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HEALTH AND HYGIENE PROMOTION

Best Practices and Lessons Learned

Field School participants in Cikidang Village, Lembang, Bandung, West Java are introduced to concepts of Health and Hygiene. Together, they discuss how to piece together components of the Fecal-Oral Transmission chart. This activity represents one creative, hands-on technique used to promote community-based awareness and problem solving of Health and Hygiene issues.

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EXECUTIVE SUMMARY



In 2006, the Ministry of Health of the Republic of Indonesia issued the National Strategy for Community-based Total Sanitation (STBM) “to accelerate community access goals toward sanitation and behavioral hygiene improvement” (STBM, 2008, p: 3).

The main goal of STBM is to decrease diarrheal disease and other environmental-related diseases. STBM identifies five key behaviors, or pillars: 1) Open Defecation Free (ODF) community, 2) safe food and drinking water handling, 3) hand washing facility for proper hand washing with soap, 4) proper waste water management, and 5) proper waste management. These five key behaviors, with the exception of #4, have been central to the ESP Health & Hygiene (H&H) strategy.

The purpose of the “Health and Hygiene Best Practices and Lessons Learned” publication is to reflect on the design and implementation of the Health and Hygiene (H&H) Communication Strategy of the USAID-funded Environmental Services Program (ESP) and to share “what worked” with the Government of Indonesia and the larger community working on water.

This publication aims to reach local government officials at the district and sub-district levels, managers of water and sanitation initiatives, grassroots organizations such as NGOs, Posyandu (integrated health service post) cadres, health and education officials, and those interested in hygiene improvement programs. This document is also intended for the donor community and cooperating agencies who can refer to this body of accumulated knowledge when designing programs that aim to achieve sustainable hygiene improvement with increased potential for scaling-up.

The 22 Best Practices and Lessons Learned presented in this publication are the result of a collective process involving reflection, analysis, and understanding of the H&H Communication Strategy and its effectiveness during field implementation. This document presents the results of a collaborative effort among Local Government authorities, health and education officers, school teachers, community leaders, and ESP program staff, all of whom were instrumental to program success. A series of meetings, revisions of communication materials and project documents, and interviews with field partners, have all contributed to the identification of key Best Practices and Lessons Learned.

The Health and Hygiene (H&H) strategy developed from initial conceptualizations among project health specialists to embrace a dynamic process involving a wide variety of community resources, connected through ongoing local initiatives for hygiene and environmental improvement. The resulting H&H strategy cannot be regarded as traditional “hygiene promotion”. Rather, it is best considered a community mobilization and participatory effort. It incorporates conventional concepts of hygiene, including hand washing with soap and the use of latrines, as well as concepts less commonly associated with hygiene, such as waste management, re-greening, composting and beautification/cleaner neighborhood as prioritized by the community. The ESP Model for Health and Hygiene Promotion utilizes two fundamental approaches: the “Clean, Green and Hygiene (CGH) Kampung” and the “Clean, Green and Hygiene (CGH) School. As illustrated by this publication, these two approaches promote a more competent network of organizations, solid partnerships, and stronger formal and informal leadership necessary for an effective and sustainable H&H strategy.

Clean, Green and Hygiene (CGH) School

Schools serve as an effective entry point for greater community involvement. Students and teachers spread hygiene messages and behaviors to parents and community members at large. Building hand washing with soap water stations, connecting water pipes, learning about organic and non-organic waste separation, composting, and tree planting would not have been possible without the committed partnership of schools, parents and communities. Lessons Learned include:

1. Building commitment among a school's headmaster and teachers by responding to their own goals
2. A well-structured Health and Hygiene curriculum motivates teachers and engages students with innovative and interactive tools and hands-on activities
3. The Clean, Green and Hygiene Agenda leverages support from diverse sectors
4. Expanding Child-to-Child hygiene promotion as an entry point for hygiene behavior change for parents and community members
5. Establishing strong linkages with Local Government, Puskesmas and Posyandu to endorse CGH school activities and leverage support for effective program implementation
6. Involving the media to raise visibility and public commitment of local and school authorities
7. Scaling-up the CGH school approach through demonstration sites (showcases) that allow others to witness the benefit of CGH Schools

Clean, Green and Hygiene (CGH) Kampung

The great diversity and potential for local assets and resources aid in the promotion of Health & Hygiene practices. The representatives of neighborhood wards (Rukun Tetangga, or RT), neighborhood blocks (Rukun Warga, or RW), Posyandu, PKK networks (Family Welfare Movement) and other informal leaders actively participate in facilitating various hygiene-related activities including: waste management, water treatment at the household level, sanitary disposal of feces, and Hand Washing with Soap (HWWS). This strong network of local leadership helps bring communities together toward a common goal. Lessons Learned include:

8. Leaders provide support to the CGH agenda when they realize that the approach is an opportunity to access technical program-based resources and government funding for their communities

9. The technical expertise provided by the program garnered the commitment of NGOs and CBOs while increasing their technical capacity to support sustainable activities
10. Promoting HWWS as part of a larger set of hygiene behaviors that resonates closely with community members and encourages routine practice of the behaviors (STBM agenda)
11. Securing access to water and the participation of women increases success of H&H activities
12. The economic impact gained from composting and recycling translated to notably more sustainable practices among those who realized the benefits

Capacity Building among local networks

Capacity building is regarded as a comprehensive process by which social networks, stakeholders, and partners do not only gain how-to technical competencies, but also the guiding principles to work toward a shared vision, stimulate commitment, and capitalize from indigenous and local assets. By enhancing those capacities, a positive and enabling environment has been created to support the promotion, ownership and sustainability of hygiene behaviors and a cleaner environment. Lessons Learned include:

13. The use of participatory approaches to train local school teachers, networks, and community members increases overall commitment for H&H promotion and strengthens interpersonal communication skills, self confidence, and assertiveness
14. The H&H training curriculum increases networks' expertise by using local communication vehicles as a platform for H&H promotion
15. The broad range of technical content of the Health and Hygiene training package enhances participants' skills beyond health promotion; it promotes a sense of confidence and empowers them to undertake new initiatives

Hand Washing with Soap (HWWS) advocacy at local and regional levels

Successful advocacy initiatives show that local governments, leaders, and media influence the creation of an enabling environment, which is necessary for hygiene behavior change and increased access to water and sanitation technologies. Lessons Learned include:

16. Large scale HWWS advocacy events enhance commitment from high level Government officials and private sector partners by generating high visibility through national media, TV and press coverage

17. Encouraging Regional level multi-sector authorities, religious leaders, and school constituencies to take the front stage and lead advocacy efforts at the regional and district levels to enhance visibility and commitment to HWWS

Research, Monitoring and Evaluation

Research and monitoring and evaluation (M&E) are critical to program design, effective hygiene strategies and messages, and learning about the impact achieved. While formative research delivered meaningful results, the M&E was not implemented as originally designed due to other program priorities. The Lessons Learned described in this section are expected to encourage other similar programs to increase efforts to properly fund and prioritize rigorous research and evaluation activities. Lessons Learned include:

18. Investing in innovative formative research, to gain knowledge about people's perceptions surrounding hygiene, increases the potential for program success
19. A monitoring and evaluation system designed to include the direct participation of stakeholders increases understanding and motivation for hygiene promotion
20. Providing technical support to closely supervise data collection by stakeholders in the field to assure data quality and accuracy
21. Tracking school attendance is an easy way to monitor effects of hygiene practices and reduce illness (diarrhea and other hygiene-related illnesses like worms or respiratory infections)
22. Investing in rigorous program evaluation to learn how and why the program worked and build upon components that worked best

This publication has been possible thanks to the contribution of local stakeholders, government officials and ESP Health and Hygiene team members. The publication represents a selection of a larger set of lessons learned accumulated over the past five years, thanks to the candid and decisive participation of the men and women that reside in ESP locations. Sharing this exercise with a larger community of interested institutions, networks, and individuals in health and hygiene promotion is of prime importance. We expect that the information shared herein will be useful for others confronting unique challenges and opportunities and we welcome feedback from readers to continue to advance the field of Health and Hygiene communication.



INTRODUCTION



Hygiene promotion poses a challenge for interventions worldwide which aim to reduce diarrhea among young children. Few opportunities for trying new approaches to hygiene promotion have sufficient funding and a supportive environment. The Environmental Services Program (ESP) has combined a resourceful and encouraging environment for innovative strategies and research, resulting in a successful promotion approach to hygiene improvement throughout Indonesia.

Over the 5.5 years of the project, the development of the Health and Hygiene (H&H) strategy evolved from initial conceptualizations from health specialists in the Jakarta office, and went on to embrace a dynamic process involving a wide variety of community resources, connected through ongoing local initiatives for hygiene and environmental improvement. The resulting H&H strategy cannot be regarded as traditional “hygiene promotion” but, rather, is best considered a community mobilization and participatory effort that goes beyond a conventional concept of hygiene.

The H&H strategy incorporates unconventional behaviors not typically associated with hygiene, such as waste management, re-greening, composting, beautification, and cleanliness, as prioritized by the community. ESP hygiene promotion focuses on 4 key hygiene behaviors: 1) hand washing with soap, 2) solid waste management, 3) safe disposal of children's feces and 4) safe sources of drinking water.

The objective of this document is to share with the larger community working on hygiene promotion “what worked” for ESP. This includes work to promote long-lasting impact, while further increasing the potential for scaling-up the strategy.

The document is organized into four sections:

The **first section** describes the conceptual frameworks that provided the foundation for the development of the Health and Hygiene Communication Strategy;

The **second section** briefly describes how this strategy fits and supports the National Strategy for Community-based Total Sanitation (STBM) issued by the Ministry of Health of the Republic of Indonesia;

The **third section** presents the Lessons Learned for each of the components of the H&H communication strategy; and

The **fourth and last section** provides a list of recommendations for future programs interested in achieving sustainable hygiene practices.



HEALTH AND HYGIENE PROMOTION FRAMEWORKS



Most hygiene interventions implemented over the last 50 years have promised to deliver reduced rates of diarrhea. Research has shown, however, that hygiene interventions that emphasize diarrhea prevention have had limited success. Several factors may account for this gap. Firstly, in many contexts, communities often perceive diarrhea as being the result of causes not necessarily related to hygiene (i.e. unfriendly climate, consumption of spicy food, growing up, mystical forces).

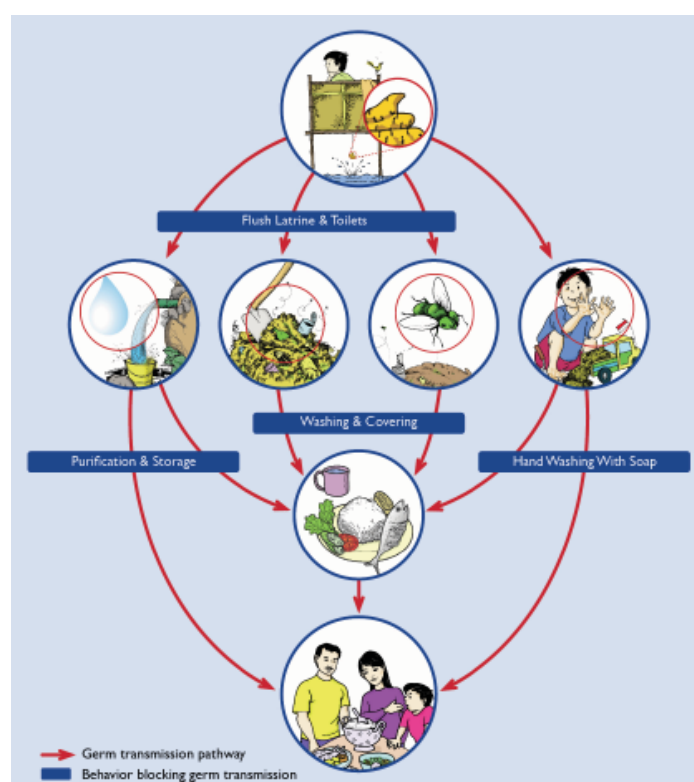
This has an impact on the way in which diarrhea prevention and hygiene must be approached. In addition, hygiene interventions commonly use a “silo” approach which fails to adequately integrate the various hygiene practices found to directly effect diarrhea. Emerging research is calling attention to the role that psychosocial factors and other intermediate, non-health related variables, have on hygiene practices (Curtis, 2003; Figueroa & Kincaid, 2009). Research thus far indicates that no single approach to the promotion of water treatment and hygiene is likely to sufficiently sustain improved hygiene behaviour practices. Instead, innovative and holistic approaches are necessary for developing effective solutions to health and hygiene interventions in the future.

To guide the development of the Health & Hygiene Strategy, ESP used various frameworks from the health and behavior change fields. Combined, these frameworks are at the core of ESP's success in impacting hygiene behaviors and reducing the rate of diarrhea in ESP program sites. A brief description of the models used follows.

1.1. THE FECAL-ORAL TRANSMISSION CYCLE OF DIARRHEAL DISEASE

The transmission routes of viruses, bacteria, and pathogens that cause diarrhea are represented by the 4Fs, which were first described in the Fecal-Oral Transmission Cycle (F-O Cycle) by Wagner & Lanoix (1958). The 4Fs are fluids, fields, flies, and fingers. According to Wagner & Lanoix, the 4Fs contaminate water and food with human feces, which are then consumed by humans. For each pathway, transmission barriers can be designed to block fecal matter from reaching human consumption. As shown in Figure 1, transmission barriers to prevent diarrhea include 1) using sanitary means of feces disposal, 2) water treatment and proper storage, 3) washing and covering food from flies, and 4) washing hands with soap after defecation, after cleaning a child's bottom, after eating, and before feeding a child.

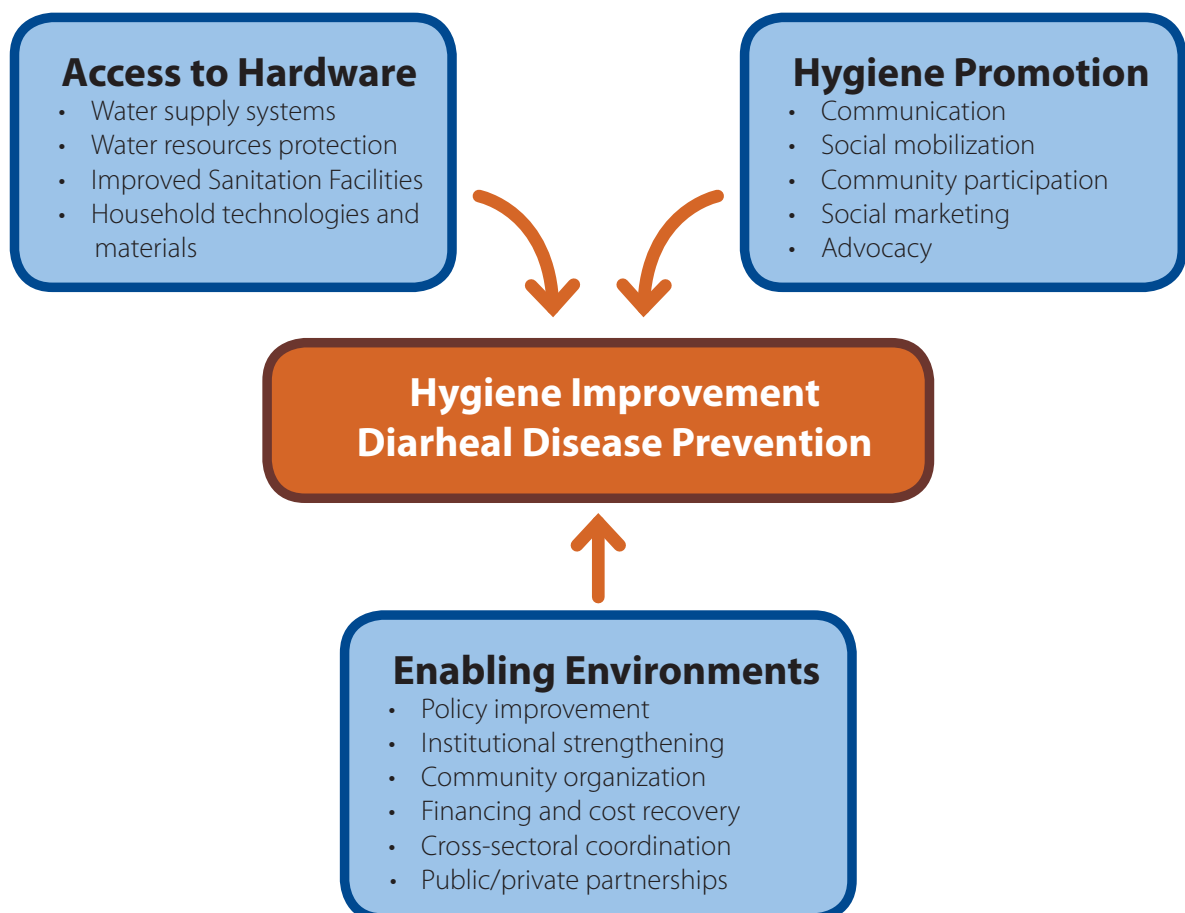
Figure 1. Fecal-Oral Transmission Cycle



1.2. HYGIENE IMPROVEMENT FRAMEWORK TO DECREASE DIARRHEA

For the design of the ESP Health and Hygiene (H&H) communication strategy, the F–O cycle model was critical, given ESP’s mandate of diarrhea prevention. However, it was not enough. The H&H communication strategy needed to be based on behavior change communication models that could provide ESP with the necessary elements for improving hygiene practices that prevent diarrhea. One such model was the Hygiene Improvement Framework (HIF) shown in Figure 2. This model suggests that three elements are needed to improve hygiene behaviors, including 1) access to hardware such as soap and hand washing stations, 2) hygiene promotion, such as community mobilization, that engages community members in the new practices, and 3) an enabling environment that facilitates or enhances the access to key technologies and the practice of hygiene behaviors, such as enhancing political support and institutional strengthening.

Figure 2. Hygiene Improvement Framework



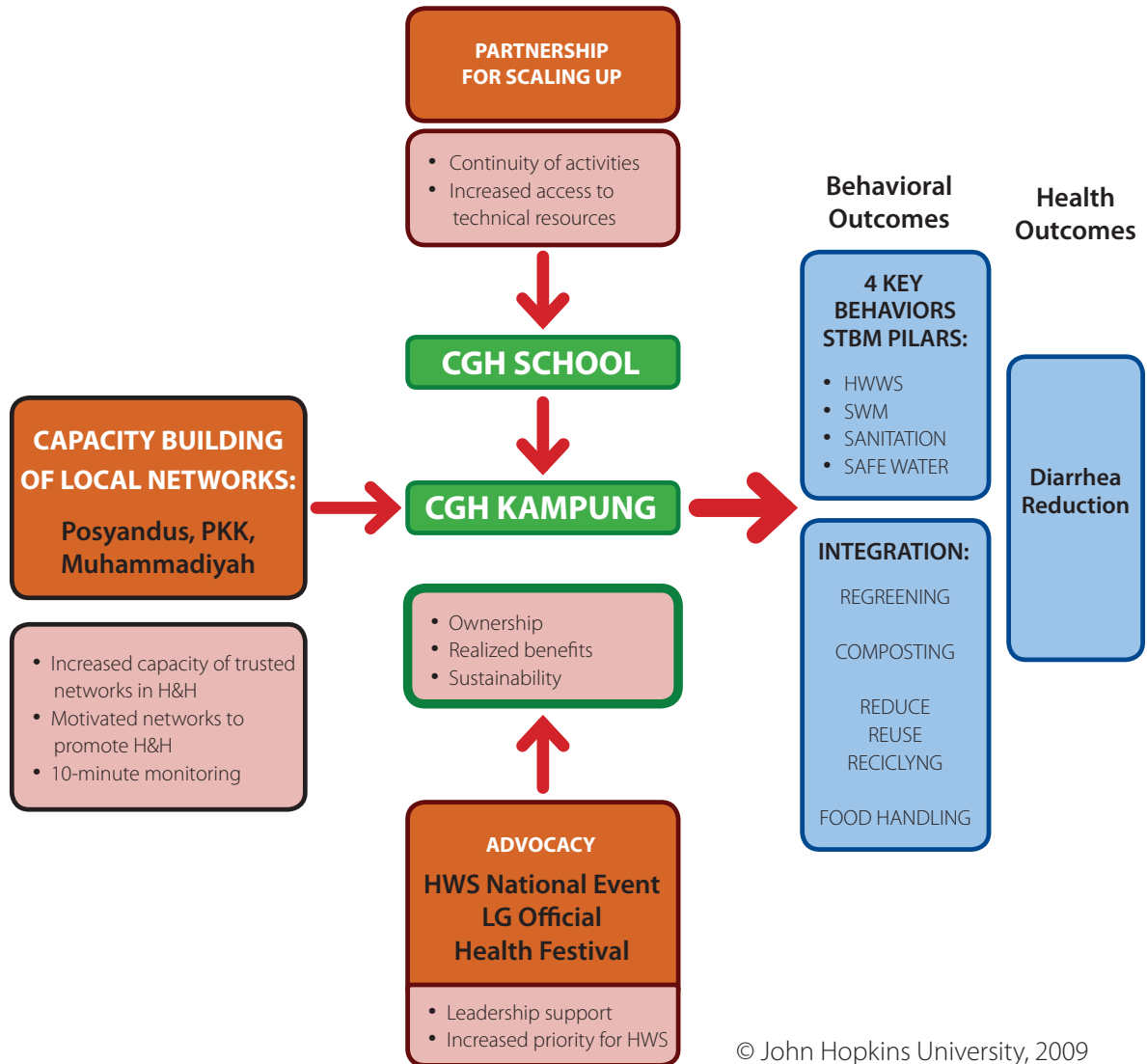
1.3. ESP MODEL TO PROMOTE HYGIENE BEHAVIORS FOR DIARRHEA PREVENTION

Supplementing the models above, and for the design of its formative research, ESP used tested models of communication and behavior change that draw on a wide variety of theories of social and behavior change (See “Health and Hygiene Behaviors in Indonesia: Results of the Formative Research” USAID, ESP, Rimbasmaja, R, Figueroa, M.E. et al 2006). Using this solid theoretical base and innovative research approaches as a foundation, ESP identified a variety of behaviors beyond those described by the F-O cycle and by the HIF above, as relevant to diarrhea prevention in Indonesia. Waste management in particular, was described by study participants as a leading behavior linked to other hygiene practices and a key cause of diarrhea. Therefore, waste management was included as a key hygiene practice, as important as hand washing with soap, for diarrhea prevention in ESP program sites. The research results also provided the basis for designing a comprehensive H&H communication strategy that involved community resources identified within the research study. Using the formative research findings, ESP developed an integrated H&H communication strategy, anchored by two fundamental concepts: the “Clean, Green and Hygiene Kampung” and the “Clean, Green and Hygiene School” (See Figure 3).

The ESP model for Health and Hygiene promotion is centered in the *kampung* (village) and the school, where community resources convene and where integrated action takes place. These resources include 1) existing local networks, 2) partnerships to facilitate scaling-up the strategy, and 3) formal and informal leaders, and community members. Key to the sustainability of hygiene practices is the concerted action of all these resources with specific tasks complementing each other and creating a synergistic effect (red boxes in the model). To accomplish this, the H&H communication strategy provided each community resource with tools and activities, engaging all components in a collaborative effort to promote a strong, enabling environment that supports the 4 key hygiene behaviors of ESP: 1) hand washing with soap, 2) solid waste management, 3) safe disposal of children’s feces, and safe sources of drinking water (upper blue box). While giving priority to these key hygiene practices is relevant for diarrhea prevention, ESP added re-greening, composting, and recycling in response to Indonesian’s understanding of hygiene, as a cleaner and healthier environment focused around households and the community.

The “Clean, Green and Hygiene Kampung” and the “Clean, Green and Hygiene School” became the anchors of the H&H strategy and the pillars for sustainability as they inherit a more competent network of organizations, solid partnerships, and stronger formal and informal leadership, as shown by the lessons in this publication.

Figure 3. ESP Model for Health and Hygiene Promotion



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HEALTH AND HYGIENE INTEGRATIVE BEHAVIOR CHANGE COMMUNICATION MESSAGES AND STBM BEHAVIORS



In 2006, the Ministry of Health of the Republic of Indonesia, issued the National Strategy for Community-based Total Sanitation (STBM) “to accelerate community access goals toward sanitation and behavioral hygiene improvement” (STBM, 2008, p: 3). The main goal of STBM is to decrease diarrheal disease and other environmental-related diseases. STBM identifies five key behaviors, or pillars: 1) Open Defecation Free (ODF) community, 2) safe food and drinking water handling, 3) hand washing facility for proper hand washing with soap, 4) proper waste water management, and 5) proper waste management. Four of these five key behaviors, with the exception of #4, have been central to the ESP H&H strategy.

The ESP H&H strategy strongly supports four of the six components of the STBM strategy including: 1) creating a conducive environment through advocacy and partnerships for enhanced governmental support, 2) the advancement of awareness and leadership that promote hygiene behaviors to support total sanitation, 3) knowledge management through educational curriculums that addresses the total sanitation approach and use of data for knowledge improvement, and 4) monitoring and evaluation that relies on people in the communities to monitor activities and results. The following section describes key lessons learned from the Health and Hygiene Strategy, particularly the ESP legacy and the successful roll-out of STBM across Indonesia.



SELECTED BEST PRACTICES AND LESSONS LEARNED FROM HEALTH AND HYGIENE PROMOTION



The innovative and participatory approach conceptualized by the ESP team to promote improved hygiene behaviors in 366 sites across Indonesia, has resulted in an extensive amount of accumulated knowledge and experience. It is challenging, in a short document such as this, to summarize the wealth of lessons that this 64 month project has learned while engaging communities in hygiene improvement.

The lessons described below represent a selection of the cases that provide the most significant evidence of “what works” for sustainable hygiene behavior change. These lessons are organized by the main strategic components described in the ESP Model for Health and Hygiene Promotion: 1) Clean, Green and Hygiene School, 2) Clean, Green and Hygiene Kampung, 3) Capacity Building among local networks, 4) Hand Washing with Soap advocacy at local and regional levels, and 5) Research, Monitoring and Evaluation.

3.1. CLEAN, GREEN AND HYGIENE (CGH) SCHOOL

The CGH School is an integrative, school-based health and hygiene strategy with the purpose of engaging schools' headmasters, teachers, school committees and especially students with learning opportunities that encourage the development of healthy and hygienic behaviors, including environmental health. The ultimate goal is to prevent diarrhea and avoid other diseases such as flu, avian influenza, dysentery and respiratory tract infection. The CGH School strategy has worked in tandem with other ongoing initiatives such as the School Health Unit (UKS, Unit Kesehatan Sekolah) and volunteer student doctors, or "little doctors" (dokter kecil), which aim to influence hygiene-related behaviors among students and school staff. Little doctors is a government program, implemented nationally and at all educational levels, to improve the quality of education by developing health and hygiene behavior change.

The CGH School strategy calls for the implementation of a number of interrelated activities. Over the past five years, ESP has worked in 95 schools from Aceh, to Java, to Eastern Indonesia. The aim is to bring changes at the school-level that expand to the family and community levels. Among the main initiatives, the CGH School strategy focuses on:

- Promotion and adoption of key behaviors among students and school personnel. Behaviors include Hand Washing with Soap (HWWS), sorting and dumping garbage in the proper place, planting and caring for trees, and maintaining school toilets.
- Integrating Clean, Green and Hygiene (CGH) concepts into the school curriculum, including hands-on activities to be carried out by teachers and students at the school and community levels.
- Encouraging schools to invest and provide access to sanitation facilities, Hand Washing with Soap sinks, garbage cans for organic and non-organic waste, and land for tree planting and other greening activities.
- Strengthening and revitalization of "little doctors" and "child-to-child" promotion, to reach out to kids and adults at the school and community levels.

Lessons learned

The CGH School approach has revolutionized the way hygiene promotion is perceived and implemented within the school system. Furthermore, it proved a very timely approach, engaging with and enhancing environmental agendas by incorporating Health and Hygiene benefits for children and their communities. The lessons below present small examples of such successes across ESP sites.

1. Building commitment among a school's headmaster and teachers by responding to their own goals

East Java. Panggungrejo Elementary School in East Java has already been selected as one of the top10 candidates for the yearly “Environmental School Award”, or Adiwiyata award. The school headmaster understood that the CGH School strategy was not only introduced at an opportune time for strengthening his commitment to the environmental and green agenda, but that the strategy's hygiene component would also provide him the opportunity to expand his vision while making his school more competitive in the running for the Adiwiyata award. The school invested in Hand Washing with Soap facilities, increasing their availability to students and school staff. Today, Panggungrejo School is proudly receiving visitors and showcasing their CGH infrastructure, the educational CGH materials utilized in the classrooms, and the active parent-teachers committee that links CGH School work with the larger community.

West Java. Encun Surniati, a teacher in Cisalasih Elementary School, Lembang, West Java, has been committed to her role as a green teacher for years. She is excited to improve the conditions of her school by helping to support a wide range of environmental options for her students. Under the CGH School initiative, Encun is helping to set up hand washing stations, build sanitation facilities, distribute waste bins, and even beautify the school grounds by participating in the replanting of new vegetation. Along with four other schools, teachers and school principals have formulated a CGH concept that prioritizes their actions towards improving surrounding conditions and building community efficacy by mobilizing a set of diverse partners. All five schools have set up a formal plan to recover from changing environmental conditions as their lush vegetation diminishes. “Things change fast when a dense population has economic urges,” Encun said with passion. Teachers have become well aware that schools are an integral element in catalyzing social and environmental change, both within and outside their walls. They have advocated the idea of making model schools that strive for a clean and friendly environment, which carries over to all levels of their community. Sanitation facilities are being repaired, as needed, and new latrines are part of upcoming CGH plans for future development. The schools have also promoted the presence of the School Health Unit (UKS) and have successfully linked this to the CGH agenda.

North Sumatra. ESP cooperated with schools to improve the school infrastructure (the construction of clean water facilities and MCK), as well as to promote clean behavior. This was voluntarily supported by the school committee in Sikeben Elementary School 10, 18 and 42 in Sikeben Village as well as students' parents, with the school providing food and drink and supervising the entire process. Currently, children no longer defecate on the unused land behind the school, and they now have consistent access to water to wash their hands.

2. A well-structured Health and Hygiene curriculum motivates teachers and engages students with innovative and interactive tools and hands-on activities

ESP participating schools have integrated the CGH environmental and hygiene educational sessions and hands-on field activities into their curriculum, with the objective of developing students' knowledge, attitudes, and practices and to encourage them to take personal responsibility for environmental protection and cleanliness. The topics developed by CGH have particularly emphasized building health and hygiene awareness through active learning, problem-solving, and building critical-thinking and communication skills. This "innovative interactive" learning approach gained teachers' support.

North Sumatra. Committed teachers from 11 elementary schools, grades 1 to 6 are using the CGH manual's pedagogical approach of "learning by doing" to prepare a more interactive Study Development Plan (RPP) that encourages students to learn through experience. This hands-on teaching style stimulates dialogue among the students, enables them to see the benefits of their efforts, and serves as a break from the traditional teacher-led classroom sessions. Children are inspired to envision their perfect school environment and are given the tools to make their dreams a reality.

Central Java. Elementary school teacher from Salaman Yogyakarta were empowered and proud to share the results of the CGH activities performed by their students (planting trees, hand washing stations and recycling bins) with parents, community leaders and most importantly, with other schools, thus serving as a school role model.



Teachers develop CGH-based RPP (teaching plan) in Kota Batu, East Java

West Java. Ade Sabarudin is a teacher at Pertiwi Elementary School, Bandung, West Java. In addition, he is a member of a team who developed the Environmental Learning curriculum, or PLH. Ade worked hard to ensure that the Clean, Green, Hygiene concept was included in the PLH curriculum, especially for the sixth grade teaching materials. “I was inspired by CGH activities in my school and suggested that we expand the concept to the curriculum. My idea was supported, and now it’s part of teaching material in schools,” said Ade.

Erlangga, one of the biggest school books publishing company, expressed interest in publishing the curriculum as a standalone book. The curriculum is now used by teachers in West java as a reference for their Environmental Learning class. Chapter I of the book is entitled “Implementing Sanitation, Health, and Beauty at Home, at School, and in the Community”. It explains the importance of Hand Washing with Soap, waste management, tree planting, as well as the availability of hardware facilities and the UKS program in schools. In Pertiwi school, the spirit of CGH is apparent beyond the curriculum. Global Hand Washing with Soap Day is now in the school’s annual agenda and is celebrated independently with local resources.

3. The Clean, Green, and Hygiene Agenda leverages support from diverse sectors

The brief case studies below illustrate the diverse funding sources and institutional commitment leveraged by the CGH agenda.

East Java. In Malang East Java, Kota Batu district, the Head of the Sub District Education Office, Sukistono, has mobilized young teachers to prepare a curriculum based on sanitation and environmental principles. Through this curriculum, schools are encouraged to be “greener” and to adopt clean and healthy behaviors. “The high number of diarrhea cases and the recent decrease in the quality and quantity of water are relevant to ESP’s concept of the CGH School,” Sukistiono says. The success of Sukistiono and his team of young teachers in developing an integrated and comprehensive curriculum inspired by the CGH approach, encouraged the Head of the Education Agency to institutionalize the CGH curriculum in 89 schools in Batu, Malang. Participating schools must be able to commit at least one hour per week of CGH-based PLH (Environmental Education) to meet the minimum requirements for CGH. Teachers have been receptive and



Sukistono (sitting) guides elementary school teachers in Batu, East Java, through the CGH-based teaching method

able to develop their own professional capacity through the Education Agency's exclusive PLH training opportunity. To date, the Agency has trained 35 teachers in the implementation of PLH and these newly trained environmental champions continue to share their knowledge through regular teacher's club meetings. To consolidate these efforts, the Head of the Education Agency has publicly vowed to rehabilitate the school sanitation facilities in the next financial year, which will promote the structural changes and provide the necessary foundation for sustained hygiene behavior change.

East Java. Muhammadiyah's four elementary schools in Surabaya, East Java adopted the CGH manual, constituting a long-term investment to create a clean and healthy lifestyle among their students. Sholihin Fanani, the headmaster of Muhammadiyah's Elementary Schools explained, "By emphasizing clean and healthy life skills, students will have both hands-on experience and the formation and motivation to become actors of change in their own environment. This type of education is also taught by Islam, as pronounced by the Prophet, that cleanliness constitutes part of the faith." The adoption and full implementation of the CGH curriculum provides added value to schools, which aspire to obtain further recognition and accreditation.

North Sumatra. In Medan, North Sumatra, CGH School activities were received with great enthusiasm from the Health Service Office as they served as an opportunity to strengthen the ongoing development of the School Health Unit effort (UKS). Support was given by creating opportunities to advocate for CGH Schools in the media (radio, newspaper) and in meetings with the heads of community health centers throughout Medan. In addition, during the North Sumatra Fair, the Medan Health Service Office provided a special stand for the promotion of CGH, especially Hand Washing with Soap (HWWS), where hand washing campaign materials were widely distributed to visitors. A high level of commitment was also displayed when the Medan Health Service Office presented CGH School accomplishments and activities to the National Exhibit at the National Health Day in Jakarta '08. The HWWS campaign attracted the attention of the Minister of Health Siti Fadilah Supari in Medan. He decreed that all municipal/regional governments throughout North Sumatra should carry out similar campaigns in their respective regions, both through schools and the community.

North Sumatra. In Sikeben Village, Sibolangit, Deli Serdang District community leaders matched ESP hardware support to CGH Schools by committing labor, maintenance and security services to preserve the new infrastructure. In addition, the local government, sub-district and village heads authorized construction licensing. From the private sector, contributions were received by Bodhicita Mandala Conservation, an International NGO from Taiwan, who gave its support in the form of goods/items such as the provision of thousands of plant seeds for greening at schools and related neighborhoods. Support was also received by Unilever who provided soap for hand washing stations.

4. Expanding Child-to-Child hygiene promotion as an entry point for hygiene behavior change for parents and community members

Whenever possible, CGH activities link up with school initiatives like “little doctors” – also referred to as *dokter kecil*, “HWWS ambassador” or “water police” – to further advocate hand washing and waste management. The training of little doctors is conducted in cooperation with the local Health and Education Agencies to ensure alignment with government youth empowerment programs.

West Java. The Pertiwi Elementary School in Bandung has supported HWWS ambassadors, along with their teachers, as they visit neighboring communities and train young mothers on CGH related behaviors. “HWWS ambassadors are very helpful to assist the change of behavior, as children like to learn and be reminded by their friends,” explained Ade Sobarudin, Vice Principle of Curriculum Affairs of SD Pertiwi.

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LESSONS
LEARNED

Encouraged by the CGH curriculum, children participating in the little doctor programs are increasing opportunities for the Health and Hygiene messages to impact the household and communities, encouraging parents and siblings to also take part in behavior change. Rima Nurkhasanah, an 11 year old little doctor teaches her entire family about the importance of the five crucial times for HWWS, separating organic and non-organic waste and replanting. She asks her mother to boil water for at least 3-5 minutes to kill all harmful germs that may have accumulated in the drinking water supply. In addition, Rima asks her father, who makes

Muhammadiyah elementary school students
in Yogyakarta participate in a waste management activity





Rima, an elementary student shows her mother how to properly wash her hands with soap

fried rice for a living, to provide HWWS facilities in his stall. This single action keeps her father's hands clean throughout the day and also provides a convenient hand washing station for his customers as well.

"Rima always tells me to practice HWWS while we are all watching TV in the afternoon or cooking in the kitchen. We haven't suffered from diarrhea since then," testifies Sri Suyani, Rima's 43 year old mom.

Central Java. In Magelang, Central Java, Salaman State Elementary School No. 2, children are proud to be known as water police. Children in this group have become mentors for their friends, helping to ensure an adequate supply of water, soap, and towels in the school. Motivated by the CGH curriculum, these water police students are also taking turns in maintaining the HWWS School stations and waste management facilities in an attempt to build a supportive environment for all students in the school to continue to practice hygiene behaviors. During breaks and/or extracurricular activities, student members can often be seen holding discussion groups and Q&A sessions for friends about hygiene and sanitation practices and ways to stay healthy. In addition, students are proud to demonstrate how to produce compost out of organic waste on a daily basis. Non-organic waste is being used to produce recycled goods through hands-on skill sessions. Children then display their unique art creations made with recycled materials to the class.

5. Establishing strong linkages with Local Government, Puskesmas and Posyandu to endorse CGH School activities and leverage support for effective program implementation

North Jakarta. Schools have improved the effectiveness of their CGH activities by encouraging school committees to invite the entire community to participate in youth events. The Islamic school, Madrasah Ibtidaiyah (MI) Al Ifadah, located in a densely populated area in Penjaringan Sub-district, North Jakarta, facilitates cooperation with the surrounding community to obtain space for greenery, waste management and HWWS activities. In order to deal with the confines of their small school property, MI invites local citizens to engage in public discussions about ways to expand the CGH concept to surrounding locations. One such solution, reached between the government and community organizations, was giving MI the right to use a small piece of land under the highway for activities such as greenery, waste management, and HWWS. Now children can carry out these activities on the land provided. According to Rachmat, a tutor and member of the Sub-district Committee, "CGH Program may improve the image of



School children motivate Penjaringan communities in North Jakarta to keep their environment clean

MI Al Ifadah and serve as a promoter of the school... With improved image, the school will become more popular."

West Java. In Cikidang, collaboration with local communities has been fostered through the provision of clean water facilities to create an environment which reinforces HWWs activities. Cikidang Elementary School 1 and the Head of Cikidang village share the same clean water station, allowing children to see one of the village's most respected members

engaging in positive behaviors. This also helps community members realize that the children's health is also their shared responsibility.

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LESSONS LEARNED

West Java. In order to meet clean water needs, the headmaster of Pasirhalang Elementary School, Sukabumi in West Java established close cooperation with the community to share clean water and sanitation facilities. Community members living in the vicinity of the schools may utilize the clean water and sanitation facilities. In return, the community co-keeps and co-maintains them. "The site of schools located in the middle of residential areas has made us consider the importance of establishing cooperation with the community so that the existing facilities can be further maintained and protected," said Dedy Koswara, the Headmaster of Pasirhalang Elementary School.

East Java. Several CGH Schools in Batu, East Java, invited community members that attended ESP Field Schools to be guest teachers. The aim was to strengthen student understanding and enrich the variety of teaching methods. Guest teachers (Field-School alumni) gave hands-on lessons on compost making and utilizing animal dung to make briquettes or recycling plastic garbage. The involvement of these guest teachers, as Environmental Education continues in Batu, serves as an advantage for the school by mutually reinforcing behavior change in the community.



Nani Dada Rosada, HWWs Ambassador and Chairwoman of Bandung's women organization PKK during Global HWWs Day celebration in Bandung, West Java

In Pandanrejo village, Batu, cadres, Field School alumni, and guest teachers initiated a garbage sorting program. Every student was asked to bring plastic garbage from his or her own house. The activity was treated as a homework assignment. Eventually, students asked their parents to start collecting plastic garbage. Collecting plastic garbage from shops was not a viable solution, so households began collecting used goods from their communities. It was due to this activity that parents initiated a garbage processing campaign.

East Java. Pandanrejo 1 and 2 Elementary Schools, Kota Batu have also utilized community resources by collaborating with Posyandu cadres to reduce plastic waste among local villages. With help from these cadres, similar plastic collection initiatives have been underway. Cadres are training children in waste treatment, composting, and manure utilization. In their organic waste management class, children are asked to bring waste plastic from home to be recycled into various useful products, such as handbags and wallets. “It seems to be more effective to ask a child to bring waste from home rather than giving a long explanation at the Posyandu,” Tuti, a cadre in Pandarejo, explains. As a result, people now manage their waste at home and the volume of plastic waste in Tulungrejo Village has decreased significantly, leading to a cleaner community for everyone to enjoy.

East Java. In Tulungrejo 3 Elementary School, Kota Batu, there is an environmental conservation program in which 4th grade students are encouraged to plant seedlings of tamarilo, suren, and alpukat. According to local residents, the seedlings they grow at home will produce almost Rp 100,000 per month for every child once the crops reach full maturation in two years. Realizing this significant economic benefit, mothers of these students are now planting trees at home as well, and thus further contributing to the success of this greenery program. Overall, the hope is that these replanting efforts will be an economical method for improving soil erosion, air quality, and biodiversity. Schools and cadres are also utilizing the plentiful availability of cow manure in the *kampung*. The teachers and community cadres are teaching others how to produce organic fertilizer from this manure and other organic wastes to promote more fertile soil. The cooperation between parents and teachers in this effort reflects the harmony of this school-community balance that stimulates the adoption of clean behaviors.



A student at Pandanrejo Elementary School in Batu, East Java is sorting organic and non-organic waste



Community members in Bandung teach students in Tamansari techniques for producing recycled paper

6. Involving the media to raise visibility and public commitment of local and school authorities

While implementing the CGH programs, schools have been working together with media outlets such as newspapers, local radio, and TV stations to advocate and deliver the vision of CGH Schools. Those most closely involved with the programs have become resource people on TV, radio talk shows, and press reports. Their successful CGH programs provide inspiring stories that media personnel love to discuss, and stories/photos permeate local stations in all forms of mass media.

East Java. The cascading affect of these CGH news-briefs have reached the eyes and ears of many important figures within the districts (i.e. Mayors and Heads of Agencies) whose overwhelming support has invigorated the program. The Mayor of Batu in East Java, Edi Rumpoko, strongly supports the implementation of a CGH-based curriculum in all elementary schools in his administration area and is committed to seeing this program flourish.

West Java. Through a Clean, Green and Hygiene Festival, schools have received additional local media coverage that led to the Vice Regency of West Bandung, Mr. Ernanan, to commit to the full adoption of the CGH School theme over a five-year period. Politicians and other local stakeholders have made these commitments to reporters, in front of the camera, and in writing, to bring credibility to the CGH program and reassure continuous media involvement. Through this media connection, journalists can disseminate key preventive behaviors to a wider audience and help clarify any confusing issues and dispel myths related to sanitation or hygiene. Overall, the communication planning and dialogue between media and government has been streamlined so as to build self efficacy, balance risk perception, and provide a unified voice of credible information for the Indonesian public to follow about CGH.

7. Scaling-up the CGH School approach through demonstration sites (showcases) that allow others to witness the benefit of CGH Schools

East Java. As a means to further broaden the CGH footprint, the program has begun integrating non-traditional advocates to reinforce clean and green messages. One such collaboration has been with the Islamic organization, Muhammadiyah, of East Java. Muhammadiyah has expressed a strong commitment to the CGH concept due to its close connection with Muhammadiyah's own vision and mission. This complementary partnership has enabled the CGH life-skills principles to be infused into an additional 449 state and Islamic schools in East Java. These schools have integrated the CGH concepts across their current curriculum in Science, Bahasa Indonesia, Physical and Health Study, as well as into practical hands-on learning activities. Students are being provided with hands-on learning experiences, during which they can apply what they have learned. For example, field trips have been arranged for students to visit polluted rivers. Field discussions promote dialogue and awareness about unhealthy latrines and the problems associated with scattered waste.

Central Java. The success of the CGH program at 5 schools in Sambak Village, Central Java has inspired the Education Service Office to expand CGH to nearby schools. Today, at least 9 schools have implemented CGH in their teaching and learning activities at school. The Education Service Office asked for technical assistance and materials in the form of CGH modules and posters to be applied at several schools in Pucungroto, Bumiayu, Sutopati, and Salaman Kebonrejo villages. As a supporting force, the Education Service Office allowed schools to use the School Operational Assistance (BOS) fund to prepare hygiene and sanitation facilities such as HWWS and garbage cans, and to renovate toilets.

3.2. CLEAN GREEN AND HYGIENE (CGH) KAMPUNG

Clean, Green and Hygiene (CGH) Kampung is an integrative and participatory communication approach focused on village communities. The CGH Kampung strategy capitalizes on the existence of local assets and resources by partnering with the Posyandu (integrated health service post), PKK networks (Family Welfare Movement), neighborhood wards (RT) and neighborhood blocks (RW), village heads, and informal leaders. They all engage in the promotion of five key behaviors sponsored by the CGH community, including: HWWS, waste management, water treatment at the household level, sanitary disposal of feces, and community greenery through regular events and activities. To supplement these efforts, key NGOs bring the technical and hardware know-how needed to improve water and sanitation community infrastructure. The ultimate outcome is to prevent diarrhea among children under 5 years old and avoid other diseases such as flu, avian influenza, dysentery and respiratory tract infections.



The Mayor of Medan takes active participation in a Hand Washing with Soap (HWWS) event

Lessons Learned

8. Leaders provide support to the CGH agenda when they realize that the approach is an opportunity to access technical program-based resources and government funding for their communities

Jakarta. In Petojo Utara and Jembatan Besi, Jakarta, ESP joined efforts with the Neighborhood Block (RW), Integrated Service Post (Posyandu) and other community representatives to run a rapid assessment on access to clean water, sanitation services, waste disposal, and hygiene practices. The assessment utilized the “transect walk” approach which guided community stakeholders and leaders to identify problems related to environmental degradation, wasted resources, and poor hygiene practices, among others. Through interviews and FGDs with the community, and with the participation of Posyandus and other USAID related projects, including HSP (Health Services Project), SWS (Safe Water System Project), DBE (Decentralization District Education Project), and ASA (Aksi Stop AIDS Program), leaders were able to analyze each specific problem, brainstorm potential solutions, and draw a community Action Plan. Three months were invested in this process, which served to build leaders’ involvement, ownership and commitment toward finalizing the assessment and drawing an Action Plan. The final product was an outstanding blue print document that included an inventory of accessible water and sanitation resources, local government, and private sector financial support, and program opportunities that will ensure the successful implementation of the community Action Plan.



The launching of the Hand Washing with Soap (HWWS) station at Aur District, Medan, North Sumatera

North Sumatra. In Aur Sub-district, Medan, North Sumatra, HWWS promotion was the entry point activity that laid the groundwork for a close and strong partnership with local village authorities. Clean river, clean water, and water purification with Air Rahmat activities followed HWWS promotion. Based on the accomplishments of the

village, the head of Aur Sub-district was motivated to compete for the “Cleanest Village” award which is organized by the Municipal Government on a yearly basis. As a result, Aur Village became the model sub-district for many surrounding areas.

9. The technical expertise provided by the program garnered the commitment of NGOs and CBOs while increasing their technical capacity to support sustainable activities

Jakarta. In RW 4 Jembatan Besi, ESP partnered with the local NGO PPKM, Perhimpunan Peningkatan Keberdayaan Masyarakat (Association for Community Empowerment) to implement a piped water “Master Meter” pilot project. ESP enhanced the capacity of PPKM on aspects related to gender mainstreaming, effective communication, and production of H&H communication materials, as well as technical aspects related to Master Meter implementation. This made PPKM one of the few NGOs capable of replicating this experience in other villages. Agus Rosadi, PPKM Field Coordinator for clean water, explained, “The Master Meter program is not only benefiting the Jembatan Besi community, but has also given the opportunity to PPKM to grow technically and expand this experience in other villages.”

West Java. While organizing a sanitation campaign, ESP established cooperation with local NGOs including the Water Communication Working Group (K3A), Kapas Foundation, and NGO networks such as Coalition for Healthy West Java (KuJBS) and Cianjur Healthy City Forum (FKS). To strengthen the capacity of its partners, ESP provided trainings in the form of discussions and technical assistance regarding communication strategies, as well as a session to better understand factors that cause diarrheal disease. Through this training, partners learned alternative teaching methods and interpersonal communication methods to improve sanitation dissemination efforts. “Events such as the health festival helped the behavioral change process among the community members and provided another perspective for KuJBS with regard to health promotion,” said Dian Marviana, KuJBS program manager.



Head of Aur Sub-district takes part in the Hand Washing with Soap event at Aur District, Medan, North Sumatra

East Java. In Malang, ESP sponsored two staff members from the NGO Paramitra to learn community-based garbage management at Surabaya University Urban Training Center (Pusdakota Ubaya). Following the training, NGO members replicated what they learned among Family Welfare Movement associates (PKK) and the Organization of Civil Servants'Wives (Dharma Wanita) of Malang Association. Content of the training included clean and healthy practices such as HWWS, safe drinking water, waste management, greening and reforestation.

10. Promoting HWWS as part of a larger set of hygiene behaviors that resonates closely with community members and encourages routine practice of the behaviors (STBM agenda)

West Java. When the ESP program first began, only a few people were sorting waste at home. With the introduction of waste management activities promoted within the CGH kampung strategy, the communities gradually started following the steps recommended by Mapeling (Community Group Caring for the Environment) and Posyandu cadres. In Margaluyu sub village, Nagrak, Cianjur, communities began making use of used cans or buckets as waste bins. This had an immediate impact on the cleanliness of the Cisarua Leutik River, a major water source for the Wargaluyu sub-district. White teak now lines either side of the road to create a shady environment and to grip the soil bank to curb erosion.

The number of properly constructed latrines is increasing over time and the quality of those new latrines has also improved considerably (venting pipes, fly screens, pour flush). Sarifudin, Head of Mapeling, attests, "After joining Mapeling and being trained [by ESP/CGH] on the importance of clean behavior, I am encouraged to actively access other programs such as Community Led Total Sanitation (CLTS) by the Health Agency. The benefit of this is that I can distribute and share my knowledge to other people and, in turn, people start constructing their own toilets." By directly seeing the benefits of sanitary practices such as HWWS, waste management, using toilets, and drinking safer water, Mapeling staff feel more encouraged

to advocate for community sanitation. “Our family hardly ever suffers from diarrhea now,” Ijah, a Posyandu cadre, testifies.

East Java. In Malang, Kota Malang, Mojokerto, Pasuruan, Kota Batu, Pasiran, Kota Surabaya and Sidoarjo, the CGH Kampung strategy invites the community to make a habit of washing their hands with soap. Importantly, it also encourages the sorting, processing, and covering of garbage; the consumption of safe drinking water; utilization of appropriate sanitation; and greening or reforestation activities. ESP introduced these behaviors through community discussions and trainings, aimed at community leaders and existing social networks. Capacity building resulted in improved communication between Posyandus, PKK, local government agencies, and the health service office, which cadres consulted for up-to-date information. Cadres are now able to locate hygiene information which enhances the sustainability of healthy behaviors at the community level.



A health cadre explains the importance of washing hands at the five critical times during the Health Festival in Tamansari, Bandung, West Java

Elementary school children in Marunda, North Jakarta enjoy treated drinking water, using Air Rahmat (from Safe Water Systems), on Global Hand Washing with Soap Day



Jakarta. Collaboration with other USAID health-based programs such as Safe Water System (SWS) supported the process of building comprehensive understanding on the cycle of bacteria transmission. Over time, leaders and cadres have begun to thoroughly understand the cycle of bacteria transmission and are now actively introducing water purification concepts that are introduced by the SWS program. In Petojo Utara, the people are familiar with the commercially marketed chlorine product, Air RahMat, as a practical alternative for household drinking water disinfection. Vendors are also turning to this convenient treatment option as a way to quickly and efficiently treat their commercial drinking water supply for public distribution. For instance, an ice vendor in Petojo Utara confesses that it is much cheaper to use Air RahMat than use water boiled with a gas stove.

West Java. In addition to water purification, communities are also standing behind the promotion of proper sanitation habits to reduce neighborhood fecal contamination. The cadres have proposed the construction of public latrines to be included in their PNPM Mandiri program as a way to further institutionalize and fund this infrastructure expansion. “Once trained on the basic sanitation concepts, we now understand that village development is not only based on building roads or bridges, but it can also include the construction of public latrines,” Nina, a cadre in Cinagara Bogor, explains.

11. Securing access to water and the participation of women increases success of H&H activities

West Java. The construction of clean water and sanitation facilities in three hamlets in Kertajaya in West Java increased community awareness of the importance of hygiene and sanitary practices. In cooperation with the Sukabumi Regency Health Service Office and Community Health Centers, ESP used this opportunity to provide trainings on HWWS and sanitation practices as a means to prevent infectious diseases such as diarrhea and malaria, which were prevalent in Kertajaya Village. The Water Management Group and Posyandu cadres worked hand-in-hand to follow-up the training by campaigning for healthy sanitary practices among community members. Material used for the training included diarrhea prevention and treatment. In addition to the above, they campaigned for malaria prevention through cleaning the environment activities and the use of mosquito nets.



Marlina, a posyandu (health post) cadre from Cijambe Village, Subang, West Java, facilitates a Hand Washing with Soap demonstration to mothers and children in the area



Making compost out of organic waste

West Java. In several sites of West Java, the promotion of hygienic behavior has been a challenge for cadres and local communities. As illustrated by Padalarang Village, West Bandung, access to clean water in West Java, especially during the dry season, is very irregular. For drinking and cooking purposes, villagers have to buy water from water vendors set at high prices. Yet, cadres did not give up on promoting HWWS, demonstrating that

one bottle of water, or one ladle of water, is enough to be used effectively and efficiently.

Jakarta. ESP in Jakarta helped develop a community-based organization (CBO), for a communal Master Meter piped water distribution program. The CBO is responsible for maintaining, operating, financing, and repairing the water infrastructure. The composition of the CBO's management includes the representation of women who were encouraged to voice their interests and opinions. In addition, ESP also provided briefings with regard to behavioral change for CBO members, who further act as liaisons for water users. CBO members help convey environmental messages and information about sanitary practices, including HWWS, water processing, water storage at home, sanitation, and garbage.

North Sumatra. In Maimun, Medan, people face structural hurdles to real behavior change due to the lack of clean water and sanitation facilities. In order to tackle some of these issues, people created a woman-based clean water forum that manages clean water for those unable to access it from the PDAM. The water can also be used for public MCK (bathing, washing and toilet facility) in the village as well as providing clean water for poor communities. The forum collects fees and manages the efficient distribution of water.

12. The economic impact gained from composting and recycling translated to notably more sustainable practices among those who realized the benefits

East Java. Since its inception, the CGH Kampung strategy has shifted the public perception of waste. Particularly in Wonokromo, Surabaya, people are realizing that waste also has a latent economic value. Irsan, a local cadre, disclosed that his community group makes about Rp 360,000 (approx \$36 USD) a month from the sale of solid waste collected in and around the village. The profits from these sales have been used to build a base camp for the community members to gather. Irsan's experience is one of many that have motivated people to start sorting their own waste, collecting solid waste from their surroundings, and selling it for a profit. Using "*Takakura*" method and "*Tong komposter aerob*" composting baskets, this



Recycled products fashioned from plastic waste

community is turning organic waste into compost to benefit crop production. These waste management activities symbolize a rebirth of the long-vanished “communal action”, or *gotong royong*. The river and small alleys in the *kampung*, that were once smelly and dirty, now appear significantly cleaner as a result of these community-led clean up efforts. Wonokromo’s dedication to this beautification process

earned it a prestigious “Clean and Green Kampung Award” that was bestowed at the end of 2007 by the government of East Java.

West Java. In Kampung Wargaluyu, Cianjur, people are also transforming organic waste into compost for use as an alternative to expensive store-bought organic fertilizer (POC). The soaring price of chemical fertilizer has encouraged farmers to use organic waste for compost and liquid organic fertilizer (POC). Meanwhile, many urban communities use compost to fertilize their home plants. The new habit of converting organic waste into compost has encouraged people to turn empty spaces into lush green spaces by adding decorative plants that can now be seen nicely arranged in the corners of alleys or yards. Lack of terrain has not deterred people from turning their surroundings into green areas. “The presence of the plants surrounding the house freshens the atmosphere.” Rini, a Posyandu cadre in Tamansari, Bandung surmises.

Jakarta. Since early 2008, cadres of RW 08 in Petojo Utara Sub-district, Central Jakarta and RW 04 in Jembatan Besi Sub-district, West Jakarta have been actively sharing their skills and encouraging others to recycle plastic waste. The plastic waste is artfully redesigned into beautiful and elegant handbags, prayer sheets (sajadah), or wallets, creating a source of business. They also reuse bottles or cans as drinking containers and flower pots. Total income from the sale of over 500 such recycled products since August 2008, has reached 18 million rupiah (approx USD \$1,800). The majority of the money goes to the individuals producing the goods, which serves as a supplement to household income. Another small portion (10%) is funneled directly to the community or other social activities like Posyandu.



Women from Petojo communities with their recycled products during an ESP event in Petojo, Central Jakarta



A womens group analyzes water quality in a densely populated area in Maimun, Medan

During the life of the project, the H&H strategy has expanded the competencies and performance of a number of organizations, local networks, and individuals. Likewise, it has developed a number of interactive tools and communication materials that made possible the implementation of activities.

Lessons Learned

13. The use of participatory approaches to train local school teachers, networks, and community members increases overall commitment for H&H promotion and strengthens interpersonal communication skills, self confidence, and assertiveness

West Java. Capacity building activities among Posyandus used interactive tools that made the learning process highly participatory, hands-on, and effective. Posyandu cadres in Cinaraga village, Bogor District felt well prepared following the training. As a result, they launched hygiene promotion activities on F-O transmission targeting leaders and community members. Participants were given pictures of feces, water, soil, flies, food, hands and human beings and were asked to organize the information, indicating the germ transmission pathways. This methodological approach helped Posyandu cadres identify what people knew, clarify misconceptions, and deepen knowledge about germ transmission and more importantly, how to prevent transmission. Posyandus also conducted field experiments engaging community members. One such experiment observed the changes in rice over 3-4 days, comparing a control batch with one that had been touched with dirty, unwashed hands.



Group discussion during CGH training in Cinagara, Bogor, West Java

“Field experiments” strengthen people’s understanding about hands as transmitters of germs and disease,” remarked one Posyandu cadre. Likewise, practical sessions on how to boil water effectively, sort garbage, and learn about the functionality of a gooseneck toilet, were extremely motivating for the participants. As pointed out by the trainers, ending the workshop with an Action Plan to make their village clean, green and healthy was the most rewarding experience!

East Java. Training school teachers took on a whole new approach. In coordination with the local Education Service Office in Malang, Batu, Pasuruhan, Mojokerto districts and Malang city, the ESP H&H team applied the PAKEM method—Active, Creative, Effective, and

Enjoyable Learning Method—that brought together 190 CGH School teachers from the five above-mentioned districts. Hands-on practice, field demonstrations, and group discussions sparked high levels of receptivity, interest and motivation among teachers and education officers. In addition, these training events also provided the know-how to develop the Teaching Program Plan (PPP) for each of the participating schools. The PPP looks at the core courses and identifies where CGH content and messages could be incorporated as a cross-cutting subject. This provides evidence of institutionalization and therefore sustainability of Health and Hygiene messages.

Using participatory approaches is the best learning experience according to Neni Laelah, a cadre in Cinagara Bogor, East Java. Neni used to complain about the time that training events took from her already tight schedule. But after participating in the H&H promotion workshop, Neny said, “Sir, is the training really over? It was actually a lot of fun participating in this training.... It wasn’t boring and it was very useful to learn all these new ways of working with community members...”

14. The H&H training curriculum increases networks' expertise by using local communication vehicles as a platform for H&H promotion

East Java. In Malang, Batu, Mojokerto, Pasuruhan districts and Malang city, the H&H strategy engaged Posyandu networks to learn about the use of local entertainment and artistic expression as communication platforms for hygiene behaviors promotion. Traditional gamelan music (karawitan), drumming (kentrunggan), singing and drama, as well as annual events and cultural celebrations were discussed as highly effective communication vehicles to promote the CGH agenda. Cadres learned how to practice on radio and TV talk shows to give visibility to CGH messages and relate stories about the hard work of communities and schools. From the cadres' perspective, the use of innovative communication methods and the ability to learn about communication, public speaking, and media interaction was considered significantly valuable. They saw the power of using entertainment, education, and the media to attract larger community groups, deliver effective behavior change messages, and commit leaders, district health officers, and religious groups to support these efforts.

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LESSONS LEARNED

In Jakarta, North Sumatra, East and West Java, the comprehensive training that cadres experienced has helped expand their horizons, increasing self confidence and commitment to their role as catalysts of change. Training topics included CGH behavioral messages, effective and interpersonal communication skills, and innovative ways to promote hygiene. In community events such as pengajian (Koran recital group) and PKK (local women group), cadres do not miss the opportunity to stand up and encourage others to embrace a healthier lifestyle.

A child actor is rehearsing his role as Parmin, a character from a docu-drama about environmental and natural resources management





The involvement of posyandu cadres during a gender workshop in Magelang, Central Java

15. The broad range of technical content of the Health and Hygiene training package enhances participants' skills beyond health promotion; it promotes a sense of confidence and empowers them to undertake new initiatives

Capacity building efforts aimed at teachers, Posyandu cadres, CBOs, NGOs, and community leaders have included a wide spectrum of subjects. Among others, this includes HWWS, composting methods, waste separation, recycling, water facility maintenance, behavior change messages and materials production, management and organization of events, monitoring hygiene practices, and gender issues. This broad range of skills has given cadres a better understanding of the interconnected nature of all ESP and H&H strategies. For instance, community Posyandus engage as facilitators at CGH Schools and train teachers on topics of composting, waste separation, and HWWS. Likewise, ESP Field School community experts supporting CGH School greening efforts, offer an innovative strategy for strengthening the school-community link and expanding the commitment for clean and healthy living behaviors.

East Java. Gender equity workshops have helped bring awareness to the role of women and men in regard to water and sanitation issues. In Pandanrejo village, after participating in the gender training, Deni, a Posyandu cadre, actively promoting health at the community level, realized how hygiene and sanitation roles and responsibilities were divided along gender lines. Generally speaking, women “do” hygiene promotion and men “do” sanitation work. When joining the Village Development Discussion (Musyawarah Pembangunan Desa or Musrembangdes), she observed that the meetings were dominated by men, and lacked input from women. She was persistent in her desire to learn more and finally succeeded in bringing both the voices of women and men to the discussion table. This resulted in increased budget allocations for hygiene and sanitation (i.e. septic tank for MCK sanitation and a home based plastic waste collection), provided by the village administration, and supported by the full participation of women.



National Hand Washing with Soap (HWWS) celebration at Monas, Jakarta, May 6, 2006

3.4. EXTENSIVE HWWS ADVOCACY AT THE NATIONAL AND REGIONAL LEVELS

Creating an enabling environment that supports, encourages and models desired hygiene behaviors and enhances access to water and sanitation technologies is key to H&H program success. A committed Government, a passionate leader, and an active media are all essential for promoting and sustaining hygiene behaviors. Through high level advocacy and partnerships with the media, government officials, civil society organizations, and grassroots networks, community members strengthen their commitment to health and hygiene. ESP conducted a number of well-attended public HWWS events that aimed to increase awareness and adoption of the hygiene agenda among high level government officials. The following is a selection of key Lessons Learned identified from ESP's advocacy and media work.

Lessons Learned

16. Large scale HWWS advocacy events enhance commitment from high level government officials and private sector partners by generating high visibility through national media, TV, and press coverage

Jakarta. On May 6, 2007, the National Monument (Monas) square was packed with thousands of children and mothers. They brought bottles of water, soap, and hand towels and proudly wore t-shirts displaying Hand Washing With Soap messages. Those in the crowd included Aburizal Bakri (The Minister of People's Welfare), Siti Fadilah Supari (The Minister of Health), Bambang Sudibyo (The Minister of National Education), and USAID and Unicef representatives.

Almost simultaneously, governors in East Java, North Sumatra, West Java also launch similar activities in their respective provinces. Aburizal Bakri, together with 2700 students and parents from 30 schools in Jakarta, demonstrated the proper method for Hand Washing with Soap. “We must be aware that the prevalence of diarrhea in Indonesia can be decreased to 40% through the proper habit of HWWS during five critical times, namely before having a meal, after defecation, before holding a baby, after washing the bottom of a child, and before preparing meal,” Aburizal informed the crowd in his speech.



The Hand Washing with Soap event in Malang, East Java which broke the MURI (Indonesian museum of record) record after gathering 2,677 people to wash their hands with soap

The Hand Washing with Soap day campaign gained significant free coverage by national TV, major radio stations and written press. Media coverage of this event was thoroughly documented in 14 online media, 29 printed media, and 1087 electronic media, or 1,130 total media. Over 10 million people were reached by the various media campaigns and news activities.

West Java. In Gedung Sate of Bandung, the Governor of East Java, Dany Setiawan, engaged in dialogue with over 1200 children, parents and teachers after performing a HWWS demonstration. “Do you have the habit of washing your hands with soap at home, Sir?” a clever student asked. “I never have diarrhea, and I am sure that has something to do with my habit of washing my hands with soap regularly,” Dany replied. Ana Fitria, 11 years old, one of around 1,000 children participating in the puppet show in Surabaya, described the event as the most exciting day of her life. “I couldn’t help myself! I had to play with the puppets while distributing the message of a healthy life to other children,” Ana said with a wide smile.

17. Encouraging Regional level multi-sector authorities, religious leaders, and school constituencies to take the front stage and lead advocacy efforts at the regional and district levels to enhance visibility and commitment to HWWS

East Java. In the city of Malang, the radio talk-show ‘Prevent Diarrhea in Only 20 Seconds’ was responsible for launching the mass media HWWS campaign. The Mayor of Malang Peni Suparto featured as the key radio talk show host. He pointed out the high level of diarrhea prevalence in the region. For example, 75,388 cases reported in 2005 represented the highest rate in East Java. This difficult situation motivated the Malang mayor to challenge the Indonesian Records

Museum (MURI) for the largest mass gathering of hand washing participants set at 2,677 people in 2006 in Sukabumi, East Java. "Let us try to reduce the number of diarrhea cases in Malang by breaking the national record for hand washing with soap!" he declared. Peni's idea was received positively by Wings Groups corporation (a hygiene and personal care product manufacturer based in Surabaya) which funded the event and donated soap. As a result, 10,000 elementary school children and parents from 50 schools gathered on August 4, 2007 to wash their hands with soap. MURI verified that 7,389 people gathered to wash their hands with soap, successfully setting a new record. "This record is not merely about numbers. What is more important is to motivate children and parents to live a clean and healthy life," Peni explained.

West Java. In October 2008, twenty HWWS ambassadors from SD Pertiwi in Kota Bandung and PKK chair woman and wife of Mayor, Nani Dada Rosada, conducted mini door-to-door HWWS trainings in the nearby *kampung*. In addition, Elementary School Pertiwi children demonstrated effective HWWS and drew palm signs on the school walls. At the same event, students put together a music show using empty cans and bottles, turning the stage into a 'recycled orchestra.' "This activity inspired me to encourage all PKK members to give an example of proper hand washing with soap techniques to the people," Nani Dada Rosada mentioned after the show.

East Java. In Malang, Dinoyo Sub-district, Posyandus engaged in a more visible and entertaining strategy to promote H&H behaviors by organizing Health Festivals to coincide with other special festivities such as Independence Day or religious celebrations. The chief of the village, village officials, schools, local art groups, and youth groups worked together on the event planning committee. The committee was responsible for the agenda, list of invitees, art and music groups, competitions and activities. As part of the Health Festival program, participants were trained in washing their hands properly, using Air Rahmat for safe drinking water, and sorting organic and non-organic waste, among others. Activities came in the form of interactive games, HWWS songs, and dramas, and all featured the 5 behaviors promoted by the CGH kampung. The Health Festival attracted Local government officials and district and sub-district authorities to support the initiative and engage in the activities.

3.5. RESEARCH, MONITORING AND EVALUATION (M&E)

Research and Monitoring and Evaluation (M&E) is not always a well understood support mechanism for effective program implementation. Without it however, programs run the risk of addressing the wrong problems, developing ineffective messages, not learning from program results, and perhaps most importantly, lacking the ability to identify and scale-up successful models, approaches, and activities.

From the very start of the program, the ESP H&H communication strategy emphasized the importance of including research and evaluation to document the impact of program activities. While formative research was implemented as originally proposed and delivered meaningful results, the M&E was not implemented as originally designed, due to other overriding program priorities. From the experience of ESP, it is recommended that future programs invest in collecting M&E data to provide accurate evidence of program impact. We hope that the lessons described below encourage other similar programs to increase efforts to properly fund and prioritize rigorous research and evaluation activities.

Lessons Learned

18. Investing in innovative formative research, to gain knowledge about people's perceptions surrounding hygiene, increases the potential for program success

To develop an integrated H&H communication strategy, ESP needed a detailed picture of the local hygiene practices and of the factors facilitating and inhibiting these hygiene behaviors. The limited effect of hygiene interventions that has been documented elsewhere prompted ESP to innovate and conduct a qualitative formative research effort that departed from previous approaches used by water and hygiene interventions. ESP focused its formative research on the identification of the psycho-social and environmental factors that affect practices related to hygiene in the program locations. Using a set of participatory research tools, the formative research explored the perception and meaning of the word “clean” among the intended audience, in addition to analyzing the basic motivations for and impediments to sustained hygiene behaviors, the identification of gateway behaviors for hygiene promotion, and existing community practices that the program could use to ground healthy hygiene practices. The results confirmed what wider literature sources have documented: communities generally show a weak association between diarrhea prevention and hygiene. It also provided the basis for the development of the Clean, Green and Hygiene (CGH) concept that addressed the communities' perception of hygiene and facilitated the integration of the varied aspects defined by the community as being part of “hygiene”. The CGH concept became the core element of the communication strategy and involved the community and the school as anchors for its implementation.

19. A monitoring and evaluation system designed to include the direct participation of stakeholders increases understanding and motivation for hygiene promotion

Systematic learning is key to program success and feedback, especially when data is collected and used by stakeholders. To monitor progress of ESP activities in motivating hygiene behavior change, a systematic data collection activity was implemented across ESP focal districts. In accordance to its participatory approach, ESP decided to involve existing community resources in program monitoring. Given their reputable role as health monitors in communities nationwide, Posyandu cadres represented the ideal way to fulfill this task. A focused and concise questionnaire was developed and a “Ten Minute Monitoring” process was set in place. The approximately 10-minute interview emphasized key hygiene behaviors (HWWS, effective water treatment, appropriate disposal of child’s feces, and safe disposal of solid waste) and events and campaigns to address diarrhea among children under three years of age. Data collection for this monitoring activity was conducted twice a year, beginning early 2007, with the last collection cycle completed in June 2009.

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LESSONS LEARNED

Through this activity, ESP was consistent with their participatory approach philosophy, and involved existing resources and harnessed community commitment, while improving the capacity of Posyandu cadres to improve data collection methods and gather accurate data to evaluate hygiene promotion. This rewarding experience encouraged the Posyandu cadres

The Hand Washing with Soap event in Malang which broke the MURI record after gathering 2,677 people to wash their hands with soap





Students at Muhammadiyah 4 Elementary School in Surabaya discuss how to piece together components of the Fecal-Oral Transmission chart

to further increase their efforts to pursue effective hygiene promotion activities for diarrhea reduction. Several examples exist, across the ESP sites, to illustrate the creativity of Posyandu cadres to analyze collected data, learn about progress in their communities, and reinforce successful efforts to improve hygiene behaviors. One example is the creation of bar graphs by cadres in East Java to depict the number of respondents reportedly practicing hygiene behaviors in the community.

The Ten Minute Monitoring process opened new opportunities for Posyandu cadres to incorporate their hygiene message during data collection visits. In Wonokromo, Surabaya, Ms. Eli, Posyandu cadre, explains, “Often, respondents ask about the topics surveyed. Usually I will explain after completing the survey. I use those moments to explain about clean and healthy living behaviors. I hope what I did will support a better clean and healthy living practice in my respondent’s house.”

In addition to tracking program progress, results from the Ten Minute Monitoring have already served to complement data from the Posyandu and could potentially serve as an important source of data for local Puskesmas.

20. Providing technical support to closely supervise data collection by stakeholders in the field to assure data quality and accuracy

A standard practice in data collection is to utilize a supervisory function that provides quality assurance of the data being collected. This supervisory function is even more necessary when the data is intended to assess program effect, so that reliability and accuracy are not compromised. This supervisory function is also critical if the interviewers also serve as the change agents

implementing the program activities being monitored, as is the case of the Posyandu cadres. A hygiene promotion agent that simultaneously functions as the data collection interviewer, monitoring its own activities, may produce biased data. For example, lack of supervision during data collection may result in interviewers encouraging respondents (often unintentionally) to give certain answers. A supervisory function in place increases confidence that data quality has not been compromised. Comprehensive supervision was not in place for the Ten Minute Monitoring activities done by Posyandu cadres. Occasionally, this resulted in data being improperly recorded in the questionnaires, thus having to reconcile consistency for analysis purposes. Involving change agents in self-monitoring is effective, however field supervision should be strongly considered to avoid data recording errors and biased data.

Data collection by Posyandu cadres proved to be an efficient task given their expertise in monitoring children's health. In Indonesia, Posyandu cadres can be considered the voluntary arm of the Ministry of Health. Created decades ago to promote healthy practices at the community level, Posyandu have become a solid and respected resource in the communities they serve, and a fundamental component of the Indonesian health sector. The long history of Posyandu cadres functioning as "gatekeepers of health", and their longstanding ethical reputation as data providers for the Ministry of Health, make them a valuable local resource rarely found in contexts outside Indonesia. To strengthen their work quality for the Ten Minute Monitoring activity, the ESP team systematized several activities, such as conducting preparation meetings in each data collection period, to reinforce the importance of complying to survey standards. Over time, the goal of this capacity building activity further empowered Posyandu cadres to become more proficient at carrying out the household interviews. This improvement was observable over time by the consistency of each wave of data collected using Ten Minute Monitoring.

21. Tracking school attendance is an easy way to monitor effects of hygiene practices and reduce illness (diarrhea and other hygiene-related illnesses like worms or respiratory infections)

An economical way to assess the effect of hygiene practices on children's health is to study school attendance records. These records are an integral part of routine school administration and can be adapted, if necessary, to include the reason for absenteeism among children. For ESP, school data was not collected, but anecdotal evidence abounded it showed that schools were reporting fewer students missing school due to diarrhea in program areas.

To support these anecdotal reports, ESP started collecting school attendance data in some ESP and non-ESP locations but, unfortunately project close-down activities prevented ESP from following through with a thorough data analysis process.

22. Investing in rigorous program evaluation to learn how and why the program worked and to build upon components that worked best

To track changes in hygiene practices and diarrhea episodes, ESP implemented the Ten Minute Monitoring survey. This monitoring activity was a successful initiative that resulted in increased motivation to improve hygiene practices in the program sites. However, ESP lacked a rigorous evaluation methodology to specifically assess the effect of the program on changes in hygiene practices, and of these changes on diarrhea prevalence.

Data from waves 1 and 4 of the Ten Minute Monitoring survey were analyzed. Results from this analysis showed an increase in the 4 key hygiene behaviors. The results also showed a positive correlation between the key hygiene behaviors and a lower number of self-reported diarrhea cases among households in the survey. It further suggested that waste management activities have an indirect effect on reduced rates of reported diarrhea. This indirect effect worked through hand washing with soap; Households that practiced waste management behaviors as promoted by the program also reported increased hand washing with soap at the critical times for diarrhea prevention. This finding confirmed the results of the formative research that identified waste management as the entry behavior for increased hand washing with soap. See ESP report Analysis of Effect of 4 Key Behaviors on Diarrhea Prevention (March 2009) for further information.



RECOMMENDATIONS



The Ten Minute Monitoring survey was not designed to rigorously evaluate program activities and therefore the results of the analysis need to be further confirmed. Additional data collection and analyses have been suggested to support the findings and include: collecting data from control sites, comparing results of reported diarrhea with health sector data (to assess seasonality effects), and conducting data quality spot checks in a sample of communities to retrospectively assess data collection quality by Posyandu cadres. However, wrapping up project activities, in anticipation of project close-down, prevented ESP from conducting a thorough analysis of the additional data. ESP should have invested in a rigorous evaluation approach and conducted sufficient and accurate data collection to properly analyze data and fully demonstrate program effects on behavior change and diarrhea prevalence.

It is intended that future programs will benefit from the above Lessons Learned briefly presented in this publication. In particular, we provide the following summarized recommendations to Health and Hygiene program designers and implementers to assist in their efforts to improve water, sanitation and hygiene behaviors and to make activities sustainable.

Recommendations from ESP's Health & Hygiene Promotion Experience include:

1. Invest in obtaining a better understanding of people's views and perceptions, priorities and preferences regarding hygiene at the individual, household and neighborhood levels to promote sustainable Health and Hygiene initiatives;
2. Develop a communication strategy that responds to people's views of hygiene and that meets their most urgent needs. Delivering such a strategy will connect with people's aspirations and will increase their readiness to adopt hygiene-related behaviors;
3. Include waste management as a "gateway" behavior in Health & Hygiene promotion projects in Indonesia. In urban and rural areas, Indonesians view waste management as an important part of a cluster of hygiene-related practices including water treatment, Hand Washing with Soap, and sanitation;
4. Anchor Health & Hygiene promotion at the school level to assure sustainable behavior change. Involving schools to perform as "centers of excellence" where not only parents and children, but also cadres, community leaders, and district officers can gather and make decisions, will benefit students and the community at large;
5. Engage leaders and tackle the community agenda early on in the process to assure ownership, effective results, and sustainability. Communities have a clear understanding of their most pressing Health & Hygiene needs. It is effective to develop capacity building strategies that are participatory and gain the commitment of grassroots networks and Posyandus who see them as opportunities to expand their learning techniques and grow professionally. Strengthening capacity programs should promote innovation both in technical matters and facilitation approaches;
6. Always invite the mass media to provide high level visibility to program activities. Media helps facilitate the engagement and commitment of leaders contributing to create an enabling environment that promotes Health & Hygiene practices; and
7. Invest in a solid Monitoring and Evaluation design to demonstrate program impact and provide a comprehensive view of program impact that meets rigorous standards for accurate program evaluation.



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