



THE PHILIPPINE SUSTAINABLE SANITATION KNOWLEDGE SERIES

The SuSEA LGU Experience

General Santos City

Bauko

Dagupan City

Guiuan

Polomolok

Alabel



Department of Health

The SuSEA LGU Experience

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The findings, interpretations, and conclusions expressed herein are those of the writers and not of the World Bank, the Swedish International Development Cooperation Agency or the Water and Sanitation Program.



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The Philippine Sustainable Sanitation Knowledge Series:

- Guidebook for a Sustainable Sanitation Baseline Study
- Guidebook for a Local Sustainable Sanitation Strategy
- Guidebook for a Local Sustainable Sanitation Promotion Program
- Guidebook for Community-Led Total Sanitation
- Guidebook for a Zero Open Defecation Program
- Guidebook for Onsite Sanitation Technologies
- Guidebook for Designating a Water Quality Management Area
- Guidebook for Marketing a Septage Treatment Facility
- Guidebook for Monitoring and Evaluation
- Septage Management Program: The General Santos City Experience
- **The SuSEA LGU Experience: Alabel, Bauko, Dagupan. General Santos City, Guiuan, Polomolok**
- Guidebook for a Disease Prevention and Control Program for Soil-transmitted Helminth Infections and Diarrheal Diseases
- Guidebook on Water Supply Protection Program
- Water Pollution Prevention and Control Program: The Polomolok Experience



For inquiries or comments, please contact the email address listed for the National Center for Disease Prevention and Control listed under this page:
http://www.doh.gov.ph/contact_us.html.

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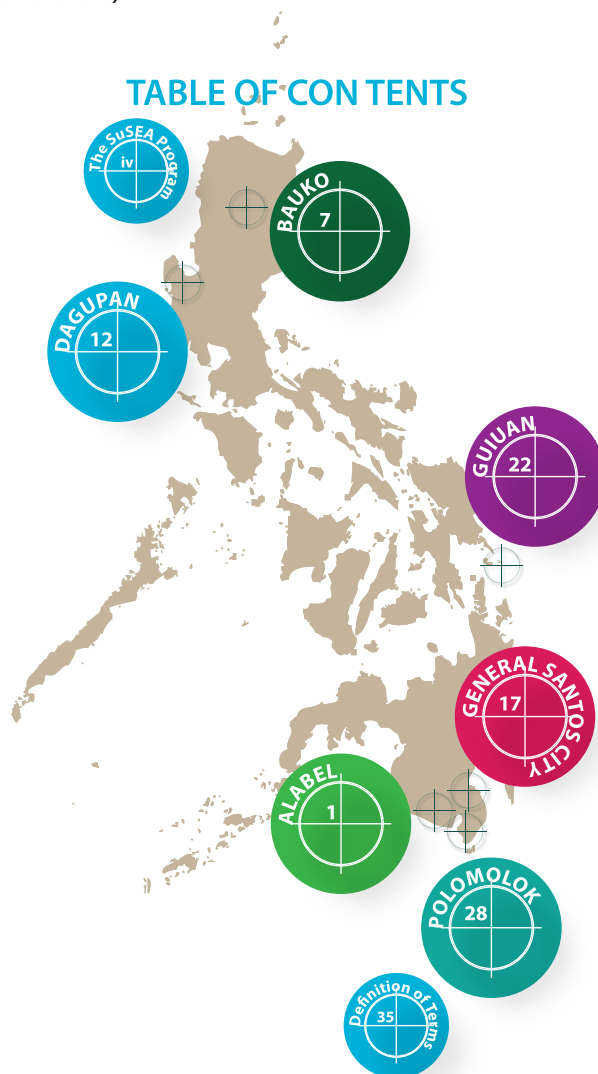
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The SuSEA Program

The Sustainable Sanitation in East Asia Program-Philippine Component (SuSEA) supported by the Water and Sanitation Program (WSP) of the World Bank and the Swedish International Development Cooperation Agency (SIDA), and implemented through the leadership of the Departments of Health (DOH) and Environment and Natural Resources (DENR), is geared towards increasing access by poor Filipinos, primarily low-income households, to sustainable sanitation services by addressing key demand and supply constraints. Aside from this, the program hopes to learn from local implementation of sanitation programs as basis for national policy and operational guidance.

SuSEA Philippines commenced in July 23, 2007 as a learning program to support the Government of the Philippines (GoP) update its approaches and interventions in sanitation and needs that were not present or not addressed in traditional sanitation programs that focused on two extremes: 1) toilet-bowl distribution and hygiene education and 2) centralized sewerage systems. The most important of these emerging needs are:

- Complementing interventions related to the reduction of risks of sanitation- and poverty-related diseases such as soil transmitted helminthiasis and acute gastroenteritis
- Linking sanitation interventions with environmental objectives, such as the improvement of water quality and water resources
- Sanitation in rapidly urbanizing towns and cities, including the occurrence of disease episodes

that aggravate impacts of poor sanitation (such as flooding) on the economy and quality of life of city populations

- Reaching pockets of communities that comprise the remaining 20% of those without access to basic sanitation, particularly in the rural areas (among whom include indigenous peoples/cultural minorities) and urban slum communities.

SuSEA-Philippines was designed using four different models as the platform for developing specific interventions (according to themes below). The learning gained and the tools developed from these models served to assist other local governments units (LGUs), as well as informing national sanitation policy and programs for GoP-led expansion and scaling up. The four models are:

Model 1 Disease Prevention and Control – Sanitation interventions for the eradication/ reduction of disease

Model 2 Water Quality Management – Sanitation interventions for the improvement of water quality within a water quality management area

Model 3 Liveable Cities – Sanitation interventions for the improvement of quality of life in cities and low-income urban poor communities

Model 4 Sustainable Rural Livelihoods – Sanitation interventions to support sustained livelihoods in rural areas

Six sites participated in the main program sub-component of SuSEA. These are: Bauko Municipality in the Mt. Province, Dagupan City in Pangasinan Province, Guiuan Municipality in Eastern Samar Province, General Santos City and Polomolok Municipality in South Cota-



bato, and Alabel Municipality in Sarangani. The desired outcome in each of the project sites varied according to the model and agreements by the Program Steering Committee and the local government.

While outcomes varied per site, each of the projects were additionally intended to provide the LGUs with a fount of information on developing and running their own sanitation programs based on the on-field experiences of the SuSEA team and their partners.

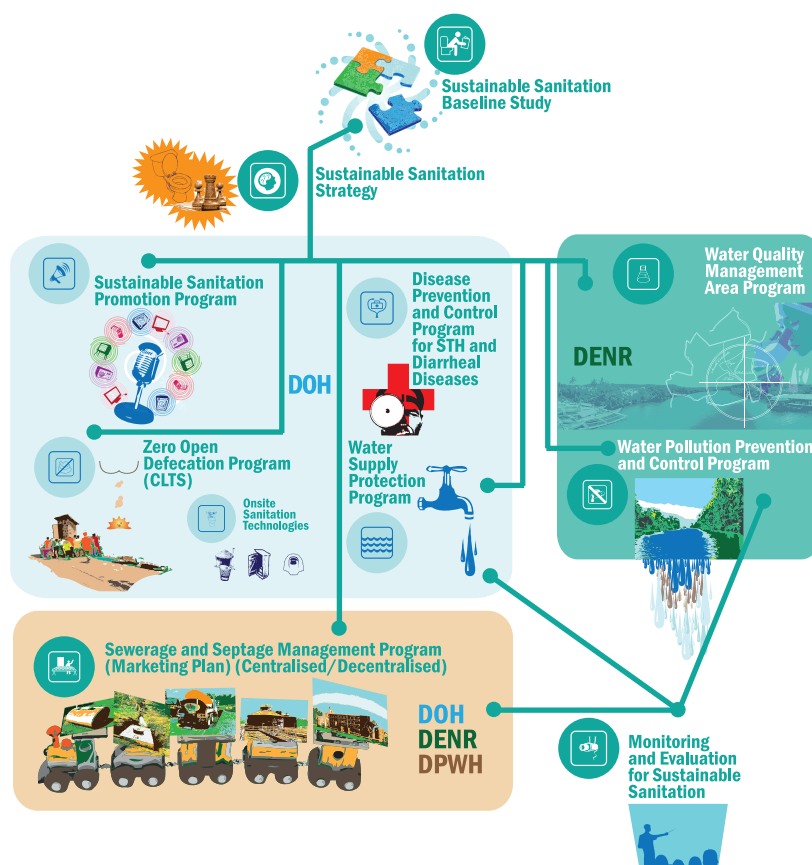
This information has been packaged for your use in a Sustainable Sanitation Knowledge Series, to which this guidebook/report belongs. The reader is encouraged to familiarize himself/herself with all the guidebooks/reports in this series beginning with the Guidebook for Conducting a Baseline Study and

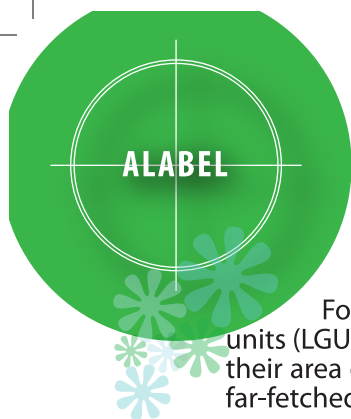
followed by the Guidebook for Developing a Local Sustainable Sanitation Strategy.

What guidebooks/reports you choose to utilize next will be determined by your community's particular needs and your LGU's proposed sanitation programs.

Below, you will find an illustration of the various sustainable sanitation programs (SSPs) under the National Sustainable Sanitation Plan (NSSP). For each of these SSPs, SuSEA has also developed materials under the Philippine Sustainable Sanitation Knowledge Series, intended to guide local government units in implementing the various sanitation programs and initiatives in their own area. The information gathered in the Knowledge Series is, in turn, based on specific SuSEA projects and activities in each of the six project sites.

Sustainable Sanitation Programs





The Philippine Sustainable Sanitation Knowledge Series

ALABEL EMERGES FROM TWILIGHT *A SuSEA story of sanitation in Alabel, Sarangani*

For most local government units (LGUs), septage management in their area of governance seems like a far-fetched idea. Even with the passage of the 2004 Clean Water Act, which encourages LGUs to establish and maintain sanitation programs including the operation of septage treatment facilities (STFs), septage treatment is still non-existent in most cities, much less in rural municipalities. This may be due to the lack of funds, technical knowledge, or lack of

Lucky are the chosen few

In the provinces of Sarangani and Davao del Sur, seven municipalities and their LGUs here can be considered somewhat lucky. The municipalities of Alabel, Malapatan, Glan, Maasim, Kiamba and Maitum in Sarangani; and Malalag in Davao del Sur, all received STFs in 2007 built through the Southern Mindanao Integrated Coastal Zone Management Project (SMICZMP) imple-



A model rendition of the Alabel Septage Treatment Facility

understanding on what an STF does.

To the first time reader of the term, an STF is a facility that stores and processes domestic septage. Domestic septage is a mixture of scum, sludge (solids), and liquid removed from a domestic septic tank. This definition comes from the members of the Technical Assistance Management Services (TAMS) of the Sustainable Sanitation in East Asia Philippines project (SuSEA). SuSEA is a World Bank supported project that helps selected LGUs in the Philippines formulate and implement sanitation programs in their locality.

mented by the Japan Bank for International Cooperation and the Department of Environment and Natural Resources (JBIC-DENR). With an STF already in place, these LGUs would have become one step closer to complying with the Clean Water Act.

But as the Sarangani municipalities that received an STF soon realized, owning an STF does not necessarily translate to having the capacity to operate it in a viable way. The STF operations of Maasim, Kiamba, Maitum and Malapatan have been sporadic—operating on and off—while Glan's STF is presently not





The Alabel Septage Treatment Facility

in operation. With the investment of funds and personnel on the part of the LGUs on these STF, such unreliable operations also mean financial losses for these municipalities. While all of these LGUs remained in the twilight of not knowing what really is wrong, Alabel tells a different story.

In the beginning, Alabel was hesitant about accepting the STF since it was not confident about the new technology being introduced. Alabel officials knew they were not fully knowledgeable and capable of operating an STF. Thinking that such a facility was a rare opportunity, however, they decided to accept the STF, along with the challenges that went with it.

Like the other LGUs, Alabel's initial experience in operating its STF was full of frustrations. For one, they did not have enough technical knowledge to operate the STF. They did things on a trial and error basis. Second, they couldn't understand why only a handful of their constituents availed of their desludging services—even when they had already passed a septage management ordinance, which mandates the residents of Alabel to construct septic tanks and regularly desludge them

every three years. With all these difficulties on hand, Alabel was on the verge of giving up.

SuSEA equips Alabel

With the help of SuSEA and the Philippine Environmental Governance Project (EcoGov) funded by the U.S. Agency for International Development (USAID), the Alabel officials gradually became confident in their knowledge of sanitation practices. They were particularly enthused about the idea of making the operations of their own Septage Treatment Facility sustainable while caring for the Sarangani Bay and the well-being of the local residents, including those in nearby General Santos City.

"SuSEA was very timely," says Engr. Allan Rivera, Municipal Environment and Natural Resources Officer (MENRO) of Alabel. It was in 2007 when Alabel had just acquired the STF, the same year when SuSEA started its activities in the municipality. "Although our knowledge about operating our STF started with EcoGov, SuSEA strengthened such technical guidance and helped us address our immediate concerns



The SuSEA Team during a site visit to Alabel.



particularly in operating our STF. We appreciate the tandem of these two projects. Both are very helpful," continues Engr. Rivera.

Through EcoGov, Alabel was able to conduct an inventory of septic tanks among the households in the municipality. SuSEA's baseline study, conducted with the participation of the personnel of LGU Alabel, confirmed the results of the inventory. Through the study, Alabel learned that about 7,500 households had installed incorrect septic tanks, that open defecation was a problem, and that those residing along riverside and coastal areas were more likely to suffer from acute gastroenteritis, a sanitation related disease. Because of the results of this baseline study, SuSEA suggested raising the health and environmental awareness of the residents to support the STF.

This made Engr. Rivera realize that operating the STF required sustainability mechanisms. These mechanisms came in the formulation and enforcement of policies and the conduct of advocacy and marketing activities aimed at getting the full support of residents who would be provided with sanitation services. "SuSEA taught us how to formulate the Local Sustainable Sanitation Plan (LSSP), the Marketing Plan, and partner with other LGUs, particularly

with the General Santos City for the much needed institutional arrangements in operating the STF. It helped us to fully understand our role in identifying key sanitation issues and possible solutions," Engr. Rivera explained.

Slowly, the Municipal Government of Alabel implemented activities to improve its sanitation program. After getting technical inputs from SuSEA on how to improve operations of the STF, Alabel started efforts to amend the earlier septage management ordinance they had passed. The amendment included flexibility in setting desludging and processing fees for non-Alabel clients, particularly General Santos City, a major target client for the STF. The computation of fees was among the things they learned from SuSEA.

A huge STF responsibility

The Alabel's STF means huge responsibility. It is the largest of its kind to be constructed along Sarangani Bay compared to those in the other six towns where STF's were also built. If it were to provide services only to its nearby households with desludgeable septic tanks, the



possibility of the STF staying idle for most parts of the year would be extremely high. This means further financial losses for the LGU that may eventually affect basic service delivery to people. Alabel, therefore, needed to find a solution that would effectively maximize the use of the STF and make its operation sustainable.

The marketing plan

With technical assistance from SuSEA, Alabel formulated a marketing plan that would make the sustainable operation of the STF within its reach. The marketing plan spelled out possible approaches and strategies to make Alabel's STF a fully operational and viable investment for the benefit of the environment and the people.

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As an input to the marketing plan, Dr. Rolando Metin, Institutions Development Specialist of SuSEA writes, "The STF's core markets are the households and establishments in Alabel. A larger market exists in neighbor General Santos City. The latter is almost 10 times larger than Alabel's in terms of number of households (2009 - Alabel: 11,625; General Santos: approximately 94,950). General Santos also hosts numerous industrial, commercial and institutional establishments, including national government offices."

"The facility can become a financial liability to the municipality unless a) more of the other Alabel households (about 10,000) construct

properly designed toilets and septic tanks and have them desludged every three years and b) Alabel extends the STF service to its big neighbor, the city of General Santos and possibly, even Polomolok, north of General Santos. A third and critical factor is the sustained support of the Alabel households by paying regularly the desludging fee prescribed by the town's STF ordinance."

The LGU also started implementing information, education, and communication (IEC) activities to make the people aware of the ordinance and actions they can take to improve their health and environment. One such IEC activity is a required orientation, for those needing to renew their business permits and obtain issuances, which informs people on where their fees go. Because Alabel's fees for business permit renewals and issuances also cover desludging services, people are informed of the need for desludging.

The SuSEA difference

Technical assistance from SuSEA was critical in strengthening Alabel's own STF Team. Before SuSEA, Alabel perceived its STF to be merely serving its own constituents and no efforts were initiated in collaborating with other LGUs for the operation of the STF. Now, for Engr. Rivera, the Alabel STF Team is more capacitated in its operation of the STF as well as its enforcement of the septage management ordinance.

There have also been coordinated efforts with other LGUs, particularly in General Santos City in utilizing the STF. To date, a Memorandum of Agreement (MOA) has been signed between Alabel and General Santos City concerning the latter's engagement of septage treatment services from the former. The support of decision- and policy makers in Alabel was further magni-





Ugaliin ang 1-2-3 Habit!



1
GUMAMIT NG CR.
WAG DUMUMI KUNG SAAN-SAAN



2
MAGHUGAS NG KAMAY
GAMIT ANG TUBIG AT SABON
BAGO AT PAGKATAPOS
GUMAMIT NG CR.



3
MAGPA-DESLUDGE O
MAGPASIPSIP NG SEPTIC TANK
TUWING 3-TAON
(Makipag-ugnayan sa
MENRO-Alabel)

Sa 1-2-3 habit, Alabel, siguradong malinis!



A sample poster created by the Alabel team reminding people to observe proper sanitation practices, including having their septic tanks deslugged every three years.

fied by the move to increase the budget allocation on the septage management program of the municipality.

"Through SuSEA, we also learned about Community-Led Total Sanitation (CLTS). This equipped us in organizing a local CLTS team at the municipal level," Engr. Rivera related. The continuous conduct of CLTS in Alabel meant identifying and prioritizing sitios and barangays, which need to change unsanitary behavior, particularly open defecation (OD). If not addressed properly, OD makes children more vulnerable to water-borne diseases especially during rainy days.

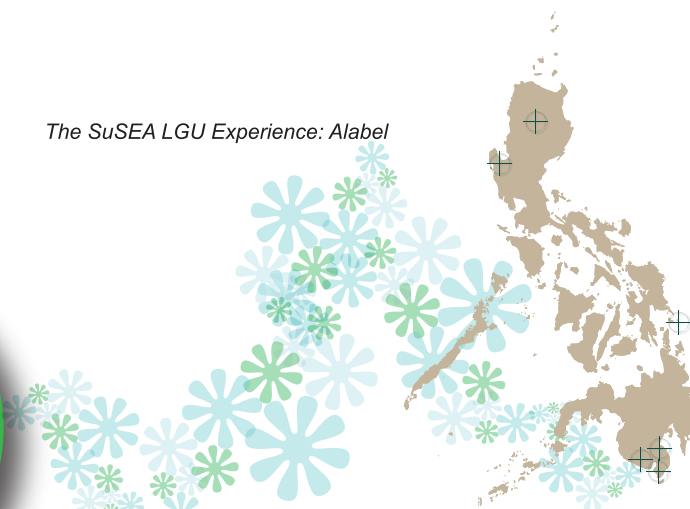
The local CLTS Team did not waste time in involving the residents through community consultations along with communication and advocacy activities. Dr. Honorato Fabio was able to integrate the other health programs with CLTS. For instance, when the same barangays targeted for CLTS experienced typhoid fever outbreak, they gave treated bednets as reward to those

who were able to construct their own toilets. This was mainly the idea of Mr. Leo Cuico, Alabel's Sanitation Inspector.

"The treated bednets can repel all types of insects that can cause various sickness. Those who were able to construct toilets used indigenous materials like bamboos and coconut leaves. This is our way of proving to the residents that one need not to spend a lot of money to be clean and healthy," explained Mr. Cuico. The success of these activities have since led to the declaration of a total of nine puroks or sitios, where people have changed their behavior and have started using toilets, leading to the declaration of these areas as Zero Open Defecation sites from 2008 to 2009.

Engr. Rivera attributes a portion of the success, even at the community level, to SuSEA. "We have observed that SuSEA's working principles recognize the role of local communities on sustainable sanitation. This helped in capacitating the communities while promoting owner-





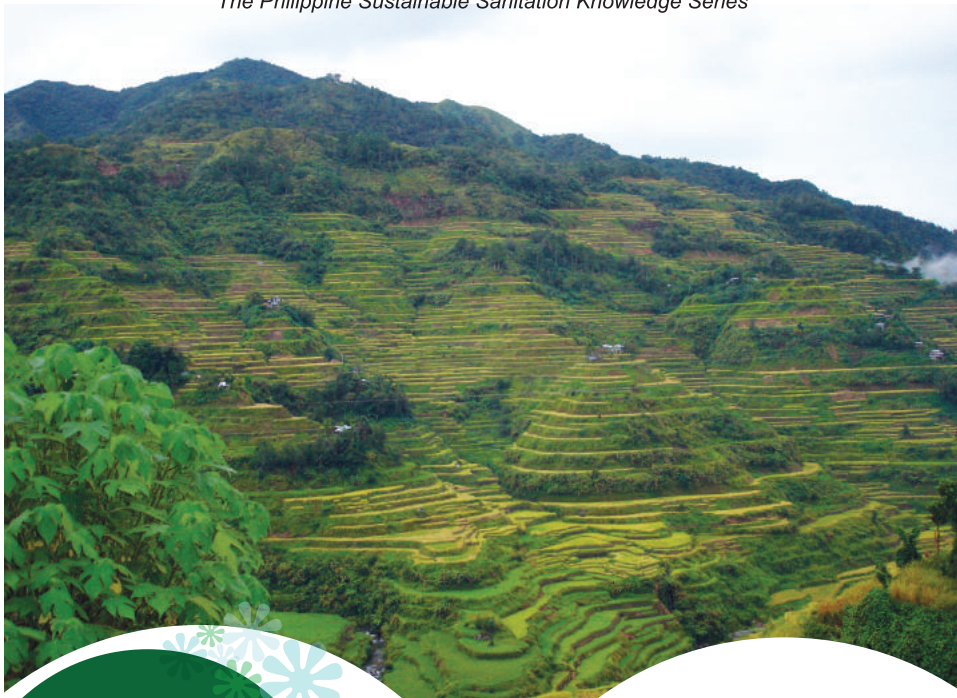
The SuSEA TAMS and World Bank team in a meeting with the Alabel LGU, discussing the terms of the MOA with General Santos City.

ship thus, facilitating greater impact," he explains.

Even with the exit of the SuSEA project, Alabel stays confident in fully implementing their marketing plan and remains hopeful for the eventual success of their Septage Management Program.

Alabel hopes to share this confidence with the five other coastal municipalities in Sarangani that have STFs but have yet to formu-

late and implement their own Local Sustainable Sanitation Strategy, which lead to the creation of LSSP. As Engr. Rivera puts it, "The LSSP is vital in the sustainable operation of the STF. This ensures combined efforts in protecting Sarangani Bay. Alabel can help these LGUs in the advocacy and development of their LSSPs, and other sustainability mechanisms for STF operations."



**BAUKO,
MOUNTAIN
PROVINCE**

**Water And Sanitation Challenges
In Rural Upland Indigenous Peoples' Villages**
A SuSEA story of sanitation in Bauko, Mountain Province

Many anthropological literatures both old and recent attest to the high sense of community and organization among the people of the Cordillera Region. So it is as baffling as it is interesting to account the challenges of SuSEA-Philippines in their efforts towards a community-led water and sanitation project in one of the villages in the said region.

The Sustainable Sanitation in East Asia Philippine Component or SuSEA-Philippines is a project funded by the World Bank and implemented through the Department of Health and the Department of Environment and Natural Resources, working towards increasing access of poor sections in the country to sustainable sanitation. It places emphasis on a sustainable framework for poor inclusive sanitation

services while addressing key demand and supply constraints in the Philippines.

In March 2008, after several consultations and a baseline study, SuSEA-Philippines identified water supply contamination and water use optimization as the main project concern in the municipality of Bauko in Mountain Province. The baseline study confirmed a high (92%) sanitation coverage in the municipality. This, consequently, directed local program design to place emphasis on the reduction of contamination of drinking water in place of local sanitation improvements. Two remote upland barangays out of the twenty-two (22) villages in the municipality were initially identified as priority sites – Barangays Banao and Guinzadan Sur. Barangay Bagnen Oriente was later added as a priority site. Initially, the SuSEA-Philippines' local government unit (LGU) partner in Bauko was more apt to building structures to protect water catchment and supplies in the area. The LGU and local residents suspected water sources in the area were threatened by fertilizer and pesticide contamination from vegetable farms surrounding the water sources.

However, chemical water testing conducted in 2008 yielded inconclusive results. No unusual or hazardous levels of chemical contamination were found.

By the second half of program implementation, it was clear that development of a Water Supply Protection Program (WSPP) was most appropriate for Bauko. A WSPP intends to provide potable drinking water supplies to households (HH) in Bauko through the mobilization of local communities.

Accessibility

Bauko has the smallest population among partner LGUs and is the “hardest to reach location” of the six pilot program sites in the country. The Technical Advisory and Management Services (TAMS) consultants of SuSEA-Philippines usually allot two days of travel from Manila going to Bauko and another two days traveling back just to conduct a one-day workshop or meeting.

The town’s location is in a province (Mountain Province) that is land locked and positioned at the heart of the Cordillera Region. Its mountainous and rugged terrain is consistent with the rest of the region. As a consequence, accessibility in a significant portion of the town is limited. Transportation in nearly one-third of the 22 barangays in Bauko is irregular. SuSEA-Philippines supposed that the town’s topography is one reason why transportation in the area is poor.

Abject Poverty

In the same way, slow economic activity in the area contributes to the underdevelopment of road networks in many villages of Bauko. The town is considered a fourth class municipality. Although some documents claimed it jumped classification from 6th class to its current 4th class standing, it is still within the low-income municipality category. Of the ten municipalities in Mountain Province, Bauko is the most populous and the 4th poorest (Philippine National Statistical Coordination Board or NSCB, 2005).

Bauko’s population of more than 29,000 people (NSCB 2007) is predominantly (99.6%) of Kankana-ey descent. Kankana-ey is an ethno-linguistic group belonging to a larger indigenous group commonly referred to as Igorots. Over the years, the Kankana-eyes of the Cordillera Region have maintained their distinct cultural identity and indigenous socio-political structures. SuSEA-Philippines recognized that such indigenous socio-political structures were under-maximized to help facilitate the accomplishments of local program objectives. This is another factor that posted some challenges to program implementation.



Bauko’s rugged terrain limits accessibility in a significant portion of the town.

Like many indigenous groups in the Cordillera Region, the Kankana-eyes in Bauko built sloping terraces to maximize farm space in their rugged terrain. Many Kankana-eyes in this area engaged in subsistence agricultural production. Agriculture serves as the backbone of Bauko’s local economy where 92% of households in the municipality engage in either vegetable or rice farming (SuSEA Bauko Baseline Study Report, 2008).

The average household monthly income in Bauko is PHP7,244 (SuSEA Bauko Baseline Study 2008).

However, the distribution of households by monthly income reveals that a larger proportion of households in the municipality (82%) only earn five thousand pesos and below. And a significant 41% of such earns PHP2,501-PHP5,000 monthly. Meanwhile, only 13% earn an average monthly income of PHP5,000 to PHP10,000. And a very small percentage (4%) of households earn more than PHP10,000 monthly.

The income profile of households in Bauko offers some explanation in the low “willingness to pay” for improved water and sanitation facilities in the municipality. This, combined with relatively flawed household spending habits, elucidates the consistent high non-monetary (labor) contribution for the maintenance of the existing water supply system in priority barangays. Such local reality poses the biggest challenge in the implementation of a sustainable water supply protection program in Bauko.

Low Priority

Prior to SuSEA program introduction, low priority is seemingly accorded to the improvement of water and sanitation facilities in Bauko. Evidence is apparent in municipal

sanitation-related programs where budget allocation for important water quality surveillance and chlorination is irregular. It is difficult to ascertain whether the lack of improvement in water and sanitation facilities is due to a deficiency in local funds or lack of appreciation of the need for improvement.

However, the SuSEA program design, as noted by the Mid-Term Review team in 2009, enabled the generation of new understanding in the Bauko LGU regarding water and sanitation issues. This proved useful in the mobilization of some LGU personnel in the formulation of baran-

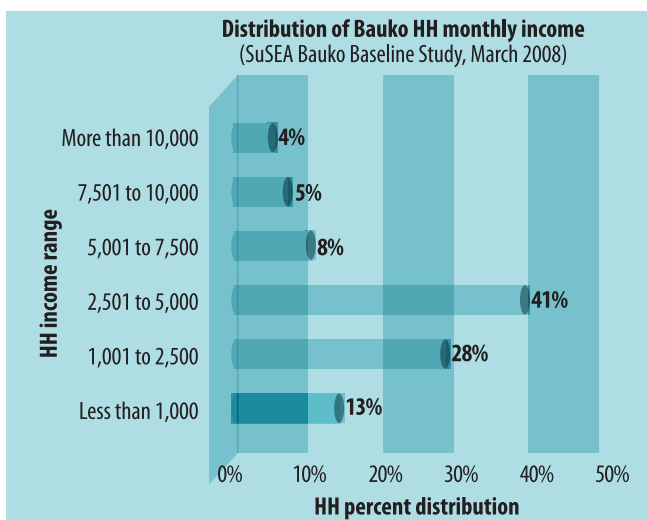


Table: List of Municipal Sanitation-Related Programs

PROGRAM	DESCRIPTION	ISSUES
Water Quality Surveillance	<ul style="list-style-type: none"> • Existence of water laboratory • Bacteriological & selected physio-chemical water testing 	Reagents for water testing not always available.
Water Chlorination	<ul style="list-style-type: none"> • MHO conducts periodic water treatment 	Chlorine granules provided not adequate to meet needs.
Food Sanitation	<ul style="list-style-type: none"> • 399 food establishments • 344 food handlers 	Existence of Sanitary permits. Health Certificates for food handlers.
Solid Waste Management	<ul style="list-style-type: none"> • 2006 multi-stakeholder training • LGU allocated funds in 2006 for 4 pilot barangays 	Insufficient funds for the construction of Materials Recovery Facility(MRF).



SOURCE: Bauko Local Sustainable Sanitation Plan, 2008

gay level WSPP in the second half of program implementation. Key people such as Municipal Health Officer Dr. Samuel Masidong and his Sanitary Inspectors, staff from the Municipal Engineer's Office, Municipal Board Clerks, staff from the Records Unit and others have facilitated the fast tracking of the formulation of a WSPP. Even the local chief executive responded positively by creating a municipal Water Safety Plan (WSP) team by virtue of Executive Order No. 08 in August 2009. This Municipal WSP is envisioned to facilitate the provision of resources in support of the planning and implementation efforts of the WSP in the three identified priority barangays and later for all water systems in Bauko.

Health And Water Supply Protection

SuSEA-Philippines 2008 household survey data reveal typhoid and fungal infection among the top illnesses in Bauko. Both illnesses, as pointed out by SuSEA-Philippines, are attributed to water quality problems. Meanwhile, 2006 data from the Bauko Rural Health Unit (RHU) registered watery diarrhea as the fourth top leading cause of morbidity in the area. Survey data further reveals that most residents in Bauko considered contaminated water as the main cause of illnesses in their area.



Engr. Marieto Perez of the SuSEA TAMS Team explains the importance of formulating a WSP to the Bauko LGU during a WSP orientation workshop.

Such perception is supported by data results from 2006 to 2008 where 90% of water sources in Bauko failed to pass the standard bacteriological test. These data revelations helped ascertain the option to implement a Water Supply Protection Program.

A look at the context of the Bauko WSPP is incomplete without a closer scrutiny of the town's water sources. There are 95 water sources in Bauko that are of varying characteristics based on the point of origin. Almost a third (28.09%) of the total number of households has access to Level III water source, or have piped water supply inside their houses. While nearly half or 48% of households in Bauko have access to piped water supply with communal faucets or Level II. The remaining 23.52% of households have access to water by fetching from a point source or Level I. An insignificant 0.41% has direct access to natural springs.

Community Mobilization For Safe Water

Formation of barangay level Water Safety Planning teams pushed forward the SuSEA local program in Bauko. The planning teams combined dedicated LGU municipal and barangay level personnel which, in turn, encouraged a broader base of participation in the priority barangays. Involvement of the WSP team members in the assessment of water systems in their communities and the formulation of appropriate action plans increased the stake of local communities in the goal for "full access to safe water" (Bauko Local Sustainable Sanitation Plan 2008).

Water Safety Plans developed in the 3 priority barangays have salient common features. This can be attributed to the common water system that has been identified for pilot – all 3 water sources are surrounded by vegetable gardens that use chemical pesticide. Because of this feature, the SuSEA-TAMS supposed that the 3 pilot water systems are highly susceptible to contamination from the environment. This is aggravated by the absence of in-take boxes for the Matalao and Sesekan water sources in Barangays, Bagnen Oriente and Banao, respectively as locals adhere to traditional beliefs that "spirits do not like concrete structures built on water sources." Water flow will eventually die according to this traditional belief. Additionally, all water systems have ground concrete water tanks and distribution pipes that are laid along drainage canals



Many households in Bauko obtain their water from sources similar to the one pictured above.

in the area.

Water system maintenance in priority barangays turned out to be similar altogether. Two caretakers in each water system are assigned and supported by a meager budget from the barangay income revenue allotment the WSP team members in the assessment of water systems in their communities and the formulation of appropriate action plans increased the stake of local communities in the goal for “full access to safe water” (Bauko Local Sustainable Sanitation Plan 2008).

Meanwhile, SuSEA-Philippines noted that pipe connections in pilot water systems are haphazardly installed indicating the lack of planning and technical support from the local government unit. This further underscored the need for a water safety plan in the area.

Short- to long-term control measures and action plans were laid out in the process of the water safety planning. As the pilot water system conditions in priority barangays are virtually similar, content of control measures and action plans are not too different from one another. Steps range from the household practice of boiling water for drinking to elevating pipelines to safe levels to prevent seepage of wastewater flowing along drainage canals. Steps also included the extension and replacement of dilapidated and rusty water pipes.

Conversely, the heart and key accomplishment of the WSP planning process is the organization of community level groups. There is a Water Safety Planning team that carried out the assessment of existing water system in priority barangays and formulated the appropriate course of action. And far along in the implementation is the organization of Barangay Water Safety Associations

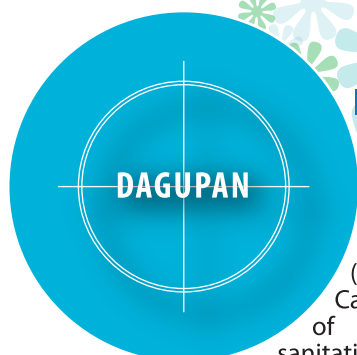


The repair of leaking water pipes (above top) and the construction of protective fences (above bottom) to prevent animals and humans from contaminating a water source, are among the action steps encouraged by a water safety plan.

(BWSA) that will carry out the WSPP in priority barangays.

Meaningful Consensus

Through a more meaningful consensus between the partner LGU and SuSEA-Philippines, the local program in Bauko made better progress towards the second half of implementation. Although initially starting with differing options for improving health outcomes in the area, the willingness and openness of SuSEA-Philippines and its partner LGU to identify and tackle a broader range of sanitation and water-related challenges enabled the option of a WSPP to come to light. The intention of SuSEA-Philippines to engage in an evidence and outcome based approach built a more meaningful consensus among local stakeholders, ensuring support and sustainability of the identified appropriate intervention.



IN PURSUIT OF SUSTAINABLE SANITATION

A SuSEA story of sanitation in Dagupan City

When Dagupan City Health Officer (CHO) Dr. Leonard Carbonell first heard of the possibility of sanitation initiatives in his city in August 2006, it was through the Provincial Health Office (PHO). The PHO had sent him an invitation to attend a scoping workshop conducted by the Department of Health (DOH) and the World Bank (WB), which was, back then, still in the stage of identifying its six project sites for a sanitation project in the country. He recounts, "There were several municipalities/provinces/cities — about eighteen, I think, and they told us they would only pick six [project sites]. When it came to Pangasinan, they were thinking of three sites: Bolinao, Malasiqui, and Dagupan City. The funny part is, they said, if everything else will become equal, the decision to choose would come from the Provincial Governor or from the Provincial Health Officer."

Concerned that Dagupan's status as a chartered city, which essentially renders it independent of the province of Pangasinan, would nullify its chances of being selected as a site, Dr. Carbonell sought to find a way to convince the DOH & WB team of the importance of a sanitation initiative in his city. He found out that during an upcoming visit the team would be staying in Dagupan and invited them to stop by his office for a meeting. He recalls, "[During the meeting,] we gave them the necessary data they needed. We gave them a tour of the city in terms of the need for sanitation interventions, and to really show them the problem." Also present at the meeting were some of the city's department heads (planning, information, waste management operation, health office, etc) and the Vice Mayor, all of whom Dr. Carbonell had also invited. "What we were trying to relay to them is that [poor] sanitation threatened the progress of the city," he says, "...to show how beautiful Dagupan City is, how progressive, how developed. For me, at the back of my mind, I was thinking,

we're here at this stage where things are good but if poor sanitation continues, we know it will really affect, not only the health, but also the livelihood of the people, like our bangus industry because we are selling Dagupan as the bangus industry of the world."

Dr. Carbonell's efforts paid off. In late 2006, the Dagupan City Health Office received a letter informing them that they had been selected as one of the six project sites for a sanitation initiative, later to be known as the Sustainable Sanitation in East Asia (SuSEA) Philippine component. But it was only the beginning of much work to be done.

Implementing Sanitation Intervention Efforts

The SuSEA Technical Assistance Management Services (TAMS) team, with help from Dr. Carbonell, began by conducting a baseline study in November to December 2007, hoping to gather an accurate picture of existing sanitation conditions in the city. Sanitation mapping, household surveys, stool surveys, and key interviews were conducted and supplemented by secondary data derived from reports and records of local and national institutions.

The baseline study showed that there was indeed a need for sanitation interventions in the city. According to the study, 17% of all households in Dagupan did not have toilets. Among the island barangays, this percentage is even higher with 42% not



Dr. Carbonell, in a meeting with personnel from DOH's Environmental Occupational and Health Office and the SuSEA TAMS Team.

having a toilet facility. Additionally, in 2007, water and sanitation related diseases such as acute gastroenteritis (AGE) and soil transmitted helminthiasis both figured in the top 10 causes of morbidity in Dagupan for all ages and sexes. The former (AGE) was also cited among the top 10 causes of child mortality for the same year.



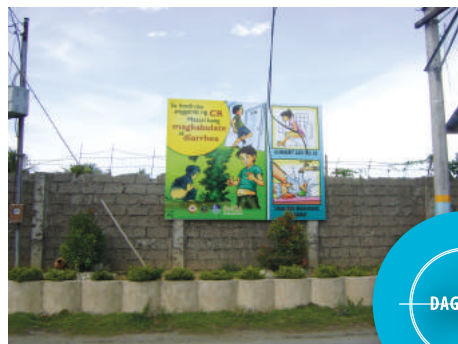
Dagupan enumerators conducting sanitation mapping for the baseline study.

All this information and much more were presented to the City Mayor and other stakeholders upon the baseline study's completion. The presentation was successful in that it galvanized the City Mayor into releasing an Executive Order organizing a SuSEA Task Force which was placed in charge of developing and implementing a local sustainable sanitation plan (LSSP) and a local sustainable sanitation promotion program (LSPP) for Dagupan, which developed relevant information, education, and communication (IEC) materials for sanitation.



Along the way, many other important milestones in the fight for sustainable sanitation were also reached.

This included, among others, the drafting of a Health and Sanitation Code for the city, the organization of capability building seminars in relation to sanitation, the conduct of a stool survey among school-children and a geospatial modeling study to investigate the incidence of AGE in relation to flooding, and the drafting of a septage management plan for the city.



A billboard on proper sanitation practices, one of the IEC materials developed as part of Dagupan's LSSPP

- For the stool survey, the objective was to establish an estimation of the burden of infection regarding soil-transmitted helminth (STH) infections, which are caused by widespread parasitic infections and whose occurrence is closely related to prevailing environment and sanitation conditions. Stool from 262 children, with ages ranging from 9 to 11 years, in five elementary schools in Dagupan were examined using the Kato-Katz procedure. The results of the survey showed that the cumulative prevalence rate among the children was 48.85%, very close to the high prevalence rate of 50% and above set by the World Health Organization.
- The geospatial modeling study, on the other hand, was aimed at performing analysis and modeling of geospatial data to determine if factors such as elevation, proximity to river, and flooding, which cause contamination of drinking water supply are related to incidences of acute gastroenteritis (AGE) in Dagupan City. Results from the study showed that activities

associated with the human population play a big role in contributing to incidences of diarrheal diseases in Dagupan City. It also showed that residents in high density, developed, and non-agricultural areas tend to have higher incidences of diarrheal diseases, that increase in the area of river water with fecal coliform bacteria can increase the exposure of residents to fecal contamination, and that the water sourced from hand pump or jetmatic pump may be contaminated with pathogens causing diarrheal diseases. Finally, it was also revealed that increase in the capacity of drainage areas (low-lying areas) tends to divert contaminated water away from the high-density populated areas. Based on these findings, the study was able to formulate recommendations for the control of AGE in Dagupan City.

- The drafting of the Dagupan City Septage Management Plan (SMP) and Central Business District (CBD) Sewerage Plan were among the important accomplishments of SuSEA for Dagupan City. Essentially, both plans lay out a strategy to improve urban sanitation and environment through the reduction of domestic wastewater pollution load (particularly from effluent septic tanks) to water bodies and groundwater, thereby protecting people's health and making the city more livable. While the SMP aims at citywide coverage, the CBD sewerage plan covers three poblacion barangays and two adjacent barangays. The drafting of the CBD, in particular, was a necessary addition as SuSEA discovered that Dagupan also served as a catchment area for water flowing from surrounding areas. Any improvements in septage management, therefore, also had to be applied to Dagupan's neighboring areas.

Initiatives beyond SuSEA

"One of the initiatives outside of the deliverables for SuSEA," Dr. Carbonell adds, "was the building of instant CRs



One of the instant comfort rooms conducted by the City Engineering's Office-Dagupan LGU. This particular CR is located at the Public Cemetery, Barangay Poblacion, Oeste.

(comfort rooms)." So-called because of the speed with which they were constructed, these 'instant CRs', Dr. Carbonell explains, were built in only 2-3 days, "We were able to build seven instant CRs in five priority barangays. Three of them were island barangays, one was a river barangay and the other was a coastal barangay." These barangays (Pugaro, Salapingao, Bonoan-Gueset, Pantal, and Poblacion Oeste) were all previously identified as 'priority barangays' because of the high incidence of water and sanitation related diseases in these areas.

In addition to the instant CRs, the team also focused on sanitary facilities in public schools. "Thirty-nine comfort rooms within classrooms at the Dagupan City National High School, and seven comfort rooms for other elementary schools were rehabilitated," Dr. Carbonell shares, "We made improvements because they were non-functional." Additionally, two comfort rooms were constructed at Judge Jose De Venencia Memorial High School.



Challenges

The implementation of sanitation projects in Dagupan was not without its own challenges. With instant CRs (with facilities for both males and females) costing an estimated PHP48,000, it was important that the instant CRs that were erected were actually used by people. “Communal toilets have been built before,” Dr. Carbonell explains, “but it’s either first, they’re not using it, second, there is no maintenance system, and third, pagnasira [when the toilet becomes clogged or broken], there is no initiative to renovate it so they regress back to open defecation.” To ensure the continued use of the toilets, the SuSEA Task Force applied a modified community-led total sanitation (CLTS) approach, which worked on educating the community on the need of using comfort rooms and emphasized the prevention of diseases transmitted through the fecal and oral route.

“We wanted the demand to come from them,” says Dr. Carbonell, “That they should use the communal toilets or if there is no communal toilet, they can use their use their neighbor’s toilet or their relative’s toilet, usually naman magkatabi yan sa island barangays or sa informal settlers (usually, people’s homes are located beside each other’s in the island barangays or among the informal settlers). So we did another round of consultations, reemphasizing now anong gusto nila (what they want)—and the communal toilets still came up.” He continues, “But we told them, those communal toilets that we made, what is our assurance that you will

continue to use them?” To answer his question, the community agreed to put up neighborhood sanitation brigades. These neighborhood sanitation brigades are composed of groups of people in a certain purok and are in charge of the maintenance of the communal toilet. In the future, Dr. Carbonell says, neighborhood sanitation brigades will also be trained on disease surveillance reporting and the IEC campaign on disease prevention and hygiene promotion.

He advises, “There have to be several core teams who will do this, not just one, to help with the lectures and the areas involved. Some of these are the CLTS lead facilitators, who are city government employees who have regular functions—from the City Health Office, midwives, sanitary inspectors assigned to the areas.”

As for the future, the main challenge, for Dr. Carbonell, lies in enforcement “We have put in place legislative policies specific to Dagupan—a Septage Management Policy, a Health and Sanitation code. We just need to enforce these policies.”

Words of Wisdom

To other local government units looking to establish or improve a sustainable sanitation strategy in their area, Dr. Carbonell has this piece of advice to share: “Never give up. You will have setbacks but never give up. Political will and commitment are critical and you need a champion...the reality is the city mayor should be the champion behind everything in a political set-up like the Philippines.



Dr. Leonard Carbonell

Dr. Carbonell has been City Health Office for Dagupan for five years now; rising to his current position after serving 11 years as the city's Assistant City Health Officer. Sanitation, he believes, should be a shared responsibility and shared ownership by the community, the city government, and other stakeholders.



Mayor Benjie Lim

Back when he was City Mayor of Dagupan in 2006, Mayor Lim was very much aware of the need to invest in sanitation; he supported the SuSEA project and Dagupan's role as a project site. As the elected Mayor for 2010-2013, Mayor Lim reaffirmed the need for sustainable sanitation benefitting households in lower income groups as they suffer the most when they get sick and when their livelihood is affected because of poor sanitation.



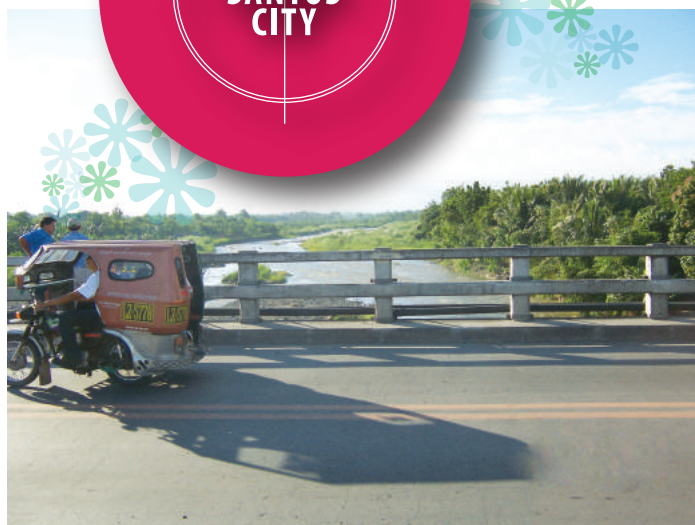
Mayor Al Fernandez

Realizing that the sanitation programs initiated by Mayor Lim were good for the city, Mayor Al Fernandez continued the implementation of these programs in 2007-2010. Mayor Fernandez pushed for a citywide implementation of SuSEA from its three priority barangays as Dagupan City is a catch basin of all rivers and waters flowing downstream.

GENERAL
SANTOS
CITY

MAGANDANG GENSAN AIMS TO BECOME A LIVEABLE CITY

A SuSEA story of sanitation in General Santos City



General Santos City, also known as GenSan, is one of the stakeholders for the designation of the Silway River as a Water Quality Management Area.

"Magandang GenSan!" Initially coined by then General Santos City Mayor Pedro "Jun" Acharon Jr. back in 2005, this phrase, which means Beautiful GenSan! in English, does not only stand as a slogan for the city as reflected in its official website, but as Acharon once declared, is "a statement of hope...a shortened paraphrase of the city's vision."

This vision—for a better, more beautiful General Santos City—is one that was equally shared by the Technical Assistance Management Services (TAMS) team of the Sustainable Sanitation in East Asia Philippines (SuSEA) component. SuSEA, which is a project supported by the World Bank, arrived in General Santos in 2007, aiming to implement sanitation interventions for the improvement of quality of life in cities and low-income urban poor communities. Through SuSEA, General Santos City is also one of the stakeholders for the designation of the Silway River as a Water Quality Management Area (WQMA). This means that, along with the municipalities of Polomolok, Tupi and T'boli in South Cotabato, GenSan is responsible for creating and enforcing ordinances on pollution control for the river. This is significant

because the Silway River traverses onto the Sarangani Bay, declared as a Protected Seascape area through Presidential Proclamation No. 756 for its value to the tuna industry, one of the top sources of revenue for GenSan.

In the beginning stages of the project, the City Government of GenSan was hesitant upon learning that they had been chosen as a project site for SuSEA. Similar projects had approached them in the past but the City Government was not prone to accepting projects unless they understood completely the new technology involved or being introduced. "For us, sanitation is not just a health concern. It is a city-wide issue that involves health, environment, administration, and engineering. SuSEA was open to our ideas and had the same concept," says Engr. Nael Cruspero, from the City Planning and Development Coordinator.

SuSEA's initial activities, which were mainly consultations and discussions with the various sectors in GenSan including the elected local officials; representatives of national agencies, which hold office in the City; members of the Chamber of Commerce; small businessmen, including the private

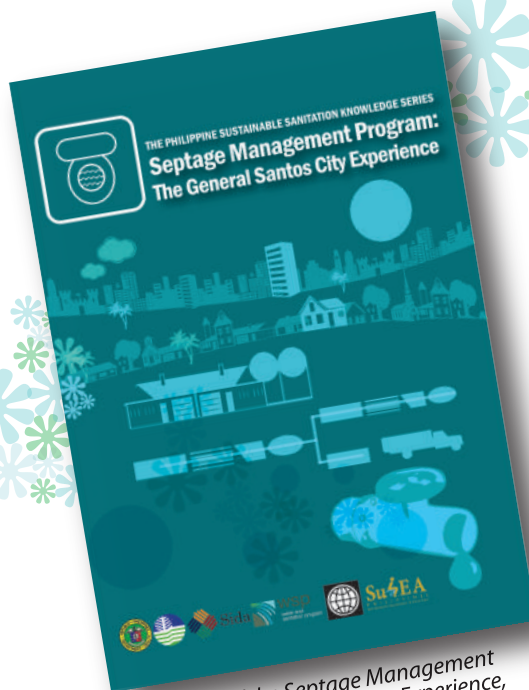
desludging service providers; the General Santos City Water District Board; and officers of rural water associations, built a strong foundation on sanitation. "Because of these activities, there is a groundswell of community support to the Project as well as a demand for the appropriate and sustainable sanitation services," explains Engr. Cruspero.

Sanitation as an integrated effort

True to their idea of sanitation as an integrated effort, the City Government of GenSan approached the implementation of sanitation activities in a holistic way. GenSan formed the Sustainable Waste Management Board to address the solid, liquid, and air pollution concerns of the city first through formulating local action plans and ensuring their enactment. The Board involves the private sector, elected officials, and several department heads. "This way, all understand the interrelatedness of the issue and our roles in it," Engr. Cruspero further explains.

The Board also developed the Local Sustainable Sanitation Plan (LSSP) of the city. Included in this LSSP is a description of the city's Septage Management Program or the proper hygienic way of handling sludges from septic tanks. The LSSP has been duly adopted by the Sangguniang Panlungsod that officially makes the LSSP ready for implementation.

Following the development of the LSSP, the City Government also formulated the Septage Management Ordinance. The Ordinance mandates all GenSan residents or Generals, as the residents fondly refer to themselves, to construct and use toilets with the correct septic tanks and regularly desludge their septic tanks once every three years. To prevent unlawful sludge disposal, which may result in water-borne diseases such as acute gastroenteritis, especially among children, the Ordinance also calls on the water districts of the city, in addition to the existing private desludging service providers, to provide desludging services in accordance with the Clean Water Act. This means that the city should use a certified Septage Treatment Facility (STF) to prevent disposal of sludges in areas like



Book cover of the Septage Management Program: The General Santos Experience, under the Philippine Sustainable Sanitation Knowledge Series, which discusses the development of the Septage Management Program of GenSan.



One of the consultative meetings held among Alabel and GenSan stakeholders.

rivers and farmlands that eventually contaminate ground water.

The declaration to use a certified STF initially opened new challenges for GenSan. First, the water district and the water supply associations were not ready to include desludging as part of their

services. Second, the concept of bringing their collection to an STF was new to private desludging service providers.

With the help of SuSEA, however, representatives of no less than the National Water Resources Board (NWRB) and the water district, Manila Water Company, Inc. were brought in to help solve the issue. The NWRB's discussion of new policies and guidelines enlightened the water associations and made them realize that they needed permits to legitimize their operations, which serve 20 percent of the total households of GenSan. Manila Water, on the other hand, shared possible investments on sanitation technologies that brought forth the idea among the city water district, water supply associations, and the private desludging service providers that sanitation can still be profitable.

The GenSan and Alabel partnership

The issue of finding an STF that would take care of GenSan's desludging services posed another problem for the city in the beginning. The nearest STF to GenSan is located in the municipality of Alabel, located about 10 kilometers from the city. Unbeknownst to them, Alabel was, back then, also struggling to find a way to maintain the expensive operation of the STF, which had a capacity beyond the needs of the municipality's residents. Through the efforts of SuSEA and the Philippine Environmental Governance Project (EcoGov) funded by the U.S. Agency for International Development (USAID), a solution to both Alabel and GenSan's problems was proposed and a Memorandum of Agreement (MOA) between the two local government units (LGUs) was formalized. The MOA officially formalized the cooperation of the two LGUs on septage management: the desludgers of GenSan would dispose of the human excreta they gather from the city into the Alabel's STF for proper treatment and processing while Alabel would receive payment for processing the sludges, to be paid for by the desludging service providers.

Though the MOA is mutually beneficial for both LGUs, it took some time before the agreement was reached and finally signed by the concerned Local

Chief Executives (LCEs): the City Mayor of GenSan and the Municipal Mayor of Alabel.

"Getting the two LCEs sign the MOA was not an easy task," recalls Engr. Cruspero. The city government officials were at first unappreciative of the idea of using Alabel's STF; while the residents of Alabel criticized their LGU for exploring the notion of accepting sludges from GenSan. With constant advocacy led by Engr. Cruspero, city officials eventually came to understand the importance of Alabel's STF to their septage management program and in particular, pollution control efforts for Sarangani Bay. The idea that the possible partnership with Alabel is aligned with the City's Magandang GenSan vision was equally convincing to the city officials.

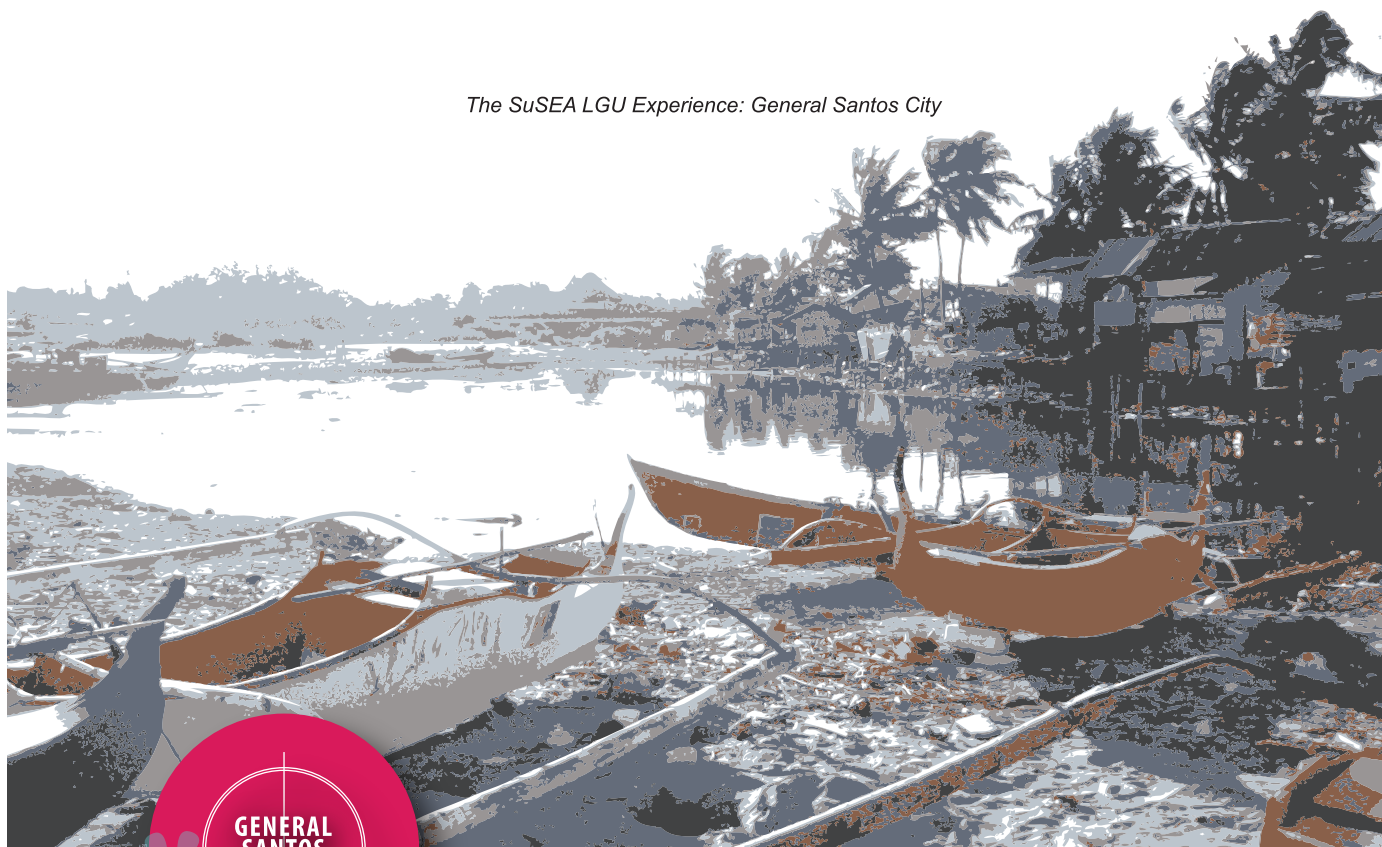
In the meantime, in Alabel, where an ordinance on septage management had also recently been passed, Engr. Allan Rivera, Municipal Environment and Natural Resources Officer of Alabel explains, "We needed clients like GenSan to maximize the use of our STF. Otherwise, it will mean financial losses that may impact on our services delivery to our constituents. I challenged our critics to formalize their complaints as I am ready to explain to them the Municipal Government of Alabel's views on this issue but no one got the courage to do so. I was thinking that it is possible that our critics might have no toilets or no septic tanks or no right septic tanks. This may be one of the reasons they had no courage to face us."

Confidence in the new mayor

Even though a new Mayor of GenSan has since taken over the leadership of the city, Engr. Teodorico Dumagan, Acting Administrator, is confident that the Septage Management Ordinance will be implemented soon. "Mayor Darlene Antonino-Custudio focuses on the environment. She mentioned this in her inaugural speech," says Engr. Dumagan.

The following is an excerpt from the City Mayor Darlene Antonino-Custudio's inaugural speech:

"We want to make sure that our homes are situated in a clean and balanced



GENERAL
SANTOS
CITY



*General Santos City Mayor
Darlene Antonino-Custodio*

ecosystem. Our environment and sanitation, therefore, is another critical social concern. As a metropolis, we generate so much waste. The city government and the 26 barangays will draw up a barangay-based garbage collection system project with the goal of inculcating innate household responsibility in making the city clean. The youth sector will also have a crucial role in spearheading the campaign and initiation of our environment and sanitation programs.”

Big work ahead

For Engr. Dumagan, once the new City Mayor acts on full swing, the implementation of their Septage Management Ordinance will mean big work ahead. The city plans to implement its Septage Management Ordinance with an Information, Education, and Communication campaign to increase awareness of the Generals on sanitation and their roles as mandated by the said ordinance. “The people’s participation is very important. We need to implement the communication plan that SuSEA helped us develop. Even I am preparing to correct my home’s septic tank. It will be hard to convince our constituents if we, the



supposed enforcers, are not following the ordinance,” explains Engr. Dumagan.

The City also has to perform its role as one of the key stakeholders and members of the Governing Board of the Silway WQMA once it is officially formed with the Regional Environmental Management Bureau as the lead National Government Agency. Together with the municipality of Polomolok, GenSan supported the preparations prior to designation of the Silway River as a WQMA through the provision of additional funds and the participation of its personnel for the full water sampling and monitoring from the upper level to downstream of the river.

Positive learnings

Even in public hearings, where EMB Regional Office XII presented the water analysis, GenSan remained active. The conduct of public hearings to inform the stakeholders of the water analysis is part of the process prior to designating Silway as a WQMA. Since GenSan also conducts water quality monitoring and classification of the river covering the city’s territorial jurisdiction, they initially questioned the EMB Regional Office XII’s findings. This stirred controversy, as the city government was initially unaware that only EMB can officially classify the water quality of the river.

The earlier misunderstanding, however, did not stop the city from supporting the designation of the Silway as a WQMA. “They continuously helped through more policy support. In fact, GenSan became more active than ever in SuSEA activities and even in Sarangani WQMA activities. All their department heads are always there to participate,” shares EMB Regional Director Datu

Tungko Saikol.

The city government remained supportive of the designation of Silway River as a WQMA for environmental reasons. “It traverses and connects towards the Sarangani Bay, a Protective Seascape and another WQMA,” explains Engr. Cruspero. GenSan also conducted information awareness initially to the residents of five barangays located along the Silway River to address and change the behavior of defecating either directly at the river or through what they call the “wrap and throw” method, which means wrapping human waste and throwing it into the river.

Mrs. Catalina Llagas, a GenSan resident, teacher, and Department Chairperson of B.S. Environmental Science of Ramon Magsaysay Memorial Colleges, reports seeing early signs of positive changes and progress among the residents of the five barangays along Silway River. “I always pass by and see those areas especially looking at those living under the bridge over the Silway River. I also often bring my students there for our environmental activities. I have seen the changes in the people’s behavior. The area, where they used to openly defecate and therefore was so filthy and stinky, has turned into a vegetable plantation. It is so amazing,” explains Mrs. Llagas.

Though the Magandang Gensan vision started with former GenSan City Mayor now Representative Jun Acharon, the newly-elected City Mayor Darlene Antonino-Custodio promises to continue realizing the same vision. With the commitment of its key personnel and participation from the people, Generals can expect Magandang GenSan! to become more than the statement of hope it was once declared to be, but a reality for all.

GUIUAN, EASTERN SAMAR

SERVING THROUGH SANITATION

A SuSEA story of sanitation in Guiuan, Eastern Samar



A shot of a coastal area in Guiuan, one of six pilot sites for SuSEA Philippines.

Marcos Raguirag was skeptical about the idea of a community-led sanitation initiative when he first heard it in a meeting with other barangay leaders in 2008. “It cannot be done,” he said to Dr. Socorro Flores, the Municipal Health Officer of the town of Guiuan in Eastern Samar. But even before the local community-led sanitation program concluded in 2009 in his town, he would have proven himself wrong.

The community-led program on sanitation first began with a visit from the SuSEA-Philippines Team three years ago. SuSEA, which is a project funded by The World Bank and stands for Sustainable Sanitation in East Asia in the Philippines, works towards increasing the access of poor sections of the country to sustainable sanitation, supporting a sustainable framework for poor-inclusive sanitation services. This includes addressing key demand and supply constraints in the Philippines. Reason enough for coming to a town like Guiuan where nearly 60% of households (HH) live below the poverty threshold (Guiuan Secondary Baseline Survey).

Back in 2008, Barangay Captain Marcos Raguirag knew there was much room for improving access to sanitation facilities in his village. On several occasions in the past, his barangay funds had been depleted by providing assistance to local residents during bouts of water borne related illnesses. But he knew his community well enough to say that implementing a community sanitation project would be next to impossible.

“People will simply not build toilets nor will they lift a finger to help others build their toilets,” he explained during one of his first meetings with SuSEA. He had been Barangay Captain in Dalaragan for two terms now and had previously served as Barangay Councilor for three terms. He had observed how past efforts of sporadic distribution of toilet bowls by the local municipal government of Guiuan had been unsuccessful in his community and other neighboring coastal villages.

Once, in 2006, toilet bowls were distributed to selected households in Dalaragan and several other barangays in the municipality. Accompanying

construction materials like cement bags were also provided but as most of the household recipients were low income families, most of the materials were sold and converted into much needed cash for other household expenditures. The toilet bowls, in turn, were either stashed

away or converted into other items like ornamental flowerpots.

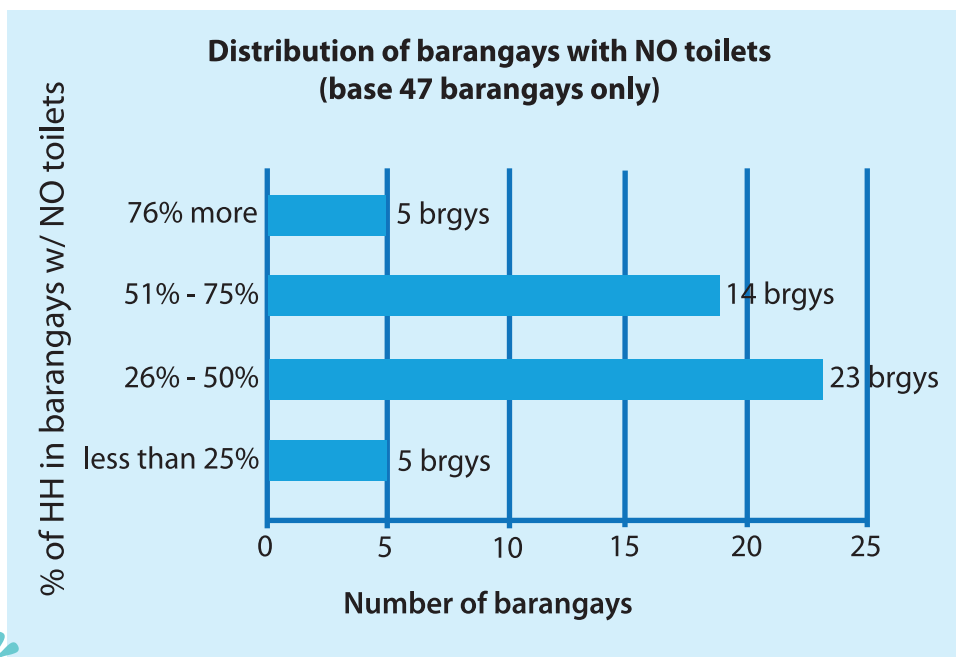
Like many rural communities in the country, use of cistern-flush/pour-flush water sealed toilets is relatively low in Barangay Dalaragan. Prior to the entry of SuSEA, municipal data indicated that three-fourths of households (21 out of 73) in the barangay did not have access to sanitation facilities. People were more preoccupied with what food to eat than with proper human waste disposal.

Low access to sanitation facilities

The rest of the municipality of Guiuan shared the same predicament as Barangay Dalaragan. Sanitation data estimates for the whole municipality are varied and provide only rough approximations for the 61 barangays. Incomplete data from the municipal Sanitary Inspector's office reveal that of the 47 barangays surveyed, a significant 40% have either half or more households needing toilet facilities. Another notable 49% declare 27-50% of their households are without toilet facilities. In another data estimate, the total number of households in Guiuan without access to sanitation facilities is 63% (Guiuan Secondary Baseline Survey).



A typical pour-flush toilet in Guiuan. Data showed that, prior to SuSEA, the use of toilets such as these was relatively low.



Low access to sanitation facilities of many households in Guiuan helps provide some explanation to the consistent appearance of diarrheal disease as one of the five leading causes of morbidity. This is even more alarming considering that SuSEA baseline data reveal a general increase in trend of diarrheal disease in the municipality in the last five years.

Poverty and lack of gainful employment are the backdrop of such low access to sanitation facilities in Guiuan. Although the employment rate is seemingly high at 81.2%, households with incomes falling below the poverty threshold appear to persist at nearly 60% (Guiuan Secondary Baseline Survey).

From personal to government responsibility

When SuSEA came to the shores of Guiuan it was not only Barangay Captain Raguirag who was convinced of the urgency of a local sanitation project. Earlier visits by SuSEA team members had already won over to sustainable sanitation the young local chief executive of Guiuan, Mayor Annaliza Gonzales Kwan. Strongly motivated to influence the course of development of her poor town, Mayor Kwan was eager to explore areas of development missed by previous administrations and quick to respond to the concept of a local water and sanitation project.

It was Mayor Kwan's understanding of the nature, extent, and urgency of the sanitation challenge that turned out to be the single key ingredient that increased the chances of a successful SuSEA program in the Guiuan. "SuSEA opened my eyes that sanitation is one of the most important things for my constituents," Mayor Kwan once said in an interview.

Congruent vision

Prior to SuSEA, the local government unit (LGU) in Guiuan, under the focused leadership of Mayor Kwan, is heading towards the long-term vision of developing tourism, and its fishing industry. Both industries are deemed vital to generating much needed local revenues as well as employment. And certainly one of the immediate challenges in developing both industries is local sanitation.

Cautious in opening-up its beautiful shores to unrestrained tourism, the Guiuan LGU had, even before the entrance of the SuSEA project, already set-out to formulate relevant policies in investment, tourism, and solid waste management. But in 2008, open defecation was still a problem and the use of hanging toilets among the coastal villages was not uncommon. Additionally, residents along the town's only seaport where a market is situated, were not employing proper sanitation practices.



Mayor Annaliza Gonzales-Kwan used to run the only rural bank in Guiuan before joining the mayoral race in 2004. Family and friends fearing her safety tried to dissuade her from going against a local political clan that held the top municipal post for nearly 33 years in the town. But Mayor Kwan was undeterred. She was determined to help her town become better. "A good leader is someone who can bring his people from one state to a better state," she says, explaining that taking her town from a state of underdevelopment to a progressive state remains her main motivation in leading Guiuan.

With the coming of SuSEA, investing in local sanitation became a pivotal point for tourism and the local fishing industry. Local sanitation, along with tourism, became part of Mayor Kwan's flagship program. Four priority areas were identified by the Guiuan LGU for the sanitation campaign: (1) reduction of open defecation together with the improvement of access to local sanitation facilities; (2) eradication or minimization of acute gastro-enteritis and soil transmitted helminth infections; (3) improvement of the disease surveillance system; and (4) behavior change.

Through a series of consultations, it was determined that combined implementation of sanitation interventions for the eradication/reduction of disease and sanitation interventions to support sustained livelihoods in rural area would be most appropriate for Guiuan. Under SuSEA-Philippines, which uses four different models as the platform for developing specific interventions, these interventions fall under Model 1 (Disease Prevention and Control) and Model 4 (Sustainable Rural Livelihoods), respectively.*

Delegating and broadening sanitation responsibility

By creating the local core team composed of competent and key municipal personnel, Mayor Kwan helped set the local SuSEA program promptly in motion. The core team was organized into three sub-teams for planning, operations, and communications. Major players were the Municipal Vice-Mayor, the Municipal Planning & Development Officer, the Chairperson of the Health Committee of the Municipal Board and the Municipal Health Officer (MHO), who served as the coordinator for the entire team. In turn, the core team gathered inputs from other stakeholders such as local nongovernment organizations, church groups, and the private sector.

Mayor Kwan also made certain that there was sufficient budget allocation for improving sanitation facilities in her town. In the past, municipal budget allocation and utilization for sanitation had been relatively low.

Under Mayor Kwan, the sanitation budget reflected a million peso allotment in 2008 and 2009 successively. This budget was used to provide assistance to five barangays wanting to set-up local sanitation facilities within the SuSEA local program frame.

Participatory and workable sanitation solutions

In 2009, despite his earlier skepticism, Barangay Captain Raguirag set out to do what he had previously called an "impossible" task: building toilets.

Concerned that his village council would be difficult to persuade, Barangay Captain Raguirag turned to Dr. Socorro Flores, the Guiuan MHO, for help. Dr. Flores, in turn, spoke to the village council, explaining to them the interconnectedness of health and sanitation. The moment the council members were convinced, two plans — Plans A and B — were crafted to increase access to sanitation facilities in Dalaragan.

Plan A entailed encouraging households to construct "de buhos" (pour-flush) type toilets with cement flooring in plots near their houses. Drawing from barangay funds, a toilet bowl and one sack of cement were distributed to each selected household in the barangay. But after 1-2 weeks no toilets were built. Distributed materials remained untouched. Seeing the delay, barangay officials attempted to call a community assembly. Snacks will be served, they announced. But still nobody came.

Persistent, Barangay Captain Raguirag went from house-to-house asking people why they failed to install the distributed toilet bowls. As it turned out, people thought that the suggested design would not last more than a month. Soil around the cemented floor will collapse, they said. They wanted toilet facilities that were more durable and could be used for a longer period. For Plan B, Barangay Captain Raguirag turned to the Mayor's Office for PHP100,000 worth of support. Without delay, 2 cement bags, 56 hollow blocks and 2 steel bars were distributed to each household in two sitios needing to construct toilet facilities. However, after a few days, still nobody lifted a finger to



*The other two models are Model 2: Water Quality Management Area (Sanitation interventions for the improvement of water quality within a water quality management area) and Model 3: Liveable Cities (Sanitation interventions for the improvement of quality of life in cities and low-income urban poor communities).



Guiuan community members at work, this time constructing communal septic tanks for the community.



a few days, still nobody lifted a finger to construct their own toilet. Construction materials, again, remained untouched.

Encouraged by Dr. Flores, Barangay Captain Raguirag, decided that this time, he would lead the way. He began by starting the construction of one toilet facility for a nearby house in his own sitio. The house owner was very pleased upon seeing the finished toilet. And the house next door was so impressed that they wanted a toilet for their own house too. So the Barangay Captain moved on to construct another toilet for the next house. Then onto another house. Then still another.

Seeing that their Barangay Captain was constructing toilet facilities on his own, other barangay officials came in to offer help. Meanwhile other community members started volunteering their own houses for toilet construction. Soon, most of the barangay council members were pitching in free labor to build 41 toilets in two months. If no free labor or snacks were provided by the target households, Barangay Captain Raguirag encouraged council members to continue with the work and not complain. Sustainable sanitation would be its own reward.

Despite all the efforts and sacrifices, there were still some residents in Dalaragan that were not provided with a toilet facility. To rectify this, barangay funds were used to buy some bags

of cement and piled-up old tires to use as makeshift septic tanks. Toilet bowls were molded using an old Department of Health pattern provided by Dr. Flores. Nine additional toilet facilities were constructed.

Today, only two households in Dalaragan are without proper sanitation facilities. Sanitation efforts in Dalaragan also extended to other aspects of community life such as proper solid waste management. Currently, barangay officials are campaigning for the segregation of household waste: biodegradable household wastes are buried while plastics are set-aside for recycling. The barangay is also working on a local ordinance requiring all houses to be constructed to have provisions for a sanitation facility.

Appropriate sanitation solutions

Other priority barangays in Guiuan have since come out with workable sanitation solutions. The use of a percentage of the barangay development fund has been a common solution among villages that were able to build a significant number of toilet facilities. Another solution the barangay leaders have successfully tried is the raffling out of material for toilet facilities in situations where resources are low but demand for sanitation facilities is high.

The raffle guarantees that no one is unnecessarily favored, preventing future conflict in the community. Additionally, the limitation in land area in some communities where houses are either built too close to each other has been addressed by building communal toilets. Communal toilets also provide a workable solution in cases where there are limited funds available for sanitation facilities.

For houses constructed over a water surface, the construction of a piped system where all households will be connected to a communal facility along the sides of the jetty has been proposed. This communal facility, called the Decentralized Wastewater Treatment System, is hoped to service up to more than 200 households and will be accompanied by some road widening. Although some people have raised concern regarding compensation for houses that will be relocated, most are anticipating the success of the local sanitation program in their area.

Key upshots

Hoping to trigger awareness and move local communities into concerted action, SuSEA carried out a series of workshops among target barangays. Of the 12 barangays in Guiuan, ten underwent triggering sessions through the formulation of community-led total sanitation (CLTS) planning.



Communal toilets constructed by the Guiuan LGU at a public elementary school.

Villages included in the priority barangays that underwent triggering sessions constructed the most number of toilet facilities since the SuSEA program began, putting up as many as 50 new toilet facilities in the case of Dalaragan. This can be partially attributed to the persistence of monitoring in Dalaragan as in other villages that constructed a significant number of toilet facilities. Barangay leaders attested to the dedication and patience of the local core team, particularly Dr. Flores, in following-up construction efforts through community visits and constant communication regarding the status of community sanitation plans.

The story of Guiuan animated how the SuSEA intervention increased awareness in the LGU regarding local sanitation and in turn, accelerated its response.

Table : List of Barangays with CLTS

BARANGAY	TOTAL HH NUMBER	HOUSEHOLDS WITH TOILET FACILITY		DIFFERENCE
		BASELINE	POST INTERVENTION	
In Priority List				
DALARAGAN	73	21	71	50
TAYTAY	175	94	130	36
BARBO	133	79	103	24
BUNGTOD	189	76	87	11
SAN JUAN	109	22	22	0
Not In Original Priority List				
SULANGAN	730	454	455	1
BAGUA	120	68	71	3
PAGNAMITAN	121	66	661	0
BARAS	274	161	69	8
TRINIDAD	95	56	61	5



A member of a triggered CLTS community standing proudly beside the toilet he has built.

Amidst competing priority, sanitation received focus as it was harmonized with the local economic development program on tourism and marine conservation. The participatory nature of the intervention helped sustain interest and generated the concerted actions of local stakeholders while the Local Core Team's monitoring ensured the delivery of targets to increase access to local sanitation facilities.

MAKING WAY FOR SILWAY *A SuSEA story of sanitation in Polomolok and South Cotabato*

POLOMOLOK



The Silway River traverses the municipalities of T'boli, Tupi, Polomolok, and General Santos City.

The artist Vincent van Gogh once said, "Great things are done by a series of small things brought together." For the Environmental Management Bureau (EMB) XII (SOCKSARGEN*) Regional

Office and its partners, this certainly proved true in their efforts to have the Silway River designated as a Water Quality Management Area (WQMA).

For the people who worked so

*SOCKSARGEN stands for South Cotabato, Sultan Kudarat, Sarangani, and General Santos

hard for the designation of the Silway River as a WQMA, that success was no insignificant feat: The Silway River is only the 5th body of water to receive the designation as a WQMA in the entire country, the first for a freshwater body in Mindanao and the 2nd in the region and the whole of Mindanao, after the Sarangani Bay.

As a WQMA, Silway becomes a priority concern of the local government units (LGUs), water districts, EMB XII, and other national offices in the SOCSKSARGEN. These institutions, which will serve as the governing board, will make the WQMA operational, undertake its mandated functions and responsibilities, and exert all their efforts to find and allocate the resources to improve and monitor the once clear waters of Silway.

Based on the Clean Water Act of 2004, the EMB is responsible for the provision of a comprehensive water quality management of water bodies. This includes regular monitoring of the body of water and surrounding industries and their effluents. Water quality monitoring through periodic sampling is a crucial step in designating a WQMA.

While the EMB Region XII (SOCSKSARGEN Regional Office) had long wanted to conduct water sampling particularly of the Silway River, insufficient funds had been hampering their efforts. The EMB needed PHP1 million on the average to be able to buy the reagents or chemicals necessary to analyze the water quality of samples from the river, support transportation and mobilization of EMB personnel in establishing water monitoring stations, and regularly conduct water sampling of the river for one year. How water sampling was eventually conducted and how the results of this sampling became the basis for the eventual designation of the Silway River as a WQMA is the story of this article.

Silway as a priority

The Silway River is an important source of water supply in South Cotabato, serving at least 3 municipalities (T'boli, Tupi, Polomolok), one city (General Santos or GenSan), and including a watershed that runs across an estimated 9,000 hectares of prime and productive

agricultural lands. Because of the river's association with GenSan, well known for its tuna, there is greater pressure to keep the waters of Silway safe. If pollution of the Silway River remains unchecked, this could lead to the wrong perception that tuna from GenSan comes from polluted waters, likely affecting sales of one of the country's top export commodities and weakening the tuna industry, which contributes to about 4% of the Gross National Product and provides employment and livelihood to over one million Filipinos.

Need for collaboration

Getting the Silway River designated as a WQMA was not an easy task. Key stakeholders, specifically the LGUs, which have territorial responsibility over areas where the river traverses, needed to collaborate with one another towards shared responsibility of enforcing policies and ordinances and implementing water pollution programs aimed at improving the water quality of Silway River. Because the river flows from the mountainous municipality of T'boli, cutting across Tupi and Polomolok and drains down into the Sarangani Bay in General Santos City, the cooperation of no less than 46 barangays, three municipal LGUs, and a city was needed.

Through the Sustainable Sanitation in East Asia (SuSEA) project of the World Bank under its Water and Sanitation Program, initial groundwork and close coordination were conducted among the concerned LGUs and stakeholders. Initially, only Polomolok and General Santos City were the target areas for SuSEA in designating a WQMA. But upon realizing that the municipalities of T'boli and Tupi were also contributors to the river's contamination, the SuSEA team and its local partners worked toward involving the two municipalities in the WQMA process.

Previous data had shown that there was a high incidence of waterborne diseases mainly due to poor sanitation practices, including open defecation, and the lack of sanitary toilets. Additionally, the level of contamination of the Silway River was mainly attributed to domestic wastes, resulting to the river's contamination, the SuSEA



EMB Region XII, Polomolok LGU, and Provincial Environment and Natural Resources Office staff conducting water sampling, one of the actions necessary to designate a WQMA.

team and its local partners worked toward involving the two municipalities in the WQMA process.

Previous data had shown that there was a high incidence of water-borne diseases mainly due to poor sanitation practices, including open defecation, and the lack of sanitary toilets. Additionally, the level of contamination of the Silway River was mainly attributed to domestic wastes, resulting in the rise of diseases among children, especially during the rainy season when the water level goes up. Many residents along the river defecate openly while their untreated water from piggeries, etc. and undsludged septic tanks drain to the river and at times seep to the ground water.

LGU commitment and SuSEA

Because SuSEA wanted to equip key stakeholders with skills and knowledge for addressing the problem of open defecation, including the designation of the Silway River as a WQMA, it organized several workshops and consultations. Through SuSEA, the political will of the LGUs gradually came into the picture.

Some 400-500 participants attended about 20 consultations and workshops on sanitation and designating a WQMA from October 2008 to January 2010. The reaction to these workshops and consultations was overwhelming.

Suddenly, the EMB Regional office was not alone in its quest to conduct complete water monitoring and sampling of the Silway River. When SuSEA provided the needed funds for the conduct of the water sampling, the Municipal Government of Polomolok and the City Government of General Santos also followed suit. Each LGU provided funds from their supplemental budget while they were joined in by two other municipal governments in providing personnel, some of whom were engineers while others were from health, sanitation, and pollution control departments. All had learned to appreciate the environmental relevance of the new experience with the EMB whose personnel led the water monitoring and analysis activities from the upper to downstream parts of the Silway River.

The effort to have the Silway River designated as a WQMA was a critical part of SuSEA's goal to improve sanitation practices in these areas. In recounting the WQMA process, Engr. Mar Perez, Deputy Team Leader of SuSEA explains, "To many among the Silway communities, awareness raising was not very necessary to get their commitment. They knew the state of the river even before SuSEA came in. They needed the push and SuSEA gave that needed force to help them organize their efforts and get things going for the river and for the benefit of the people in the long run."

Sweet WQMA success

After having completed the full water monitoring and quality analysis of Silway River, the EMB Region XII was able to write a report to the Department of Environment and Natural Resources (DENR) using the water sampling results, documentation of stakeholder consultations, maps, and endorsements or

resolutions to recommend the designation of the Silway River as a WQMA. The three municipalities of T'boli, Tupi, and Polomolok as well as the City of General Santos, also signed a resolution supporting and recommending the same WQMA designation.

The ultimate accomplishment came in April 19, 2010 when the DENR

the 1996 water quality standards. The Philippines is off-track in its Millennium Development Goals for both rural water and rural sanitation. The designation of a WQMA is one of the strategies identified by the Clean Water Act to address this situation. It is one big step to improve our water bodies with the participation of all people and institutions concerned.



One of the many stakeholder consultation meetings on designating a WQMA.

officially designated the Silway River as a WQMA in Polomolok, South Cotabato through Administrative Order 2010-10. The efforts and support from the LGUs of these municipalities and city, manifested also by official resolutions and communications, went a long way towards convincing the DENR of the Silway River as a model for WQMAs in the country.

Alarming state of water bodies

The state of freshwater bodies in the Philippines has been worsening over the past several years as reported by various Official Development Assistance agencies and by the DENR itself. In 2007, the DENR reported that of the 457 water bodies classified; only 51% meet

Now having two WQMAs under its region, the EMB SOCSKSARGEN has every reason to be proud. But the work is not over yet. The EMB Regional Office still has to stimulate the momentum and mobilize the key stakeholders, particularly the LGUs, to make the Sarangani Bay and Silway River WQMAs work. This means constant vigilance, through regular monitoring of Silway's water quality by the EMB and making sure that the local WQMA institutions, i.e., the Governing Board, the Multi-Sectoral Group and the Technical Secretariat are operational and are aided by effective management systems. The LGUs have to demonstrate their political will and stand firm with their commitment in protecting the river.



The SuSEA LGU Experience: Polomolok

In time, perhaps, with the concerted efforts of everyone, the LGUs, the various stakeholders and EMB will succeed in bringing the river back to what it was before – a source of life for all the communities surrounding it and the tuna of Sarangani Bay.

For a better, cleaner Silway River and Polomolok

For the municipality of Polomolok, there were two reasons for participating in the SuSEA project. The first was to help in reviving the Silway River, as they understood its importance to the Sarangani Bay, a declared Protected Seascape area (Proclamation No. 756, March 5, 1996). The second was to rid themselves of the perception as a stinking municipality. “We wanted to change the people’s perception that when you say Polomolok it means the foul awful smell coming from our areas,” explains Mr. Eronio Muno, Municipal Planning and Development Coordinator of Polomolok. Aside from the water sampling activities, Polomolok’s municipal personnel also participated in the Community-Led Total Sanitation (CLTS) training of facilitators where they realized the importance of community involvement, especially the local leaders, in changing their constituents’ behavior of defecating in open areas along the Silway River and other smaller water bodies draining to this river.

“Through CLTS, we realized the importance of community involvement in sanitation, especially in constructing and using toilets. We also realized that increasing the awareness of the people is very important. They are the natural leaders,” shares Mr. Muno. Following the CLTS, the Municipal Government of Polomolok engaged the participation of barangay captains, barangay health workers, schoolteachers, and principals in their campaign for toilet construction and use. Employing the same activities and demonstrations they learned during the CLTS training and through actual community sanitation mapping, Polomolok made residents realize how

easily human excreta can contaminate the food they eat through open defecation and the presence of flies. Soon the residents started building toilets. “We have triggered* villages, specifically those along the Silway River, through CLTS. We gathered all local leaders and assigned monitoring teams to ensure that toilets are constructed and used appropriately,” says Engr. Hezel Marullano, Engineer I of Polomolok.

“They now know how to build toilets from the toilet bowls we have distributed,” Mr. Muno happily announces. Before SuSEA, Polomolok residents used the toilet bowls they received from the municipal government as hen’s nests or plant pots. “They did not realize the importance of having and using toilets until they saw how and why their children often suffer from diarrhea. The demonstrations of how flies transfer human excreta into the food we eat horrified them,” continues Mr. Muno. The Municipal Government of Polomolok still monitors the triggered villages and thinks of ways to reinforce toilet construction and use and to reward communities, which will be certified and announced as having “Zero Open Defecation.”

For the Municipal Government, one of the best parts of the success of CLTS in Polomolok is the savings. “When the people tell us they don’t have money to construct toilets, we explain how having and using toilets can save them in the long run by not spending money for their sick children caused by diarrhea. We used our own health data from our Municipal Health Office and from the baseline study conducted by SuSEA,” shares Mr. Muno, who notes that according to the baseline study, diarrhea has consistently been among the top three causes of morbidity in Polomolok for the past several years. With the introduction of CLTS in the municipality, it is hoped that diarrhea, will soon become mere problems of the past. “From 2009, there have been no incidents of mass cases of diarrhea, especially in the communities where Muslims and Indigenous Peoples reside. This is why we plan on expanding CLTS to other barangays,” says Dr. Edwin Dipus, Municipal Health Officer of Polomolok.

**Triggering refers to the process of facilitating a local community’s analysis of its own sanitation situation and profile, using participatory exercises and tools, with the objective eliciting a realization of the adverse effects of open defecation and a decision to take action to stop the practice (Guidebook for Community-Led Total Sanitation)*



Community members engaged in a CLTS activity.



One of the main reasons for the success of introducing CLTS in Polomolok is the participation of local leaders like Barangay Captain Felix Bacaling of Barangay Koronadal Proper. Barangay Captain Bacaling, who participated in the CLTS training conducted by SuSEA, strove to implement the lessons he learned in his barangay by painstakingly visiting each house in his jurisdiction and explaining the benefits of constructing and using toilets. He recalls, “The people here got used to

The Municipal Government of Polomolok reached vendors, nearby residents and customers of the public market through information, education and communication activities that explained the need to stop open defecation and maintain cleanliness in the market. These were followed by the improvement of public toilets in the market and the addition of a detailed guard to ensure that nobody would open defecate within the surroundings.

The Polomolok LGU also constructed a wastewater treatment facility in the public market. In mid-2009, the Municipal Government started the construction of the wastewater treatment facility was found to be unable

defecating in the open; for some it has been part of their culture. Through the CLTS activities, the people realized how they get sick from their own wastes. This convinced them to construct their toilets. Others just followed suit since they get embarrassed from not owning one.”

In addition to his personal advocacy, Barangay Captain Bacaling also passed an ordinance prohibiting his constituents from hosting backyard piggeries without proper septic tanks. The ordinance is intended to benefit not only the constituents of Brgy. Koronadal Proper, but the users of the Silway River as well. “In the 1960s, we could still swim and bathe in the river,” shares Barangay Captain Bacaling, “Now, we can get skin diseases. Before the introduction of CLTS, floating feces goes with us when we cross the river. Now, we don’t see much of that anymore.”

The stinky public market

Polomolok also started implementing sanitation interventions in the public market, which had been the main source of the foul odor in the municipality and whose wastes also directly affect the Silway River. Before the sanitation interventions, vendors and nearby residents of the public market were reported to openly defecate within the market’s surroundings while SuSEA’s Polomolok Zero Open Defecation Program report showed that the “septic tank in the market’s public toilets overflow directly to the canals in the market.”

to fully process waste and thus, get rid of the public market’s foul smell due to a problem in design and the occurrence of electrical interruption, the Municipal Government has allocated PHP4 million to fund a generator that will support the full operation of the wastewater treatment facility and finally eliminate the foul smell emanating from the market.

A continuous commitment

By now, Polomolok has drafted its Municipal Ordinance on Water Pollution Control and Septage Management, which they are hoping will be passed



The Polomolok Public Market was a main sanitation intervention area.

soon. The Ordinance covers activities to minimize, if not keep pollution entirely off, the Silway River by improving sanitation practices of their constituents both in public and private places, and including the construction of toilets and septic tanks in houses.

"We have started lobbying with possible officials, including the committees in health and environment of the Sangguniang Bayan, to make sure that this important ordinance is passed. This can be considered as a flagship of the Mayor," explains Mr. Muno.

Polomolok will also start reviewing its Local Sustainable Sanitation Plan (LSSP), particularly the immediate activities that have to be implemented. "We have to review the LSSP and make sure that budget is allocated. We are now preparing our Annual Investment Plan and we have to make sure that our target activities in the LSSP and Ordinance will be implemented and are included in our budget for 2011," Mr. Muno further explains.

The budget planning also considered Polomolok's commitment to the Silway WQMA. Even after the designation of Silway River as a WQMA, Polomolok remains supportive through committing funds in its Annual Investment Plan for 2011 to support EMB in its continuous water monitoring of the river.

The Municipal Planning and Development Office will provide a vehicle to help the EMB in its field activities in the area. The EMB has already informed the concerned LGUs, which will comprise the Governing Board of Silway WQMA, of the requisites to keep their initial efforts in full momentum. Polomolok is among the first to register its commitment.

Consistent towards cityhood

Other than the commitment to health and environment, Polomolok also aspires to become a city. "What we appreciate with SuSEA is that it provided us clearer and effective ways to become a cleaner and healthier municipality. For us, a healthy environment is one of the indicators for cityhood," explains Mr. Muno. Polomolok will update its revenue code to reach the needed PHP100 million revenue target as one of the prerequisites for cityhood aside from population and land area.

With the improving sanitation practices in Polomolok, the Municipal Government may just hit several birds in one stone. As the Municipality is expecting better perception of the people in Polomolok soon, this will eventually lead to improved tourism, which in turn can contribute to their revenues to help reach that PHP100 million revenue target. "It will no longer be shameful for us Polomolok residents. People will soon change their mindset of Polomolok as a stinky place. And this can improve our tourism soon," explains Mr. Muno.

Clearly, in the Municipality of Polomolok and for the Silway River, great things have already been happening, put together by a series of small things through the efforts of stakeholders and people, holding steadfast in their commitment to sustainable sanitation. It is these efforts, great and small, which make a difference to the cause of sanitation as whole. It is hoped that such efforts may be replicated by other LGUs and start another series of small steps to make another great change in the journey towards national sustainable sanitation.

