1. APPROACH

To deliver the engagement, the assessment team undertook a 360-degree approach which included an assessment of the HH market across three broad levels: a) Demand side, b) Supply-side, and c) Ecosystem level.

The study leveraged concurrent triangulation, which is a mixed-method approach involving a collection of

qualitative and quantitative information from structured interviews and ongoing secondary research. The illustration below showcases the approach taken, categories of stakeholders consulted, and broad areas of information sought to help assess the market gaps and opportunities in the HH supply chain in Indonesia.

A. DESK REVIEW-

- ‡ Policy landscape and various initiatives to strengthen HH in Indonesia
- ‡ Market potential and current trends of HH products and services
- ‡ Innovations in HH products and facilities

B. PRIMARY INTERVIEWS –WE SPOKE TO A RANGE OF STAKEHOLDERS INCLUDING:

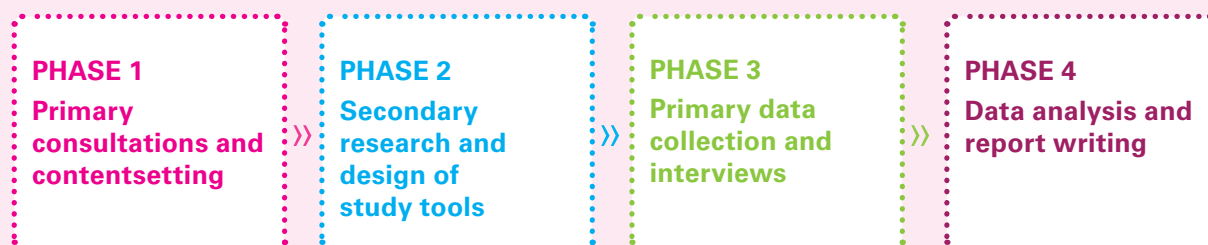
- ‡ Demand-side stakeholders
- ‡ Supply-side stakeholders
- ‡ Ecosystem Enablers

C. ANALYSIS AND DOCUMENTATION-

The information collected from secondary and primary research was further synthesized to assess the market drivers and barriers and the stakeholders involved in HH (supply-side).

2.2.2. METHODOLOGY

The study was conducted in four phases described in the figure below.



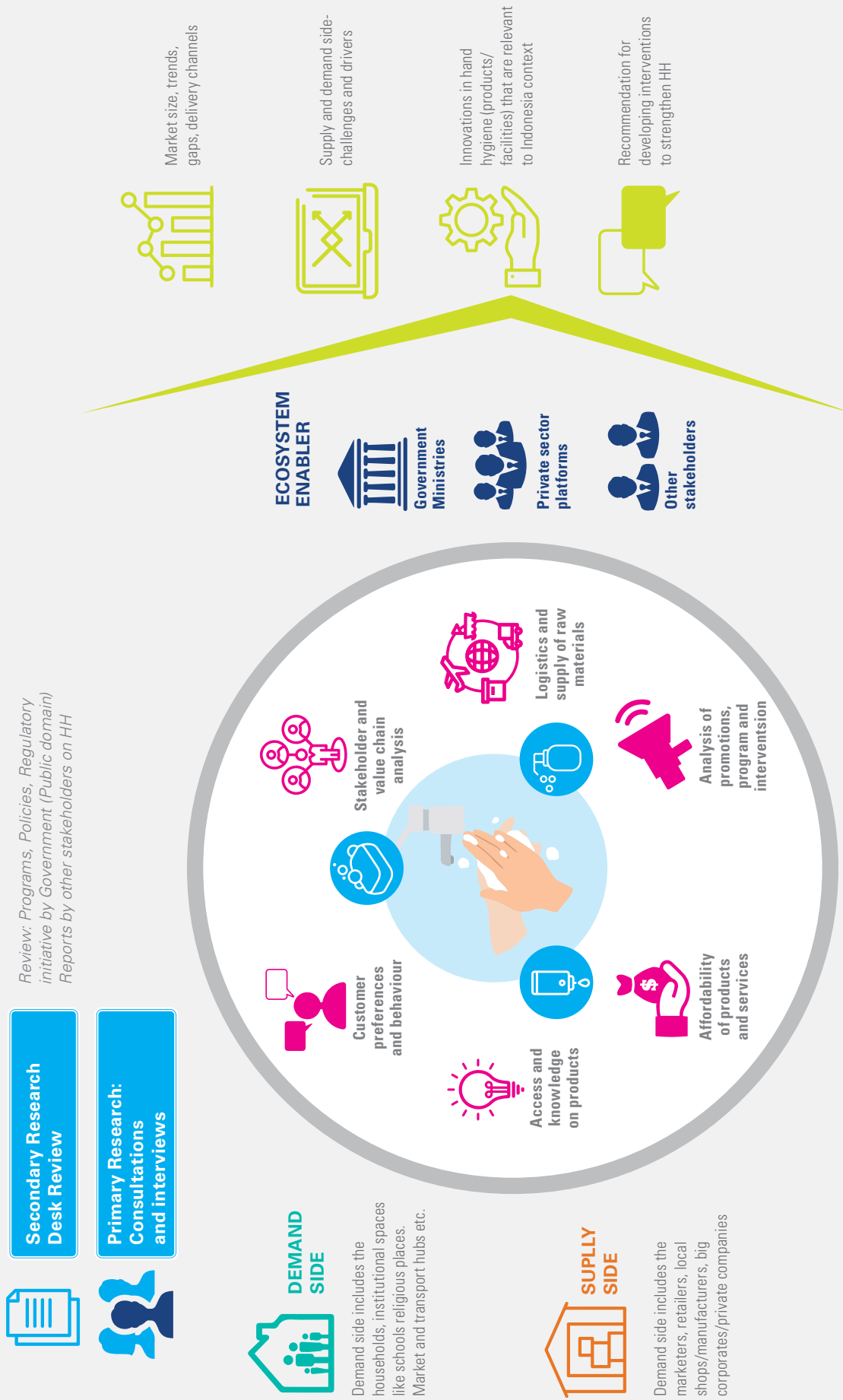


Figure 5: Approach and methodology adopted for the study

2.3. STUDY AREAS AND LOCATIONS

The study was conducted across three provinces in Indonesia, namely, Jakarta, Nusa Tenggara Timur (NTT), and Papua. The primary data collection included stakeholders from three categories as given below.

1. **Demand-side stakeholders:** This category included households, schools, health facilities, offices (public and private workplaces), public markets, and transportation hubs.
2. **Supply-side:** This category included MNC manufacturers, local manufacturers and innovators, stockists and distributors, and local retailers (including smaller Warungs)
3. **Ecosystem enablers:** This stakeholder category included government officials at the local, provincial, and national levels, development partners such as USAID and the World Bank, and local NGOs

The districts in each province included:

1. **NTT:** Kupang (urban and rural) and Southwest Sumba (urban and rural)
2. **Papua:** Jayapura, Wamena and Biak (both urban and rural)
3. **Jakarta (Jabobetadek):** Bogor, Tangerang, and East Jakarta (all urban and rural)

The type of settings visited included households, schools and madrasahs, places of worship, workplaces, transport hubs, markets, and health facilities. The questions included the use of soap and water for washing hands as well as hand sanitizer.

The study mainly assessed the following factors:

1. Availability of HWWS facilities (type of water supply, type of handwashing facility, availability of soap)
2. The costs incurred for obtaining handwashing facilities and maintaining them,
3. Financial and operational challenges for building and maintaining HWWS facilities.
4. Key barriers to practicing handwashing in public places
5. Observation of the status of HWWS facilities to corroborate interview responses.

The study aimed to identify the key factors for handwashing in households and selected public settings. These factors include a) the opportunity for washing hands, b) enabling factors or people's ability to practice handwashing; and c) the motivation that they were likely to wash hands given the state of existing facilities.

2.4. LIMITATIONS OF THE STUDY

1. **COVID-19 impacting primary data collection** – The study was envisaged with extensive data collection through primary interviews to understand the HH market in Indonesia. However, due to COVID-19-related travel restrictions, some of the interviews and data collection were conducted over the phone/ virtually which may have limited the gathering of sensitive and critical qualitative information.
2. **Limited secondary data availability** – Given that HH implementation in the country is at a nascent stage and that country is devising an HWWS roadmap, limited secondary literature is available on the supply side.
3. **Reluctance to share information** – Since HH is personal-level information, there was reluctance from the respondent in sharing such information. Additionally, while interacting with private companies, there was reluctance in sharing their business-related (category or product-wise sales) data.

3

MARKET LANDSCAPE FOR HAND HYGIENE AND TRENDS

This chapter provides an in-depth analysis of the findings obtained from the primary data collection across the three provinces. The findings are divided into three sub-sections as per the three categories of stakeholders. A summary of the findings is provided after each stakeholder's findings.

3.1. KEY INSIGHTS: DEMAND-SIDE

3.1.1. HOUSEHOLDS

The insights from the primary and secondary data have been captured for multiple HH value chains. Among cleaning products, liquid soaps are a dominant category and bar soaps also hold a significant share of the market. It has been reported that liquid soap is now picking up as a preferred product for hand washing since it can be used for multiple purposes including HWWS and bathing.

DATA TABLE 1: TYPE OF HAND HYGIENE PRODUCT USED (N=78)
SOURCE: PRIMARY DATA, INTELECAP ANALYSIS

PROVINCE	NTT	JAKARTA	PAPUA	GRAND TOTAL	IN PERCENTAGE
Liquid soap	1	20	26	47	60.0%
Bar soap	20	4	4	28	35.8%
Others	2			2	2.5%
Ash	1			1	1.9%

PRICES:

Most households reported an average monthly expenditure of around IDR 3000-18000 (USD 0.2-1.2) on soaps. The households in the rural areas mentioned that they would prefer a cheaper SKU or package size. For liquid soaps, their ability to be used for HWWS as well as bathing is an added advantage and makes them cost-effective. In rural areas, the price and its characteristic of being 'soft on the skin' are important criteria for the purchase of soaps. In most areas, only a few households spent more than IDR 25,000 (USD 1.77). Findings show that a minority of urban residents in Papua spent around IDR 35,000 to 50,000 (USD 2.33 to 3.33). Most rural residents purchased soaps in the range of IDR 3,000-15,000 (USD 0.2-1).

FINANCING:

Most households had financed their handwashing facilities themselves. However, only 25 percent of households had an HWWS facility and others simply used water from a bucket.

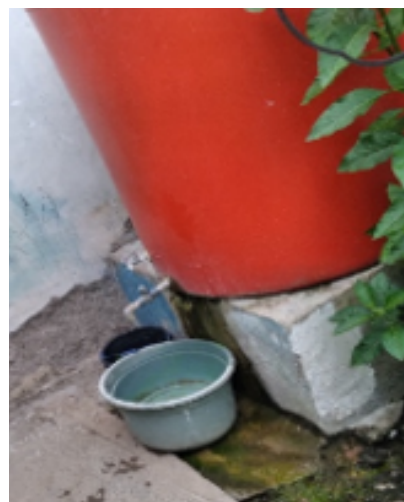
PRODUCTS:

The key criteria for choosing soaps include good foam during washing, affordability, and easy availability. Household observations showed that most households had bar soap in their home, while some had liquid soaps along with them. Most households reported buying their soaps from local stores or nearby smaller stalls. Most households reported that they used only hand sanitizers when they were outside the house and in many cases, they used it only if it was free. The use of hand sanitizers was low across both rural and urban areas due to low awareness and high price sensitivity.

ACCESS AND USE:

Most urban households reported easy access to handwashing products through daily needs shops and supermarkets. Most stores were reported to be within 15 minutes of walking distance of most households irrespective of geographies. However, access to various handwashing products was reported to be a challenge in Papua, while in NTT, rural respondents reported that the shop and kiosks were farther away and products were not always available. This was especially so for households in the remote areas of Papua and NTT.

Most of the households reported not having a fixed HWWS facility with a water facility (piped/non-piped). In terms of HWWS facilities, most households had either a container with a tap or buckets in their homes. Only about a fourth of households had a permanent HWWS facility while others relied on a temporary container with taps for washing hands. Most households reported changing the water in the container daily and cleaning the container. Some of the observation from the field has been shared below.



Examples of some household handwashing facilities
 @2021/Intellectap/SPIRE

Over 65 percent of the respondents at the household level reported practicing hand washing only 3-4 times a day. This indicates that hand washing during critical moments during the day is being missed.⁴ The below table summarizes the observation of HH practice in Households.

⁴ Since most instances in the day such as meals, use of toilets, and going out of the house are likely to occur more than once in a day and the total necessary instances are likely to be more than five.

DATA TABLE 2: PROVINCE-WISE HOUSEHOLDS PRACTICING HAND HYGIENE (HANDWASHING) (N=78)
SOURCE: PRIMARY DATA, INTELLECAP ANALYSIS

	NTT	JAKARTA	PAPUA	GRAND TOTAL	IN PERCENTAGE
Use Buckets	17	21	21	59	75.7%
HWWS facility with a water tank	7	3	9	19	24.3%

In terms of access to one piped water connection at home, out of the 78 households visited, nearly 75 percent were found to have access. 90 percent of households in NTT and Papua in both rural and urban areas did not have a piped water connection. For households without piped water, a hand pump or well served as the primary water source. In 2-3 cases, people also supplemented water from a neighboring well or hand pump.

3.1.2. WORKPLACES

ACCESS

Nearly all offices reported having no challenges in accessing soaps and handwashing consumables. Most offices obtained soaps from retail stores near the office, while around 20 percent obtained them from wholesale channels. Liquid soap was reported to be the preferred option in most of the offices. Most restrooms surveyed had water available and an HWWS facility. Each toilet/restroom had on average two HWWS facilities. One of the major challenges that were reported by most office managers across provinces and settings was the unavailability of gender-segregated toilets or separate handwashing areas.

We do not have separate sanitation facility and basins for men and ...

*Office representative,
East Nusa Tenggara*

PRODUCTS

The common brands of handwashing products that were used include Lifebuoy, Dettol, Nuvo, and Biore. In Papua, very few offices reported using bar soaps, most of them reported using liquid soaps since it was affordable and available in larger pack sizes. In terms of hand sanitizers, nearly 75 percent of offices did not have hand sanitizers in key areas such as cafeterias, desks, and meeting rooms. Most had a hand sanitizer only near the entrance.

Evidence suggests that a lack of separate toilets often dissuades women from washing hands and following appropriate hygiene, especially since washbasins are located near restrooms where privacy is necessary.

DATA TABLE 3: PRESENCE OF SEPARATE WASH FACILITY (INCLUDING HWWS) FOR WOMEN AND MEN (N=36)
SOURCE: PRIMARY DATA, INTELLECAP ANALYSIS

	NTT	JAKARTA	PAPUA	GRAND TOTAL	IN PERCENTAGE
Separate facility –not available	11	5	8	24	66.6%
Separate facility available	1	7	4	12	33.3%

Workplaces had water connections from government supplies and groundwater sources such as bore wells or wells. In some cases, workplaces reported buying water from commercial bottled water suppliers. Most offices in rural areas of NTT and Papua were dependent on groundwater-based sources such as bore-wells, tube wells, etc. and they reported facing some challenges when rainfall was inadequate. The below table shows the sources of water across the provinces.

DATA TABLE 3: PRESENCE OF SEPARATE WASH FACILITY (INCLUDING HWWS) FOR WOMEN AND MEN (N=36)
SOURCE: PRIMARY DATA, INTELLECAP ANALYSIS

	NTT	JAKARTA	PAPUA	GRAND TOTAL	IN PERCENTAGE
Perusahaan Daerah Air Minum (PDAM, Local water company)	10	6	7	23	64%
Ground	2	6	5	13	36%



PRICES AND FINANCING

The reported average monthly expenditure on purchasing soap for an office of 20 staff was around IDR 100.000 (USD 7). Some offices with higher staff capacities (up to 100 staff) reported spending about IDR 1 to 1.5 million (USD 70) a month for the purchase of soaps. Budgeting for soaps and maintenance was included in the monthly budgets, but procurements were usually adhoc, no specific agency or contractor was in place for supplying soaps and other cleaning needs.

The Ministry of Trade (MoT) has mandated in its COVID guidelines that offices should be promoting hand hygiene and COVID-19 norms including mask-wearing and social distancing. A large proportion of offices across both urban and rural areas reported that they had received some Information, education, and communication (IEC) materials from the government for promoting hand hygiene and COVID-19 norms in the office. However, many offices reported that it was not possible to follow all MoT guidelines due to infrastructure and financial constraints.

Nearly 66 percent of workplaces visited did not have segregated facilities for washing hands for women and men, which can be a major barrier to access. On the other hand, nearly 50 percent of workplaces reported having facilities that could be used by persons with disabilities. However, many observed facilities did not adhere to accessibility guidelines to enable use by persons with disabilities. Hence, better education and awareness about disability-friendly facilities may be necessary at workplaces.



3.1.3. TRANSPORT HUBS AND MARKETS

ACCESS:

In urban marketplaces and transport hubs, the primary source of water was the public water supply system. In rural areas, the supplies were mostly from groundwater sources including borewells, wells, and hand pumps. There were no significant differences across provinces and the water supply sources.

DATA TABLE 5: CURRENT SOURCES OF WATER IN HWWS (N=47)
SOURCE: PRIMARY DATA, INTELLECAP ANALYSIS

	NTT	JAKARTA	PAPUA	GRAND TOTAL	IN PERCENTAGE
Ground	10	6	9	25	53%
PDAM	3	14	5	22	47%

Nearly 70 percent of institutions did not have hand sanitizer stations. A few had them near the restrooms. In most transport hubs and markets, HWWS facilities were present inside toilets or near sanitation facilities. In major transport hubs and markets, these facilities were not separate for women. Hence, access to handwashing facilities remained limited for women. Even a major transportation hub in Papua did not have separate toilets for women, which shows that significant gaps exist in public infrastructure across provinces. The problem was also prevalent in public facilities in NTT. These facilities also did not have disability-friendly HWWS facilities. Better implementation and monitoring of guidelines are necessary.

DATA TABLE 6: AVAILABILITY OF SEPARATE TOILETS (INCLUDING HWWS FACILITY) FOR WOMEN AND MEN (N=47)
SOURCE: PRIMARY DATA, INTELLECAP ANALYSIS

	NTT	JAKARTA	PAPUA	GRAND TOTAL	IN PERCENTAGE
Separate facility available	6	17	3	26	55%
No separate facility	7	3	11	21	45%



PRICE/ FINANCES

More than half of the facility managers at markets and transport hubs reported that they spend part of their revenues or internal budgets on maintenance of the HWWS facilities. The lack of a specific budget line for HH-related expenses such as procurement of supplies (soaps), or the routine O&M of HWWS facilities makes it difficult to ensure continuous usage. Even for government facilities such as transport hubs, the market assessment suggests that no additional budgets were received for enhancing the HWWS facilities to make them compliant with the accessibility guidelines.

PRODUCTS

Most managers reported that hand sanitizers were not widely available in their settings. Considering the challenges related to water availability and the COVID-19 situation, hand sanitizers can be an option that needs to be promoted especially in market areas and public places.

It was observed that having separate toilet facilities that include HWWS units is essential to improve hygiene practices among men and women. Another requirement reported by the facility managers is the availability of HWWS facilities outside of the toilets. The lack of such facilities discourages the HH best practices at public places and transport hubs.

The lack of inclusive HWWS facilities in public places was another challenge that discourage persons with disabilities and other vulnerable and marginalized groups from practicing HH. During the assessment, none of the public facilities visited was disability-friendly and inclusive.

All the HWWS facilities are the same and no special modifications are done for people with disability

*Market Supervisor,
Papua - Jayapura City*

Most transport hubs and markets had promotional materials for hand hygiene and COVID-19 protocols placed at the entrance and exits, however, the impact of the same couldn't be verified during the data collection.

3.1.4. SCHOOLS

ACCESS

Most schools in rural areas reported using groundwater, and one school mentioned having a municipal connection (known as PDAM connections) for the water supply. Papua province had one school in an urban area that had a government connection, and schools in peri-urban and rural regions relied on groundwater such as wells or bore wells to get water.

DATA TABLE 7: THE CURRENT SOURCE OF WATER SUPPLY IN SCHOOLS (N=19)
SOURCE: PRIMARY DATA, INTELECAP ANALYSIS

Geography	NTT			JAKARTA			PAPUA			TOTAL	IN PER-CENTAGE
	Peri-urban	Rural	Urban	Peri-urban	Rural	Urban	Peri-urban	Rural	Urban		
Ground water				2		2	2	2		8	42%
PDAM		1		2		4			1	8	42%
Bottled	1	2								3	16%

Few schools reported challenges in accessing water during the summer season due to dependency on rains for groundwater recharge.

We use pump to draw water and since its not enough, we purchase clean water for the school

School administration

PRODUCTS

Most of the schools reported having a regular supply of handwashing products and that there were no significant challenges.

Nearly 30 percent of madrasahs reported sharing HWWS facilities with mosques. Most schools visited in Papua and Jakarta had semi-permanent HWWS facilities including a stored water source through a piped connection or water tanks. The facilities were constructed using bricks, concrete, or stone slabs with taps on them. The facilities present at schools were not mobile.

Most schools in NTT had temporary HWWS facilities⁵ and it was reported that the facilities erected in the schools were of poor quality and had issues with frequent breakage. Schools reported that it was challenging to do regular O&M of installed HWWS facilities and often there is a lack of budget to do the same.

FIGURE 10: HANDWASHING DRUM IN SCHOOLS AND TEMPORARY HWWS FACILITY

Geography	NTT			JAKARTA			PAPUA			TOTAL	IN PER-CENTAGE
	Peri-urban	Rural	Urban	Peri-urban	Rural	Urban	Peri-urban	Rural	Urban		
Permanent	1		1			4	2	2	1	11	58%
Temporary		3	5							8	42%

⁵ Temporary HWWS facilities usually include buckets or water containers with taps which have a small water storage capacity and need frequent refilling.



PRICES

Procurement of soaps was managed by the school administrators through the school budget. Most schools had a procurement budget ranging from IDR 100,000 to 500,000 (USD 7 to 35). Schools in the peri-urban and rural areas in NTT and Papua had a very low budget of around IDR 5,000-25,000 (USD 0.35 -1.75), which was reported to be insufficient by the school administrators to purchase enough supplies for the school.

Secondary evidence suggests that schools maintain sanitation infrastructure from their general budget or the Bantuan Operasional Sekolah (BoS) i.e., the School Operational Funds budget. The World Bank assessment has found that schools have deprioritized maintenance of toilets and sanitation infrastructure since BoS budgets are not sufficient to meet all other costs along with sanitation (Kumala, 2021). Respondents reported that the government had provided some promotional materials, mainly for compliance with general COVID-19 regulations including handwashing and mask-wearing for schools.

Among school children, around 60 percent reported that they had started washing hands regularly only after the pandemic started. Others reported that it was a routine they followed even before the pandemic. The type of HWWS facilities used as reported by students was equally distributed between permanent and semi-permanent or temporary structures. Students from schools in NTT and Papua, especially in the rural regions were more likely to report having temporary HWWS facilities. All adolescents interviewed in Jakarta province reported having permanent HWWS facilities at their school, while 25 percent of adolescents in NTT said they had permanent HWWS facilities in their schools. All students reported having sufficient water and soap.

3.1.5. PLACES OF WORSHIP

Nearly 65-70 percent of places of worship visited had permanent HWWS facilities whereas some places in NTT and Jakarta had temporary HWWS facilities on their premises. Most HWWS facilities had liquid soap placed near them and few facilities had bar soaps. In very few cases, ash and mud were used as cleansing agents.

DATA TABLE 9: TYPE OF HWWS AVAILABLE (N=21)
SOURCE: PRIMARY DATA, INTELECAP ANALYSIS

Geography	NTT			JAKARTA			PAPUA			TOTAL	IN PER-CENTAGE
	Peri-urban	Rural	Urban	Peri-urban	Rural	Urban	Peri-urban	Rural	Urban		
Permanent	1	2	3	1	1	2		2	3	15	71%
Temporary	1		3		1	1				6	28.5%

Most religious places relied on donations from visitors to finance the purchase of HH products. Some churches reported that the parish funded the expenses related to hygiene. The chief caretaker is responsible for maintaining stocks at the facility, and around 6-8 liters of liquid soaps were kept as buffer stocks.



Figure 11: HWWS facilities at places of worship ©2021/Intellectap/SPIRE

All worship places in Jakarta and Papua had a separate restroom for females, while most in NTT did not have a restroom for women. Most HWWS facilities did not have any specific procedure for maintaining the facilities, and most repairs were done based on their needs.

DATA TABLE 10: PRESENCE OF HAND SANITIZER STATIONS (N=21)
SOURCE: PRIMARY DATA, INTELECAP ANALYSIS

	NTT	JAKARTA	PAPUA	GRAND TOTAL	IN PERCENTAGE
Hand Sanitization station available	5	4	4	13	62%
Hand Sanitization station –not available	3	3	2	8	38%

Many places of worship had promotional materials about HWWS on their premises that mainly included correct handwashing steps and encouraged people to wash hands before visiting the place of worship. Most of the communications were either at the entrance or the exit and few places had some messaging in the major prayer halls or assembly areas.

3.1.6. HEALTHCARE FACILITIES

It was observed that most of the primary healthcare facilities (HCFs) in NTT and Papua relied on groundwater for their requirements, while the ones in Jakarta had a municipal water supply. In cases where groundwater was not available, HCFs relied on neighboring water sources such as the village head's well or community wells to get water.

All HCFs visited reported the use of liquid soaps for handwashing. While enquiring about stock, it was observed that not all the HCFs keep a buffer stock, but some reported keeping 1-2 jerry cans of 5 liters of liquid soap as a buffer. Nearly 70 percent had a monthly budget for soaps ranging from IDR 50,000-5,00,000 (USD 3.5 - 35), with some having a budget up to IDR 1 million or around USD 70.

HWWS facilities were found to be severely inadequate in the HCFs observed. Nearly 60 percent of HCFs in NTT did not have a washing sink in the doctors' rooms. It was also reported that critical points in the HCFs such as labor rooms did not have a washing sink with running water. Similar problems were also observed in some peri-urban facilities in Jakarta. HCFs in NTT were also under-equipped in terms of not having hand sanitizer stations at critical points such as the doctors' room and delivery rooms. The lack of HWWS facilities at critical points in an HCF serves as a serious deterrent in practicing key moments of handwashing (WHO, 2019). WHO recommends handwashing or hand sanitization before touching a patient, before clean/aseptic procedures, after body fluid/exposure risk, after touching a patient, and after touching patient surroundings in its guidelines on hand hygiene in healthcare settings (WHO, 2011).

DATA TABLE 11: WASH SINK IN HWS IN THE LABOUR/DELIVERY ROOMS OF HEALTH CARE FACILITIES (N=51)
SOURCE: PRIMARY DATA, INTELLECAP ANALYSIS

Geography	NTT			JAKARTA			PAPUA			TOTAL	IN PER-CENTAGE
	Peri-urban	Rural	Urban	Peri-urban	Rural	Urban	Peri-urban	Rural	Urban		
Available		3	5	10	8	3	1	2	4	36	71%
Not available	6	4	2	2		1				15	29%

Nearly 80 percent of HCFs reported that there was no specific activity for promoting handwashing at the facility. This was commonly seen across HCFs in Jakarta. The HCFs in NTT and Papua had some level of engagement with community members to promote HH. Few facilities reported that they provided free soap to community members when needed. Most HCFs had promotional messages at the entrance and in some key places like waiting rooms and entrances.

SUMMARY

INDIVIDUAL HOUSEHOLDS

Limited accessibility of hand hygiene products and HWWS facilities at the household level impacts HH behaviour

Most households have water supply from either groundwater sources or municipal piped connections. In rural areas, more than 60 percent of the water supply is from wells or tube wells. Access to adequate water is not reported as a challenge. Soap availability and the desired package sizes are not a challenge in urban areas, but rural residents often report that preferred size small packages are not always available. This demotivates rural residents from spending higher amounts of money on buying soap. In rural areas, the walking distance to shops is sometimes

more than 15 minutes, which demotivates people from going to the shop only to buy soaps. Summary of the key challenges at the household level:

- ‡ The lack of HWWS facilities within households affects the adoption of handwashing at critical times.
- ‡ Low reported times of handwashing with soap reflect that some key moments are being missed.
- ‡ Smaller package sizes for soaps are demanded by rural consumers so that they can afford to buy them.

PUBLIC PLACES: MARKET, TRANSPORT HUBS

The lack of inclusive HH facilities in public places demotivates vulnerable populations and impacts hand hygiene behaviour

The Indonesian MoT has devised new guidelines to install new HWWS facilities and hand sanitizer stations across public facilities. Some facilities have provided additional HWWS facilities which include a tank of stored water and taps operated by a foot pedal or by hand to enable people to wash their hands. In places such as markets, outdoor facilities with water tanks and taps have been observed. However, some fundamental gaps such as the non-availability of separate washrooms and basins for women and people with disabilities are major access barriers. Hand sanitizer stations are installed at entrances of most of the facilities, but many are now not being used or refilled. Qualitative interactions with other stakeholders such as NGOs also corroborated the fact that hand sanitizer use and enforcement by facility managers have reduced. Summary of the key challenges in public places:

- ‡ Infrastructural constraints to building HWWS facilities do not allow the construction of new facilities. This results in a lack of an adequate number of facilities to encourage handwashing at critical instances of the day in public places.
- ‡ The lack of inclusive HWWS facilities leads to challenges in access to HH for vulnerable groups.
- ‡ New guidelines for public facilities have not led to better facilities like hand sanitizing stations, this signifies the need for better implementation and monitoring

INSTITUTIONAL PLACES: SCHOOLS

Securing funds for regular O&M of HWWS facilities is critical to promoting HH in schools in addition to awareness activities

About 40 percent of visited schools had challenges in maintaining handwashing facilities and reported that a lack of funds was a key challenge. Most school administrators reported that while they usually had funds for the purchase of basic HH products, major repairs were a challenge. More than 80 percent of schools visited have HWWS facilities available and students are also encouraged to wash hands at various times during the day. Many corporate partners and NGOs have also adopted schools and provided HWWS facilities to ensure access and availability. However, nearly 30 percent of Madrasahs reported sharing handwashing facilities with adjoining mosques. Summary of the key challenges at the schools:

- ‡ Soaps are available in schools, but disruption in water supply and the frequent need for refilling water impedes the handwashing practice among children in schools.
- ‡ Regular O&M of HWWS facilities is critical to ensure sustainable practices are adopted by children at school.
- ‡ Funding and operational challenges affect the availability and maintenance of HWWS facilities in schools.

INSTITUTIONAL PLACES: PUBLIC AND PRIVATE OFFICES

Lack of hand hygiene facilities including products/ infrastructure (HWWS facilities/water) is critical

Public and private offices have mainly dealt with enhanced handwashing needs by using hand sanitizers. Since most workplaces do not have the funds or the space to install new HWWS facilities, hand sanitizers are an easier option. For workplaces in rural areas, some have built HWWS facilities outside in the open spaces near their offices. Workplaces in rural areas noted that installing new HWWS facilities was a challenge since it entailed significant expenditure. Urban workplaces in buildings noted that constructing new facilities was not possible in the existing space. In rural areas, some workplaces did not have segregated restrooms for men and women, often causing challenges to accessibility. Summary of the key challenges at the workplace:

- ‡ Monitoring social distancing and HH at workplaces is still a challenge due to a lack of space and the ability of workplaces to enhance HWWS facilities.
- ‡ Awareness about HH and the need for enforcing it in workplaces is low among most interviewed managers.
- ‡ Lack of regular O&M is a major barrier to sustained use of HWWS facilities.

HEALTHCARE FACILITIES

HWWS facilities were found to be inadequate in the health care facilities observed. Nearly 60 percent of HCFs in NTT did not have a washing sink in the doctor's rooms. Critical points of care in the center such as labor rooms did not have a washing sink with running water. Similar problems were also observed in some peri-urban facilities in Jakarta. HCFs in NTT were also under-equipped in terms of not having hand sanitizer stations in places such as the doctor's room and delivery rooms. Patients were usually asked to sanitize their hands while entering the HCF. Hand sanitizers were available at about 2-3 points within the HCF. Summary of the key challenges at the HCFs:



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- ‡ HCFs in rural areas are under-equipped to provide adequate HWWS facilities and hand sanitizer stations to staff and patients.
- ‡ Budgets for sanitation facilities seem to be dependent on local conditions, hygiene facilities were not maintained according to necessary standards in many HCFs.
- ‡ Use and access to hand sanitizers are prevalent but remain low.

3.2. KEY INSIGHTS: SUPPLY-SIDE

3.2.1. MULTINATIONAL PRODUCT MANUFACTURERS

SOAPS

Market share and sales data were obtained from the Euromonitor and MarketLine reports for Indonesia from 2021. The Indonesian market for personal hygiene products was worth USD 800 million in 2020.⁶ The personal hygiene category includes soaps, hand sanitizers, bathing, and other products. It is projected that this segment is likely to grow to USD 3 billion by 2025.⁷ The Euromonitor and MarketLine reports show that the market is currently driven by bar soap as the major hand hygiene product. Liquid soap has seen major growth during the pandemic due to the government's messaging and regulations which made it mandatory for all stores, restaurants, and public spaces to provide a hand-wash sink, thus enabling people to wash hands more often. Product and marketing innovations were introduced by several companies, e.g., some brands such as Lifebuoy launched their body wash/shower gel in smaller packaging, while other brands such as Antis, Nuvo, and Dettol launched bigger packs of liquid soap and hand sanitizers to make the products cheaper considering the higher usage.

Due to the outbreak of COVID-19, there was a sharp rise in demand for hand hygiene products which led to shortages of products. It has been observed that players in the hygiene⁸ category increased their production in early-2020 to meet the rising demand. While prices increased for a short while, the quick rise in production across companies led to average unit price growth at less than half the rate recorded in 2019. The graph below shows category-wise sales of hygiene products in Indonesia in the last 5 years.⁹

⁶ Euromonitor and Marketline survey data, 2021

⁷ Euromonitor and Marketline survey data, 2021

⁸ Hygiene product category includes liquid and bar soaps, body powder/gels/wash etc.

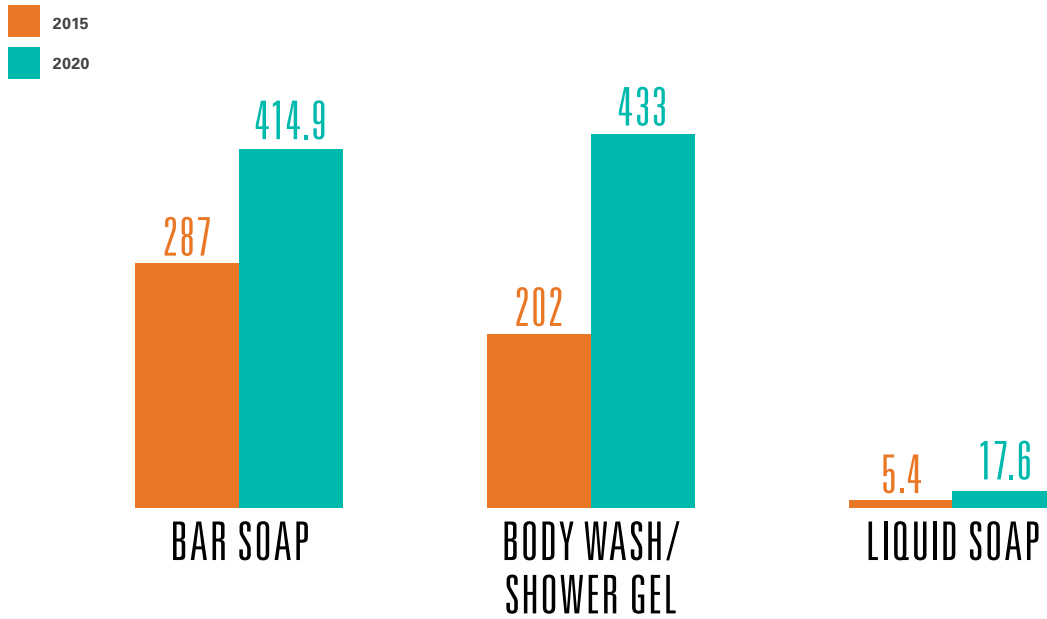
⁹ Euromonitor Passport Report: Beauty and personal care in Indonesia, Intellectap Analysis



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Category-wise sales 2015 & 2020

While the liquid soap category has shown robust growth in the last 5 years, the sales of bar soap have plateaued but have not declined. As illustrated in the figure above, the body wash and shower gels have shown a sudden spike in sales as they are perceived to be multi-faceted products that can be used for ‘cleaning’ as well as cosmetic purposes, something which liquid soaps, usually marketed for a single purpose of cleaning hands do not possess. Additionally, the category-wise sales of hygiene products show that **48 percent of sales have been of bar soaps in 2020.**

It is projected that the liquid soap will show an 18X rise in sales by 2025.¹⁰

PROJECTED SALES FROM 2020-2025 (USD MILLION)		
CATEGORY	2020	2025
Bar Soap	414.0	417.0
Body Wash/ Shower Gel	432.4	688.0
Liquid Soap	175.0	950.0



Category-wise sales of products 2020

¹⁰ Euromonitor Passport Report: Beauty and personal care in Indonesia

While there is an expectation that the hygiene concerns are expected to persist even as the COVID-19 pandemic eases, it is likely to continue leading to a rise in sales of liquid soap. Data from Euromonitor¹¹ and MarketLine¹² and analysis from this study show that there is a perception that bar soaps are inferior to 'antibacterial' products, but the challenges of affordability for body wash and liquid soap will ensure that bar soaps survive. This has also led to companies launching smaller pack sizes of liquid soap for increasing the penetration in the rural and underserved markets.

The projections suggest that a lot of the demand for liquid soap was coming from bulk orders from public facilities, which were mandated to have a handwashing sink on their premises and found liquid soap dispensers to be the easiest alternative to deploy. Moreover, the reports suggest that the demand for handwashing facilities in public places is unlikely to diminish and will maintain the demand for liquid soaps in the forthcoming years.

PROJECTED CAGR FOR HYGIENE PRODUCTS: 2020-2025			
CATEGORY	2020-21	2020-25 CAGR	2020-25 TOTAL
Bar soap	0.3	0.1	0.7
Body wash/shower gel	3.0	9.7	59.2
Liquid soap	63.7	40.1	439.8
Total category	3.3	6.6	37.5

COMPETITIVE LANDSCAPE

In the HH market, Unilever Indonesia is the lead player, followed by Sayan Mas Utama PT (Wings Group Indonesia) and PT Cussons, whereas the others include Reckitt Indonesia and Johnson and Johnson. While Unilever Indonesia had more than a 50 percent share in 2016, it has given way to local and more niche brands in recent years. This is also reflected in the Nielsen report¹³ published in 2016 on consumer behaviours in hygiene, which reported that niche brands had risen due to some consumer segments becoming more aware of eco-friendly practices, avoiding chemical ingredients, and a rising purchasing power.

Two key brands, Lifebuoy and Lux together held nearly 50 percent of the market share, while some others by Wings Group Indonesia were a distant second. An analysis of the sales figures from 2017-2020 shows that the market share has not been captured by existing players but rather has been taken up by local manufacturers who may have cropped up during recent times. While detailed data is not available, there is also a possibility that a combination of localized brands which have grown recently and a shift towards more premium products due to increased awareness could have resulted in the emergence of new local brands.

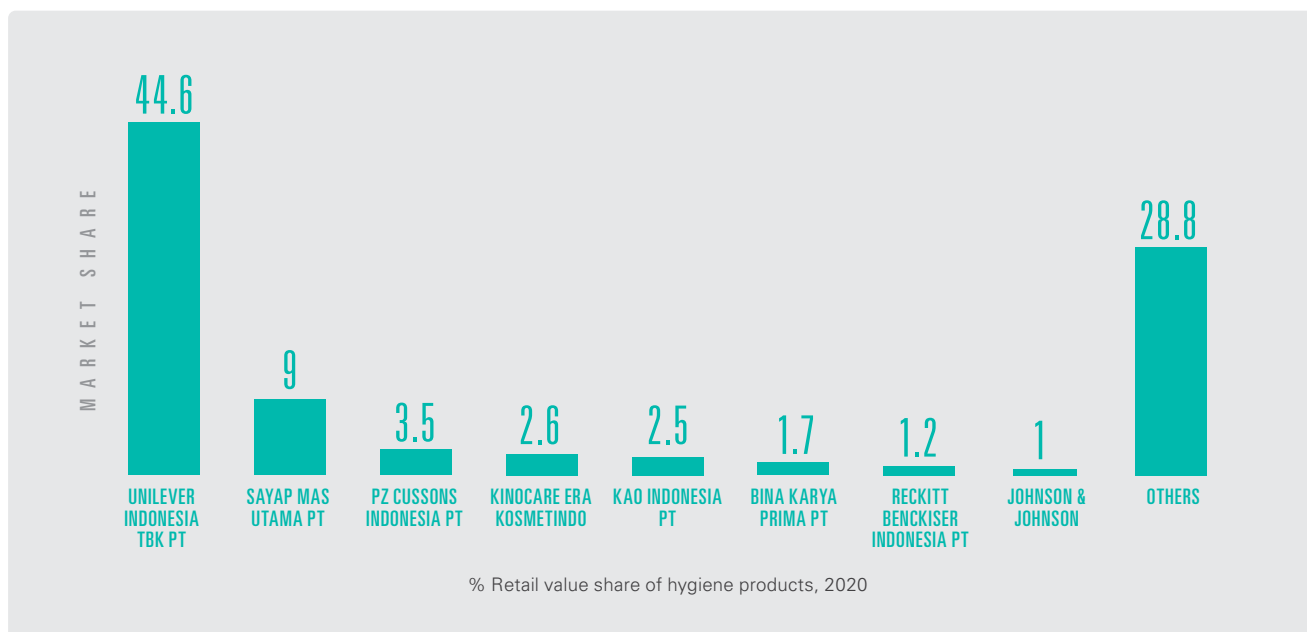
PROJECTED CAGR FOR HYGIENE PRODUCTS: 2020-2025		
BRAND NAME	COMPANY (NATIONAL BRAND OWNER)	% RETAIL VALUE BRAND
Lifebuoy (Unilever)	Unilever Indonesia Tbk PT	21.8
Lux (Unilever Group)	Unilever Indonesia Tbk PT	20.2
Nuvo (Wings Corp)	Sayap Mas Utama PT	5.0
Giv (Wings Corp)	Sayap Mas Utama PT	3.6
Bioré (Kao Corp)	Kao Indonesia PT	2.2
Cussons Baby (PZ Cussons Plc) Shinzu'i	PZ Cussons Indonesia PT	2.0
Cussons Imperial Leather (PZ Cussons)	PZ Cussons Indonesia PT	1.4
Dove (Unilever Group)	Unilever Indonesia Tbk PT	1.4
Dettol (Reckitt Benckiser Group Plc (RB)	Reckitt Benckiser Indonesia PT	1.2
Zwitsal (Unilever)	Unilever Indonesia Tbk PT	1.2
Johnson's Baby (Johnson & Johnson Inc)	Johnson & Johnson Indonesia PT	1.0

11 Euromonitor Passport Report: Beauty and personal care in Indonesia

12 Market Line Industry profile: Personal Hygiene in Indonesia

13 The Dirt on Cleaning: Home cleaning/laundry attitudes and trends around the world

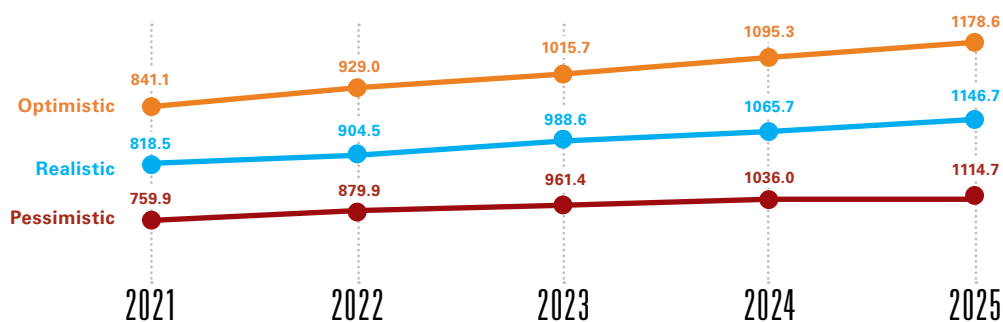
BRAND NAME	COMPANY (NATIONAL BRAND OWNER)	% RETAIL VALUE BRAND
Yuri	Joenoos Ikamulya	0.6
Pigeon (Pigeon Corp)	Multi Indocitra Tbk PT	0.5
My Baby	Tempo Scan Pacific Tbk PT	0.5
Others	Others	29.2
Total	Total	100



While limited information was available on the pricing and affordability of these products, stakeholder interviews suggest that commercially marketed products with a certain level of revenue/ profits are liable for 10 percent tax in Indonesia. This typically is passed on to the consumers and tends to increase the price of the product.

MARKET FORECAST

The analysis of published reports shows that the overall market value for hand hygiene products is expected to grow at a rate of CAGR of 8 percent from 2021 to 2025. The average rate of growth will be around 8.78 percent across five years. The analysis has tried to forecast market value in three scenarios i.e., optimistic, normal, and pessimistic. In a certain scenario such as a plateau in sales post the COVID-19 surge, sales may show a lower rise by up to 2.5-3 percent in each category of HH products. It is also likely that sustained demand for HH products may also lead to higher sales than forecasted.



Market forecast hand hygiene products in USD million
Source: Intellect analysis

THE MARKET FOR HAND SANITIZERS

The huge demand for disinfection saw many new brands venturing into the hand sanitizer and hand gel business in 2020. Earlier in the COVID-19 outbreak, brands that launched hand sanitizer and hand gel ranged from personal care, cosmetics, and skincare to home hygiene product companies.

The hand sanitizer market saw a nearly 73 percent rise in sales during 2019-2020 from USD 100 million to USD 173 million in 2020.¹⁴ The pandemic has led to the establishment of hand sanitizers as a necessary product, especially for the middle- and upper-class sections of the population. The rise in sales projected by sales figures has also been supported by key informants and in major stakeholder interviews. However, as expected, the sales for hand sanitizers are projected to correct marginally to USD 161 million and then continue to rise to about USD 205 million by 2026, signifying that the product category will be a focus area for major players.¹⁵

Some indicators such as the source of obtaining hand sanitizers are also undergoing a change and e-commerce is likely to play a major role, by increasing its share up to 25 percent, up from around 9 percent in 2019. While data on market categorization is not available, likely, the market for hand sanitizers is most likely driven by more affluent users due to the sharp rise in online sales. Key informant interviews have supported the hypothesis that the use of hand sanitizers is more prevalent among the richer sections of society in urban areas.

THE MARKET FOR HAND WASHING WITH SOAP (HWWS) FACILITIES

Secondary research shows that HWWS facilities have come up in a big way in Indonesia as a response to COVID-19. Most of these HWWS facilities have been installed as a response to emergencies like natural disasters and pandemics and are mostly temporary in construction. They are manufactured using available local materials and resources and do not have an established supply chain.

Currently, they are mostly installed either through government authorities at public/private and school facilities or by not-for-profit organizations. There is limited involvement of private companies or major commercial ceramic manufacturers in providing HWWS facilities in public places. In some cases, MNCs like Unilever and Wings Group have provided HWWS facilities through their corporate social responsibility (CSR) initiatives

In initiatives supported by NGOs, the designs are

¹⁴ Market survey report- Statista

¹⁵ Market survey report- Statista



created and supervised at the local level while the construction is done by the local vendor. In initiatives by NGOs, the challenge of maintaining these facilities arises due to limited capacities at the local government level to manage these facilities once they are constructed. While NGOs reported that they could help in construction, for most organizations, routine maintenance of the HWWS was not feasible considering their limited financial and operational bandwidth.

In addition to the supply chain, the unavailability of water for HWWS was found in secondary and primary research as a major challenge and it acts as a disincentive for HWWS practice. Ensuring a continuous supply of water or storage is critical for the operationalization and sustainability of the facilities.

Organizations like UNICEF, WVI, Yayasan Mercy Corps Indonesia, etc. have installed many such HWWS facilities which are innovative in places like Biak district in Papua province. The facilities range from temporary (tippy tap) to permanent (brick and mortar) and from community to household level.¹⁶

¹⁶ HWWS facility and Supplies for COVID -19 response

3.2.2. DISTRIBUTORS, SUPPLIERS, AND RETAILERS

A wide range of HH products is supplied/sold which majorly includes bars and liquid soaps. A small proportion of the distributors and retailers also stock hand sanitizers. Some of the key brands are Lifebuoy, Dettol, Nuvo. Lux, Sunlight, etc.

Distributors and suppliers reported stocking all key product categories including bar soaps, liquid soaps, and sanitizers. Most recorded sales were mainly for Lifebuoy, followed by Dettol and Nuvo. Hand sanitizer sales were reported by a few suppliers, signifying that the product is not yet popular among most Indonesians. The hand sanitizer brands reported to be sold were Sleek, Antis, and Dettol.

Nuvo and Lifebuoy is the most sold product in urban and rural market

*Warehouse staff,
Multiple locations*

Most large suppliers and distributors obtained products at their warehouses, and then packaged these goods to be sent to the next smaller warehouse or distributor, after which smaller batches of products were sent to retailers, mini-markets, and traditional retail outlets (Warungs).

Most of the retailers reported that bar soaps were the highest selling commodity among HH products. While liquid soaps were also in demand, bar soaps remained the dominant product. Very few retailers reported sales of hand sanitizers. Most stores in NTT did not sell hand sanitizers, also a high proportion of the stores in Jakarta and Papua were not stocking hand sanitizers, signifying that the demand and penetration remain low for the category.

Most stores reported the dominance of five-six key brands, namely Lifebuoy, Dettol, Lux, Shinzui, Sunlight, Give, and Nuvo. For hand sanitizers, the Sleek and Antis brands were sold the most. Most sellers reported that the local brands were more popular, and most stores did not stock international brands or those different from the mainstream. The ones which stocked international brands were mostly in Jakarta and urban areas of Papua and NTT. It was reported by many urban retailers that their consumers used different products for bathing and handwashing, while rural and peri-urban consumers reported the use of the same product for bathing and

handwashing. This showcases that the socioeconomic status of the individuals determines the choice of the category and varied product use.

Smaller SKUs of the products are more in demand in rural areas due to their lower prices

Most distributors and retailers did not report any specific geography-wise preferences for SKUs, however, some distributors serving rural areas in NTT and Papua reported that smaller SKUs were more in demand in rural areas. Distributors and retailers reported that most pack sizes and their prices ranged between IDR 2,000-25,000 (USD 0.14-1.4). This corroborates findings from the consumer data, where the range was around IDR 3,000-20,000 (USD 0.21-1.41). Rural stores reported sales estimates of about IDR 2,000-5,000 (USD 0.14-0.35), underlining the socioeconomic background as the underpinnings of buying habits. A couple of them also reported having products as expensive as IDR 80,000 (USD 5.6) or in some cases, even IDR 200,000 (USD 14) per pack, however, it is likely that such large SKUs are consumed by institutional buyers or a small class of affluent buyers.

At the higher levels, most distributors reported that they had cars or vans to transport products to the smaller stores or warehouses, while most small stores reported that they used vehicles (small cars) to transport the products from warehouses to local stalls and shops. In many cases, the small stores reported that they visit the distributor and collect their goods. Most small distributors did not have any alternative mechanisms apart from cars or smaller vans and did not use any transportation partners for delivering stock to the retailers.

Most of the large stockists were based in urban areas, while one in Papua was based in a suburban area. Many distributors and suppliers reported transportation as a key challenge in product distribution in provinces such as Papua and NTT, where the reach of goods is limited due to the distance and lack of frequent transportation, and high costs. Additionally, extreme weather conditions result in delays in the deliveries with limited transportation options. In rural Papua and NTT, heavy rains disrupted transportation and delayed supplies.

In Jakarta, products reach all the geographies due to robust connectivity, while in Papua and NTT, remote and mountainous regions remain unserved due to lack of connectivity. In these regions of Papua, supplies are often dependent on villagers visiting weekly markets or shops occasionally.

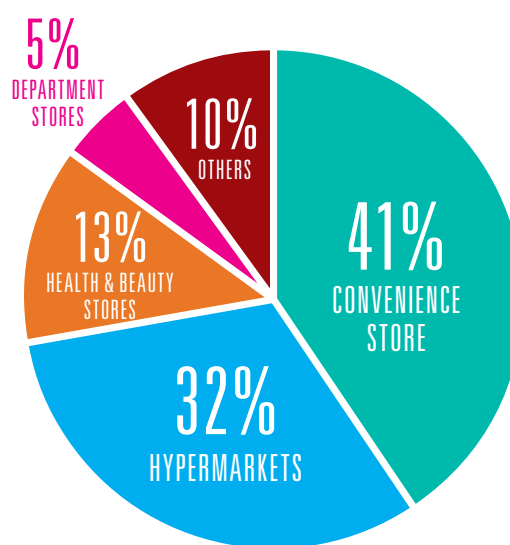


Most suppliers also did not speak of any specific support that they needed to improve reach and business, however, suppliers in Papua and NTT reported that they needed transport support from the government, in terms of improved frequency of supplies from mainland provinces and better connectivity through cargo planes. Some suppliers

also shared the need for capital support, while a small number of suppliers also requested the government for a better regulatory atmosphere.

DISTRIBUTION CHANNELS

In Indonesia, the main distribution channels for personal hygiene products (including handwashing products) are convenience stores, which account for 40.8 percent of the total market value in 2020. The next biggest channel for soaps and hygiene products are hypermarkets & supermarkets, which account for 31.8 percent. Retail pharmacists account for 13 percent of the sales, followed by departmental stores of 4.9 percent.



Points of sale for hygiene products

The insights from primary interviews suggest that e-commerce platforms have also emerged as one of the major channels for the sales of these products. During the pandemic, the rise in sales through online modes or home delivery was at around 30 percent, and the rise in online purchases would sustain, although the exact magnitude is unknown.¹⁷ However, nearly 75 percent of people reported that going to a traditional market or shop remained their favourite mode of buying household goods. Secondary research shows that while the traditional retail stores may not suffer significantly, the prolonged period of social distancing, work-from-home arrangements, and restricted movements would lead to long-term behaviour changes and greater adoption of e-commerce (Shopee and Tokopedia) for buying daily necessities. In rural areas, the traditional warungs remain the key source of household goods.

17 The Dirt on Cleaning: Home cleaning/laundry attitudes and trends around the world

While the distribution channel is well established in the urban market, there are challenges in the rural market. It was highlighted by the stakeholders that last-mile delivery in a remote and rural locations is still a challenge in Indonesia. Geographies such as the Western and Central parts of Indonesia have good penetration of products compared to the Eastern region.

DISTRIBUTION CHANNELS FOR HAND HYGIENE PRODUCTS

Indonesia is a vast country—the 15th largest in the world in terms of land area. Its 273.5 million people are spread out across more than 6,000 inhabited islands. For consumer-packaged goods or fast-moving consumer goods (CPG or FMCG) companies to make their products available to such a large and dispersed population, they must do business with the country's myriad retailers, which operate a combined 4.1 million off-premise and on-premise stores selling CPG products.¹⁸

Given the geographic challenges and the immense number of retail outlets in Indonesia, Route-To-Market planning and execution are extremely important for FMCG companies. Indonesia's businesses are organized along traditional lines, with the full spectrum of agents,¹⁹ distributors,²⁰ and other intermediaries represented in the economy.²¹

For distribution of the products, two channels are prominent i.e., Modern and Traditional.

- ‡ Modern: Manufacturer - retailer – consumer
- ‡ Traditional: Manufacturer - wholesaler - retailer - consumer

Finding a stocking distributor can be a challenge in Indonesia due to a general unwillingness to assume the carrying charges involved with warehousing. Traffic congestion and weak infrastructure often make it expensive to ship products long distances within Indonesia from a central warehouse.

The secondary information suggests that the current availability of third-party distributors is not well spread across the country and is concentrated in only two out of five islands of Indonesia. The below maps give a snapshot of the distribution network for Kino, Unilever, Kao in Indonesia.

Unilever Indonesia brings a vast network of distributors and major area offices for most provinces in Indonesia. The company reports no major missed geographies at the provincial or district-levels, however, the distributor network is noticeably smaller in some regions such as East and West Nusa Tenggara, and with only about 5-6 distributors in Papua. Kao Indonesia has seven major sales offices and a network of 170 sub-distributors across the country, like other companies, the network has a much smaller presence in NTT and Papua. This may lead to a lower penetration in hard-to-reach areas. A thorough analysis of the existing distribution network of the large MNCs indicates that:

- ‡ There is an over-dependence on third-party distributors to make the products reachable to the last mile, especially in remote locations dominated by traditional retailers.
- ‡ There is lesser penetration of the distributors/agents in the Northern and Western belts of the country i.e., Kalimantan, Sulawesi, and Papua have a limited network of distributors.

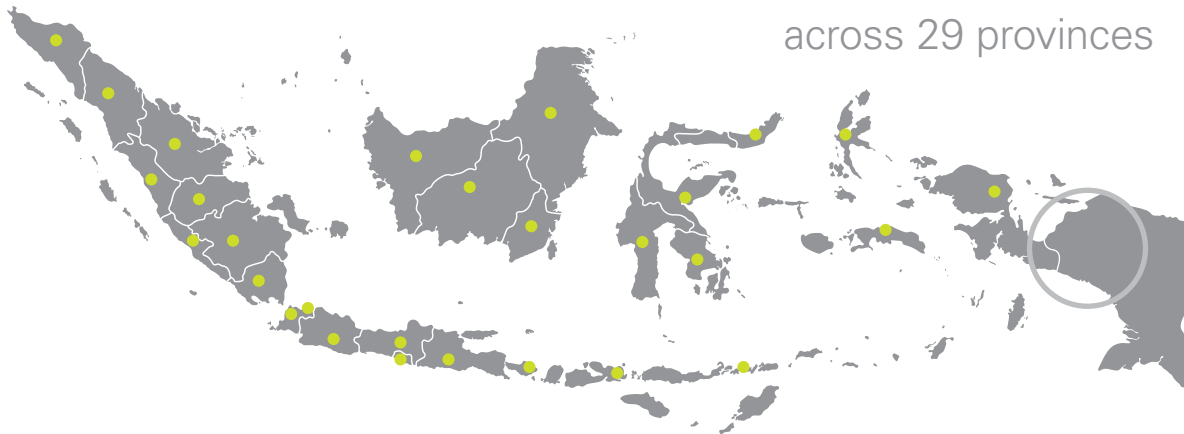
¹⁸ Winning in Indonesia's consumer-goods market: Best practices in customer and channel management, McKinsey & Company, Nielsen, 2015

¹⁹ An agent is a national trading company acting as mediator to act for and on behalf of the principal on the basis of agreeing to undertake marketing without transferring rights to physical goods and/or services owned/controlled by the appointing principal. The principal may be a manufacturer or supplier and may be located offshore or onshore.

²⁰ A distributor is a national trading company acting for and on behalf of the company on the basis of an agreement to purchase, store, sell as well as market goods and/or services owned or controlled.

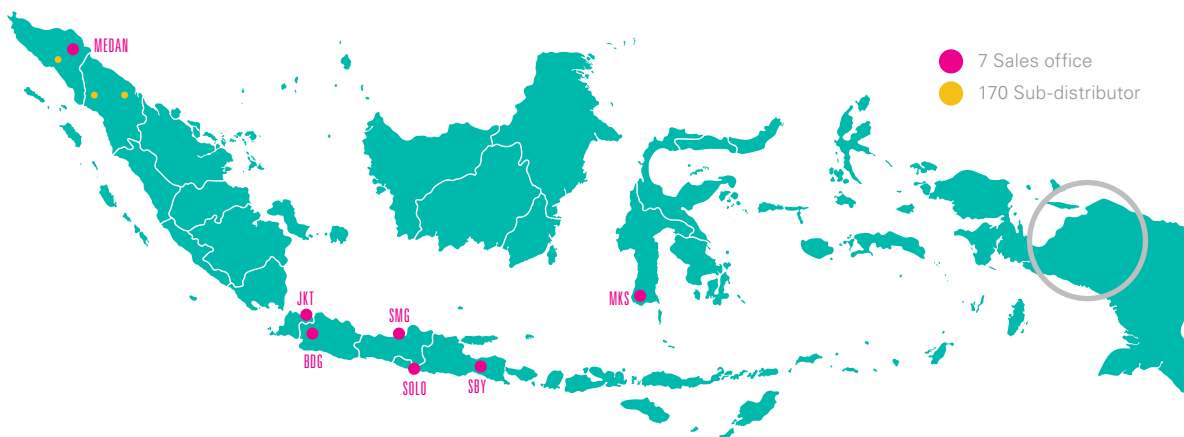
²¹ Official Website of the International Trade Administration, Indonesia - Country Commercial Guide

55 Distribution network across 29 provinces



KINO SALES & DISTRIBUTION NETWORK

Source: <https://www.kino.co.id/resources/document/Others/company-presentation-q2-2021.pdf>



KAO DISTRIBUTION NETWORK

Source: <https://www.kao.com/id/en/about/outline/profile/>



UNILEVER DISTRIBUTION NETWORK

Source: https://www.slideshare.net/indo_acf/unilever-iacf-prevention-of-corruption-presentation-11-june-2014

3.2.3. LOCAL MANUFACTURERS AND ENTREPRENEURS (HH PRODUCTS, HWWS FACILITIES)

Most of the local manufacturers cater to a niche market as there is no sustained demand for local products

The number of manufacturers for HH products contacted was quite small and was found only in Jakarta and Papua. Most manufacturers reported that they produced hand soaps in the form of liquid soaps, while some also produced allied goods such as detergents and floor cleaners. It was reported that the price of their SKUs ranged from IDR 8,000 to 30,000 (USD 0.53-2), while in some cases, cartons of up to IDR 72,000 (USD 4.8) were also sold.

Weak market linkages are a key deterrent for local products to scale beyond their restricted geographies

Most of the companies reported not having any specific supply strategies for rural areas or underserved areas. Most are sold through conventional channels including selling directly to businesses and through retail channels. A majority reported selling through some online portal and using social media for promoting their products. Most of the companies did have specific strategies for serving underserved areas and are largely dependent on either sales agents or online portals to increase their reach.

The availability of the material in remote areas for the construction of HWWS facilities is a challenge.

It was observed that there are very few local start-ups that are in the business of creating designs and installing HWWS facilities in houses and other public infrastructures. Most local manufacturers are individuals or groups of masons. Most commercial sanitary-ware manufacturers are based in major provinces, and innovative products such as HappyTap and SATOTap (Lixil) are slowly trying to explore the Indonesian market and are in the exploratory stage with various other local stakeholders for scale-up.

Most of the HWWS facilities observed during the primary survey were installed either through government authorities at public/private places and school facilities or by not-for-profit organizations.

There is a need to promote and foster enabling ecosystem for more local manufacturers and entrepreneurs. The entrepreneurs are also in need of financial assistance, and innovative financing needs to be executed in terms of loan products to support business expansion. The capacity of innovators needs to be enhanced through training in technical

(HCD-designs), local /alternate material, and non-technical aspects of creating business in HH space.

Regarding the mode of sales, most businesses reported that they have included online marketing in their sales strategy due to movement restrictions.

3.2.4. INNOVATORS

Conducive government policy and ecosystem support to establish the market entry of innovators is one of the key demands of most major international innovators

During the consultations with various stakeholders and some international innovators, it was highlighted that the current innovation ecosystem is not very conducive for innovations (product/infrastructure), due to regulatory compliances. One of the international brands that are currently exploring the opportunity to enter the Indonesian market highlighted many entry-level barriers for international brands like them. Some of the key issues experienced by these international innovators are a lack of understanding of the heterogeneous market (geography, segment, and culture for them). Since importing products is expensive as it involves high transportation costs, setting up a manufacturing unit is a preferred option, however, obtaining permits for such innovators is difficult. Additionally, the lack of market shaping and awareness about products, and lack of demand for innovative products such as portable HWWS facilities were also key concerns. International innovators shared that the government and ecosystem enablers needed to make efforts to shape markets for such innovative products through increased awareness and incentives for international companies.

In many LMICs, supporting development sector start-ups and innovations has been a major area of focus for governments as well as DFIs. Programs in India such as Start-up India, Invest India, and its linked procurement mechanisms to foster start-ups and link them with related government programs are one such example. Across the world, UNICEF has also taken efforts in places like Ghana, Bangladesh, and many others, where collaborative programs with governments and other DFIs have led to investments in promising products and processes which help countries achieve the goal of improved access to sanitation. Major organizations like BRAC have also funded start-ups that address sanitation and handwashing. In Bangladesh, the government of Bangladesh and BRAC collaborated to support innovations in the field of sanitation and handwashing innovations for pilots in BRAC work areas.²²

²² Clean Hands to save lives: <http://blog.brac.net/clean-hands-to-save-lives-innovations-from-south-asia/>

Similarly, the Government of the UK and the Government of Ghana developed a Sanitation Challenge for Ghana to encourage innovators and local governments to implement innovations in sanitation.²³ Taking the learnings from these interventions across the globe, UNICEF in close collaboration with GOI can also ideate such an impact investing program in Indonesia.

SUMMARY

MANUFACTURER: MULTINATIONAL PRODUCT MANUFACTURERS

MNCs and governments have a limited engagement that does not address the current shortcomings of the market

In the current scenario, the handwashing market, worth nearly USD 800 million is dominated by four to five major FMCG manufacturers and distributors who command nearly 65-70 percent of the market share. A plethora of nearly 23 other local and niche product companies address the remaining market. In most urban and rural areas, distributors reported that product distribution was handled by a combination of sales agents who delivered shipments on a bike or a van (if needed), and for very small villages or settlements, shopkeepers usually made periodic visits to the distributors to obtain goods. Key takeaways are:

- ‡ Current distribution channels of HH products by MNCs do not have clear visibility of underserved and unserved areas.
- ‡ The engagement of the government with MNCs is limited and is not utilized for solving the challenges related to the accessibility and availability of HH products.
- ‡ The regulations and compliances need to be more business-friendly to make penetration of the HH products to underserved markets a reality.

LOCAL ENTREPRENEURS AND MANUFACTURERS

Little support is available for start-ups and entrepreneurs in the domain of sanitation and hygiene

Local entrepreneurs sell soaps and, in some cases, manufacture HWWS facilities. Most local manufacturers sell their goods in a particular district or cluster of villages based on the proximity. In the

²³ Sanitation challenge for Ghana: https://assets.publishing.service.gov.uk/media/5eba7e2286650c279626e59c/Sanitation_Challenge_for_Ghana_evaluation_report.pdf



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case of urban areas, their catchment may include a particular locality in a city. Most businesses are self-funded or funded through money borrowed from friends or family members. Most manufacturers do not have linkages or communication with other similar entrepreneurs in the region, so knowledge or experience sharing is rare among local entrepreneurs. The key takeaways are:

- ‡ Local manufacturers reported a limited market reach and no encouragement from government agencies for expanding their business.
- ‡ Smaller entrepreneurs do not have financial support for enhancing their reach or for business development.
- ‡ Innovations using locally available alternate construction materials for HWWS facilities are available, but not promoted or supported through official channels.

INNOVATORS

The lack of conducive government policy and ecosystem support for innovators is one of the key market entry barriers

Many innovative products and localised solutions exist across the country and at the global level. However, the lack of conducive policy and business regulations poses entry-level barriers to many innovators who want to enter Indonesia. The key takeaways are:

- ‡ Regulatory and financial challenges for domestic and international innovators limits entry into the market.
- ‡ Interest in adopting innovative products is low and the enabling ecosystem including national and state governments are yet to promote conducive regulatory policies such as tax benefits, local production incentives, rebates, etc. to enable the scaling of innovations.
- ‡ Innovations that have the potential to be commercialized and scaled need ecosystem support to establish local channels but have not been successful in encouraging the government or other major enablers to do so.
- ‡ Even local innovations implemented in smaller geographies across Indonesia have found it difficult to scale. A lack of programs that build capacities of entrepreneurs/innovators in financial and non-financial skillsets and a coherent ecosystem that incentivizes innovations are the biggest hindrances.

DISTRIBUTORS, SUPPLIERS, AND RETAILERS

Most suppliers and distributors do not have clear visibility of underserved areas

Distributors usually stocked products from multiple companies and supplied products to retailers only for large orders. In some cases, they had sales agents supplying products to rural areas through bikes and vans. Smaller retailers usually visit the larger distributor themselves to get their product stocks. Extreme weather conditions often result in disruptions in the supply chain that leads to the unavailability of HH products. The key takeaways are:

- ‡ Missed and underserved areas in the country are not adequately tracked, potentially leading to a lack of last-mile access across many rural areas.
- ‡ Most distributors reported that a lack of connectivity and transportation was a major challenge faced by them to meet the demands in underserved markets.



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3.3. KEY INSIGHTS: ECOSYSTEM ENABLERS

3.3.1. GOVERNMENT: NATIONAL AND REGIONAL

HWWS is an activity that falls under the ambit of central ministries, state agencies as well as local governments. While the Ministry of Health usually coordinates HWWS activities at the national level, handwashing programs are implemented by different entities within their administrative regions.

There are a total of 19 ministries and institutions in the central government that are responsible for health-related outputs. The Ministry of Health coordinates with 13 ministries/institutions to implement a 'whole-of-society' approach to achieve universal access to hand hygiene in Indonesia. This commitment follows the National Call to Action on HWWS that was agreed on by the ministries during Global Hand Washing Day in 2020. The ministries involved are responsible for implementing HWWS in their respective domains. For example, MoECRT is responsible for HWWS in schools, MoRA for implementation in Madrasas and mosques, the Ministry of Tourism and Creative Economy at tourist sites, and local governments for overall implementation across their jurisdictions. Developing sound coordination mechanisms and monitoring the implementation of the guidelines is a challenge. For this study, only a subset of these 13 ministries was covered through stakeholder interviews with senior officials within each ministry and with local officials at the local government level for the cities visited.

Our interviews and consultations involved the Ministry of Home Affairs (MOHA), Directorate of Sanitation from the Ministry of Public Works and Housing (MoPWH), Ministry of Religious Affairs (MORA), Ministry of Education, Culture, research and technology (MoECRT), Ministry of Trade (MoT) and the Ministry of Planning and Development (BAPPENAS) among others. Most government departments reported that all sanitation-related programs were to be merged with the Community-based total sanitation (STBM) program. MOHA recommended that the STBM should be strengthened by integrating with the Healthy Living Community Movement (GERMAS). The Directorate of Sanitation recommended that the HWWS National Roadmap and action plan be discussed with the Directorate of Drinking Water and the Ministry of Public Works, as these can be utilized for developing infrastructure related to handwashing.

Most provincial governments reported that the water supply in high population density urban areas is managed by a centralized underground pipeline system managed by PDAM. Some local governments had contracted local private sector partners to supply water through bottles or tankers in areas where piped water was not available. In rural areas, most households depend on groundwater sources like borewells and wells. Local governments reported that HWWS facilities were available in most locations except in the remotest regions. They also mentioned that many of these HWWS facilities would not have piped water connections. In slums, it was likely to have a common HWWS facility for a small group of houses.

One of the key challenges reported by government officials is the lack of convergence among different levels of government, namely the national, regional, and local governments. While national-level policymakers reported that policies have been formulated to maintain minimum standards for handwashing in public places, they accepted that there is a lack of resources to ensure compliance with these rules by regional ministries and local governments. Complicated mechanisms for the O&M of public HWWS infrastructure in key institutions like schools, public markets, and transport facilities also emerged as a major challenge.

While most government entities reported that they wanted better private sector engagement, there was no roadmap for ensuring engagement with private sector stakeholders at any level. While local NGOs and international organizations had reported that they had tried to build programs to engage local private entrepreneurs, government officials reported that there was no consensus on the mechanism of engaging with the private sector.

Key stakeholders reported that this lack of coordination among government ministries and departments had led to entrepreneurs opting out of any structured engagement programs. Even for engagement with major private players such as Unilever, Reckitt, and others, government ministries noted that this was limited to CSR programs and donations to specific institutions like schools or health facilities. Going forward, there is a need to have a strategic and sustained engagement with the private sector to meet the gaps in HH space.

At the local level, the discussions with government officials, DFIs, and major NGOs suggest that the government would need to devise rules and standards to involve private suppliers and stakeholders for active participation. This would ensure that entrepreneurs would be more amenable to providing products and services for maintaining handwashing infrastructure.

3.3.2. MULTILATERAL/BI-LATERAL INSTITUTIONS

Most institutions reported that challenges with engaging with the private sector persisted on both the demand and supply sides. USAID reported working with suppliers to design solutions such as metered connections for water access at subsidized prices, and suppliers for HWWS facilities in community settings. A key component of USAID programs in HWWS was working with local and provincial governments and ensuring that they were on board with these initiatives. Since many institutions like schools, public places, slums, etc. relied on these governments, involving them was critical.

While IUWASH and IUWASH PLUS enhanced access through some large-scale programs, their reported impact on ground-level demand generation was short-lived (Overbeek et al., 2016). Both the programs aimed to build a joint demand-supply initiative to enhance localized access to water, toilets, and handwashing facilities however most of these demand generation activities led to only a small rise in uptake. From the supply side too, USAID reported that their efforts to utilize local entrepreneurs in provinces with low access such as in NTT led to limited success due to complex rules of procurement for government programs, and the lack of an enabling environment for local entrepreneurs.

While both IUWASH and PAMSIMAS tried to build a network of various suppliers and bring them together for demand generation activities of STBM, there was a lack of coordination among local entities, especially amongst local government, health facilities, and microfinance institutions. This ultimately led to demands not being fulfilled and a consequent loss of trust in the government and other agencies to provide these services.

Some officials also noted that a common challenge is the lack of awareness about the need for soap, or the need to use hand sanitizers when water and soap were not available. This was also reported in an assessment by USAID, where people reported using only water instead of water and soap for cleaning their hands. The perception that hands that 'looked' and 'smelled' clean do not need to be washed with soap persists. Soaps were usually reserved for occasions where hands were visibly soiled.

Both USAID and the World Bank reported that innovative mechanisms including better products, innovative communication strategies, and innovative financing mechanisms were necessary for better access to HWWS and demand generation among the public.

3.3.3. NOT FOR PROFITS/INTERNATIONAL, LOCAL, COMMUNITY BASED ORGANIZATIONS

NGOs interviewed included Mercy Corps, PLAN Indonesia, Indonesian Red Cross, and World Vision Indonesia among others. These organizations were involved in developing strategies for handwashing and sanitation specifically in disaster-prone areas.

Most NGOs and stakeholders interviewed reported that with the onset of COVID-19 and government regulations, the demand for HWWS facilities increased. As a response to the increased demand and the government requirements, many NGOs set up HWWS facilities across the country. However, a year and a half into their installation, they are in poor shape as there were limited or no provisions for maintenance. Many of these HWWS facilities are currently not functional, hence creating access-related challenges for the communities using them.

These stakeholders observed that more people than before had begun to practice HWWS, but the motivation for HWWS was not sustained, mainly due to the difficulty in obtaining adequate water and soap for handwashing. While many organizations have encouraged local governments to provide for HWWS facilities, based on their reports, local governments have responded in a limited manner. The private sector tried to provide portable HWWS facilities. This led to a steep rise in demand and consequently, in the prices for newly constructed HWWS facilities in 2020. However, the demand for HWWS facilities was not sustained in the later phases of the pandemic in 2021. This led to prices of HWWS facilities coming down significantly. During the interviews, NGO representatives noted that prices for HWWS facilities had stabilized, but demand was low.

In rural areas, NGOs reported that there are additional challenges in setting up HWWS facilities. Since markets are far away and the demand is high, inputs such as bricks and zinc are scarce or expensive for building HWWS facilities. In provinces such as Papua, Maluku, Ambon, and NTT, supplies are a major challenge which leads to a rise in prices and distortion in the demand and supply.

Another critical challenge has been the quality and the durability of readily available HWWS facilities in the markets. Finding reliable suppliers for the maintenance of HWWS facilities remain a challenge. NGOs reported that access to HWWS facilities in public places, HCFs, offices, and similar institutional setups is inadequate and needs attention. In rural areas, major facilities such as markets and transport hubs lack public HWWS facilities.

The discussions with NGOs also highlighted that there is a need to design and deploy locally suitable HWWS facilities. NGOs reported that the handwashing efforts in disaster-prone areas need to have solutions designed which is suitable to the local context. NGOs have taken the initiative to work with local stakeholders to design local solutions and have shared the same with local manufacturers who could build these HWWS facilities at a reasonable price. Going forward there is a need to engage with local governments so that these designs could be scaled in other similar contexts to build HWWS facilities for the people at a low cost. Most NGOs reported that a joint mechanism involving NGOs, private sector suppliers, and local governments could be a solution to the challenges of access.

SUMMARY

GOVERNMENT: NATIONAL AND REGIONAL LEVEL

Government officials at various departments noted that there was a renewed focus on developing HWWS facilities in public places post COVID-19. Most local and state-level officials noted that respective ministries and departments were instructed to monitor the installation of handwashing facilities in their respective domains, but state-wide coordination was not conducted on a routine basis. Most ministries did not report coordinating with other departments for their activities, especially at the state level. At the district level, officials reported having limited bandwidth to monitor handwashing at all facilities and often sought support from NGOs and local partners to build and maintain HWWS facilities. Local government officials also noted that monitoring of HWWS in



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offices, public places, etc. was a major task and most local governments would not have the resources to conduct it. Some of the key takeaways are:

- ‡ The lack of standard guidelines for HWWS facilities in various settings creates challenges in monitoring compliance.
- ‡ There is a need for improved coordination between national-level ministries and state/ local agencies.
- ‡ The maintenance of HWWS facilities remained a challenge in most public places.
- ‡ Better private sector engagement mechanisms were needed to fund and maintain public HH infrastructure.
- ‡ Microfinance is a promising tool to enhance access to handwashing infrastructure in homes in vulnerable areas including urban slums and rural areas.
- ‡ One of the major challenges was to ensure coordinated action among various levels of government.

MULTILATERAL/BI-LATERAL

Promoting innovations and entrepreneurship can help strengthen the supply side issues of hand hygiene

Agencies such as USAID and the World Bank have worked to improve water supply in their selected project areas through IUWASH PLUS and PAMSIMAS. Handwashing, while a priority, has been a secondary priority, usually thought about after ensuring water supply and access to toilets. However, the pandemic has led these stakeholders to design activities specifically for handwashing. Some critical insights emerging from these stakeholders are as follows:

- ‡ Access to water and HWWS facilities remains a challenge in urban slums and rural areas, this leads to demotivation among households to practice HH at critical times.
- ‡ Successful localized solutions implemented by NGOs have not been scaled-up in other similar contexts within the country.
- ‡ Many NGOs reported having advocated for policy-level changes at the regional level but had received limited support.
- ‡ Local NGOs have reported that localized innovations often find a limited uptake due to lack of finance, a lack of standardization in designs, and a lack of government support.

NOT FOR PROFITS/INTERNATIONAL, LOCAL, COMMUNITY BASED ORGANIZATIONS

Localized solutions to create demand and supply can improve HH in rural and underserved locations

NGOs have worked with communities to build HWWS facilities by using locally suitable HWWS designs and engaging masons to build them. Few NGOs have worked with schools and remote communities to develop human-centered design solutions for building locally suitable HWWS facilities without professional help. The key takeaways are:



RECOMMENDATIONS

This section puts together the recommendations and the potential interventions that can be adopted to strengthen the hand hygiene supply chain in Indonesia. These are based on the insights garnered from the primary and secondary research, and various stakeholder consultations at the national, provincial, and district levels. The recommendations are based on the premise that the supply side is poised/ ready to supply the hand hygiene solutions so that the intent to wash hands with soaps is converted into desired behaviour. The details of the recommendations include insights from the market assessment, the proposed interventions to execute the recommendation, parallel learnings or best practices from other countries, and the potential partners who can support in executing the recommendation.

1

The private sector can play a major role in addressing the demand-supply gap in hand hygiene by introducing innovative technologies, mobilizing finances, etc. in Indonesia. However, it has been observed that the current engagement of the private sector with the government through the PPP-HWWS platform is limited to a few meetings and common events. There is a need to collectively put a cohesive action plan to have 100 percent penetration of hand hygiene products in Indonesia, especially in remote locations

Recommendation # 1 (Short-term)	STRENGTHEN THE CURRENT PPP-HWWS PLATFORM FOR MORE ACTIVE ENGAGEMENT OF PRIVATE COMPANIES WITH THE GOVERNMENT AGENCIES.
Proposed Interventions	<p>The current PPP-HWWS platform could be restructured into a 'National Alliance' that acts as a unified voice to inform policy, build evidence and engage with the government in driving the hand hygiene agenda at the national and provincial levels in Indonesia.</p> <p>The platform will engage with the stakeholders in a "mission mode" to take the hand hygiene agenda across the country by undertaking activities around the following areas:</p> <ul style="list-style-type: none"> ‡ Community awareness: Create a national movement to bring behaviour change through various corporate volunteering programs ‡ Knowledge Sharing: Engage with multiple stakeholders through National level conclaves and awards to felicitate champions in HH space ‡ Industry Consultation: Engage with the private sector (small, medium, and large organizations). Through the 'Industry Group,' the alliance can conduct advocacy on relevant policies. <p>The platform will comprise multiple "taskforces" that will research and advocate across specific issues related to hand hygiene such as Communication, Institutional Strengthening, Inclusivity, Innovation, and Technology. The task force can commission small studies and projects across the issues to further deepen the understanding and build advocacy tools around it.</p> <p>As part of the Industry Consultation, the Alliance will house a sub-group called 'Industry Group'. This group would consist of large business conglomerates, innovators, and local manufacturers who would deliberate and advocate for regulatory and fiscal policies, taxations, etc., for ease of doing business in Indonesia.</p> <p>UNICEF can also advocate and coordinate with MoH and other relevant ministries to design a 'Private Sector Engagement Cell' to ensure more private sector companies can enter the market by taking outreach activities through the Alliance platform.</p> <p>The alliance can mainly operate through its taskforces guided by the strategic direction of the Steering Committee. The Alliance will be a voluntary collaboration of organizations and individuals coming together with a shared vision. Therefore, decisions and actions will be made through a democratic and decentralized process that involves consideration of all viewpoints and respect for opinions.</p>

Learnings from the Globe or Best practice	<p>Similar alliances have been created with common interest areas and agendas in the past, such as National Faecal Sludge and Septage Management Alliance (NFSSM Alliance), a national-level collaborative body driving the discourse of non-sewer system management in India. The NFSSM Alliance works through its four taskforces guided by the strategic direction of the Steering Committee.</p> <p>Similar to platforms like the India Sanitation Coalition and Industry bodies like CII and FICCI in India, platforms, and associations in Indonesia should be leveraged to strengthen the PPP-HWWS platform.</p>
Partner/s	<p>Private sector companies, the Ministry of Health, and other key Ministries at the National level</p>

2

Lack of inclusive HWWS design especially for persons with disabilities and other vulnerable population groups like children can discourage the use thereby impacting hand hygiene practice.

Moreover, an innovative product solution that has the potential to address challenges like hand hygiene in a water scare situation or can trigger desired behavior for hand hygiene needs scaling and adequate funding to bring sustainable impact.

Recommendation # 2 (Short-term)	<p>CREATE AN ENABLING ENVIRONMENT TO BUILD THE CAPACITY OF THE INNOVATORS AND START-UPS TO SCALE INDIGENOUS TECHNOLOGIES/ PRODUCTS IN THE LOCAL MARKET</p>
Proposed Interventions	<p>A. A REGIONAL-LEVEL INNOVATION CHALLENGE FOR CREATING HUMAN-CENTRIC DESIGNS (HCDS) FOR HWWS CAN BE DESIGNED AND ROLLED OUT.</p> <p>Human-centered design approaches are intended to seek inputs from the end-users on the selected product or intervention and ensure that specific contextual inputs are included in the design. This is especially necessary for HWWS facilities where user-friendliness remains a key element for appropriate usage.</p> <p>UNICEF along with the Ministry of Health can launch an “HCD Design Challenge” requesting innovations to address specific challenges related to vulnerable and marginalised population groups (VMPPGs) and difficult geographies. The challenge can be divided into four stages:</p> <ul style="list-style-type: none"> ‡ Stage 1: Design of the challenge and roll-out ‡ Stage 2: Shortlisting of the potential solutions ‡ Stage 3: Pilot implementation ‡ Stage 4: Scale-up and commercialization <p>Existing platforms, INCUBITS (WASH Innovation Hub), which aims to bring major ecosystem partners together to ensure systemic support for innovations in the WASH domain can be leveraged to run this challenge.</p>

<p>Proposed Interventions</p>	<p>B. A 'WASH INNOVATION FUND' FOR EARLY-STAGE INNOVATIONS CAN BE DESIGNED THAT ENCOURAGES INNOVATORS TO ENTER THE HH MARKET</p> <p>Innovators have the scope to expand their footprint and also gain funding and mentorship from experts, while supply-side stakeholders and enablers such as governments and DFIs can help innovators pilot their products in their respective project areas and address the design challenge faced by VMPPGs to access hand hygiene facilities.</p> <p>UNICEF can design an 'Innovation Fund' to support early-stage innovation and provide seed funds to test them for scale. The fund can be designed in collaboration with multi-lateral organizations. The seed amount will help the innovators in de-risking the initial investment required to scale from prototype to beta version. Post the proof of concept is successfully piloted such innovations can raise funds for commercialization.</p> <p>C. DESIGN TAILORED INCUBATOR/ ACCELERATOR PROGRAMS TO BUILD THE TECHNICAL CAPACITY OF START-UPS</p> <p>UNICEF in collaboration with GOI and partners such as USAID can design an incubation and accelerator facility that can provide training to micro-enterprises working in the areas of WASH (including HH businesses).</p> <p>The facility will enable entrepreneurs to access technical, financial, governmental, and policy support to sustain and accelerate local and global market access. The facility will provide structured training under the 'Enterprise Development Program' to enterprises at various stages of their lives.</p> <p>The PPP-HWWS platform can be leveraged to provide knowledge and mentorship support to these local entrepreneurs.</p> <p>At the provincial/district level, programs like the STBM and IUWASH that work with sanitation entrepreneurs to build and maintain toilets can also be leveraged to shape up the local hand hygiene market. Liaisoning with local sanitation entrepreneur collectives such as APPSANI (Asosiasi Pengelola dan Pemberdayaan Sanitasi Indonesia) and sanitarians part of STBM and IUWASH can help address the end-to-end value chain of sanitation including hand hygiene.</p>
<p>Learnings from the Globe or Best practice</p>	<p>The Humanitarian Innovation Fund's WASH grants are one such example that aims to explore and grow the potential innovations to improve the effectiveness of humanitarian WASH.</p> <p>WE Hub an initiative started at the state level in India, can be studied and leveraged. The initiative is a first-of-its-kind, state-run platform for women entrepreneurs to start, scale and achieve global market access. WE Hub provides services like seed funding, mentoring, virtual programs (in case women can't travel), business guidance, and Government liaison that will help women establish their enterprise.</p>
<p>Partner/s</p>	<p>UNICEF, GOI, USAID, UK-Indonesia Tech Hub (an initiative of UK Government), Entrepreneur collectives such as APPSANI (Asosiasi Pengelola dan Pemberdayaan Sanitasi Indonesia) and STBM and IUWASH front-line coordinators, GIZ, INCUBITS platform, DFIs</p>

3

Regular practice in hand hygiene especially during critical moments during the day is important to achieve health outcomes and BCC plays a key role in influencing such actions. Faith-Based Organizations (FBOs) and other leaders can play a critical role in influencing the behavior of an individual/community.

<p>Recommendation # 3 (Short-term)</p>	<p>REPURPOSE THE COMMUNICATION TO INDUCE TRIALS AND STIMULATE DEMAND. CURATE PROGRAMS WHERE FBOS OR COMMUNITY OPINION LEADERS CAN BE ROPED IN TO DISSEMINATE HAND HYGIENE MESSAGES TO THE COMMUNITY THROUGH MULTIPLE ENGAGEMENT MECHANISMS. INCREASED DEMAND WILL FURTHER STIMULATE THE MARKETERS TO ADDRESS THE SAME.</p>
<p>Proposed Interventions</p>	<p>Globally, about 64 percent of schools are faith-related,²⁴ there are unique opportunities and benefits from linking spiritual learning with learning on WASH and the environment, and the improvement of WASH facilities in schools. Community-based interventions are often much more effective in facilitating sustainable change for WASH. Faith-based organizations are especially critical stakeholders since their activities extend to a wide variety of areas including religious congregations, schools, charitable activities, and other forums where messages and behavior change activities related to hygiene can be sustainably delivered.</p> <p>In Indonesia, STBM program can be leveraged, and the government can develop BCC programs that target FBOs. Many training modules exist on HH BCC activities. We propose that the same can be repurposed to pilot a capacity-building program with key messengers being influencers like Faith-Based Organizations (FBOs), Village heads (rural areas), and Healthcare representatives to talk and create awareness of HH in remote areas to generate demand for hand hygiene products.</p> <p>The programs can also take an innovative approach of leveraging the non-traditional route of reinforcing hand hygiene behaviour. These could involve beauty parlours, salons, etc. in propagating positive hand-hygiene behaviour.</p> <p>Innovative solutions like games, documentaries, stories, etc. can be developed by repurposing the existing communications to trigger demand for hand hygiene products, and to convert these demands to trials of the products. The increased demand will have a positive ripple effect on the supply of the products as marketers will stimulate the supply chain to meet the demand.</p>
<p>Learnings from the Globe or Best practice</p>	<p>In Africa, the Africa Christian Health Associations Platform (ACHAP) plays a major role in providing community services through hospitals and health clinics. Along with these services, Christian Health Associations from Uganda, Kenya, Ghana, Zimbabwe, and Lesotho joined a WASH training organized by ACHAP and facilitated by Global Water 2020.</p> <p>In addition, Cameroon Baptist Convention Health Services implemented WASH and infection prevention and control (IPC) assessments and staff WASH training. At the ACHAP biennial conference in 2019, the CHAs shared their progress, lessons learned, and potential next steps. Many CHAs have emphasized the role of WASH during the COVID19 pandemic, resulting in concerted community outreach and support for formal governance mechanisms and efforts in improving hand hygiene.</p>

²⁴ <https://www.washinschoolsindex.com/storage/documents/October2018/zLUFgRUIGyXj7SoZksde.pdf>

Partner/s	<p>Faith in Water (Faith in Water had worked with Christian groups in Indonesia on faith-based approaches to address the WASH-related challenges, which can be leveraged.)</p> <p>Muhammadiyah (Muhammadiyah in Indonesia had undertaken BCC activities during the pandemic and supplied hygiene kits in underserved areas. Some Muhammadiyah polytechnic schools had also developed locally manufactured hand sanitizers and created hand sanitization tunnels where commercial supply chains were weak)</p> <p>Engagement with PKK (family welfare movement) should be scaled up to promote BCC for hand hygiene.</p>
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4

Regular operation and maintenance of HWWS facilities in public places like transport hubs and markets are critical to ensure accessibility and use of HWWS facilities and improve handwashing practices.

Recommendation # 4 (Medium-term)	WASH FACILITIES (INCLUDING HH INFRASTRUCTURE) CAN BE DEVELOPED AND MANAGED IN PPP MODE USING VARIOUS REVENUE MODELS TO ENSURE REGULAR MAINTENANCE OF THE FACILITY.
Proposed Interventions	<p>Government can engage with private sector companies to develop and manage WASH facilities including HWWS facilities in public places in a PPP mode. The facility can be funded by the government and managed by a private agency. The facility can be tailored to local contexts as necessary.</p> <p>Such solutions can be funded through a variety of mechanisms including social venture funds or public-private partnerships (PPPs), which would involve multi-sectoral partners to provide services or funds.</p>
Learnings from the Globe or Best practice	<p>One example could be a pay-per-use Sulabh model tested widely across India and other developing countries.</p> <p>This model has built public sanitation facilities that charge a nominal fee for usage and has also worked on developing innovative products which lower water consumption and reduce the need for sanitation facilities in each household.</p>
Partner/s	Private sector

5

<p>Recommendation # 5 (Medium-term)</p>	<p>DEVELOP AND IMPLEMENT A WATER, SANITATION AND HYGIENE MONITORING INDEX (WASH MI) THAT CAN SUPPORT THE AUTHORITIES AT VARIOUS LEVELS TO TAKE INFORMED DECISIONS AND DEVELOP APPROPRIATE INTERVENTIONS.</p>
<p>Proposed Interventions</p>	<p>UNICEF should design a Water, Sanitation, and Hygiene Monitoring Index (WASH MI) that can serve as a monitoring tool in assessing the WASH status of an area through a set of process, output, and outcome level indicators across personal, social, and environmental aspects. Primarily, this will entail developing an index and institutionalising the same within government systems. The focus will be on assessing what all information is already being collected and how the same can be collated and translated into a meaningful monitoring index/dashboard for informed decision making. The tool can also be used at the central level to understand the performance of provinces and can support evidence-based decisions for financial allocations under various WASH-related schemes.</p> <p>The index would essentially help stakeholders, in measuring the WASH status of their respective provinces. Based on the measured status, the stakeholders can decide on interventions/initiatives to be undertaken to improve the status of their provinces. The index will act as a monitoring mechanism to understand the current performance of a particular area/region under various Key Performance Indicators (KPIs) thereby highlighting the problem areas for interventions or budget allocation.</p> <p>The tool can be used by the private sector to identify the areas which lack a supply of HWWS facilities or hand washing agents. This can enable the private sector to take strategic decisions for business growth, for example, identification of underserved geographies and strengthening the supply of products to increase the customer base. Another example is, that the private sector can 'Adopt a school' (including Madrasah), where they can adopt one or more schools and support them with regular O&M of their WASH facilities (including hand hygiene) through their CSR fund. Similar models have been implemented under Swachh Vidhyalaya Abhiyan (Clean School Program), in India where corporates and Public Sector Undertaking (PSUs) were mandated to create WASH infrastructure and maintain them.</p> <p>The tentative blueprint of the proposed WASH MI is illustrated below-</p> <div data-bbox="402 1512 1458 2072"> </div>

Proposed Interventions	<p>The ideation, roll-out, and institutionalization of the WASH MI would be done in a phase-wise manner by executing the following key steps:</p> <ul style="list-style-type: none"> ‡ Design framework to develop the tool ‡ Pilot implementation of the tool (Beta version) with the select province ‡ Finalization of the tool ‡ Capacity building of provinces accessing and interpreting the tool ‡ Institutionalization of the tool at the Central level, Ministry of Health
Learnings from the Globe or Best practice	<p>A similar monitoring system has been implemented in India under Swachh Bharat Abhiyan (SBM) and is called Swachh Survekshan. This helps in understanding the current sanitation situation across cities and also motivates them to perform better.</p>
Partner/s	<p>Relevant government ministries and local governments, UNICEF, bilateral agencies</p>

6

Last-mile delivery of products is a challenge in remote and underserved areas and innovative approaches.

Recommendation # 6 (Medium-term)	<p>EXISTING SOCIAL STRUCTURES, GRASS-ROOT ORGANIZATIONS, AND OTHER COLLECTIVES SUCH AS WOMEN'S GROUPS CAN BE LEVERAGED FOR MARKET ACTIVATION AND DELIVERY OF PRODUCTS</p> <p>THE MNC/DISTRIBUTORS CAN ADOPT AN INCENTIVIZING MODEL TO HAVE PRODUCT PENETRATION THROUGH THESE 'SERVICE PROVIDERS'</p>
Proposed Interventions	<p>Private sector (MNCs and distributors) can engage with the existing social structures like women collectives, and health cadres as 'Service Providers' to undertake market activation of HH products and incentivize them. Organizations like Muhammadiyah and local collectives like Women's groups have played a huge role in ensuring that emergency response was ensured in many underserved areas. Such groups can be leveraged by private companies.</p> <p>UNICEF or other development partners can extend support to the private sector in mobilizing such groups and making the requisite materials available.</p>
Learnings from the Globe or Best practice	<p>A similar model of "Social marketing" has been adopted by agencies like ASMO (Afghan Social Marketing Organization) in difficult locations like Afghanistan to deliver health care services.</p>
Partner/s	<p>GOI, Muhammadiyah, Women's collectives</p>

7

Access to finance for local entrepreneurs/ SMEs is a challenge.

Recommendation # 7 (Medium-term)	DESIGN A LOAN PRODUCT THAT ADDRESSES THE MISSING MIDDLE FOR ENTERPRISES TO GROW AND SCALE WITH THE HELP OF FINANCIAL INSTITUTIONS (FIS) AT DIFFERENT STAGES OF THEIR GROWTH
Proposed Interventions	<p>It has been observed that while there is a need for building the capacity of the enterprises in accessing the loan, there is a need to scale and improve profitability for these enterprises. The loan amount for these enterprises has an upper limit and the actual need for financing the growth activities goes beyond the threshold limit. This requirement falls into the missing middle segment with limited options for financing such a segment.</p> <p>There is a need to design varied loan products for SMEs in Indonesia which address this missing middle for the enterprises to grow. Financial institutions can look at providing loan products to the enterprise at a different stage of their growth to address this gap. Below are the indicative roles which UNICEF can play:</p> <ul style="list-style-type: none"> ‡ UNICEF can play a catalytic role and identify partners who can act as initial investors and will be responsible for put in the first loss tranche. ‡ UNICEF can facilitate and work with financial institutes like public banks and non-banking financial institutes (MFIs) to design a loan product that can address the ticket size requirement for the entrepreneur. ‡ UNICEF can also work with financial institutions and entrepreneurs to develop capacity-building sessions to support entrepreneurs in addressing the challenges they face in completing the documentation process for loan applications.
Learnings from the Globe or Best practice	None
Partner/s	UNICEF, development partners, financial institutes like public banks and non-banking financial institutes (MFIs)



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8

The current policy environment is not conducive to the growth of the local manufacturers and Micro, small and medium enterprises (MSMEs)

Recommendation # 8 (Long-term)	INCENTIVIZE THE LOCAL ENTREPRENEURS TO ESTABLISH A RELIABLE SUPPLY OF PRODUCTS IN THE CURRENTLY UNDERSERVED MARKETS.
Proposed Interventions	<p>There is a need to create an enabling environment for the local manufacturers and the medium and small-scale enterprises. To incentivise the suppliers, the government can focus on reducing tariffs/ taxes/ VAT on a selected set of products for local or regional brands. This will help in reducing the cost for the local players and allow them to expand their business in new geographies.</p> <p>This will require creating enabling policies and schemes at the National level and planning the effective implementation on the ground.</p>
Learnings from the Globe or Best practice	<p>None</p>
Partner/s	<p>UNICEF, Ministry of Finance, Ministry of Cooperatives and Small & Medium Enterprises, and BAPPENAS</p>

SUMMARY

<p>Short-term recommendations</p>	<ol style="list-style-type: none"> 1. Strengthen the current PPP-HWWS platform for more active engagement of private companies with the government agencies 2. Create an enabling environment to build the capacity of the Innovators and Start-ups to scale indigenous technologies/ products in the local market 3. Repurpose the communication to induce trials and stimulate demand. Curate programs where FBOs or community opinion leaders can be roped in to disseminate HH messages to the community through multiple engagement mechanisms. Increased demand will further stimulate the marketers to address the same.
<p>Medium-term recommendations</p>	<ol style="list-style-type: none"> 4. Strengthen the private sector supply chain to bridge the demand-supply gaps 5. WASH facilities (including HH infrastructure) can be developed and managed in PPP mode using various revenue models to ensure regular maintenance of the facility. 6. Existing social structures, grass-root organizations, and other collectives (SHGs) can be leveraged for market activation and delivery of products. The MNC/distributors can adopt an incentivizing model to have product penetration through these 'Service Providers'. 7. Design a loan product that addresses the missing middle for enterprises to grow and scale with the help of financial institutions (FIs) at different stages of their growth 8. Develop and implement a Water, Sanitation, and Hygiene Monitoring Index (WASH MI) that can support the authorities at various levels to take informed decisions and develop appropriate interventions
<p>Long-term recommendations</p>	<ol style="list-style-type: none"> 9. Incentivize the local entrepreneurs to establish reliable supply of products in the currently underserved markets.

REFERENCES

- Afkhar, R., Kumala, C., & Nomura, S. (2021). *Improving toilet hygiene and handwashing practices during and post-COVID-19 pandemic in Indonesian schools*. <https://openknowledge.worldbank.org/handle/10986/35926>
- Badan Penelitian dan Pengembangan Kesehatan & UNICEF. (2020). Profil Ketersediaan Sarana Air, Sanitasi dan Higiene di Puskesmas Tahun 2020. Kementerian Kesehatan Republik Indonesia. https://www.academia.edu/47763726/Profil_Ketersediaan_Sarana_Air_Sanitasi_dan_Higiene_di_Puskesmas_2020?email_work_card=view-paper
- BPS 2021, Proportion of Household Who Have Handwashing Facility With Soap And Water by Area of Residence (Percent), 2019-2021: <https://www.bps.go.id/indicator/152/1274/1/proportion-of-household-who-have-handwashing-facility-with-soap-and-water-by-area-of-residence.html>
- Direktorat Jenderal Pendidikan Anak Usia Dini, Pendidikan Dasar dan Pendidikan Menengah, UNICEF Indonesia, GIZ Indonesia, & SNV Indonesia. (2020). Profil Sanitasi Sekolah Tahun 2020. Kementerian Pendidikan dan Kebudayaan Republik Indonesia. http://repositori.kemdikbud.go.id/22134/1/isi_FD54325B-2BC7-476F-8EDD-615705C2D5DE_.pdf
- Kumala, Citra (2021, July 21). The current state of WASH facilities in Indonesian school: *Washing hands to safely reopen schools for all*. World Bank. <https://blogs.worldbank.org/eastasiapacific/current-state-wash-facilities-indonesian-school-washing-hands-safely-reopen-schools>
- Ejemot-Nwadiaro, R. I., Ehiri, J. E., Arikpo, D., Meremikwu, M. M., & Critchley, J. A. (2021). Hand-washing promotion for preventing diarrhoea. *Cochrane Database of Systematic Reviews*, 2021(1). <https://doi.org/10.1002/14651858.CD004265.pub4>
- Hirai, M., Graham, J. P., Mattson, K. D., Kelsey, A., Mukherji, S., & Cronin, A. A. (2016). Exploring Determinants of Handwashing with Soap in Indonesia: A Quantitative Analysis. *International Journal of Environmental Research and Public Health*, 13(9). <https://doi.org/10.3390/ijerph13090868>
- Kabir, M., Mehmet, H. •, & Ashraf Khan, S. (2021). *Islamic Finance and Sustainable Development: A Sustainable Economic Framework for Muslim and Non-Muslim Countries*. https://www.researchgate.net/publication/353898412_Islamic_Finance_and_Sustainable_Development_A_Sustainable_Economic_Framework_for_Muslim_and_Non-Muslim_Countries_A_Sustainable_Economic_Framework_for_Muslim_and_Non-Muslim_Countries
- Karon, A. J., Cronin, A. A., Cronk, R., & Hendrawan, R. (2017). Improving water, sanitation, and hygiene in schools in Indonesia: A cross-sectional assessment on sustaining infrastructural and behavioral interventions. *International Journal of Hygiene and Environmental Health*, 220(3), 539–550. <https://doi.org/10.1016/j.ijheh.2017.02.001>
- Nugroho, L. (2014). Role of Government Support to Micro Financing in Islamic Bank for Clean Water Connection to Low-Income Communities. In *Research Journal of Finance and Accounting* www.iiste.org ISSN (Vol. 5, Issue 4). [www.iiste.org. https://core.ac.uk/download/pdf/234629809.pdf](https://core.ac.uk/download/pdf/234629809.pdf)
- Overbeek, J. W., Sutjahjo, B., Ati, Wohing, A., Sihombing, & Meynar, I. (2016). *IUWASH Final Evaluation Report*. <https://www.globalwaters.org/sites/default/files/iuwash-final-evaluation.pdf>
- PLAN International. (2016). *Sanitation Entrepreneurship in NTT Province: Private Sector partnership to achieve Universal Access by 2019*. http://www.communityledtotalsanitation.org/sites/communityledtotalsanitation.org/files/Plan_Indonesia_SanitationMarketing_NTT_ProjectHighlight_April2015.pdf
- Purnama, S. G., & Susanna, D. (2020). Hygiene and sanitation challenge for covid-19 p Cevention in Indonesia. *National Public Health Journal*, 15(2), 6–13. <https://doi.org/10.21109/KESMAS.V15I2.3932>
- Rafiqah, I., & Blackett, I. (2008). Public-Private Partnership for Handwashing with Soap in Indonesia. In *Water and Sanitation Program*. <https://www.ircwash.org/sites/default/files/Rafiqah-2010-Public-private.pdf>
- Syakriah, A. (2020). Hand washing to counter COVID-19 still a luxury for Indonesia's urban poor. *The Jakarta Post*, 1–7. <https://www.thejakartapost.com/news/2020/03/24/hand-washing-to-counter-covid-19-still-a-luxury-for-indonesias-urban-poor.html>

- The DHS Program (2018) Indonesia Demographic and Health Survey 2017. <https://dhsprogram.com/pubs/pdf/FR342/FR342.pdf>
- UNICEF (2020a). Indonesia COVID-19 Response Situation Report. <https://www.unicef.org/media/86341/file/Indonesia-COVID19-SitRep-November-2020.pdf>
- UNICEF (2020b). Lack of handwashing with soap puts millions at increased risk to COVID-19 and other infectious diseases. UNICEF. <https://www.unicef.org/press-releases/fact-sheet-lack-handwashing-soap-puts-millions-increased-risk-covid-19-and-other>
- UNICEF (2020c). To beat COVID-19, hand hygiene must become an everyday reality for all Indonesians. UNICEF. <https://www.unicef.org/indonesia/press-releases/beat-covid-19-hand-hygiene-must-become-everyday-reality-all-indonesians>
- UNICEF (2021, December 31) Indonesia COVID-19 Response Situation Report. <https://www.unicef.org/media/114246/file/Indonesia%20COVID-19%20Situation%20Report,%20Oct-%20Dec%202021.pdf>
- UNICEF (2022, April), Learning Note: Improving water, sanitation and hygiene in primary care health facilities during the COVID-19 pandemic in Indonesia, <https://www.unicef.org/indonesia/media/13811/file/Learning%20Note%20WASH%20FIT.pdf>
- USAID (2016). Local Sustainability And Innovation Component Implementation Guidelines & Plan. https://pdf.usaid.gov/pdf_docs/PA00TSNN.pdf
- USAID (2018). USAID IUWASH: Final report: Behaviour change formative research. <https://www.globalwaters.org/sites/default/files/IUWASH-PLUS-Formative-Research-Final-Report-Final.pdf>
- USAID. (2019). Increasing Access to Safely Managed Sanitation Services in the Context of Urban Indonesia (Issue February). <https://www.iuwashplus.or.id/cms/wp-content/uploads/2020/06/IUWASH-PLUS-Marketing-Strategy-March-2019.pdf>
- White, S., Thorseth, A. H., Dreibelbis, R., & Curtis, V. (2020). The determinants of handwashing behaviour in domestic settings: An integrative systematic review. *International Journal of Hygiene and Environmental Health*, 227(March), 113512. <https://doi.org/10.1016/j.ijheh.2020.113512>
- WHO (2009). WHO Guidelines on Hand Hygiene in Health Care. <https://www.who.int/publications-detail-redirect/9789241597906>
- WHO & UNICEF (2020) Hand hygiene for all. World Health Organization, December, 1–13. <https://www.unicef.org/reports/hand-hygiene-for-all-2020>
- Willetts, J., Murta, J., & Gero, A. (2016). Water and sanitation entrepreneurs in indonesia, Vietnam and Timor-Leste: Traits, drivers and challenges. www.isf.uts.edu.au. <https://www.uts.edu.au/sites/default/files/2019-05/Traits%20drivers%20and%20barriers%20of%20water%20and%20sanitation%20entrepreneurs%20and%20enterprises%20in%20Indonesia%20Vietnam%20and%20Timor-Leste.pdf>
- World Bank (2019). The National Rural Water Supply and Sanitation Project (PAMSIMAS AF). World Bank. <https://projects.worldbank.org/en/projects-operations/project-detail/P154780>
- World Bank (2020). COVID-19 Makes Handwashing Facilities and Promotion More Critical Than Ever. World Bank. <https://www.worldbank.org/en/news/feature/2020/04/30/covid-19-makes-handwashing-facilities-and-promotion-more-critical-than-ever>
- Wray, E. (2019). Indonesia: Expanding Access to Clean Water for the Rural Poor. World Bank. <https://www.worldbank.org/en/results/2019/07/29/indonesia-expanding-access-to-clean-water-for-the-rural-poor>

Annexure A

TABLE 1 KEY PROBE AREAS FOR PRIMARY DATA COLLECTION

HAND HYGIENE	INDICATIVE INFORMATION AREAS
<p>Demand-side</p> <p>Indicative Informants:</p> <ul style="list-style-type: none"> ‡ Households, ‡ School administrators, ‡ Admin staff at the workplaces 	<ol style="list-style-type: none"> 1. Sources and supply of water at various facilities (school/workplace/transport hub etc) 2. Current efforts of local government to enhance water access 3. Affordability of piped/bottled water and other sources of water 4. Availability of HWWS facilities and related costs 5. Availability and affordability of cleaning agents 6. Specific preferences for cleaning agents 7. Points of sale or buying cleaning agents 8. Maintenance costs and modalities for HWS 9. Periodic replacement of HWS 10. Suggestions for enhancing HWWS 11. Feedback on any SBC mechanisms they were exposed to 12. Online buying habits, if applicable
<p>Supply-side</p> <p>Indicative Informants:</p> <ul style="list-style-type: none"> ‡ Manufacturer ‡ Distributors ‡ Retailers ‡ Marketers ‡ Innovative Businesses ‡ Cottage industry 	<p>HWWS FACILITIES MANUFACTURING</p> <ol style="list-style-type: none"> 1. Key HWWS facilities used and demand. 2. Preference for types of HWS (mobile, semi-permanent, permanent, etc.) 3. Manufacturing of HWS <ul style="list-style-type: none"> • Manufacturing (local or regional manufacturing, if any) • Cost of manufacturing • Investments for manufacturers • Manpower • Machinery 4. Price point comparison for major vs local manufacturers 5. Desired features of products for consumers which are human centric and inclusive 6. Buying habits of HWS (types preferred, Points of sale, sellers) <p>HWWS FACILITIES SUPPLY CHAINS</p> <ol style="list-style-type: none"> 1. Price points for HWWS facilities. 2. Key products supplied and stocked 3. Price points preferred by consumers for various product and sizes 4. Supply chain to last mile (rural and remote areas) 5. Challenges in supply chains 6. Partnerships with government/ecosystem enablers 7. Innovations in HWWS facilities and supply chains. 8. Funding for fostering innovations

	<p>CLEANING PRODUCTS MANUFACTURING</p> <ol style="list-style-type: none"> 1. High demand cleaning products. 2. Preference for types of soaps (liquid, bars, gels, strips). 3. Manufacturing of cleaning agents (soaps, hand rubs, hand sanitizers) <ul style="list-style-type: none"> • Manufacturing (local or regional manufacturing, if any) • Cost of manufacturing • Investments for manufacturers • Manpower • Machinery 4. Price point comparison for major FMCGs vs. local manufacturers 5. Desired features of products for consumers <p>Buying habits of soaps (types preferred etc.)</p> <p>CLEANING PRODUCTS SUPPLY CHAINS AND DISTRIBUTION</p> <ol style="list-style-type: none"> 1. Key products supplied and stocked 2. Price points preferred by consumers and key SKUs 3. Supply chain to last mile (rural and remote areas) 4. Sales volumes at small and big retailers 5. Main buyers 6. Bulk supplies and orders 7. Challenges in supply chains 8. The volume of online orders 9. Products preferred and bought on e-commerce platforms
<p>Enablers</p> <p>Indicative Informants:</p> <ul style="list-style-type: none"> ‡ Government (National/ sub-national level) ‡ PPP-WaSH group ‡ Donors (USAID, WB) ‡ Private sector players ‡ NGOs 	<ol style="list-style-type: none"> 1. Advertising and marketing 2. Tax breaks and subsidies 3. Partnerships with ecosystem enablers (IGOs, NGOs, government) 4. Pre-and post-COVID changes in consumer demand/government policy 5. Expectations for improving the landscape for manufacturing and supply of HWS 6. Subsidies and tax breaks 7. Innovative methods explored in supply chains 8. PPPs and other collaborations explored for improving access 9. Innovations in cleaning products and soaps

Annexure B

TABLE 2 FINAL SAMPLE FOR PRIMARY DATA COLLECTION

DEMAND-SIDE STAKEHOLDERS			
STAKEHOLDER NAME	RESPONDENT	PURPOSE	NUMBER OF STAKEHOLDERS INTERVIEWED
Households	Household head	To understand the knowledge, preference, and availability of hand hygiene products and services	78
Marketplace managers and transport facility managers	Admin staff of Marketplace and Transportation Hub	To understand the product availability, accessibility, and preferences of hand hygiene products and services at Marketplace and Transportation Hub	47
Office managers	Administrative staff	To understand the product availability, accessibility, and preferences of hand hygiene products and services at Workplace	36
Adolescent boys and girls	Adolescent boys and girls	To understand practices, awareness and availability of handwashing at schools	50
Religious facility managers	Staff at Place of Worship	To understand the product availability, accessibility, and preferences of hand hygiene products and services at Religious Institutions	21
Healthcare facilities	Staff at Health Facility/ Community Health Workers/ Referral Centres	To understand the Knowledge, preference, and availability of hand hygiene products and services as observed by the health workforce in the community and at health centres	54
Total			286
SUPPLY-SIDE STAKEHOLDERS			
Retailers	Shopkeepers/ Supermart managers	To understand the challenges faced in selling hand hygiene products	61
Distributors	hand hygiene product distributor org. head	To understand the challenges faced in the distribution of hand hygiene products	36
Hand hygiene innovators	Hand hygiene product innovators	To understand their innovations in hand hygiene and challenges in developing and selling	11
Hand hygiene manufacturers	Hand hygiene large and mid-scale enterprises marketing/ sales teams head	To understand the challenges faced by the manufacturers of hand hygiene products and their sales in Indonesia	5
Total			113
Grand Total			399

PROVINCE	URBAN	RURAL	PERI URBAN
Jakarta	East Jakarta	Kabupaten Bogor	Tangerang
East Nusa Tenggara	Kota Kupang	Sumba Barat Daya	Kab. Kupang
Papua	Kota Jayapura	Biak	Wamena

Annexure C

NO	ORGANIZATION
NATIONAL LEVEL	
1	Ministry of National Development Planning Agency (BAPPENAS) & Directorate of Residential Housing
2	Ministry of National Development Planning Agency (BAPPENAS) & Directorate of Residential Housing
3	Ministry of National Development Planning Agency (BAPPENAS) & Directorate of Residential Housing
4	Ministry of National Development Planning Agency (BAPPENAS) & Directorate of Residential Housing
5	Ministry of National Development Planning Agency (BAPPENAS) & Directorate of Residential Housing
6	Directorate of Logistics Distribution Facilities
7	Covid-19 Task Forces and Behaviour Change Secretariat
8	Covid-19 Task Forces and Behaviour Change Secretariat
9	Covid-19 Task Forces and Behaviour Change Secretariat
10	Ministry of National Development Planning Agency (BAPPENAS) and Directorate of Public Health Nutrition
11	Ministry of Tourism and Creative Economy- Directorate of Standardization and Business Certification
12	Government
13	Ministry of Home Affairs
14	Ministry of Public Work and Housing (MPWH)
15	Directorate of Sanitation
16	Ministry of Transportation/Jakarta Transportation management agency
17	<ul style="list-style-type: none"> ‡ Ministry of Religious affairs ‡ Directorate of Curriculum, Facilities and Infrastructure, Institutions, and Student Affairs (KSKK) ‡ Directorate General of Islamic Education
18	Directorate of public health nutrition
19	Directorate of Standardization and Business Certification
20	UNICEF
PROVINCE/ DISTRICT LEVEL	
1	SAGA Group
2	<ul style="list-style-type: none"> ‡ Local Revenue Agency (BAPPENDA) for Biak District ‡ Indonesian Islamic Religious Scientist Council (MUI) in Biak District
3	BENTARA Papua
4	Yayasan RUMSRAM Biak
5	Yayasan RUMSRAM Biak
6	<ul style="list-style-type: none"> ‡ Local Government Development Planning Agency ‡ (BAPPEDA) Papua Province, Social Cultural Division

7	SME Cooperative Trade Industry Office and Labor SME sector
8	Women's Empowerment and Child Protection Office, Papua Province
9	Department of Social Affairs, Papua Province
10	Regional Development Planning Agency/Bappeda Jayawijaya Regency
11	Industry, trade and cooperative Industry
12	Head of Industrial dan Trade Agency

DEVELOPMENT PARTNERS

1	World Vision International
2	Plan International
3	UNICEF
4	Mercy Corps
5	YKMI
6	World Bank
7	YKMI
8	DAI
9	USAID

PRIVATE ENTERPRISES

1	HappyTap
2	Unilever
3	Cussons

UNICEF

World Trade Center II, 22nd Floor,
Jl. Jend. Sudirman Kav. 31
Jakarta 12920, Indonesia.

Tel: +62 21 5091 6100

Fax: +62 21 571 1215

Email: jakarta@unicef.org

Website: www.unicef.or.id

