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PAMSIMAS: Responding to the Water and Sanitation Challenges in Rural Indonesia

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PAMSIMAS: **Responding to the Water and Sanitation Challenges in Rural Indonesia**



Foreword

When people come together around clean water, even though the process takes a long time, sometimes remarkable things happen

Parents cooking with dirty water. Children walking for hours, carrying pails of water. Schools lacking running water for hand washing. Families using rivers and streams as open latrines. These are everyday scenes in rural Indonesia, where access to clean water is a luxury.

It doesn't have to be that way. Solutions exist. For almost a decade now, the Government of Indonesia, the World Bank, and Australian Aid (now known as the Australian Department for Foreign Affairs and Trade, DFAT), have worked together to support the Water Supply and Sanitation for Low Income Communities Project – known by its acronym PAMSIMAS.

Striving to empower communities in managing their scarce water resources, PAMSIMAS trains local governments and community in water and sanitation management techniques, facilitates knowledge sharing between stakeholders, and promote better sanitation

and hygiene practices. Communication and cooperation – those are the two hallmarks of a program that is for the community, by the community.

PAMSIMAS is also about learning by doing. When the program first debuted, many of our stakeholders -- the facilitators, community water boards, and so on -- did not have the key skills required of the program: building clean water infrastructure, sanitation, hygiene, bookkeeping and financial management, and leadership skills. By learning and practicing these key skills, not only have the people of PAMSIMAS now obtained clean water, sanitation and hygiene services, but their knowledge has grown as well.

The results of PAMSIMAS are a testament to the slow, painstaking process of building community capacity to effectively manage rural water supply, improve sanitation and acquire hygienic behaviors. When people come

Foreword

together around clean water, even though the process takes a long time, sometimes remarkable things happen.

We trust that this book can show glimpses of these communities, and the challenges they face. We hope to share with you the humble start of PAMSIMAS, and how the faith and dedication of communities brought this program, slowly but surely, to its success. For example, in Kedungdori Village in Central Java, villagers came together to help form the first water-board management body, or BPSPAMS, in order to share program updates and knowledge between the board members. When ideas are exchanged this way, problems are solved – together.

We hope that stories like this one and others will continue to be told, across the country and into the future, reflecting the growth and expansion of PAMSIMAS. And that future paints communities –and a country—that are

not only more empowered, but also healthier, with sufficient access to water supply and sanitation services. Cooking with clean water would be the norm. Children spend their afternoons studying or playing sports instead of fetching water. Open defecation would cease.

This is a future that the PAMSIMAS envisions, and one that it is determined to bring.



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Introduction

A COMMUNITY PROJECT

More than 75 million Indonesians lack access to safe drinking water

Despite continued efforts by the Government of Indonesia over two decades to provide access to improved water and sanitation facilities, more than 75 million Indonesians still lack access to safe drinking water and about 100 million are still unable to access improved sanitation facilities. Shockingly, some 60 million Indonesians have no choice but to defecate outside, often on the ground or in rivers. The overall human and economic implications are devastating. More than half of the people without access to water and sanitation facilities live in rural areas.

In an effort to improve access to water and appropriate sanitation facilities in rural areas, the Government established the Water Supply and Sanitation for Low Income Communities Program (*Program Air Minum dan Sanitasi Berbasis Masyarakat*, PAMSIMAS) in 2006.

PAMSIMAS does not merely see infrastructure construction as its end goal. Of course, to

reduce and help eliminate diseases caused by contaminated water, inadequate sanitation and poor hygiene, it is crucial that all Indonesians have access to quality infrastructure—unpolluted, properly functioning wells or other water facilities, hand-washing and bathing facilities, and improved sanitation facilities that keep excreta out of human contact. However, merely ensuring that communities have access to toilets and other sanitary facilities, does not guarantee proper usage, nor does it necessarily yield improved sanitation and hygiene. It is also essential that communities change their hygiene behavior.

Prior to the implementation of PAMSIMAS, many of the Government's efforts to improve the country's sanitation record failed simply because they ignored the complexities of human behavior. These programs focused almost exclusively on the supply side of infrastructure, without considering the demand side.

To address the complicated socio-economic and cultural factors that underlie open defecation and poor hand washing practices, PAMSIMAS adopts an approach that represents a radical departure from earlier programs. In particular, PAMSIMAS explicitly focuses on community-level change behaviors related to the adoption of good hygiene practices. This approach recognizes that the failure of even a small proportion of a community to engage in good hygiene practices could result in the spread of disease that affects the entire community. PAMSIMAS is intended to:

- Empower communities and local-level institutions to eliminate poor sanitation and adopt sound hygiene practices through measures that they themselves deem to be appropriate to their needs;
- Facilitate the adoption of good hygiene practices at the individual, family and community levels, with particular attention to the adoption of these practices at schools;

- Facilitate the promotion of good hygiene practices through community institutions, including schools, places of religious worship, village-level forums, and local media outlets.

One of the major challenges facing the Government in its mission to improve water supplies and sanitation facilities lies in the great variation in economic, social and physical conditions across the archipelago. While constraints exist across the country, the nature of these vary widely, with solutions that may be effective in the context of a rural rice-growing community in Java, being completely inapplicable in the case of remote communities in the eastern provinces or in the mountainous regions of Sumatra.

Given this situation, the Government cannot apply “one-size-fits-all” solutions, but instead needs to tailor programs to the particular needs of each individual province, district

PAMSIMAS facilities are constructed for community, by community

and sub-district in Indonesia. The goal should be to empower communities to develop solutions that work best to meet their own specific needs. Indeed many studies show that interventions are most effective if all members of the community, including women and marginalized groups, are involved in decision-making processes. In the case of PAMSIMAS, water and sanitation facilities are constructed for communities, by communities.

PAMSIMAS has proven to be effective at achieving its goals. An evaluation (the results of which were published in August 2013) to determine the impact of the program revealed that PAMSIMAS provided more than 5 million people in more than 7,000 villages access to clean water and improved sanitation facilities.

Of the villages where PAMSIMAS was implemented, it was found that almost 45 percent communities had achieved open defecation-free status, while more than 66

percent had adopted hand-washing with soap. In 72 percent of villages, water and sanitation facilities constructed under PAMSIMAS were found to be fully functioning, while facilities were found to be at least partially functioning in an additional 22 percent. The study also confirmed that a large number of women, who previously bore the burden of collecting water from distant water sources, were able to spend more of their time engaging in productive activities, such as taking care of family members or working income-generating jobs.

While PAMSIMAS has provided a large number of communities with access to safe drinking water and improved sanitation facilities, many Indonesians still lack adequate facilities. In terms of achieving the Millennium Development Goals (MDGS) on providing an increased number of people with improved access to water and sanitation facilities, the Government is committed to ensuring that no less than 67 percent of the population has

access to water facilities and 65 percent to sanitation facilities that meet the established minimum service standards by 2015.

Following the conclusion of PAMSIMAS in 2012 (PAMSIMAS I), the Government initiated the second phase of the program, PAMSIMAS II, running from 2013 to 2017. PAMSIMAS II's goal is to extend water and sanitation interventions to an additional 5,000 villages in 219 target districts in order to enable a greater number of poor, under-served communities in rural and peri-urban areas to benefit from improved access to water and sanitation services. In addition to extending the coverage of the program, PAMSIMAS II incorporates a number of modifications to the initial design. Recognizing the diverse range of challenges faced by communities across the country, PAMSIMAS II adopts a less standardized process in selecting participating villages, to avoid servicing locations where there is insufficient demand. PAMSIMAS II

also recognizes the need to provide additional support to isolated communities in eastern Indonesia and the isolated islands, due to the limited human resources and high costs in these areas.

The main distinguishing characteristic of PAMSIMAS II, however, is its increased focus on ensuring the impacts of the program are sustainable. It is not enough for PAMSIMAS to achieve short-term improvements that endure only as long as the program is in place and only benefit villages directly participating in the program.

If the program is to facilitate the achievement of improved hygiene and universal access to water and sanitation across Indonesia by 2019 and beyond, PAMSIMAS must inspire communities and district governments not directly participating in the program to adopt new approaches and paradigms to replicate the achievements in those districts directly

involved. Furthermore, it must enable all communities and governments to continue to apply new approaches long into the future, beyond the point when PAMSIMAS II is completed.

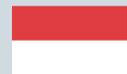
Sustainability will only be achieved through the development of strong community institutions with the necessary capacities to implement the approaches developed and socialized through PAMSIMAS. These institutions need to adopt a participatory approach for the development and maintenance of water and sanitation facilities, as well as for the design and implementation of complementary policies to ensure proper hygiene and improved health for all members of the community.

The ultimate goal of PAMSIMAS is to facilitate the development of these community institutions and strengthen district governments to ensure communities in peri-urban and rural areas will have a sustainable

access of improved water and sanitation facilities. When such institutions exist in all rural communities and supported by district governments, and are seen as a core component of the provision of basic services, Indonesia will be well on its way to achieving its goal of universal access of water and sanitation by 2019.

PAMSIMAS I Coverage Areas 2008 - 2012

BPS estimated that about
40 percent population will live
in rural areas into 2025



INDONESIA

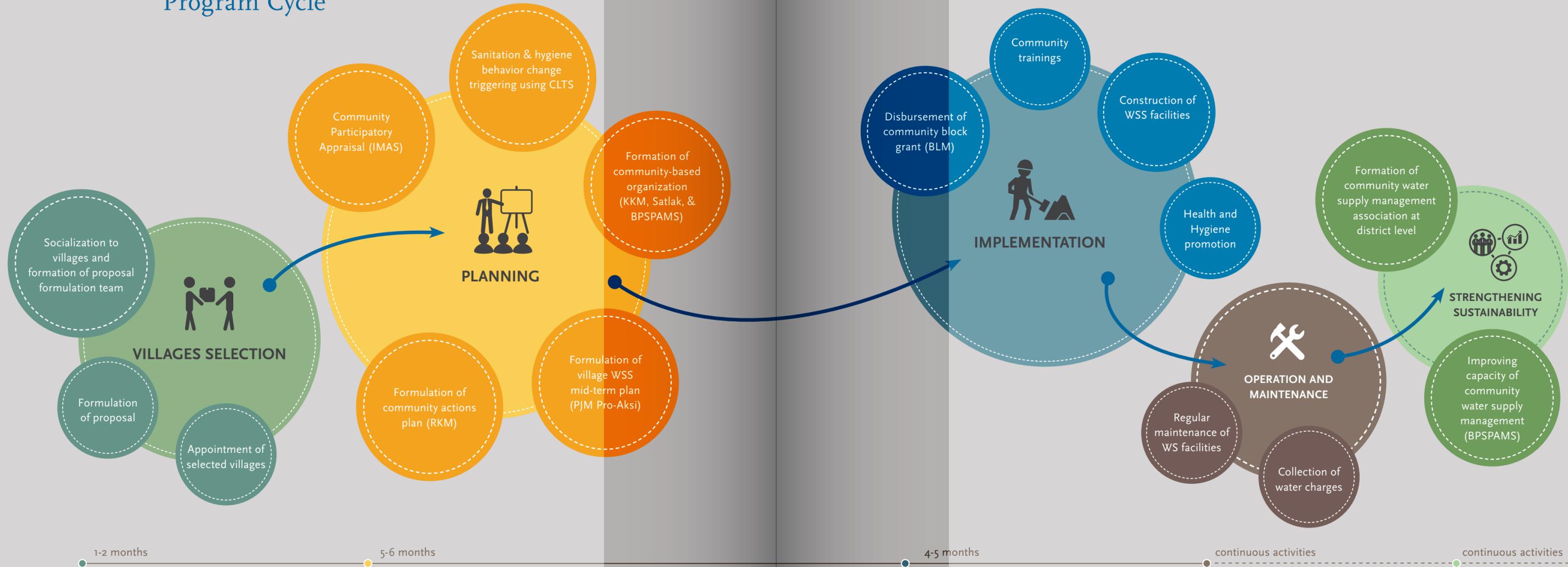
BPS (2013) - 248.8 millions

PAMSIMAS I (2008 - 2012)

NO	PARTICIPATING PROVINCES	NUMBER OF VILLAGES
1	SUMATERA BARAT	897
2	RIAU	461
3	SUMATERA SELATAN	524
4	BANTEN	142
5	JAWA BARAT	352
6	JAWA TENGAH	2,233
7	KALIMANTAN SELATAN	578
8	SULAWESI SELATAN	447
9	SULAWESI BARAT	180
10	SULAWESI TENGAH	466
11	GORONTALO	198
12	NUSA TENGGARA TIMUR	687
13	MALUKU	77
14	MALUKU UTARA	97
15	PAPUA BARAT	63



PAMSIMAS Program Cycle





01 CHAPTER ONE: PAMSIMAS





Chapter One PAMSIMAS: Safe Water Supply and Proper Sanitation Access for Poor Communities

Over the past decades, Indonesia has made significant political, economic and social progress. The country has successfully transitioned from an authoritarian, top-down political system to a thriving democracy. The number of people living below the poverty line has declined dramatically. Almost all children complete at least primary-level education, and malnutrition, along with the child mortality rate, has decreased by almost 50 percent. A flourishing middle-income country that has celebrated an average rate of economic growth of around 6 percent over recent years, Indonesia is poised to become a regional and global powerhouse.

However, despite significant progress and continued potential for further success, Indonesia's development falters in a number of significant areas. More than 75 million people still lack access to safe and quality drinking water, and more than 100 million people are still unable to access adequate

sanitation facilities. Due to a lack access to toilets, more than 60 million people have no choice but to defecate outdoors, often in full view of other people.

The human and economic cost incurred from a lack of access to improved water and sanitation facilities is devastating. Around the world, diarrhea continues to be one of the leading causes of death among young children, with the vast majority of cases of diarrhea caused by tainted water, poor sanitation and improper hygiene practices. The economic impact on sanitation in Indonesia study in 2008 presented that some 50,000 people die prematurely as a result of these unsafe practices. Many more fall sick, with more than 120 million cases of disease-related illnesses occurring each year.

In addition to the devastating risk of contracting diarrhea and other microbial infections, the economic cost that comes

LEFT
Many young women across Indonesia spend countless hours sources. This is time taken away from attending school, taking care of family members or working at income-generating jobs. (Hane Village, South Timor Tengah District of East Nusa Tenggara Province, December 2013).

RIGHT

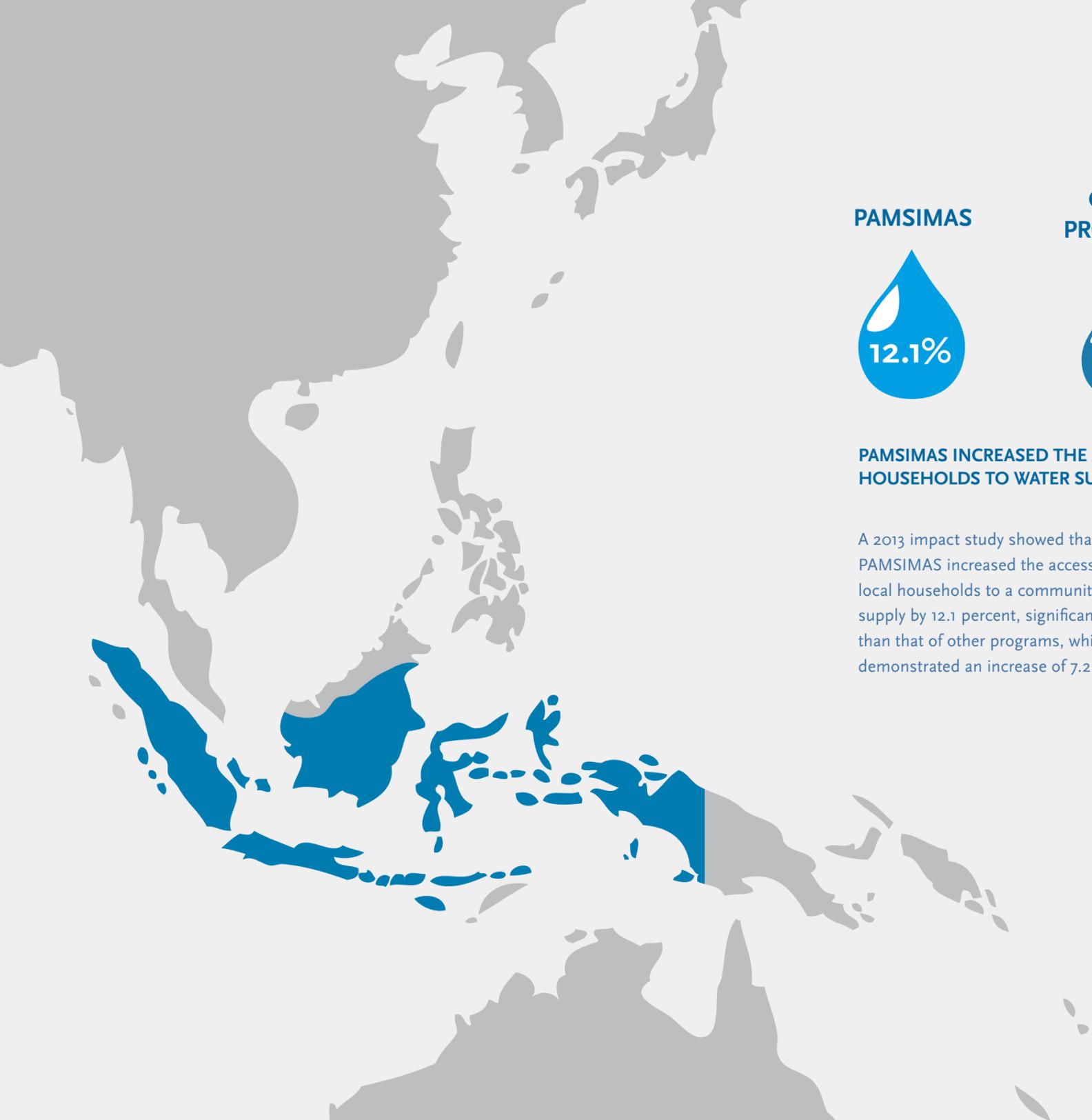
Floating toilets on a catfish pond in a village in Central Java. Discarding human waste in the pond degrades the quality of the water and creates health risks. Nobody in the village wants to eat the catfish from this pond. (Banjarnegara District of Central Java Province, June 2014).

from lack of access to clean water and poor sanitation is also extremely destructive. Diseases caused by poor sanitation result in increased expenditures on health care and place a serious burden on already strained health facilities. Without access to safe water, households are forced to either purchase bottled water or boil water themselves, resulting in significant fuel expenditures. People are forced to spend a long time traveling great distances to access wells, resulting in a loss of income-generating productivity. Meanwhile, poor sanitation is also a major cause of water pollution, which reduces the potential of freshwater rivers and lakes to produce fish and impacts tourism and optimum utilization of public facilities. The latest estimates indicate that Indonesia loses some US\$6.3 billion, approximately 2.3 percent of the country's annual gross domestic product, as a result of poor hygiene and lack of basic sanitation.

In September 2000, the Government reaffirmed its commitment to reducing poverty and improving the health and welfare of its population by signing the Millennium Development Goals (MDGs) Declaration, which include eradicating extreme poverty and hunger, achieving universal primary education, promoting gender equality, reducing child mortality, improving maternal health, combating HIV/AIDS, malaria and other diseases, ensuring environmental sustainability, and participating in a global partnership for development.

While Indonesia has made significant progress toward achieving a number of these targets, it is slightly behind in others. Indonesia is moving on track to achieve a specific sub-goal highlighted in the declaration, that of reducing by half the proportion of households without ongoing, sustainable access to safe drinking water and basic sanitation facilities by 2015. However in rural areas, number of





PAMSIMAS



OTHER PROGRAMS



PAMSIMAS INCREASED THE ACCESS OF HOUSEHOLDS TO WATER SUPPLY

A 2013 impact study showed that PAMSIMAS increased the access of local households to a community water supply by 12.1 percent, significantly higher than that of other programs, which demonstrated an increase of 7.2 percent.

communities with access of safe water and sanitation facilities remains far behind the target.

In rural areas, communities often develop their own water supply services using natural springs, rainwater and groundwater sources. While government agencies at different levels have provided community support to develop both water supply services and sanitation facilities, projects rarely invest in the creation of a comprehensive community capacity to plan, implement, operate and maintain services. Members of rural communities are also seldom involved in decisions related to establishing and managing the services. This top-down approach has led to a significant discrepancy between what users want and what they receive. The dissimilarity and imbalance promotes a lack of community ownership and unclear responsibilities for maintenance of water supply and sanitation facilities.

One of the leading challenges facing the Government and its mission to improve water supplies and sanitation facilities is the great variations in the geographical, economic and social contexts across the archipelago. While constraints exist across the country, the nature of these constraints varies widely, with solutions that may be effective in the context of a rural rice growing community in Java being completely inapplicable in, for example, a remote communities in the eastern provinces or in mountainous regions of Sumatra. In this context, it would be misguided for Central Government agencies to apply "one-size-fits-all" solutions. Meanwhile, it is also not feasible for the Central Government to take responsibility for designing solutions that apply in individual districts and provinces.

In 2003, in an effort to adopt an improved approach to addressing the poor state of water supply services and sanitation facilities, the

Government formulated the National Policy for the Development of Community-Based Water Supply and Sanitation Facilities. The policy seeks to improve the services and facilities by:

- Establishing policy goals that emphasized sustainability and effective use of water supply and sanitation services rather than the achievement of coverage targets defined in terms of construction of systems facilities
- Empowering communities to choose, co-finance, construct, manage and own their water systems
- Using gender- and poverty-sensitive approaches
- Building stakeholders' understanding with regard to service sustainability
- Measuring success in terms of sustained access to services and effective use of those services
- Measuring success in terms of sustained access to services and effective use of those services

PAMSIMAS measures success in terms of sustained access to services

Although the community-driven approach defined by this policy was only implemented in a small number of districts, it was shown to have a number of advantages over more traditional approaches to project management. Many studies revealed that a larger proportion of the facilities developed through the approach worked as intended and that it fostered a higher level of participation of communities in the construction of infrastructure, with communities incurring fees to cover the cost of maintenance.

The Government is committed to ensuring a higher proportion of households are equipped with ongoing, sustainable access to safe drinking water and basic sanitation facilities through the adoption of community-driven approaches. As such, the Government established the Water Supply and Sanitation for Low Income Communities Program (*Program Air Minum dan Sanitasi Berbasis Masyarakat*, PAMSIMAS) in 2006. The

program is implemented by the Ministry of Public Works and Housing (MPWH), Ministry of Health (MoH), and Ministry of Home Affairs (MoHA), and supported by the National Development Planning Agency (Bappenas) and Ministry of Finance (MoF), as well as their counterparts at provincial and district levels. The program receives technical and financial supports from the World Bank and the Australian Department of Foreign Aid and Trade (DFAT).

PAMSIMAS measures success not in terms of the number of facilities constructed, but in terms of sustained access and the level of effective use of services. To ensure that access is sustained, it is crucial that facilities are constructed and continue to function effectively. For the facilities to continue to operate, they must be appropriately maintained. To determine the degree to which PAMSIMAS has successfully met its goals, the Government must therefore maintain accurate

records not just of how many facilities were built, but if they continue to work and, more importantly, whether they continue to be used and whether their use contributed to improvements in the physical health and well-being of the communities. In these terms, PAMSIMAS shifts the paradigm by which the Government measures the degree to which its efforts are achieving their intended goals.

The remaining chapters of this book will describe the approaches adopted by PAMSIMAS, the achievements and challenges addressed, as well as personal stories of change from community members who benefited from the program, implementers and policy makers involved in the program.

Five Main Key Components of PAMSIMAS

1	2	3	4	5
Community Empowerment and Local Institutional Development	Improving Hygiene and Sanitation Behavior	Water Supply and Public Sanitation Infrastructure	District and Village Incentives	Implementation Support and Project Management
To ensure that a greater proportion of the Indonesian households use and benefit from improved water supply and sanitation services.	To encourage targeted communities to adopt better hygiene practices.	To encourage targeted communities to manage and sustain these improved services.	To encourage local governments to scale up other water projects using the PAMSIMAS methodology.	To encourage program management units at the district and central level to successfully manage and support this and other similar programs.



LEFT

A woman collecting water from a lake in the woods, the main source of water in Loeram Village, North Timor Tengah District. Despite the poor quality of the water, communities in surrounding areas use the lake for bathing, drinking and washing clothes. (East Nusa Tenggara Province, December 2013).

RIGHT

A mother and her young child washing clothes in a spring. The poor quality of the water in this spring causes many of those who use the water to suffer from skin irritations and transmissible diseases, such as diarrhea. (Krakal Village, Kebumen District of Central Java Province).

RIGHT

A mother and her teenage child using untreated water to wash vegetables for cooking. This behavior puts the family at risk of contracting water-borne diseases. Only by changing such behavior can the health of families, and the community as a whole, be safeguarded.





LEFT

Housewives often wash their clothes in this notoriously polluted river, despite the poor quality of the water and the significant distance from their homes.

RIGHT

A public latrine in Kali Besar Village, Tanah Laut District of South Kalimantan Province. Floods, which occur regularly in the area, create serious health risks for the community.



02 CHAPTER TWO: EMPOWERING THE COMMUNITY





Chapter Two Empowering the Community to Improve the Health

The PAMSIMAS program is intended to ensure that a greater proportion of Indonesian households use and benefit from better access to quality water supplies and improved sanitation services. Specifically, the goal of the program is to provide access to quality drinking water to 11.6 million Indonesians who currently do not have access to clean water, and access to sanitation facilities for 7.4 million Indonesians who currently do not have access to such facilities.

To benefit from these facilities, the community must use them appropriately. Therefore, the second goal of the program is to encourage members of Indonesian communities to engage in better hygiene practices. Specifically, the goal of the program is to ensure that at least 50 percent of members of participating communities refrain from open defecation and that at least 60 percent of the community practice sound hand-washing techniques. To ensure that PAMSIMAS benefits

Indonesians who need it the most, the program is implemented in villages with a low human development index, a high level of poverty, limited current access to drinking water and sanitation facilities, and a high incidence of diarrhea. While district-level governments screen villages to select those that meet these criteria, ultimately, the decision as to whether or not to participate in the program must be made by the community itself. Therefore, an intensive socialisation process is conducted to explain the goals and methods of the program, raising awareness of villagers and enabling communities to make a more informed decision.

In addition, to participate in the program, communities in the selected villages must indicate they are prepared to allocate their own resources to cover at least 20 percent of the associated costs. This is intended to ensure participating communities develop a strong sense of ownership and take

LEFT
Only 56 percent of the rural population in Indonesia has access to improved water and sanitation facilities. Fortunately, the construction of a water tower under PAMSIMAS in Manyampa Village provides a glimmer of hope. (Bulukumba District of South Sulawesi Province, December 2013).



LEFT TO RIGHT

The PAMSIMAS process at village level begins with socialization and social mapping to identify water, health and sanitation issues affecting the village. Then facilitators provide training and assistance to villagers in preparing the community action plan (Rencana Kerja Masyarakat, RKM)). A RKM presents a list of community ideas for health promotion activities, the technical design of a water system, and an operation and maintenance plan. Subsequently, the community will carry out a procurement process to ensure efficient use of the resources. After this, the community gets involved in the construction.



responsibility for a program intended to improve the community's infrastructure and overall public health.

One of the key features of the PAMSIMAS program is that necessary facilities are not simply constructed for the community, but also by the community. Studies conclude that the goals of the program are most likely to be achieved with the active involvement of all community members, including women, the poor, and members of marginalised groups that are not normally involved in the village-level decision making processes. Specifically, PAMSIMAS adopts a community-driven



approach, using two principal methodologies, namely the Methodology for Participatory Assessments (MPA) and the Participatory Hygiene and Sanitation Transformation (PHAST). The MPA defines an approach for the formulation of plans at the community level, particularly in terms of identifying the community's needs for drinking water and sanitation facilities and infrastructure. Meanwhile, PHAST defines an approach to form plans that improve communities' level of awareness regarding the use of these facilities to ensure better health through behavioral changes of the members of these communities.



A key initiative at the initial stage of these community driven approaches is rembug desa, or village hall meetings, to discuss the community's needs and determine the infrastructural demands and constraints required to address communal water and sanitation needs. At these meetings, all members of the community are encouraged to present proposals for discussion. At the same meetings, members of the community elect representatives to a village-level institution specifically established to plan, construct and maintain the necessary water and sanitation facilities.



While communities are best able to determine their own needs and devise customized solutions to meet specific needs, they may lack the technical and institutional skills and capacities necessary to implement these solutions effectively. Therefore, PAMSIMAS provides training for community facilitators, enabling them to assist in the formulation of plans and the establishment of associated village level institutions. These facilitators also play a vitally important role in determining the technical feasibility of the proposals presented and selected by the community, and in formulating work plans for the construction or rehabilitation of the required infrastructure.

Following the formulation of feasible working plans and the establishment of the necessary institutions to support their implementation, the community collects funds according to a formula agreed upon by the community itself to meet its share of the financial cost of the program. Once these funds have

been collected, the village-level institution establishes a community bank account for project management.

Once these requirements have been met, the plans formulated by the community are presented to a partnership committee at district level for evaluation. If this committee agrees on the feasibility of the plan and all other requirements have been met, the district-level public works agency and the village-level institution sign an agreement enabling the community to receive PAMSIMAS funds. Before construction of the facilities begins, members of participating communities are provided with the necessary training to ensure that they are able to construct and manage the facilities appropriately. Not only does this ensure that the facilities developed through the PAMSIMAS program meet the specific needs of the communities, but it also builds the capacity of the community to develop similar projects in the future.

LEFT
Socialization at the village level aims to raise awareness among community members and village level officials. The process aims to involve all community stakeholders, including women, poor families as well as marginalized people. Occasionally, district officials attend village level socialization.

Community itself is the principal actor in PAMSIMAS

It must be emphasized that the primary goal of PAMSIMAS is not merely to build and maintain infrastructure. Rather, it is to empower communities to improve the health and well-being of the entire community. The infrastructure developed by the program is merely a tool to achieve this goal. Therefore, following the construction of the water and sanitation facilities under the program, PAMSIMAS works closely with communities to conduct programs that encourage the appropriate use of sanitary facilities.

For example, the simple act of hand-washing with soap and clean water is one of the most effective means of preventing the spread of diarrhea, skin disease and fecal-borne illnesses like typhoid. The program enables communities to conduct initiatives to promote hand-washing and other hygienic practices at schools and throughout the broader community.

While the community itself is the principal actor in the PAMSIMAS program, improving the health of communities through the provision of infrastructure and the transformation of behaviour requires cooperation across agencies and organizations involved in health, education, infrastructure, and community governance, to name some of the sectors involved. Therefore, the program adopts an intersectoral approach, with the active involvement of numerous elements, including a wide variety of government agencies at all levels, as well as civil society organizations and the private sector.

These agencies play a critical role in the initial screening and selection of participating villages, the training of members of the community and facilitators, the verification of proposals, the administration of funding, the measurement of the program's achievements, as well as further development, replication and expansion of the program.

In particular, Bappenas, Indonesia's central planning agency, serves as the overall national coordinator of the program, while the Ministry of Public Works and Housing acts as the executing agency. A number of other government departments are involved as implementing agencies, including the Ministry of Health and the Ministry of Home Affairs. Provincial and district governments acting as primary partners and playing a significant role in the implementation of the program at the community level.

As stated in the previous chapter, the emphasis of PAMSIMAS on facilitating the achievement of sustained access to services and of the effective use of those services creates a new role for these Central Government agencies. It is relatively easy to measure how many facilities are constructed within any given time frame, but it requires a much higher level of effort to determine whether these facilities are still functioning

in the years following their construction, and an even higher level of effort to ensure that they are being used effectively. While the physical construction of facilities involves a relatively small number of government agencies, ensuring that these facilities are maintained and used effectively to improve health outcomes involves a greater number of agencies operating in a range of different sectors. Because PAMSIMAS changes the paradigm by which the Government measures the degree to which its efforts are achieving their intended goals, it requires Government agencies involved to develop new capacities and new systems.

In order to ensure these institutions and agencies are able to provide the necessary support, the program strives to build capacities through the provision of training, workshop and hands-on learning. Specifically, the program provides training to central, district and provincial public-

sector officials on achieving project's goals and the mainstreaming of its approach. In total, the program has provided training to approximately 450,000 individuals, as follows:

Community members	: 439,700
PMU and SNVT staff	: 5,800
Community facilitators	: 6,000
Water Board Associations (BSPAMS)	: 1,200
Local Government personnel	: 2,900
Project consultants	: 850

PAMSIMAS has proven to be remarkably effective at achieving its stated goals. A study published in August 2013 to determine the impact of the program in the areas in which it has been implemented showed that the program enabled more than 5 million Indonesians in more than 7,000 villages to access clean water, with a similar number of individuals gaining access to improved sanitation facilities.



LEFT

PAMSIMAS monitoring is a multifaceted activity involving the use of a sophisticated information management system. Program managers and other stakeholders can monitor the performance of village water systems and community behavior changes related to sanitation through Internet-based technologies.

Of the villages where the program was implemented, almost 45 percent had achieved open defecation free status, while more than 66 percent had adopted hand-washing programs. In 72 percent of villages where the program was implemented, water and sanitation facilities remain fully functioning, while facilities are at least partially functioning in an additional 22 percent. As a result of these improved facilities, large numbers of women, who previously bore the burden of collecting water from often distant water sources, were able to spend increased hours engaged in productive activities.

With the high level of success of PAMSIMAS, the Central and Local (provincial and district) governments across the country have expressed great interest in expanding upon and replicating the program's achievements to ensure that a greater number of Indonesians benefit from access to improved water supplies and sanitation facilities. Chapter 5 of this book will explore in detail how governments across Indonesia can build upon the successes of PAMSIMAS.



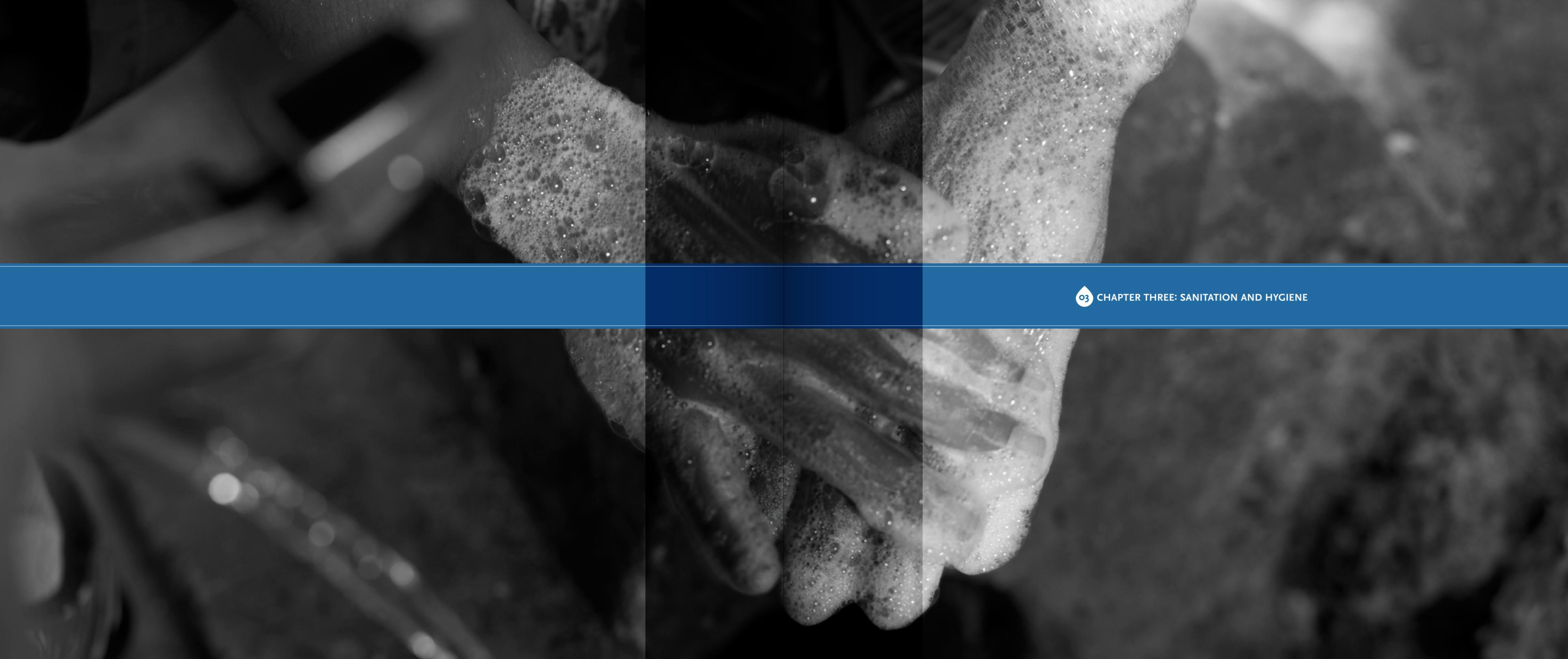
LEFT TO RIGHT
PAMSIMAS pushes communities to be transparent and accountable in managing block grants and activities. Relevant program information, such as financial facts and an awareness campaign, is publicly displayed. Community members are encouraged to report any suspicious activity and can also file complaints by using telephone numbers and email addresses listed on public information materials.



LEFT
A PAMSIMAS facilitator provides the village implementation team (Lembaga Keswadayaan Masyarakat, LKM) staff with financial and accounting skills needed to manage the community's block grant in a village in Bulukumba District. Often, the LKM members who have learned financial management, bookkeeping and other skills from PAMSIMAS go on to utilize these competencies in their personal life and career (Bulukumba District, South Sulawesi Province, December 2013).

RIGHT
A facilitator reinforces the importance of communities maintaining facilities to ensure that the benefits of the program are sustained for future generations.





03 CHAPTER THREE: SANITATION AND HYGIENE



Chapter Three

Sanitation and Hygiene: Simple Community-Led Solutions Save Lives

In 2012 UNICEF reported that around the world, diarrhea and pneumonia account for 29 percent of deaths among children below the age of five years, with more than 2 millions lives lost each year. Most of these deaths occur among poor and disadvantaged communities in the most impoverished countries in the world. Almost 90 percent of deaths caused by diarrhea and pneumonia are the result of unsafe water, inadequate sanitation and poor hygiene.

Indonesia can no longer be considered a poor country, In fact, it is now one of the fastest growing economies in the world. However, despite the significant advances the country has made—a high rate of economic growth, poverty reduction, near universal primary and junior secondary school education, increased provision of healthcare services—more than 50,000 Indonesians, most of them children, continue to die of preventable diseases.

Human waste is teeming with pathogens and, if not properly treated and disposed of, can lead to disease, water pollution, and air pollution. As presented in the CLTS Story in Indonesia (Susenas 2004), three quarters of all households in Indonesia discharge raw sewage into rice fields, ponds, lakes, rivers or the sea, while only a quarter of the population is connected to septic tanks or improved pits. When it is not disposed of properly, human waste is often washed by rain directly into waterways, which serve as the main source of drinking water for both humans and livestock. In addition to diarrhea, these poor sanitation conditions could potentially result in the outbreak of cholera, typhoid, hepatitis and other life-threatening diseases.

To reduce and eliminate potential diseases caused by unsafe water, inadequate sanitation and poor hygiene, it is critical that all Indonesians have access to good quality infrastructure, such as unpolluted,

LEFT
Proper hygiene is vital for protecting both children and adults against pathogens.



LEFT TO RIGHT

The Community Led Total Sanitation (CLTS) approach promotes community efforts to identify factors that lead to open defecation and other poor hygiene practices as a means of triggering behavior change.



properly functioning wells or other water supplies, hand-washing and bathing facilities, and improved sanitation facilities, which hygienically separate excreta from human contact.

Merely ensuring that communities have access to toilets and other sanitary facilities, however, does not guarantee they are properly used, nor does it necessarily result in improved sanitation and hygiene. To improve conditions of sanitation, it is necessary for entire communities to change their behavior. In particular, communities have to work together to eliminate the extremely dangerous practice



of defecating outside, on the ground and close to water resources used by the local community, a practice known as open defecation.

Additionally, it is critical that all members of the community engage in proper hand-washing techniques. According to UNICEF's report published in 2012, hand-washing with water and soap is the single most cost-effective health intervention to reduce the incidence of both pneumonia and diarrhea in children under the age of five. In particular, it is vital that all members of a community wash their hands properly before eating, before



preparing food and feeding children, and after using the toilet. The adoption of this simple behavior has the potential to cut the number of child diarrhea-related deaths by half and pneumonia-related deaths by one quarter.

Prior to the implementation of PAMSIMAS, many of the Government's numerous endeavors to improve the country's sanitation record failed to achieve their intended goals simply because implementers discounted the complexity of human behaviour. These programs focused almost exclusively on the supply of infrastructure without creating a demand for the infrastructure by addressing

RIGHT

Local women enjoy the benefits of a house water connection system provided by PAMSIMAS. With these facilities, they are able to cook, wash their clothes, and bathe in comfort and without risking their health and the health of their children.

Focus on behaviour change at the community level

the complicated socio-economic and cultural factors that underscore the practice of open defecation and poor hand-washing practices.

Past government programs often involved delivery of construction materials for building toilets to a small number of households, with the expectation that other households would be motivated to build their own toilets with their own money. Unfortunately, a large proportion of the beneficiaries failed to completely construct these facilities, and many even started using the granted cement and pipes for other purposes, or building toilets without proper standard. Not surprisingly, the demonstration effect was therefore insignificant, while the broader community failed to see why they should spend their money, time and energy to build facilities for which they felt no pressing need.

The approach adopted by PAMSIMAS represents a radical departure from the

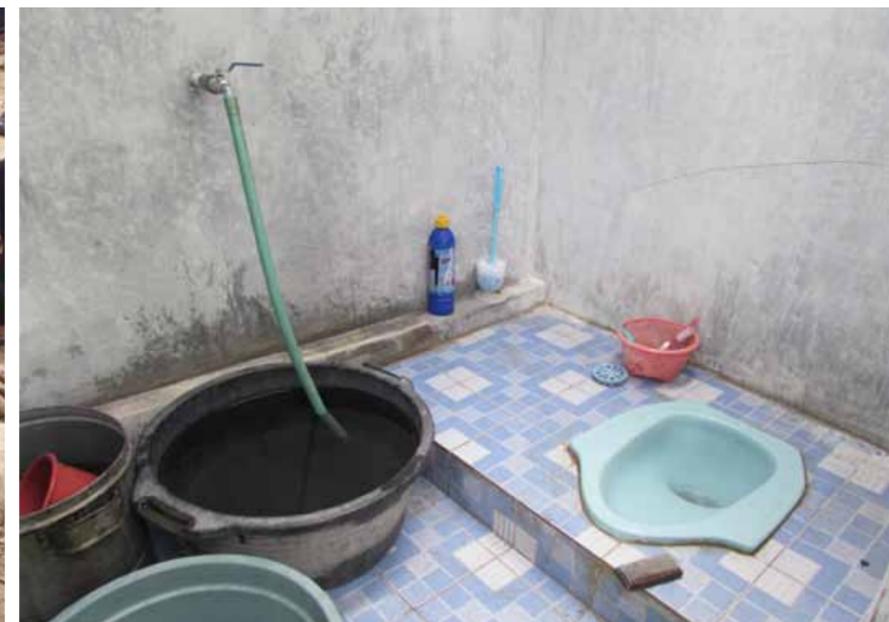
method and practices of these earlier programs. PAMSIMAS focuses on community behavior change for clean and healthy living. This approach acknowledges the fact that even the failure of a few community members to commit themselves to good hygiene practices can result in the spread of disease affecting the whole community.

PAMSIMAS seeks to eliminate poor sanitation practices and adopt good hygiene behavior through mobilizing communities and local institutions including schools, places of worship, and village gatherings and local media.

The core method to achieve these goals is referred to as “Community-Led Total Sanitation” (CLTS). The unique features of CLTS include:

- Eradication of open defecation through preventive measures designed to encourage the stigmatization of poor hygiene





LEFT TO RIGHT
Improved sanitation involves the commitment of the entire community. The pictures above demonstrate how changes can be made gradually according to a 'sanitation ladder': from simple pit latrines to permanent facilities.

It is critical that all Indonesians have access to adequate sanitation facilities and adopt proper hygienic practices

practices as well as associations between good hygiene practices and self-respect, particularly by raising awareness about the negative impacts of bad practices and the benefits of clean and healthy living.

- A focus on the transformation of behavior at the community level rather than the household level.
- Encouragement of local innovations and solutions to increase access to quality sanitary facilities, rather than relying on sets of instructions for implementing standardized programs.

- Utilization of local institutions and mutual-help, decision-making and enforcement to promote the collective adoption of hygiene practices.

It is not the goal of PAMSIMAS to impose standard, one-size-fits-all solutions to improve hygiene behavior across the diverse societies of Indonesia. Instead, the goal is to enable communities to come up with solutions that respond to their own specific needs.

In many areas across Indonesia, this approach has been remarkably effective. The manner in which communities develop solutions varies widely from place to place, according to their specific circumstances, so it is difficult to

generalize using a single case study. However, to show how these methodologies have been implemented at the village level the following chapter will provide stories of a number of actors in Kedungori, a small village in Central Java where most of the villagers farm rice.



LEFT

A sanitarian elaborates on proper hygiene methods, reiterating the importance of appropriate hand-washing techniques as a means of preventing the spread of transmissible diseases.



LEFT TO RIGHT
Hygiene and sanitation promotion in PAMSIMAS requires the active involvement of a range of stakeholders, including: teachers who play a pivotal role in promoting healthy behavior amongst children at the earliest age possible; small-scale entrepreneurs who play a significant role in enabling communities to achieve good outcomes in improved sanitation facilities; and, finally, communities which must collectively take action in changing behavior. All of the efforts resulted in a declaration of an open defecation free witnessed by district and sub-district officials.



LEFT

A hygiene promotion program in a school helps introduce 10-year-old children like Eki Dwi Suryani to proper hand-washing techniques using soap and clean tap water (Sudiang Village, Makassar Municipality of South Sulawesi Province, December 2013).

RIGHT

Children learn how to wash their hands properly in school. Then they transfer the knowledge and practice to other family members at home.





04 CHAPTER FOUR: STORIES OF PEOPLE BENEFITED FROM PAMSIMAS





Chapter Four Kedungori: The Implementation of Pamsimas in a Modest Village in Central Java

COMMUNITY PLANNING

Kedungori, a modest village, where most community members earn a living as either farmers or farmworkers is located in the sub-district of Dempet, in the district of Demak, Central Java. Prior to PAMSIMAS, fewer than 40 percent of village households had toilets or were connected to a water supply. For consumption and washing, most residents relied on water from the river, which became extremely dirty during the rainy season. The river was also as a communal toilet, with residents defecating directly into the waterway.

PAMSIMAS was first introduced to Kedungori village in 2010, when facilitators came to explain the purpose of the initiative to villagers. Initially, there was considerable resistance to the program: villagers were shocked and surprised that a government assistance program required them to contribute funds and labor to the construction of a water facility, and to pay for the construction of toilets in their own houses.

Following an intensive socialization process, supported by the village head, the midwife, and other respected community members, villagers agreed to participate. Through a series of public meetings, villagers selected a few representatives as volunteers to serve as members of the village implementation team (LKM) and the village water-board management group (*Badan Pengelola Sarana Air Minum dan Sanitasi*, BPSPAMS).

These volunteers worked relentlessly to convince community members of the value of the program and supervised the construction of a simple water treatment system (*Instalasi Pengolahan Air Sederhana*, IPAS) with the capacity to produce two liters of clean water per second, as well as the installation of 3,500 meters of pipelines, two toilets and four hand-washing facilities at the local primary school. By 2011, more than 120 households had a house-connection, together with simple, functional toilets. By 2012, 350 households

LEFT
Children often use water from a public tap to wash their hands after school, before Friday praying or playing. Such facilities help to change behavior among children and adults within community.

RIGHT

In Tallo Village, PAMSIMAS has become so successful that it was awarded a Village Incentive Grant (VIG) for its water and sanitation achievements.

Following the VIG, the water system was expanded to more beneficiaries and many more people gained access to a water connection, such as this housewife (Makassar Municipality of South Sulawesi, December 2013).

were connected, and by 2013, all 490 households in the village were connected to the water supply and had toilets in their houses.

This chapter presents the stories of the BPSAMS members, a school teacher, a district health official, and an initially reluctant member of the community.



RIGHT

Bapak Ngatmin serves as the head of village water board committee (BPSPAMS) for Kedungori Village, Demak District. Elected by the community, he has committed to provide a sustainable water service to the entire community. Most BPSPAMS members, including Bapak Ngatmin, are agricultural laborers who, out of a sense of pride, volunteer their time and expertise to serve people.

NGATMIN, HEAD OF BPSPAMS DESA KEDUNGORI

It is a matter of pride for the village that we have built this system

“In Demak, the climate is arid, but Kedungori is located right next to a river that never runs dry. Before PAMSIMAS, almost everyone in the community used the river as a public toilet, communal bath and the main source of water for cooking and washing clothes. Less than half of the homes in Kedungori had toilets, and the only functioning facilities were poor quality, soak pit toilets. Some people who lived farther away from the river used water from wells, but the water from the wells is brackish, unlike freshwater from the river. The quality of the water in the river is good even in the dry season, but the water gets filthy during the rainy season, when the silt and mud from the rice fields floods the river. During the rainy season, villagers are unable to clean clothes properly, and the water has a pungent odor and a distinct taste. Still, we were used to it. The people of Kedungori used to say you did not need to add spices or flavoring to the food you cook, because the water from the river gave everything a strong

flavor. During the rainy season, villagers are unable to clean clothes properly, and the water has a pungent odor and a distinct taste. Still, we were used to it. The people of Kedungori used to say you did not need to add spices or flavoring to the food you cook, because the water from the river gave everything a strong flavor.

During public meetings held in 2010 to socialize PAMSIMAS, the village head, the village midwife, and other village officials explained the benefits of sanitary toilets and water facilities. Officials hung banners around the village to socialize the importance of good sanitation. The school teachers also talked about it to the children. Even so, people could not grasp the idea of spending their own money on toilets when they could just use the river.

Some people slowly opened up to the idea. Some of the poorer people continued to believe the

Government would provide the whole system for free. Some better-off villagers wanted toilets, but were unable to build a system by themselves unless others cooperated, so they were more enthusiastic. With pressure from the village head and health authorities, the village agreed as a whole to participate, but there was still noticeable resistance.

Then the villagers established a core team of volunteers for BPSPAMS during these meetings. Even though I have no technical knowledge of water systems, I was happy to serve as a volunteer. The PAMSIMAS facilitators helped me to understand the technical side of it. They explained that there were several technical options for the water system. Either we could build a system to clean and filter water from the river, or we could dig wells. Nobody wanted to use the brackish water from wells, so we agreed to use a simple water treatment system.

The major problem was that people farther away from the river did not believe that it would be possible to pipe the water to their houses. They were afraid that they would have to contribute funds and labor, but there would be no benefit for them. The first year was the most difficult. When the pipes were laid down and water started to flow, people started to believe.

In 2011, more and more people were connected to the system. It became a status symbol to have a toilet in your house. Javanese people are like that: if their neighbors have something, then they want to have it too. We never had to force people to connect to the water system, we just made people feel a bit ashamed if they did not. We used social pressure. Meanwhile, at that time, a lot of people were still defecating directly into the river.

There used to be a lot of bamboo growing along the riverbank, so people could defecate without



RIGHT

PAMSIMAS provides water facilities based on the needs of rural communities and their capacity to operate and maintain the facilities. The program trained BPSPAMS to manage the facilities properly.

being seen. So in 2012, there was another public meeting where it was decided to clear the bamboo. The clearing away of the bamboo meant that if someone was defecating in the river, everyone could see them. This put extra social pressure on the villagers. A lot of people had toilets installed after the bamboo was removed. After we cleared the bamboo, defecating in the river became a lonely business. People say that defecating in the river used to be a social event: you went down to the river with your friends, you quietly went about your business, and then you hung out in a group together for a while. By 2013, if you went down to the river, you were on your own. If you did not have a toilet in your house, you were considered unusual. People have now adopted and embraced the idea that every house should have a clean water supply and a toilet. If a problem with the filtration system occurs, BPSPAMS volunteers immediately repair the issue, sometimes even in the middle of the night. Most of the core BPSPAMS volunteers

are agricultural laborers who live nearby. They are not paid; they volunteer their time and expertise out of a sense of community. It is a matter of pride to prevent disruptions to the water supply. Funds for regular water system maintenance come from monthly fees paid by the community. People do not mind paying the fees because they have come to appreciate the service.

It is a matter of pride for the village that we have built this system. A few months ago, the district government tried to encourage neighboring villages to establish a water and sanitation system akin to PAMSIMAS in their own village. They brought in a group of the villagers to observe the Kedungori system and talk to us. It made us proud that we are being held up as an example for others. It makes us feel like we have achieved something special.”



KUSNANTO, FINANCIAL MANAGEMENT STAFF OF BPSPAMS DESA KEDUNGORI

It was particularly difficult right at the beginning



“We first heard about PAMSIMAS in 2010. The people from PAMSIMAS came to explain how it worked at public meetings held at each sub-village (*rukun warga*, RW). At first, everyone was very enthusiastic. Practically everyone in each RW came to the meetings, particularly more disadvantaged people without toilets in their houses, and those living far away from the river. They thought the Government was going to provide them with free toilets, so they wanted to be one of the first families to receive one.

When they were told that they would have to contribute their own funds, people were very unhappy. They all complained that if PAMSIMAS was meant to be a Government assistance program, they shouldn't have to pay for their own toilets. Most people said that if they had to pay, they would rather just go on using the river the way they always did. It was very hard to convince people. It was particularly difficult in the beginning, when people had to contribute cash

and labor without any apparent benefits. Once the pipes were laid, people began to believe that the system might work. To be honest, people were not so concerned about the toilets, but they were keen to have good quality water piped into their house for cooking and washing. But we had a rule that you could only be connected to the water supply if you agreed to install a toilet. To build a very basic toilet and bathroom, each family had to pay between Rp. 500,000 and Rp. 1 million.

Some people explained that they really could not afford a toilet, so we agreed that some of the money raised from village contributions could be used to pay for toilets in extremely poor households. But in fact, there were not many cases like that. People were embarrassed to be considered so poor that they had to take money from their neighbors. They did not mind getting something for nothing from the Government, but they felt very different about taking money from their neighbors. To cover the operational

and maintenance costs, every household pays a monthly fee. It took a long time to decide how to structure the fee system. We had a meeting about it that went on into the middle of the night. It was exhausting, but in the end we agreed to categorize households into three: poor, average, and well-off. Each household was categorized according to the size of the house, the land area and the amount of water each house uses, but we were happy to negotiate if someone felt they were being unfairly burdened.

People are meant to pay on a monthly basis, before the 10th of each month. They have been asked to bring the fees to my house. In practice, some people are often late, although they usually settle their bill when the harvest season comes. Sometimes, we have to go to visit people in their houses and remind them to pay up. In theory, if people do not pay for three months consecutively, then we can cut off their access, but we have never actually done that. It is like a nuclear bomb, we just

use it as a threat, but we never really act on that threat. We understand that some people have to wait until the harvest to have cash in hand and that most people do want to pay when they can.

Sometimes, the people who resisted most at the beginning are the ones who are most enthusiastic about the system now. It is funny, at the beginning, people wanted the Government to pay for everything, but the PAMSIMAS facilitators told me that when the Government pays for everything, people do not bother to keep the system working. With the PAMSIMAS system, it was much harder at the beginning, but now people are much more committed. They feel like they worked hard to build the water system and they paid for it themselves, so they expect it to work and they feel they have a right to it.”

LEFT
The BPSPAMS of Kedungori Village applies a monthly tariff for water based on agreement with the community. As a financial manager for BPSPAMS, Bapak Kusnanto is responsible for collecting community contributions as well as the water fee from customers and reporting the usage to the entire community. At the beginning, he found it difficult to convince people to contribute, but that after the water system is functioning, the community is committed to making monthly payments to keep it working.



SUYATNO, SANITARIAN, DEMPET PUSKESMAS

PAMSIMAS helps us to achieve our sanitation target

“My name is Pak Suyatno. I am employed at Puskesmas Dempet which provides health services to the people of Kedungori village, amongst many other villages. Specifically, I am responsible for sanitation.

I would like to thank the Government for introducing PAMSIMAS to our district. The program has really helped us achieve our targets. Part of my job is collecting data related to number of cases of infectious diseases in each village in the district, including cases of worm infestation, diarrhea and typhoid. Before PAMSIMAS, the Kedungori village was worse than average in terms of all these issues. Since PAMSIMAS has been implemented, it has improved dramatically. It is now much better than average.

Our job is mainly to provide information and support to health personnel so that they can socialize proper sanitation practices. We do that for all villages, whether or not they participate in

PAMSIMAS. But sometimes, the health personnel in other areas are not very receptive to our messages. Maybe they have too many issues to deal with, so they do not place a high priority on sanitation. It is just one on a list of things that they have to deal with.

What I see when I deal with the personnel from villages where PAMSIMAS has been implemented is that they are more interested in this issue, and that they ask us for more support. Instead of us offering pamphlets and informational material to them, they actually ask us for the information. Perhaps, the fact that people in those villages actually have the facilities has made it possible for them to implement our recommendations regarding good sanitary behavior. Once people have access to clean water you can start teaching them how to wash their hands properly.”





LEFT TO RIGHT

BPSPAMS technical staff inspects and records the monthly usage of their customers. In an effort to constantly improve services, BPSPAMS frequently discuss expansion and upgrading options with the community, which includes moving from a public tap to a house connection. Usually, the community will upgrade the service to house connection for an additional charge to purchase extra pipes and taps.

SRI KASIHATI, BEHAVIORAL CHANGE STAFF, BPSPAMS KEDUNGORI

I need to know who it is in the village that people listen to



“I am nobody special, I am just an ordinary housewife, and my husband is just an agricultural laborer. But about five years ago, my sister-in-law had a difficult pregnancy, so I had to take her to the Community Health Center (Puskesmas) for help and advice from the midwife. Because of that, I became a volunteer (*kader*), giving advice to pregnant women, helping weigh their babies and making sure they were healthy, and so on. One thing led to another, and I found myself volunteering for more and more activities around the village. I do not get paid for it! I just do it because I like to get out of the house, meet people and do something useful.

Even though I do not have any special skills or qualifications, I have become quite well-known around the village as someone who gets involved in community activities. When we first had a village meeting to discuss PAMSIMAS, one of the things we had to do was to find volunteers who

were prepared to socialize the program and make it happen. Apart from Pak Ngatmin, who is the head of the BPSPAMS, we needed one person to be in charge of technical matters, one person to look after the community’s financial contribution, and one person to look after behavioral change. The villagers decided that since I was so active at the health center, I would be a good person to be responsible for behavioral change.

It is not easy to get people to change the way they think. You cannot just tell someone something and expect them to change. People listen to what you say and agree with you, but they still go on behaving exactly the same way they did before. So you have to keep on nagging and nagging them. But there is a lot of overlap between my activities. If I am already working with a group of women to talk about pregnancy, it is the perfect opportunity to also explain PAMSIMAS to them, to talk about washing their hands properly and using a toilet

LEFT

Ibu Sri Kasihati is a village cadre who is actively involved in PAMSIMAS. She encourages communities to adopt proper health and sanitation techniques. Ibu Sri provides examples of good hygiene practice to women groups. She advocates for many affluent women in the village to support the community’s behavior change program.

rather than going to the river. I can scare them a bit by telling them that their children’s health is at stake. Mothers care more about their children’s health than their own health, so that is the way to reach them.

It is not enough just to talk, people do not get the message. I use a few tricks to get my point across. Sometimes, before a group of people, I take a glass of water and put some animal dung in it. Then I ask who in the audience wants to drink it. Then I tell them it is exactly the same as defecating in the river and then using the water from the river to cook with. Everyone laughs and recoils from the glass, but they get the point. One of the PAMSIMAS facilitators suggested I try that, together with a few other tricks. But you have to keep pushing. I am just one person, so I cannot talk to everyone directly. And like I said, I am no one special, so not everyone listens to me. Therefore, I need to know who it is in the

village that people listen to. Then I have to meet them and convince them, so they can convince other people. From the start, the village head supported the program. Whenever there was a village event, he always promoted PAMSIMAS and encouraged people to get toilets. But other people have influence, too. For example, I meet with all the neighborhood heads (*rukun tetangga*, RT), because even if people do not attend village meetings, everyone has to deal with the RT. So, if they believe in the program, then they can pressure the people in their neighborhood to participate. The teachers and the midwife also have a lot of influence, so I often meet with them. Another tactic I use is through the local leaders involved in the women’s collective fund (*arisan*), where women gather together to pool their money and distribute the combined sum to one of the members of the group. There are a number of groups like this in the village. Some are run by women active at the mosque, others are run by the

wives of Government employees, and some are based on a particular neighborhood. The *arisans* are tight-knit groups, with strong social bonds between members. The women trust their money to the leaders, so these leaders have to be held in high regard and dependable. People look up to them and they have a lot of influence. If I can get the leaders to promote PAMSIMAS, then the other women will follow. And the women all compete with each other. They all worry about what their friends think of them. Once a few women take part, all the rest follow.

I have heard that in other districts, they use force to make people change their behavior. They have patrols to stop people defecating in the river, or they impose fines. That would not work here. If you try to force people, then they get stubborn and resist. But Javanese are very sensitive to what other people think about them. The trick is used to get people to change their behavior.”



LEFT TO RIGHT
PAMSIMAS provides significant benefits to a number of communities, particularly women. Here a housewife collects water from a public hydrant near her house. The use of regularly tested and certified water for cooking and washing ensures that women have healthier families.

RIGHT

With a water connection exists, Bapak Sudur built a toilet at home. His family saved money for it. He then convinced her neighbors to do the same. He is very glad that now many houses in her village have toilets. The village has even received an award from the sub-district and district governments for their collective initiative to adopt this practice within community. Now nobody in her village openly defecates anymore.”

SUDUR, AGRICULTURAL LABORER AND RESIDENT OF KEDUNGORI (RT01/RWIV)

These days, I'd be embarrassed to go down to the river

“My house is quite far from the river. Before PAMSIMAS, I used to go over to my parents' house and use their well to fetch water for cooking and bathe. The water was salty, but I did not mind, that just meant that I saved some money because I did not have to buy salt for my food. If I needed to defecate, I got on my bike and went down to the river.

To be honest, I was not that enthusiastic about PAMSIMAS at first. There were some people who wanted to join as soon as they heard about the program, some people came in a bit later, and then some people resisted until the very end. I was somewhere in the middle. I did not see the point in spending money on a toilet. I had a television in my house, but no toilet. My friends had a television, so I felt left out if I could not talk to them about the programs that were showing. Then when my neighbors started getting toilets put in, I began to feel left out because I did not have one. It

used to be normal, but now people started talking about you if you did not have a toilet put in.

So, I had one put in. It cost a bit less than Rp. 1 million for the basic unit, but that does not count the cost of putting in a proper floor with tiles. I spent a bit extra to make the bathroom look nicer. I think it is probably healthier than defecating in the river. I still bathe in the river after working in the fields to get the mud off, but then I come home and have another bath, with soap and clean water. I do not have to go to my parents' house for water anymore.

I waited until after the harvest season when I had some spare cash, to put the toilet in. A lot of other people did the same thing. In this village, practically everyone farms rice. Either they own their own land, or they lease land on a crop-sharing basis, or they are agricultural laborers. So, there is always a lot more money circulating around the

village after harvest. That is when people settle debts and make new purchases. The PAMSIMAS facilitators know that. So just before the harvest, they started putting on the pressure for people to get connected. Even beforehand, they got people to promise they would get connected when the harvest season came. Then, when the harvest came, they went around and reminded people of their promise.

By 2013, every house in the village had a toilet. It makes us proud when the sub-district head congratulates us and tell us that our village is so much cleaner now. These days, I would be embarrassed to go down to the river. It is not normal anymore.”



SUWANTO, PHYSICAL EDUCATION TEACHER AND CO-COORDINATOR FOR SANITATION

Children are naturally curious



“I am the teacher in charge of physical education at the primary school in Kedungori village. As such, I am responsible for coordinating activities related to health and sanitation, although all teachers are expected to take part in teaching the children on these matters. Because of my position at the school, I was involved with PAMSIMAS right from the start.

One of the biggest impacts of the program was that it improved the sanitation facilities at the school itself. Before PAMSIMAS, there was no running water at the school and only a single toilet for more than 200 students. According to the school standard, there should be one toilet for every 16 to 20 students. Without any water, the single toilet was often in a very poor condition.

With PAMSIMAS, two new toilets were built. That is still not nearly enough, but at least these toilets have water, so the students can flush properly. There are four or five taps around the school where

children can wash their hands, too. **Sometimes the pressure is weak, but the water almost always runs.**

As a school teacher, my fundamental philosophy is that if you want to change society, **you have to start with the children.** There is no point trying to change the way adults think, **they are set in their ways.** But children are still learning **and growing**, so you can guide their beliefs and **change** their behavior.

Prior to PAMSIMAS, we had already **started to** teach the children that they had to **wash their hands**, but it was hard for them to **take it seriously** without proper running water here at the school or at home. So, PAMSIMAS made us **take the job of** teaching them more seriously, particularly **because** facilitators and sanitarian encouraged us to **push** the issue.

Children are naturally curious. They like to play **and see things** for themselves. A few weeks ago, **Puskesmas gave us** some kind of brown chemical dye. **We got two groups** of children and got them to **smear the dye** over their hands. We gave one group plain water, and the other group water and soap. **They dye** was designed so that it could only **come off with soap.** We told them it was exactly the same as **after** they had gone to the toilet. If they did not use soap, then the dirt and germs would not **come off their hands.** It was like a game to them, **but they got the** idea better than if we just nagged them. **One of the challenges** is that it is difficult to **provide soap** at the school itself, because the kids carry it off to play with. They like to use it to make bubbles and such.

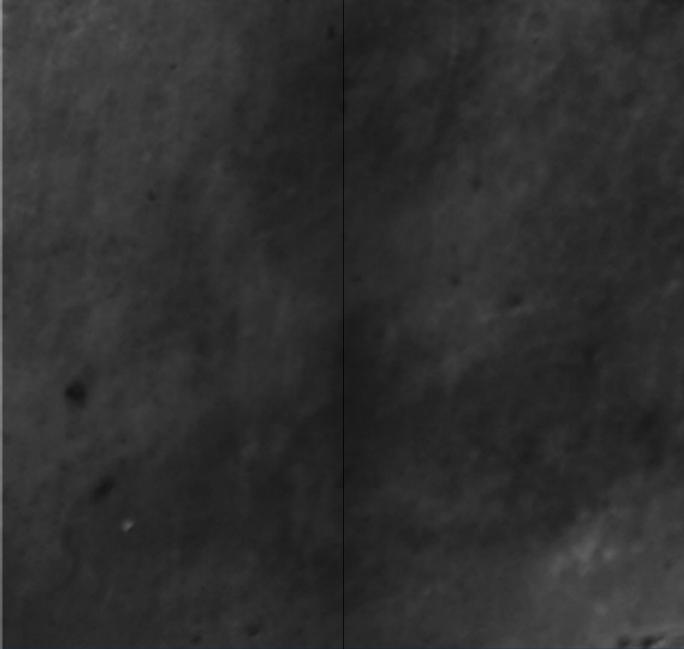
We have tried to establish a system where different groups of children are responsible for bringing soap to school each week, but it is not working yet. **Maybe we could try** dispensers with liquid soap, if we could stop the kids getting into it, but we do

not have a budget for dispensers. But now that almost everyone has running water and a toilet at home, I am sure that at least they wash their hands properly at home. Like I said, it is easier to change the way children behave than it is to change adults. Even though parents should teach their children how to behave properly, I think it is sometimes the other way around. I think the parents can learn from their children how to wash their hands properly.

I think PAMSIMAS is an excellent start, but it would be a shame if it stops here. As I said, we still do not have enough toilets at the school and we do not have a budget for soap. Now that we have come this far, we need to keep on lobbying the district education agency to provide sanitation funds. We have come a long way, but to really make sure that the children grow up to be healthy adults, we have to take it further. PAMSIMAS was just the first step, now we have to build on it.”

LEFT

As a physical education teacher in primary school, Bapak Suwanto is responsible for teaching children proper hygiene, including hand washing with soap. He hopes that the children will practice it at home followed by other family members. PAMSIMAS facility and hygiene promotion program at school help him to make the teaching is easier and more fun for children. His mission is to ensure they will grow becoming a healthy adult.



05 CHAPTER FIVE: UNIVERSAL ACCESS TO SAVE WATER AND SANITATION





Chapter Five

The Ultimate Goal: Universal Access to Safe Water and Sanitation Facilities for All Indonesians

As previous chapters of this book have made clear, the community-driven approach adopted by PAMSIMAS to empower communities to develop water and sanitation facilities according to their needs and to use these facilities appropriately, has been remarkably effective. The program has enabled almost eight million people to access clean water and about 7.4 million improved sanitation facilities across 10,000 villages. In areas where the program has been implemented, a significant proportion of the participating villages have achieved open defecation free status and implemented community-based hand-washing programs. As a result of improved hygiene and proper sanitation in these areas, members of rural communities enjoy improved health, increased productivity and an overall better standard of living.

This is an extremely impressive achievement. However, while PAMSIMAS has helped provide a large number of communities to

access safe, high quality drinking water and improved sanitation facilities, a significant number of Indonesians still lack access to such facilities. In 2013, BPS presented that more than 75 million Indonesians lack access to safe, high quality drinking water, while more than 100 million Indonesians are still unable to access improved sanitation facilities. This is unacceptable. Clearly, much still remains to be done.

The Indonesian Government has committed to achieving the goal of universal access to safe water and sanitation facilities by 2019. This means providing no less than 85 percent of the country's population access to at least 60 liters of clean water per person per day, meeting minimum service standards established by the Public Work Ministerial Regulation No. 14/2010. The remaining 15 percent, in areas where these standards cannot be met, all members of the community must have access to at least 15 liters of water

LEFT
A mother is so happy to have healthier children. With the public tap just in front of her house she can make her children to bathe twice a day—and the monthly fee for using this water is affordable. In the future, she would like to upgrade the water service to a house connection.

RIGHT

Members of the PAKEM (Partnership Committee) participate in a routine coordination meeting. Meetings are held to evaluate program implementation and determine infrastructure performance and functionality. Monitoring and evaluation activities are conducted in coordination with district officials, district water-board associations and BPSAMS members, to ensure that the community is included in the decision-making process.

per person per day, to meet the basic lifeline consumption standards established by the World Health Organization as the bare minimum necessary for drinking and cooking purposes.

In terms of achieving universal access to improved sanitation facilities, the Indonesian Government is committed to ensuring that no less than 85 percent of the population has access to facilities that meet the established minimum service standards. In areas where the standards cannot be met, all members of the community must at least have access to basic improved sanitation facilities. Recognizing the high level of success of PAMSIMAS, the National and Local Governments, as well as provincial and district governments across the country, have expressed great interest in expanding and replicating its achievements to bring universal access to water and sanitation facilities to all Indonesians. Following the conclusion

of PAMSIMAS I in 2012, the Indonesian Government initiated the second phase of the program, PAMSIMAS II, which will run from 2013 to 2017. Under this second phase, the program will facilitate the provision of water facilities to an additional 5,000 villages and extend sanitation interventions in about 219 districts in order to enable a greater number of poor, underserved communities in rural and peri-urban areas to gain improved access to water and sanitation services. Additionally, PAMSIMAS II incorporates a number of changes to the program's initial design. Recognizing the diverse range of challenges faced by communities across the country, the second phase of the program adopts a less standardized selection process for participating villages. PAMSIMAS II also recognizes the need to provide additional support to isolated communities in eastern Indonesia and the outer islands, due to limited human resources and high costs in these areas.





LEFT TO RIGHT
PAMSIMAS stakeholders oversee progress and monitor achievements through an easy-to-use website (www.pamsimas.org). The website helps ensure the program's sustainability is continuously monitored, for example, that the tap, in the middle photo, continues to function well. The website also provides information on whether messages displayed on boards about proper hygiene and sanitation techniques, in the right photo, translate into action on the part of communities.

The Indonesian government has committed itself to achieving the goal

The main characteristic that distinguishes PAMSIMAS I and PAMSIMAS II is the increased focus on program sustainability in the latter. This is based on the understanding that it is not enough for PAMSIMAS to achieve short-term improvements that last only as long as the program is in place and only benefit villages directly participating in the program.

If the goal of the program is to bring improved hygiene and universal access to water and sanitation to all of Indonesia by 2019, PAMSIMAS must inspire communities and district administrations to adopt new approaches and paradigms to replicate the achievements of those directly involved.

Meanwhile, PAMSIMAS should enable all communities to maintain new approaches beyond the completion of the program. This will only be achieved through the development of sustainable, independent, community-based institutions with the necessary capacities to

implement the approaches developed and socialized through the program.

In fact, since its inception, PAMSIMAS has encouraged district government to own funded replication program to apply same principles and approaches to achieve comparable results in terms of the development of water and sanitation facilities and the adoption of good hygiene practice. Villages participating in the program are expected to serve as champions and examples for other communities.

PAMSIMAS promotes and urges district level governments to provide 25 percent of the total program fund at the district level to finance their own community-driven water and sanitation programs in other villages. For example, in every 8 villages receiving national budget grants, it is expected that district level governments providing local budget for an additional 2 other villages.

The challenge, however, is to ensure that this process of replication and expansion of the community-based approach continues beyond the program period. BPSPAMS established to form systems to operate, maintain and expand the drinking water and sanitation facilities, remain instrumental to the success of the replicated programs.

Despite the critical role of the BPSPAMS, a study conducted in 2013 revealed that even with ongoing support provided by PAMSIMAS, less than 75 percent of these institutions were functioning as intended. Under the first phase of PAMSIMAS, it was agreed that one of the best means for improving the performance of these village-level institutions was to establish district or district-level associations to enable BPSPAMS to exchange knowledge and benefit from the experiences and lessons learned from other, similar institutions.

A national-level association of BPSPAMS was established under PAMSIMAS I to improve coordination and optimize knowledge and information sharing in the district-level institutions. Meanwhile, PAMSIMAS II focuses on the provision of training and capacity-building to improve the association's performance by facilitating communication and exchanges between the district-and village-level institutions.

The ultimate goal of the program is to facilitate the development of these institutions, so that all rural and peri-urban communities are able to develop their self-standing institutions, supported by district governments that are ultimately responsible for the provision of basic services with their own resources.



When such institutions – adopting a community-based approach to the development, maintenance and expansion of improved water and sanitation facilities and committed to achieve good hygiene and improved health for all members of the community – exist in all rural communities and are seen as a core component of the provision of basic services, Indonesia will be well on its way to achieving its goal of universal access to drinking water and sanitation.

LEFT
The proud members of BPSPAMS. They play a significant role in ensuring the water facilities are continuously functioning to serve communities as intended, and whether the behavior change of good hygiene and sanitation practice within communities can be maintained. They are members of a significant institution to whom PAMSIMAS relies on its sustainability.



Through PAMSIMAS Indonesia will get closer to achieving the target of universal access to water and sanitation access in rural areas by 2019

PAMSIMAS II Coverages Areas 2013 - 2017



INDONESIA

PAMSIMAS II (2013-2017)

NO	PARTICIPATING PROVINCES	NUMBER OF VILLAGES
1	NANGROE ACEH DARUSSALLAM	42
2	SUMATERA UTARA	56
3	SUMATERA BARAT	427
4	RIAU	264
5	KEPULAUAN RIAU	40
6	BANGKA BELITUNG	44
7	BENGKULU	80
8	JAMBI	68
9	SUMATERA SELATAN	346
10	LAMPUNG	40
11	BANTEN	95
12	JAWA BARAT	246
13	JAWA TENGAH	1022
14	DI YOGYAKARTA	34
15	JAWA TIMUR	322
16	BALI	20

NO	PARTICIPATING PROVINCES	NUMBER OF VILLAGES
17	NUSA TENGGARA BARAT	96
18	NUSA TENGGARA TIMUR	473
19	KALIMANTAN BARAT	166
20	KALIMANTAN SELATAN	246
21	KALIMANTAN TENGAH	56
22	KALIMANTAN TIMUR	20
23	SULAWESI UTARA	36
24	SULAWESI TENGAH	287
25	SULAWESI BARAT	62
26	SULAWESI TENGGARA	72
27	SULAWESI SELATAN	329
28	GORONTALO	95
29	MALUKU	104
30	MALUKU UTARA	10
31	PAPUA BARAT	79
32	PAPUA	20



Stakeholders



The Ministry of
Public Works
and Housing

Executing &
Implementating
Agency



The Ministry
of Health

Implementing Agency



Ministry of
Home Affairs

Implementing Agency



The National
Planning Agency

Steering committee and
the water and sanitation
working group



Ministry of
Finance

Steering committee



The Australian
Department of Foreign
Affairs and Trade

Donor



The World Bank

Donor

Colophon

PAMSIMAS

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PAMSIMAS: Responding to the Water and Sanitation Challenges in Rural Indonesia

Over the last few decades, Indonesia has enjoyed substantial achievements in poverty reduction, human development and improvements in service delivery. However, enormous challenges remain, especially in water and sanitation sectors. Severe consequences of poor sanitation infrastructure on public health, the economy, and the environment. Of the four most important causes of under-5 mortality in Indonesia, two—diarrhea and typhoid—are fecal-borne illnesses directly linked to inadequate water supply, sanitation and improper hygiene practice.

Difficult access to improved water supply also means that poor households, particularly women and children, spend too much time fetching water. PAMSIMAS strives to improve existing facilities and expand sanitation access through a community-based approach.
