

e-newsletter

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The view overlooking the Mangroves Forest Conservation Park in Calatagan, Batangas.



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TAO conducts technical capability-building activities with CA-assisted communities in Rizal

EARLY THIS YEAR, TAO-PILIPINAS, INC. UNDERTOOK A PROJECT ENTITLED *“Initiating Self-Help Small Infrastructure Development with Technical Capability-Building towards the Development of Community Disaster Preparedness and Mitigation Plan”*. This project, through the funding support of Christian Aid, aims to provide technical assistance and training to four communities in the province of Rizal that were devastated by Typhoon Ketsana in September 2009. The training component of the project includes a series of technical capability-building activities, the first focusing on community planning and development and a second on house retrofitting for disaster risk reduction. A workshop on the formulation of community guidelines for the use and maintenance of DRR facilities was also part of the training series.

Participants of the training series were about forty (40) representatives of the different communities assisted by Christian Aid

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Technical trainings for CA-assisted communities in Rizal:
Community Planning and Development * House Retrofitting for DRR * Formulation of Community Guidelines

TAO Project Updates:
YP internships * Staff R&R * Habagat relief operation

YP Reading List:
Follet's The Pillars of the Earth
Chan's Sustainable Environments
Potter's What is a designer

“Every kindness I received, small or big, convinced me that there could never be enough of it in our world. To be kind is to respond with sensitivity and human warmth to the hopes and needs of others. Even the briefest touch of kindness can lighten a heavy heart. Kindness can change the lives of people.”

- **Aung San Suu Kyi**, Burmese pro-democracy leader and 1991 Nobel Peace Prize awardee

TAO conducts technical trainings... (From page 1)

namely Banaba, San Mateo; Suburban, Rodriguez; Sabah, Rodriguez; and Damayan Floodway, Taytay. Also present were representatives from the following Christian Aid partner organizations: Center for Disaster Preparedness (CDP), Community Organizers Multiversity (COM), and Socio-Pastoral Institute (SPI).

Training on Community Planning and Development

The first technical capability-building activity in the series that TAO-Pilipinas conducted was the Training on Community Planning and Development (or CPD Training). The 2-day activity was held at the Function Room of The First Villa Cristina Hotel and Resort in Antipolo City on June 20-21, 2012.

The objectives of the CPD training were for the participants to: 1) understand the technical processes involved in community planning and development; 2) have adequate knowledge of technical standards for social housing and community infrastructure development, particularly Batas Pambansa 220 and other provisions of pertinent building design and construction laws; and 3) be knowledgeable of basic engineering guidelines for site development and construction of community infrastructures such as roadways, drainage and sewerage systems, and water supply lines. Four modules made up the training program and several lectures were presented by the architects and environmental planners from TAO-Pilipinas and engineers from AMH Philippines. The lectures included the following topics and presenters:

- “Technical Professionals and Processes in Community Planning and Development” by Arch. Geraldine Matabang
- “Understanding Technical Plans and Drawings” by Arch. Verna Sarraga
- “Planning and Designing Subdivision Housing Developments” by Arch. Arlene Lusterio
- “Planning and Designing Medium Rise Housing” by Arch. Angelus Sales
- “Engineering Design of Roads and Drainage Systems” by Engr. Ellen Del Rosario and Engr. Leandro Olaño Jr.
- “Engineering Design of Sewerage and Water Supply Systems” by Engr. Edsel Edra
- “Disaster-resilient Community Infrastructures” by Engr. Dius Bernal
- “Basic Guide to Building a House Made of Concrete” by Arch. Faith Varona
- “Alternative Building Materials for Low-cost Housing” by Arch. Angelus Sales

All of the lectures were delivered in Filipino and in layman’s terms as the audience were mostly community members and non-technical people. The participants actively took part in the open forum discussions, taking the opportunity to seek technical advice from the architects and engineers present. Many of the community leaders articulated concerns on basic services and infrastructures in their communities and sought technical recommendations to solve their problems. To test their understanding of the technical lectures presented, the participants were given a short group quiz on reading technical plans and drawings. They also joined in simulated



Participants of the training on community planning and development pose in front of the activity venue in Antipolo, Rizal



Participants listen to lectures and refer to training materials given during the training on community planning and development

planning workshops where they were formed into groups to create a site plan and housing design scheme using the planning tools developed by TAO-Pilipinas.

Upon evaluation of the CPD training, the participants were satisfied with how the training was conducted. It was able to meet their learning expectations which they set at the start of the program and in the community training needs they expressed during the Training Needs Assessment (TNA) conducted early on before the training proper. (Angel Sales; Ge Matabang)

Training on House Retrofitting

A month after the CPD Training, TAO-Pilipinas conducted the Training on House Retrofitting on July 25-26, 2012. Two days were also allotted for this training and it was likewise held at the Villa Cristina Resort in Antipolo City. Part of the training is a hands-on demonstration of house retrofitting, with a number of houses in Suburban Phase 1B to be selected as actual demonstration cases.

Two modules were discussed on the first day of the training, namely Introduction to House Retrofitting for Disaster Risk Reduction and Assessment Tools for House Retrofitting. In the first module, the team of engineers from AMH Philippines oriented the participants on the general

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Training on House Retrofitting (From page 2)

principles of house retrofitting against earthquakes and rain-induced flooding. Typical local examples of house damage from typhoons, earthquakes and flooding were discussed. Retrofitting measures for earthquake-resistance were shown as well as mitigation methods for flooding. They discussed engineering solutions that can be applied to ensure structure survivability.

In the next module, the resource persons introduced a checklist as a tool for the assessment of houses for retrofitting. The checklist can be used by the participants in evaluating which parts of existing houses need retrofitting for it to be more disaster-resilient. Each item on the checklist was explained and participants were taught how to visually inspect the structural condition of a house. In the afternoon session, they were grouped into teams and went to Suburban Phase 1B in Rodriguez, Rizal to inspect a number of houses using the checklist as assessment tool. Each team was assigned to complete the assessment of a house that is a typical one-storey socialized housing unit in Suburban. In selecting which houses will be assessed, five were chosen as possible retrofitting demonstration cases based on a selection criteria established by the Suburban HOA.

On the second day of the training, each team presented the results of their assessment to the AMH engineers. The groups identified various structural defects in the houses they inspected. Many cracks on the walls and floors of houses were noted. Among the hazardous conditions of the houses they observed were the proximity to a fault trace and some houses along the creek were already experiencing settlement in their flooring due to erosion. They also took notice that the houses do not have reinforced columns and beams. The engineers from AMH validated their observations (as they have inspected a number of the houses prior to the training) and corrected a few apparent misunderstanding of structural engineering concepts by the participants.

After the participants reported on their assessment results, the AMH engineers presented their findings of the structural conditions of the houses in Suburban and the appropriate retrofitting measures that may be applied. They noted three structural improvements that may be done to strengthen the houses (without adding another storey to it): installation of reinforced concrete roof beams; installation of lintel / stiffener

beams and stiffener columns on door and window openings; and plastering of cracks on floors (for moderate cracks) or installation of reinforced slab (for floors with settlement). Their recommendations were limited by the small budget allotted for actual retrofitting.

An important clarification was made by the engineers with regards to the retrofitting of houses on fault traces and houses along the creek experiencing soil erosion with floor settlement. For these cases, they considered it useless to retrofit so they did not recommend it since houses should not be constructed very near fault traces and in the other case, soil erosion along the creek should be addressed first. Only three houses were given recommendation to be retrofitted with the understanding that the retrofitting measures do not guarantee that the house will not be damaged in the event of a strong earthquake in the area.

At the end of the 2-day training, the organizers and participants made arrangements on the schedule and preparations needed for the conduct of the third module of the training which is the hands-on demonstration or actual retrofitting works in the three houses selected. Training participants with construction skills were noted as well as the construction tools that they volunteered to lend for the retrofitting. The hands-on demonstration was set on August 10, 2012. (*Ge Matabang*)

Workshop on Formulation of Community Guidelines

On August 4, 2012 the training participants were again gathered this time at the PHALTRA Conference Room in Quezon City to undergo a workshop on formulation of community guidelines. This activity entitled "Workshop on Formulation of Guidelines for the Use and Development of Community Structures for DRR" annexes the 2-part training activities conducted by TAO-Pilipinas. The workshop aims to provide the training participants with capability to formulate appropriate rules and guidelines for the use of community facilities for disaster risk reduction (DRR). It is also intended to initiate the formulation of draft guidelines specifically for community structures that will be built under the Christian Aid Post-Ketsana Rehabilitation Program. Among the DRR facilities planned under the program are the following:

- Evacuation-Livelihood Center in Banaba, San Mateo;
- Multi-Purpose Hall and improvements in the existing Covered Court (as Temporary Evacuation Facility) in Suburban, Rodriguez;
- Improvements in San Jose Elem. School (as Evacuation Center) in Sabah, Rodriguez; and
- Disaster-Resilient Model House (also as Multi-Purpose Facility) in Floodway, Taytay, Rizal.

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(L) Engineers from AMH Philippines explain retrofitting measures using the scaled model of a typical housing unit in Suburban, Rizal. (R) Training participants conducted an ocular inspection and assessment of houses in Suburban.



Participants gather at the Suburban Covered Court for the assessment of houses

Workshop on Community Guidelines

(From page 3)

TAO-Pilipinas gave a presentation for the participants to understand the rationale and importance of developing community guidelines for structure use and maintenance. They were also oriented on the process or steps in formulating the community guidelines and a guide/template which they can use was explained to them. The template was a set of guide questions organized according to themes. These included themes on Site Maintenance and Improvement; Use of Facility; and Infrastructure/Building Structure Utilities and Services. Also tackled in the template are the rationale and context for imposing guidelines and the proposed sanctions/penalties for non-compliance.

The participants were then grouped according to their communities and had two focus group discussions. In the first FGD, they were given role-playing situations that involved conflicts in the use of community facilities. They role-played a cast of characters and showed how such conflicts may be resolved in the community while underscoring the importance of setting guidelines in the use of community facilities. In the second FGD, the groups were tasked to draft a preliminary set of guidelines for the DRR facilities planned in their communities using the template that was explained to them. Because of time constraint the groups were asked to just prioritize five to seven themes in the guide questions.

As each group presented the preliminary guidelines they drafted, TAO-Pilipinas facilitators looked at the factors they took into consideration in formulating the rules and highlighted other issues they may have not considered in their proposed guidelines. The groups likewise shared community experiences in evacuating during emergencies and organizing evacuees. These gave the participants ideas on how to even out some of the problem areas in their proposed guidelines.

The workshop output by the participants shall serve as an initial draft that will have to be completed and finalized in consultation with the community. (*Ge Matabang*)

Hands-On Demonstration of House Retrofitting

After being postponed twice because of the strong *habagat* (southwest monsoon) winds during the second week of August, the third module of the Training on House Retrofitting was finally held on August 25, 2012. This final module of the training involved a hands-on demonstration of actual retrofitting works in Suburban Phase 1B, Rodriguez Rizal. Prior to the August 25 activity, preparations were already made by TAO-Pilipinas and the Suburban HOA to talk with the three homeowners whose houses will be retrofitted and to canvass and purchase the materials needed for the retrofitting. The three retrofitting beneficiaries selected were Mr. Pedro Panes of Block 15 Lot 110, Ms. Marites Aguilar of Block 15 Lot 22, and Mr. David Gahera of Block 4 Lot 21.

The training participants were divided into three groups, making sure that each group had members with construction skills. Some skilled relatives of the beneficiaries also helped in



Participants, grouped according to community, discuss and draft guidelines for proposed community DRR facilities

the construction work and additional skilled workers were hired to finish the retrofitting within three days. Engineers from AMH Philippines who recommended the retrofitting measures were on hand to give instructions to the groups. Retrofitting works done included plastering of cracks on walls and floors; removal of existing floor and replacement with reinforced slab; and installation of a stabilizing wall in one house.

At the end of the day, the training participants reconvened at the Suburban Covered Court. Certificates of participation were given to those who were able to complete the training. Skilled workers hired by the HOA along with the beneficiaries' family members were tasked to complete the remaining construction works. TAO staff returned to the site on August 29 to document the completed retrofitting works in the three houses. (*Ge Matabang*)



Engineers from AMH give instructions to the construction teams in the actual retrofitting of three houses in Suburban



Prior to doing the actual retrofitting works, participants are shown mock-ups of parts of the house that will be retrofitted.

Eleven complete YP summer internship

ELEVEN INTERNS -- A MIX OF ARCHITECTURE, civil engineering and environmental planning students -- presented their internship outputs as TAO-Pilipinas concluded its YP Summer Internship Program for 2012. The summer interns' culminating activity was held at the College of Architecture, UP-Diliman campus on May 29, 2012. A simple graduation ceremony was also held at the end of their presentations.



The summer internship program is implemented by TAO-Pilipinas as a second-stage learning process for participants of the YP Workshop on Social Housing. Interns are tasked to assist TAO project teams in office work and field work activities while exploring the relationship between technical assistance and community development. For this year's program, the interns were involved in several projects including the Masagana Resettlement Project; Design and Drafting of 5 Houses for SAPSPA; Retrofitting of Community Infrastructures in Pulo, Navotas; Small Infrastructures Development in Ketsana-affected Communities; Development of Tools for Community Planning Workshops; and Drafting and Design of Model Houses.

Among those who completed the internship were Melody Sonsona (TIP-Engg), Jessabel Saria (PUP-Arch), Alver Remolar (UP-Arch), Glenn Matre (PUP-Arch), Cris Mabato (PUP-Arch), Hazel Lapastora (UP-Arch), Sarah Chavez (Miriam-Envtal Planning), Mharren Castro (UP-Arch), Cristina Belen (PUP-Arch), Russell Amada (UE-Engg), and Mark Alarcon (UE-Engg).

At the culminating activity, TAO architects were joined by Dean Ted Inocencio of PUP-CAFA in giving feedback and reviewing the interns' outputs. Apart from the technical outputs, the interns also presented their personal reflections and the most important challenges and lessons from their internship experience at TAO. *(Ge Matabang)*



TAO staff visit mangrove forest conservation project in Batangas

STAFF R&R AT TAO-PILIPINAS IS NEVER WITHOUT ITS educational component. That maxim was proven true once more as this year's summer R&R for TAO staff in the beach towns of Calatagan, Batangas was also an opportunity to visit the Calatagan Mangroves Forest Conservation Park. Referred to locally as "Ang Pulo" (The Island), the marine-protected sanctuary is managed by the people's organization PALITAKAN with technical support from the local government and non-government organizations.

The TAO group's visit to Ang Pulo on May 22, 2012 was facilitated by Jessie Delos Reyes of Conserve and Protect Oceans Foundation. Local tour guides from the people's organization provided a brief history of the park that is now home to about 20 species of mangroves as well as a variety of fishes. Pride for the local project is apparent as the locals attest to the actual benefits mangroves conservation has provided them such as protection from storm surges and flooding and abundant marine life. The TAO group was in turn impressed by their initiative and efforts to conserve the mangrove areas and was inspired by the natural beauty of the area. The visit roused a wish for the remaining mangrove areas in Metro Manila (especially in Navotas) to be similarly protected and propagated. *(Ge Matabang)*

Habagat relief operation by TAO

THE INTENSE FLOODING BROUGHT ABOUT BY HABAGAT (SOUTHWEST monsoon) occurred last August 7 and 8 when almost all of Luzon was underwater again. TAO-Pilipinas sent text messages to all its community partners in vulnerable areas asking about their situation, if people have to evacuate, how many are affected, sick, lost/destroyed their homes, how many families were affected and what kind of support is needed. Responses through SMS were received from community partners with detailed number of families affected, sickness and age groups affected. No house was reported destroyed. Some did not leave their house during the floods and those who evacuated returned the day after.

The most vulnerable partner community in Sitio Pulo, experienced extremely high waters of about 2m and decided to move their houses away from the coast through bayanihan the week before the habagat floods. So that during habagat, they reported no sickness, no destroyed houses but requested food relief because many of their fishermen members were not able to go to sea.

Masagana, another very vulnerable community in the middle of fishponds, fortunately moved to Angat, Bulacan in Mid-July. Some members who were left in Navotas and Malabon were however not spared by the floods. Even those in Angat who were not flooded, were not able to go to work during the week of the intense flood because they still sell in Malabon and Navotas area.

The data gathered from community partners were consolidated by TAO and was included in the call for help posted in the TAO website and the data submitted to Philippine Misereor Partnership Inc. (PMPI). Some friends responded with donations of old clothes and cash.

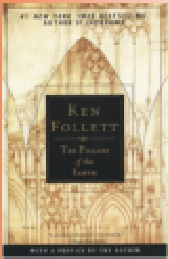
The number of families affected totalled 245 and with the amount received from PMPI and other donations, TAO decided to undertake a quick response. Relief food packs were purchased to cover the total number of families needing support. Purchase and packing was done in one day and a half and distribution was done in the afternoon until evening of the second day. Confirmation of schedule was made with key leaders. Based on their submitted number of affected families, relief packs were allocated per community. The relief goods were distributed on August 16, 2012. (Arlene Lusterio)



Relief items were purchased and packed and then distributed to 245 affected families in TAO-assisted communities in Navotas and Malabon.

YP Reading List

Books and other materials featured in this section are available at the TAO Resource Center & Library. Library use is by appointment and guidelines may be viewed at <http://www.tao-pilipinas.org/resources/library>. You may call Angel Sales at 441-0998 / 436-7301 or email lib@tao-pilipinas.org to schedule your visit.



Title: **The Pillars of the Earth**

Author: **Ken Follett**

Publisher: **Signet (1990)**

Best known for his tautly suspenseful espionage thrillers, Ken Follett takes a radical departure far into the past with an enthralling epic story about the construction of a cathedral in the fictional town of Kingsbridge set in the 12th century.

In the book, we follow Tom as he plans out a cathedral, and see how it's the kind of edifice that a builder lives to create. Later, Jack yearns to carve not merely the decorative geometric shapes he has been given to work on, but the natural shapes and designs, and he eventually does carve a figure that strains and grimaces, as it appears to hold up a part of the church. Unfortunately, the local bishop is a power hungry man with other plans. He works to disrupt the prior's efforts at every turn. His frequent ally in this is a cruel and vengeful earl consumed by his own greed. Overall, this book engages you in a medieval emotional roller coaster ride filled with love, joy and happiness mixed in with scenes of greed, cruelty, violence and tragedy.

One of the most enjoyable elements is the way Follett shares his love of cathedrals and his knowledge of Gothic Architecture through his rich and meticulous attention to detail. It's fascinating how he creates a vivid 3D image explaining the processes that takes place. How he picturesquely describes nature, buildings and the humble monastic life in that time draws you into every page. It's these details that make people fall in love with this novel. With a story spanning over 50 years (1123-1174), the 1008 (originally) pages of this book are all needed to weave this multi-generational story together effectively. And if you're a junkie for structures, architecture and medieval epics, you'll surely fall for this timeless classic. *(Klervin Collado)*



Title: **Sustainable Environments**

Author: **Yenna Chan**

Publisher: **Rockport Publishers (2007)**

Contemporary Design in Detail: Sustainable Environments documents sustainable design strategies in residential architecture. Like today's growing number of publications about sustainable architecture, this coffee-table book urges its reader to rethink conventional building design and

construction and to adopt more ecologically-conscious practices. It is also filled with delightful photography to highlight this point. But what is notable about this publication is how the author organized the sections according to strategies/innovation instead of just featuring residential projects in sequence. The book is structured into four sections --- Response to Place, Connection to Habitat, Conservation of Resources, and Use of Building Materials --- that show how the various projects explored sustainability. This logical division more succinctly demonstrates the diverse aspects of sustainability, from how a structure relates to its physical context to how green technologies and materials can be seamlessly worked into the design.

Several innovative examples of sustainable design are shown but these only represent the architecture in the northern and southern temperate zones (e.g. homes in the US, Canada, UK, China, Australia). Green roofs appear in many of the homes featured as well as the use of photovoltaic panels. Active and passive technologies (for shading and cooling) are looked at in both land-based and water-based homes. The author does not just itemize these features like a checklist for design but more importantly describes the reason and context in which the homes were designed as such.

Examples of sustainable living focus on single-family dwellings (that are presumably expensive). Including examples of high-density urban dwelling would have been appreciated but investigation into that typology may entail a separate volume. The book is a good resource for designers as it represents current ideas in residential architecture. We may look at it also as a progression in the continuing developments in sustainable design and construction. *(Ge Matabang)*



Title: **What is a designer: things.places.messages**

Author: **Norman Potter**

Publisher: **Hyphen Press (4th ed 2009)**

Considered a classic text for design students, this book delves into the nature of design. (Originally written by Norman Potter in the 1960s, this latest edition was reissued eliminating obsolete references.) By *design*, the author distinguishes it into product design (things), environmental design (places), and communication design (messages). The book is divided into three sections, the first a series of essays that examine design education, the designer as artist and artisan, what is considered "good design", design methods and techniques. In the second section Potter discusses how design work is carried out and outlines communication methods for designers. The third section offers thought-provoking advice and questions on design. Photos and drawings are intentionally left out in this book to prompt readers to think for themselves and avoid imitating illustrations.

Be ready to exert some effort in reading this book, especially the first section, as it comes across as high-level and sometimes boring to read. It is also alienating in parts especially when the author mentions English art schools and programs that are unfamiliar to designers this part of the world. The second section of the book offers more practical advice but considering that the book was written nearly five decades ago, there are still some dated information (e.g. in the checklist of tools to bring to a survey, included are carrier boards and cameras with spare films). Overall, Potter's arguments on design issues remain relevant and the book is still a good read for design students and even for practicing designers. *(Ge Matabang)*