Scaling Up Rural Sanitation

Building Rural Sanitation Capacity Nationwide in Indonesia

August 2016

INTRODUCTION

Lagging behind many of its middle-income peers in terms of access to sanitation, in particular in rural areas, Indonesia has recently experienced an acceleration from 36% in 2008 to 47% in 2015\(^1\) as a result of the Government of Indonesia's sanitation program called Sanitasi Total Berbasis Masyarakat (STBM) that was initiated in 2008.

Building on this recent success, in 2014, the Minister of Health declared STBM as the national program in order to reach the government’s new target of universal access to improved sanitation by 2019.\(^2\) The STBM program consists of five pillars\(^3\); under its Open Defecation Free pillar, the program envisages:

2. This was done through Ministerial Decree 3/2014. The universal access target for sanitation by 2019 has been formally endorsed in the government’s third five-year medium-term development plan (RPJMN) 2015-19.
3. STBM pillars: 1) open-defecation free, 2) hand washing with soap, 3) household water supply and food management, 4) household solid waste management, and 5) household wastewater management.

Key findings

- **Indonesia faces a shortage of sanitation professionals exceeding 12,000** to reach its ambitious target of universal sanitation access by 2019 and this cannot be met by fragmented business-as-usual training.

- **The Ministry of Health (MoH) institutionalizes capacity building nationwide through three streams:** i) in-service accredited training tied with staff performance credit, ii) pre-service training through health schools’ curriculum, and iii) distance training through e-learning.

- **The first 18-month institutionalization process has shown promising results:** By December 2015, almost 500 people have been awarded credit points; 497 people accessed the e-learning with 92% completion rate for mandatory module; and more than 2,000 students already completed the class.

- **Critical success factors are:** effective coordination mechanisms led by MoH; optimal use of existing organization and staff incentive structures; and complimentary web-technologies in addition to classroom and field-based training to achieve cost efficiency and reach a wider audience.

- **Continuous promotion, innovation and facilitation through systematic support and robust monitoring and evaluation will help achieve increased uptake of the new courses led by MoH.**
i) Creating demand through community empowerment and behavior change;
ii) Increasing supply of affordable and aspirational sanitation facilities by the private sector, and
iii) Enhancing the enabling environment for implementation at-scale.

Since 2007, the World Bank Group’s Water and Sanitation Program (WSP) has provided technical assistance to the Government of Indonesia to help develop and shape the implementation of its national rural sanitation program. With support from development partners, and primarily through the World Bank-funded National Rural Water Supply and Sanitation Project (PAMSIMAS), the government has now embedded STBM in the national roll-out of PAMSIMAS covering 220 districts and cities in 32 out of Indonesia’s 34 provinces.

PROBLEM STATEMENT
Nationwide implementation to reach universal access by 2019 implies that capacity at local level in highly-decentralized Indonesia will need to be drastically increased in a short time span. From 2006 to 2013 MoH reported an increase in sanitarians, i.e. government health officers responsible for sanitation, from 8,200 to 10,500, or around 4% a year. However, in 2014, 30% of the 9,599 community health centers in the 34 provinces of Indonesia still did not have any sanitarians employed. Government estimated that an additional 12,000 sanitation professionals are needed to empower community members and provide technical expertise to reach the Millennium Development Goal target of 68% for sanitation.

With the new universal access target, the demand for trained sanitation professionals will further increase significantly. This means more than doubling the existing cadre of sanitarians, with all of them requiring up-to-date knowledge and skills to implement the STBM program.

While efforts to increase the quality and quantity of sanitation personnel took place in the past, effective quality control, incentives and the required scale were lacking. Most capacity building and staff development activities were carried out through various training approaches by technical units within MoH, at different levels of local government, and by development partners and NGOs through their projects. Thus, MoH was faced with the problem on how to shift from fragmentation to a nationwide program that builds capacity of sanitation professionals in a way that allows for rapid scaling up while guaranteeing quality control.

ACTION
In 2011, the Directorate of Environmental Health of MoH asked WSP to help conduct an evaluation of existing training initiatives and provide suggestions on how a high-quality and sustainable training program could be established. Following an evaluation of existing training initiatives in 2012 by WSP, in 2013 MOH asked WSP to provide a technical assistance to create and deliver an at-scale training program for sanitation. A joint team of representatives from several units within MoH and WSP collaborated closely over two years and developed a nationwide capacity building program that essentially consists of three streams:

- Pre-service training, aimed at students of health schools. This stream has integrated STBM as a mandatory subject at all 24 public and 4 private environmental health schools so as to meet the future need of human resources.
- In-service training, aimed at existing government and project staff through a modular program of accredited training. While improving the capacity of staff to carry out their immediate tasks, performance credits are gained as an incentive for staff to advance their careers.
- Web-based e-learning courses, available for both audiences as well as for any other interested stakeholders to supplement and/or complement face-to-face training and thus bridge the connectivity gap across the archipelago.

This Learning Note describes the transformative process and key lessons learned while developing a nationwide sanitation capacity building program in Indonesia.
**KEY LESSONS**

Selecting the institutional home for a national capacity building program requires strategic consideration on mandate, resources and opportunities to leverage existing systems.

Rather than project-based cascading training, a training program institutionalized within the existing government health and education systems was deemed to be more sustainable and scalable in a country of the size and level of decentralization as Indonesia.

The MoH Agency for the Development and Empowerment of Human Resources in Health (PPSDM) was selected as the institutional home for the national STBM capacity building program because of its official mandate and experience, and well-developed mechanisms for capacity building, and its resources and organizational structure, with presence at all levels of government, i.e. from national to provincial level.

Positioning PPSDM as the host of the STBM capacity building program accelerated the mainstreaming of human resources development for sanitation in MoH. Based on the existing accreditation systems of PPSDM, the STBM in-service training could adopt a structured and standardized format, ensuring government accreditation and performance credits attached to successful completion of accredited training. Hosting of the program in PPSDM also facilitated optimal use of the different streams, and better coordination and alignment between different department’s work plans and targets.

Linking STBM training with accredited certificates and performance credits creates demand for such training but requires diligent preparation to meet quality standards. For over a decade, MoH has operated an incentive program, rewarding staff with performance credit points for completing accredited trainings. Staff members are required to continue their education through course work to increase job performance and get promotions, which come with higher financial bonuses. To capitalize on such incentives that contribute to staff demand for training, the MoH-WSP task team chose to closely follow the steps of the government accreditation process outlined below.

**Box 1. Government Accreditation Process**

1. preparing training needs assessment
2. developing training goals
3. designing the program: training tools (modules, multimedia), implementation plan, availability of trainers
4. implementing the pilot training
5. evaluating and adjusting the training

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This labor-intensive process, which took place over more than a year, resulted in five accredited curricula and modules by March 2014:

1. training for STBM facilitators
2. training of trainers for STBM facilitators
3. training for STBM entrepreneurs
4. training of trainers for STBM entrepreneurs
5. STBM training for lecturers of environmental health schools

By November 2015, almost 1,000 people participated in the above training programs. Of the initial round, however, only around 50% of participants were awarded accredited certificates, including the staff performance credits. This was due to initial difficulties of training organizers in meeting the accreditation standards, especially 4 and 5, as highlighted in box 2.

**Box 2. Example of requirements for accredited training of STBM facilitators**

1. Forty-seven training hours during day time (or upon completion of 30 hours e-learning)
2. Certified or competent trainers proven by verified curriculum vitae and completion of a master trainer
3. A set of evaluation forms to be used in the training
4. A minimum standard for the venue and training documentation to be printed
5. Dedicated staff for training administration

Many entities are organizing STBM training, including government offices, development partners, NGOs, and contracted firms. While all training organizers in principle agreed to use the accredited curriculum and modules of the STBM training, the newly established accreditation process included several quality control steps that posed initial challenges for training organizers (see box 2). Planned training timelines and budgets did not always match the diligent preparation process required for accreditation, resulting in certificates and performance credits not being issued for all participants even though the accredited modules were followed in the training.

With better preparation, it is expected that all organizers would be able to conduct accredited training in the future. The above experience also resulted in the development of an abbreviated version of the accredited training to accommodate budgets and training duration. This version combines e-learning with shorter training (e.g. reducing the training hours from 47 to 30 hours for STBM facilitators).

**Working with professional environmental health associations and health school fora was instrumental integrating STBM into existing curricula to allow rapid national scale-up of pre-service training.**

In order to ensure enough qualified sanitation staff in the future, the STBM concept was integrated into the curriculum of existing government environmental health schools. While the existing curricula already included environmental health topics and lecturers were familiar with such content, the biggest challenge was to convince lecturers about the different implementation approach of STBM. As STBM follows a community empowerment method including a no-subsidy principle, it was deemed necessary to integrate significant amounts of field work in the curriculum, a departure from more theoretical ways the subject was taught previously.

In May 2013, the Directorate of Environmental Health and PPSDM invited lecturers, members of the Communication Forum of Environmental Health Schools (Forkom JKL), and members of the Environmental Health Experts Association in Indonesia (HAKLI) for an exposure visit to see the implementation of STBM. This provided them an opportunity to directly observe and communicate with community members on the
process and impact of the STBM process. As a result, lecturers, Forkom JKL, and HAKLI members all agreed to integrate STBM into three mandatory subjects of the health schools, namely: i) health promotion, ii) basic environmental health, and iii) community empowerment.

In addition to that, the MoH-WSP task team also participated in developing the accredited curriculum for lecturers. All lecturers are now required to pass this STBM accredited training for lecturers before delivering the content in their schools. While individual schools were put in charge of developing their syllabus, teaching plan and organizing the financing for teaching and field work, Forkom JKL and HAKLI agreed to support the quality assurance of the teaching process.

Teaching started in nine schools in January 2014. Shortly afterwards, Forkom JKL expressed its ambition for rapid national scale-up during the Annual Meeting of Environmental Health Experts, convened by HAKLI in April 2014 in Makassar, South Sulawesi. Training for lecturers from all 24 public environmental health schools and 4 private schools was conducted in the following months. By September 2014, all 28 schools had already delivered STBM courses to more than 1,500 students.

In-service training can deliver positive spin-offs such as increased attention to STBM and better coordination between health schools and local government implementers.

The in-service training stream—in line with other such training—includes mandatory field work by the students. However, the key difference is that the STBM in-service training emphasizes different and practical skill sets, such as facilitation of community empowerment or Community-Led Total Sanitation. This fieldwork changed students’ mindset about the need for behavior change and community processes to address open defecation.

The partnership between STBM implementers and health schools proved to have other unanticipated benefits. The schools’ support for the STBM program has injected new enthusiasm at local district health offices to implement STBM. Simultaneously, it has created interest and encouraged health schools to conduct research on rural sanitation issues, both from a demand and supply side perspective. The development of the in-service training stream benefited greatly from the participation of local government implementers, universities, and professional associations, which enhanced the quality of the STBM training materials.

E-learning can be a cost-effective supportive pillar for in-service and pre-service training, as well as an efficient way to reach a wider audience with a high quality training program.

The Indonesian population of around 250 million people is spread out over more than 17,000 islands. Internet coverage is increasing rapidly, estimated to be around 50% in 2015. Given the limitations in training budget, availability of trainers, and quality control issues, MoH decided to create a web-enabled distance learning course to complement the pre-service and in-service training streams.

The curriculum and modules for STBM e-learning were developed from the accredited face-to-face curriculum and modules. The contents of the e-learning emphasize the conceptual and theoretical aspect of the STBM program, developing essential knowledge as a foundation. Practical skills are still to be delivered in the form of face-to-face classroom training combined with field-work (e.g. on facilitation, triggering, entrepreneurship, and monitoring). The e-learning consists of 4 modules, available in Bahasa Indonesia and English:
1) basic concept of STBM,
2) STBM facilitators,
3) STBM entrepreneurs, and
4) STBM monitoring and evaluation

Besides providing an opportunity for anyone interested to learn about STBM, e-learning also allows for cost-effective and shorter face-to-face training once e-learning is successfully completed. For example, the ‘classical’ STBM facilitators training was 6-7 days (47 hours), but upon e-learning completion, the face-to-face training can be reduced to 3-4 days (30 hours).

While self-printable certificates of participation are available upon successful completion of the e-learning, an accredited certificate with performance credits is only awarded to those staff who pass the combined e-learning and the face-to-face training sessions.

E-learning can be accessed at http://elearning.stbm-indonesia.org and was officially launched by the Minister of Health on 3 September 2014 at the STBM National Coordination Meeting in Jakarta. The e-learning marketing strategy has so far successfully relied on promotion by government high level officials in various forums as well as STBM partners.

![Image of Minister Nafshiah Mboy and Armida Alisjahbana](image)

Health Minister Nafshiah Mboy points to a monitor featuring updated national STBM data as National Development Planning Minister Armida Alisjahbana (left) and WBG-WSP Task Team Leader (right) look on following the introduction of STBM E-Learning in Jakarta.

The e-learning has also been utilized by the nationwide PAM-SIMAS project for provincial coordinators and district facilitators to update their knowledge on STBM. They also effectively use the e-learning as a handy and interactive tool to introduce STBM as a national program.

By November 2015, more than 600 people have participated in the e-learning courses. The participants have a variety of professional backgrounds beyond health officers and sanitar-ians, such as consultants, project staff, teachers, lecturers, students, NGO staff, and citizens/volunteers working on empowerment activities in their communities.

As expected, e-learning has not been without its challenges, mostly teething problems that come with the use of new technology. Also, since e-learning is open to everyone, its completion rate has been modest, standing at 45% by March 2015. To accelerate the completion rate, since June 2015 the MoH has requested STBM-related project staff and local health officers to complete the e-learning before participating in any national and regional technical events—leading to a jump in completion rate to 92% for mandatory module by November 2015.

**RECOMMENDATIONS GOING FORWARD**

Through technical assistance, the MoH has successfully created the foundations of a nationwide institutionalized capacity building program. Going forward, more effort and learning is needed to ensure wide-scale adoption of the different streams and to sustain the accreditation of the program over time.

Initial thoughts on how to address the challenges for consolidating the national capacity building program are as follows:

- The division of labor and organizational responsibilities for the STBM capacity building program need to be further delineated among the different units within MoH, i.e. the lead technical units such as the Directorate of Environmental Health and the STBM secretariat to monitor and facilitate nationwide implementation and PPSDM unit to ensure quality implementation and incentive mechanism.

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There were several technical issues experienced by users, such as delay in auto-response during the registration, insufficient server capacity, and weak internet capacity at the side of the end users.
• To ensure higher levels of accreditation, it is necessary to better disseminate information and provide support for training organizers on the procedures for accreditation. This may be done through developing a dedicated help-desk within the existing STBM secretariat.

• The proposed help-desk may also support better coordination, monitoring and evaluation of training plans developed by STBM partners, and keeping formal records of accredited STBM trainers. Such systematic support and monitoring is especially relevant now that projects like PAMSIMAS are used for nationwide implementation of STBM. The facilitation of accredited capacity building will be required at all levels, including village, district, province, and central.

• In order to sustain accreditation, the technical units of the Ministry of Health and PPSDM will need to jointly carry out regular post-training evaluation. This is required to ensure that training content and approach remains relevant and up-to-date.

• While looking ahead at the universal sanitation target, the STBM national program needs to further investigate what modifications are needed to suit denser urban environments and/or other challenging conditions. As a result, the modules developed for the three different streams will need to be adjusted over time to include new insights and approaches.

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8 Three recent laws have been supportive to scale up the STBM sanitation program, including Law No.6/2014 and Law No. 23/2014. These state the responsibility and management of water and sanitation is at district government level. Law No. 36/2014 on health workers requires all health workers to participate in a capacity building program annually, which is to be conducted by the accredited institution, which is indeed PPSDM.
RELATED READING

JMP (2014) Progress on Sanitation and Drinking Water – Update 2014


https://www.openknowledge.worldbank.org/handle/10986/11698


http://www.wsp.org/toolkit/indonesia

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About the program

Today, 2.5 billion people live without access to improved sanitation. Of these, 71% live in rural communities. To address this challenge, WSP is working with governments and local private sector to build capacity and strengthen performance monitoring, policy, financing, and other components needed to develop and institutionalize large scale, sustainable rural sanitation programs. With a focus on building a rigorous evidence base to support replication, WSP combines Community-Led Total Sanitation, behavior change communication, and sanitation marketing to generate sanitation demand and strengthen the supply of sanitation products and services, leading to improved health for people in rural areas. For more information, please visit www.wsp.org/scalingupsanitation.

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