



TAO-PILIPINAS, INC.

YP YOUNG PROFESSIONALS eNEWSLETTER MARCH - MAY 2018

Participants of the orientation session in Lupang Arenda were asked to map out the houses that were more than 2 storeys in their area. (Photo by: Therese Julia)

PO FEDERATIONS ATTEND SESSIONS ON SOIL ANALYSIS, BP 220

APOLA, THE UMBRELLA organization of three PO federations in Lupang Arenda, requested technical assistance from TAO-Pilipinas following the community action planning workshops that were facilitated by TAO in January of this year. ([See YP E-newsletter January-February 2018 issue.](#)) Their request stems from the need to conduct awareness-building campaigns among community associations in Lupang Arenda with regards to Batas Pambansa 220 standards and the geotechnical reports that explain the soil condition in the area. ([See sidebar article on page 2: A briefer on Lupang Arenda](#)) By February, TAO-Pilipinas proceeded to draft a two-day workshop program and scheduled a series of

sessions that would separately orient each of the federations at various on-site venues. Ms. Sherlyn Lucas of COM, the NGO-partner of APOLA for community organizing, assisted in coordinating the orientation sessions.

LAHOFI (Lupang Arenda Homeowners Federation, Inc.) was the first to group to undergo the orientation session on March 8 with 52 representatives of 14 HOAs in attendance at the Lighthouse Kingdom Church in Purok 3; and on March 19 for the second day of the session held at the Tapayan Basketball Court in Purok 1. KOALISYON (Koalisyon ng Pagbabago sa Lupang Arenda Council of Leaders, Inc.) had

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TAO featured in Philippine pavilion for Venice Architecture Biennale

"The City Who Had Two Navels" curated by architect and professor Dr. Edson Cabalfin will also include the work of four architecture schools, TAO-Pilipinas and artist Yason Banal.

ARCHITECT EDSON CABALFIN'S WINNING CURATORIAL proposal, entitled "The City Who Had Two Navels", is the country's representative to the 16th International Architecture Exhibition of La Biennale di Venezia which will take place from May 26th to November 25th 2018. The Architecture Biennale of 2018, with the theme of *Freespace* (by the Biennale curators Yvonne Farrell and Shelley McNamara), will present examples, proposals, and both built and unbuilt work that investigate the relationship between architecture and civil society and show architecture's contribution to humanity. The Philippine Pavilion is among the 63 national pavilions in the exhibition and will be housed in the Artigliere of the Arsenale, one of the two main exhibit locations (the other is at the Giardini).

The curatorial concept of Architect Cabalfin is inspired by Filipino National Artist for Literature Nick Joaquin's 1961 novel "The Woman Who Had Two Navels". This classic literary work delves on themes of how the past influences the present and affects the future, and of the struggles on national identity. Cabalfin's proposal explores these same ideas in terms of what Philippine cities are experiencing

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"Now that the six month closure of Boracay has been enforced, how do you think the government will handle the clean-up of Boracay?"

— YP PULSE

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A briefer on Lupang Arenda

LUPANG ARENDA IN SITIO TAPAYAN, BARANGAY STA. ANA OF Taytay, Rizal is a 171-hectare land located at the northern shore of the west bay of Laguna Lake. Classified as public land that was initially used for agriculture, part of the area was later proclaimed as a socialized housing site by virtue of Presidential Proclamation 704 issued by former President Fidel Ramos in 1995. PP 704 transferred around 80 hectares of Lupang Arenda to the National Housing Authority for disposition to families affected by the Pasig River Rehabilitation and to informal settlers in the municipality of Taytay.

In 2003, a road dike was built around the proclaimed site to protect residents (by then numbering around 25,000 families) from the rising waters of Laguna Lake. This also led to the influx of more families and further building of houses/structures in the area. The built areas in Lupang Arenda were elevated by filling the land partly with construction debris and garbage dump materials.

By 2008, a Memorandum of Agreement was signed between NHA and LGU of Rizal to implement PP 704. However, in 2009, typhoon Ondoy (Ketsana) inundated the Greater Metro Manila region and prompted former President Gloria Arroyo to issue Executive Order 854 which revoked PP 704 covering Lupang Arenda, along with PP 1160 covering Manggahan Floodway. EO 854 rendered the site unsafe for human settlements and ordered the relocation of affected families. Some 50,000 families already occupying Lupang Arenda by that time faced possible eviction due to EO 854.

Meanwhile, rapid urbanization gave rise to more land reclamation including the development of private subdivisions and industrial factories such as Asahi Corporation (built in 2012) in the same reclaimed areas surrounding Lupang Arenda.

People's organizations in Lupang Arenda have since called for the repeal of EO 854 as Taytay LGU formed a Technical Working Group and national government agencies conducted technical studies to establish the site's suitability for habitation. PHIVOLCS has stated that there are no fault traces in Lupang Arenda but that its subsurface has high liquefaction potential. This finding of liquefaction hazard was upheld by DENR-MGB's assessment and geotechnical

investigation conducted in 2016. A soil analysis commissioned by Taytay LGU concludes that the allowable soil bearing capacity in Lupang Arenda is 50 kPa. The outcome of these studies resulted to the Office of the Municipal Engineer in Taytay issuing a restriction on construction of structures in Lupang Arenda that limits building height to two-storey only.

Three federations of people's organizations in Lupang Arenda that have united under the umbrella organization APOLA (Alliance of People's Organizations in Lupang Arenda) are actively coordinating with the local and national government to push for a new proclamation re-establishing Lupang Arenda as a site for socialized housing development. The proclamation will pave way for regularization of informal settlements in Lupang Arenda. APOLA comprises of about 9,000 families (as of 2016) living in 7 puroks within the 80-hectare land included in PP 740. (GRM)

References: Brief History of Lupang Arenda by Vicente Barlos of APOLA; Presentation by DENR-MGB (Rapid Geomorphological Assessment and Subsurface Investigation Utilizing Ground Penetrating Radar and Georesistivity Equipment at Lupang Arenda); Geotechnical Report for the Soil Sampling Analysis at Lupang Arenda by UTLII.



PO federations... *(continued from page 1)*

their orientation on March 15 and 16 at the Mangoba Residence in Purok 3. Forty-three (43) representatives from 11 Koalisyon-affiliated HOAs attended the sessions. The third group, AUPFI (Arenda Urban Poor Federation, Inc.), was oriented on April 5 and 6 at the ABNAI office in Purok 1 and 45 participants from 10 HOAs joined the sessions.

The two-day program was lengthily titled "Orientation-Workshop on Planning Standards and Consideration for Lupang Arenda Site Upgrading and House Construction/Improvement". It had four learning objectives,

with participants expected to gain awareness of 1) building restrictions by the Municipality of Taytay's Office of the Municipal Engineer; 2) BP 220 minimum standards that guide the planning and design of socialized housing developments; 3) the soil condition and liquefaction hazard present in Lupang Arenda (as attested by soil sampling analysis and DENR-MGB investigations) and its implications to the design and construction of structures; and 4) examples of BP 220 non-compliance, reblocking schemes, retrofitting and engineering solutions.

The first part of the program tackled the IRR (implementing rules and regulations) issued by the municipality which restricts existing construction in Lupang Arenda to two-storey structures. A representative from the Municipal Engineer's Office, Engineer Rodolfo De Leon Jr., was able to give a brief explanation of the directive during the sessions with AUPFI. However, municipal representatives were not available to discuss this during the LAHOFI and Koalisyon sessions. Instead, Arch. Geraldine Matabang gave an overview of the IRR and discussed its contents relative to definitions found in the National Building Code. Engr. De Leon emphasized that the

allowable two-storey structure should have sheet roofing and not roof slabs or decks.

Part two of the program discussed BP 220 planning and design standards for social housing developments. Arch. Matabang presented in layman's terms the salient provisions of BP 220, specifically those pertaining to the criteria for selection of housing sites, planning considerations and the minimum design standards for site development. Her discussion of the standards covered a range of essential requirements, from lot allocation and setbacks to the provision of basic utilities and services in housing projects. This was followed by Arch.

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PO federations... *(continued from page 2)*



Group photos of all the federations under APOLA that underwent the soil analysis and BP 220 orientation sessions. **From top to bottom:** LAHOPI, KOALISYON, and AUPFI.

Angelus Sales' presentation on the minimum standards for lot planning and design of single-family dwellings.

Examples of non-compliance to BP 220 standards as seen in actual housing developments were researched and then presented by Theresse Julia during the sessions. Afterwards, Arch. Faith Varona discussed "reblocking" as a participatory planning technique to implement the regularization of informal settlements. She differentiated

partial reblocking from total reblocking schemes and presented cases of reblocking implemented in Pasig City and Valenzuela City.

The third part of the program delved into the soil condition in Lupang Arenda. Arch. Sales gave a thorough discussion of the liquefaction hazard in the area and clarified in Filipino the findings and recommendations of DENR-MGB's geotechnical investigation of the reclaimed lands in Lupang Arenda. Engineer Lorena Hernandez



Engr. Lorena Hernandez explains the effect of shear stress in a house.

meanwhile explained the results of soil boring tests conducted for the LGU of Taytay. She described in detail the different kinds of soil analysis done and explained the resulting recommendation on appropriate building foundations, clarifying in particular the stipulated allowable soil bearing capacity of 50 KPa and its implication to the construction of houses in Lupang Arenda. Engr. Hernandez also presented some examples of retrofitting to make existing structures disaster-resilient, as well as soil compaction and mat-type foundation as engineering solutions for soil types with low bearing capacity.

An open discussion followed every part of the program. In all the sessions conducted, participants had a lot of questions about the IRR, especially about how the structural assessment of existing houses will be carried out and what sanctions are to be meted for homeowners with more than two-storey houses already built. These concerns are not clearly stipulated in the directive issued by the LGU.

The last part of the program involved each HOA reporting on the initial results of an inventory they conducted on built structures based on the number of storey. They mapped and noted structures that are more than two-storey high and that will be most likely affected by IRR sanctions. These were

tabulated by the facilitators and the results from the three sessions to be collated later on.

Overall, the sessions provided the federations a better understanding of the technical studies done and its implications to construction of houses in Lupang Arenda. It also gave the participants a broad view of the responsibilities that come with the realization of a new land proclamation that will legalize their occupancy of Lupang Arenda. Among the ramification is compliance to legal mandates (such as BP 220 design standards and regulations) and adherence to processes and requirements (such as in the issuance of building permits). Likewise important in ensuring their safe settlement in Lupang Arenda is the consideration of its soil condition and the hazards of building their houses in liquefaction-prone soil.

The participating HOA leaders are expected to pass on to their members the knowledge gained from the sessions conducted to guide community decisions on shelter and settlement. TAO gave out a complete set of handouts of the presentations and will also compile all the questions and responses during the open forum discussions to help the HOA leaders in disseminating information to their members. (GRM)

TAO clinch spot in Sikat Impact Challenge



TAO technical staff shoot scenes for the video about Project Recharge which they submitted as part of the application process for the Sikat Impact Challenge.

TAO-PILIPINAS' PROJECT Recharge for the Masagana Community in Angat, Bulacan was among the five entries chosen for the Incubation Program of the Sikat Impact Challenge 2018. Presented by the Sikat Solar Challenge Foundation, Inc. (SSCFI), the Sikat Impact Challenge grants the selected entries up to Php 500,000 in seed funding to implement renewable energy (RE) projects in rural communities. Project Recharge seeks to utilize solar energy to provide lighting, power, and potable water in Masagana Community. The project is proposed by a team of TAO-Pilipinas staff led by

Engr. Lorena Hernandez with team members LArch. Rosanne Aldeguez, Arch. Verna Sarraga, and Therese Julia.

The Sikat Impact Challenge is a ten-month incubation program that aims to develop grassroots RE initiatives focused in rural areas and spearheaded by the youth. In addition to the seed funding, the program will also provide RE management training to the top five teams to aid in the development of their respective projects.

TAO-Pilipinas plans to utilize natural resources like solar energy and rainwater to address some of the needs



TAO technical staff answer questions from the jury during their panel interview. **From left to right:** LArch. Rosanne Aldeguez, Therese Julia, and Engr. Lorena Hernandez



TAO technical staff pose with the panel of judges. (Photo source: Sikat Solar Challenge Foundation, Inc.) **Top row left to right:** Therese Julia, Engr. Lorena Hernandez, LArch. Rosanne Aldeguez, and Arch. Angelus Sales of TAO-Pilipinas, Redg Plopinio, Talent Management Head of First Gen Corporation. **Bottom row left to right:** Ferdinand Buenviaje, Executive Director of CARET, Laurie Navarro, President of CSi Energy Solutions International, Angelo Valenton, CEO of Power 4 All, Inc., and Natasha Bautista, Head of Operations for QBO Innovation Hub

that were identified during the Situational Analysis and Community Action Planning Workshop in Masagana Community held in January 20 ([see YP ENewsletter January-February 2018 Issue](#)). Project Recharge aims to accomplish three components that are all powered by solar energy. The first one is installing street lamps to improve safety and security within the site. The second is constructing a rainwater purification system to be installed in the community-based resource center (CBRC) to provide an alternative source of potable water. The third is powering the CBRC with renewable energy to reduce the cost of power consumption for the community members. Capability-building and consultation workshops

will be conducted with the members in preparation for the construction and management phases. Moreover, a sustainability fund will be maintained by Masagana to reinforce the project's lasting impact on the community.

The project proposal, supplemented by an [audio-visual material](#), was submitted by TAO-Pilipinas in March 19. After securing a spot in the top ten for the initial assessment, the team underwent a panel interview last May 15 at the SSCFI office in Rockwell Business Center Tower 3, Ortigas, Pasig City. The TAO-Pilipinas team and two representatives from Masagana Community are set to join the kick-off event of the Incubation Program on June 16-17. (TRJ)



Juana Cavallida, president of Masagana Homeowners Association, narrates the needs of her community in the video done by TAO-Pilipinas.

TAO featured... *(continued from page 1)*

and underlines two “navels” that shape its architecture. It focuses on two forces “that are in constant dialogue: first, how colonialism impacts the formation of the built environment; and second, how the process of neoliberalization alters the urban landscape.”



Architect Edson Cabalfin presents his curatorial statement for the Philippine pavilion for the Venice Architecture Biennale during the press conference organized by NCCA.

NCCA press conference

The Philippine’s participation in the Venice Architecture Biennale is a collaborative undertaking of National Commission for Culture and the Arts (NCCA), the Department of Foreign Affairs (DFA), and the Office of Senator Loren Legarda. On April 26, a press conference was held at the NCCA Boardroom to introduce the Philippine Pavilion.

Architect Cabalfin presented his curatorial statement and outlined the three components of the exhibition. He named the first part as “Post-colonial Imaginations” which looks into colonial and post-colonial representations of the country in international expositions. Embodying the first navel, the pavilion poses the question: can we truly escape the colonial?

The second part is named “Neoliberal Urbanism” and examines how Philippine cities are shaped by neoliberal

ideology that advocates free market, competition, privatization and minimal state intervention. Cabalfin noted the emergence of central business district (CBD) enclaves, city expansion fueled by OFW remittances, and a 24/7 urban lifestyle driven by BPOs. For the second navel, the pavilion asks: is neoliberalization a new form of colonialism?

Pavilion collaborators

The third component of the exhibition is titled “Intersections” which presents potential responses to the forces of colonialism and neoliberalism. Cabalfin invited exhibitors including students and faculty from select architecture and design programs in the Philippines and formed a think-tank consortium to respond to these two “navels”. The pavilion collaborators include (1) De La Salle – College of Saint Benilde presenting “Futures of a Past”; (2) University of San Carlos – School of Architecture, Fine Arts and Design presenting “Sulog: Currents of Unity”; (3) University of the Philippines Diliman, College of Architecture presenting “Hybrids: Projecting the Future of Philippine Cities”; (4) University of the Philippines Mindanao, Department of Architecture presenting “Badjao Eco-Village: Empowerment of Indigenous Architecture”; (5) TAO-Pilipinas, Inc., a women-led, non-government organization that assists urban and rural poor communities; and (6) Yason Banal, contemporary artist and filmmaker who will stage a video installation called “Untitled Formations” as the culmination of the exhibition.

The four architecture schools were challenged to speculate on the possibilities for art and architecture through their proposals. They



Architects Verna Sarraga (left) and Geraldine Matabang (right) attend the NCCA press conference for the Venice Architecture Biennale.



Architect Cabalfin with representatives of TAO, Architects Geraldine Matabang (left) and Verna Lucia Sarraga (right) at the Italian Embassy luncheon.

were selected as exhibitors to represent responses from Luzon, Visayas and Mindanao; from both public and private institutions; and from both young and established architecture programs in the country. Physical models of their proposals will be presented in the exhibition.

As to the participation of TAO-Pilipinas, Cabalfin points out that the NGO “represents a practice that looks at participatory design and community engagement and empowering marginalized communities through architecture, planning and design”. He adds that while the schools provided the speculative part of the exhibition, TAO lends “an important voice that brings in a different perspective, representative of a kind of practice already being done... and as an antithesis to neoliberalism”. TAO’s

participatory design tools and samples of community design outputs during workshops, along with a video presentation highlighting its work, will be featured in the exhibition.

Catalyst for action

Architect Cabalfin stresses that the exhibition does not offer a definitive answer to the questions it poses but is meant to provoke a conversation and serve as a call to action. Recognizing that the forces of colonialism and neoliberalism are not unique to the Philippines, the exhibition aims to understand how we can react and prepare as these forces continue to influence the development of our built environment. Ultimately, Cabalfin asserts that the pavilion will put forward “an optimistic outlook of how we can make our built environment empowering, more inclusive and democratic”. (GRM)

Network partners visit Ateneo Innovation Center



Mr. Paul Cabacungan of AIC demonstrates one of the technologies they have developed.

TAO-PILIPINAS, ALONG with network partners PHILSSA and FDUP, paid a visit to Ateneo Innovation Center (AIC) in Ateneo de Manila University (ADMU) last March 28. AIC Operations Manager Paul Cabacungan accommodated Benedict Balderrama and Rhea Aguilar of PHILSSA, Paulo Genzola of FDUP, and Therese Julia of TAO-Pilipinas in their office in ADMU. Mr. Cabacungan provided a brief presentation about AIC and demonstrated some of their products.

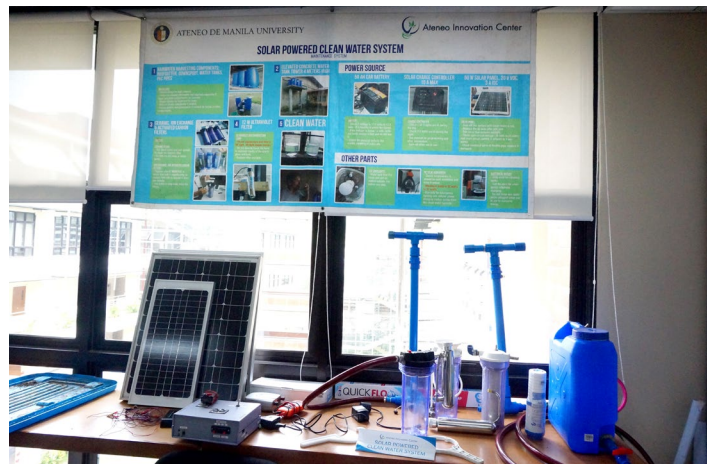
Ateneo Innovation Center is a non-profit research organization under the School of Science and Engineering in ADMU. The organization conducts research and development,

and turns innovative technologies into accessible products and services that address national concerns such as clean water, food security, energy access, and health care.

Among the products that Mr. Cabacungan demonstrated were low-cost medical devices that can be used in remote areas and disaster situations. These include the off-grid nebulizer, which is manually operated using a bicycle pump; a digital stethoscope that allows local health workers to record and send a patient's heartbeat and other internal sounds in the absence of a physician; and a heat blanket or infant incubator that warms up without electricity.



Network partners that also visited Ateneo Innovation Center with TAO staff, Therese Julia (leftmost) pose for a photo with Mr. Paul Cabacungan (middle). **From left to right:** Benedict Balderrama and Rhea Aguilar from PHILSSA and Engr. Paulo Genzola of FDUP



The solar powered clean water system is one of the technologies developed by AIC.

Some of their wireless systems for disaster operations were also discussed, such as a solar-powered radio communication system and an image transmission via radio. The latter technology allows images and text messages to be transmitted to another device using radio waves for areas without internet or mobile phone signal.

Addressing water scarcity, the AIC has also deployed solar-powered clean water systems to disaster stricken areas. Rainwater is first harvested in plastic drums; it then passes through a three-chamber filter and a solar-powered ultraviolet lamp to be purified in order to generate drinking water. Mr. Cabacungan also showed a prototype of their mobile clean water disaster kit housed in a small trolley bag.

When asked about patenting the products, Mr. Cabacungan noted that they do not claim patent as the technologies are open-source, are already established in researches, or are just being localized in communities. Several of the products can be replicated

in a 'do-it-yourself' fashion with easily accessible equipment.

The network partners' visit was initiated after the turn-over ceremony in Barangay Coloong, Valenzuela City on March 24 ([see article on Coloong ribbon-cutting](#)). AIC had worked with FDUP and its partner community for a project involving the aforementioned clean water system. The visit was also part of TAO's preliminary research on technologies utilizing solar energy for the Sikat Impact Challenge ([see article on Sikat Impact Challenge](#)). (TRJ)



The prototype of the mobile clean water disaster kit also developed by AIC.

HDM-Lund University Field Study in Metro Manila 2018



Engr. Ma. Theresa Siat, NHA Division Manager East Sector II, present the Manggahan Floodway Low-Rise Housing in Pasig City to the Lund University students.

FROM FEBRUARY 13 to March 02, 2018 senior architecture students of the Urban Shelter: Housing for Extreme Environments Course of the Housing Development and Management (HDM) -Lund University, Sweden visited the Philippines for their field study. For the past nine years, HDM has been conducting its field study in the Philippines annually, with TAO-Pilipinas as local coordinator.

This year, 14 foreign students visited and interviewed residents in various housing projects by government, private, non-government organizations in Metro Manila. These included low-income housing developments by the

National Housing Authority (NHA) in the Smokey Mountain Medium Rise Building (MRB) Resettlement in Manila City; Manggahan Floodway Low-Rise Housing in Pasig City, and the Quezon City National Government Center-West MRB project. Also visited was the local government of Quezon City-led mixed-income low rise developments in Bistekville 2 done in cooperation with private developer Phinma Property Holdings, and Bistekville 4, an on-site resettlement implemented with Habitat for Humanity.

For the private sector-led developments, the students looked at the high-rise condominiums of Amaryllis



Lund students visit a DMCI vacant lot as one of the project sites that they will have to develop into a housing project.

(Quezon City) and Maricello (Las Pinas) by DMCI Homes; Sofia Bellevue Medium-rise Condominiums by Phinma; and the Bonifacio Global City and Ayala Central Business Districts (CBD) in Makati City. On the NGO-led development, St. Hannibal Empowerment Center (SHEC) housing project in Phase 2 BPI property and Phase 17 MRB (Cornejo Street) in Pasay City were visited and residents in Phase 2 were interviewed. Lectures were also conducted on the Philippine housing situation, human settlements issues, and building standards at the NHA, UP College of Architecture, Ayala Land, Inc. and TAO-Pilipinas offices.

The visit and interviews were conducted to help the students understand and also get valuable insights on the Filipino family and culture. The visit to both low-income and middle-income housing gave the students ideas on the contrast in the housing situations of the various income strata. The housing visits will also help the students craft their housing proposal that is the culmination of the urban shelter course requirement.

The project sites in the Philippines were provided by the NHA and DMCI, both areas 2 to 3 hectares in size.

The NHA site is located along Agham Road and North Avenue across the proposed new CBD of Quezon City and is the home of around 600 informal settler families. The DMCI site is a former electronics factory (Philips) that has been vacant for almost five years now. It has undergone rehabilitation to neutralize a contaminated area. The students were formed into five groups, only one chose the DMCI site. Majority found the NHA site more challenging socially, environmentally and spatially.

As part of their research, the students also interviewed technical professionals of NHA, UP College of Architecture, and TAO-Pilipinas regarding the architecture profession and working with human settlements issues in the Philippines.

On their last week, the students were asked to put together a presentation of their preliminary findings for their design proposals. The presentation was held at the NHA Housing Technology Development Office (HTDO) attended by representatives from the NHA, DMCI, UP College of Architecture, and TAO-Pilipinas. (MFYV)



One group of Lund students interview a resident from the St. Hannibal Empowerment Center (SHEC) housing project in Pasay City.

Coloong inaugurates handrail and clean water system



The handrail that TAO designed for DRCHOA is finally finished.



Ma. Razel Laxamana, assistant secretary of DRCHOA, hosts the ribbon cutting ceremony.

A RIBBON-CUTTING AND TURN-over ceremony for the handrail and solar-powered clean water system projects of Del Rosario Compound Homeowner's Association (DRCHOA) was carried out in Barangay Coloong 1, Valenzuela City last March 24. The event was attended by DRCHOA officers and members, barangay officials, Valenzuela City Disaster Risk Reduction and Management Office (VCDRRMO), Valenzuela People's Organization Network (ValPONet), Partnership of Philippine Support Service Agencies, Inc. (PHILSSA), Foundation for the Development of the Urban Poor, Inc. (FDUP), Ateneo Innovation Center (AIC), and TAO-Pilipinas, Inc. The projects were implemented by FDUP and its partner community DRCHOA. They were funded under the Financial Enablers Project (FEP) through the PHILSSA consortium.

FDUP and DRCHOA tapped AIC to provide training on the construction, use, and maintenance of the solar-powered clean water system. The structure, which is installed in the multipurpose building, harvests rainwater and purifies it using a three-chamber filter and a solar-powered UV lamp. It also utilizes the solar panels to power two LED bulbs and two charging stations. The system allows the community to have access to potable water and electricity in times of disasters. The handrail, on the other hand, was designed by TAO-Pilipinas after multiple consultations and a validation session with the community members ([see YP ENewsletter November-December 2017 Issue](#)). Additionally, six solar street lamps provided by the barangay LGU had been installed at the designated handrail posts. Both projects were completed through



Dr. Arnaldo Antonio, head of Valenzuela City DRRMO, gives a brief speech about their partnership with Brgy. Coloong 1 and DRCHOA.



Mr. Carlos Oppus, director of AIC, checks the solar powered filtration system of the rainwater harvesting system that AIC helped set-up together with DRCHOA.

bayanihan efforts of the community.

The inauguration ceremony was opened with a brief narration of the community's history, from being permanently surrounded with water, to achieving security of tenure and working toward disaster resilience. The opening remarks were then followed by the two ribbon-cutting rites for the handrail and the clean water system.

Among those who delivered messages afterward were VCDRRMO Head Dr. Arnaldo Antonio, Barangay Captain

Wilfredo Ramos, AIC Director Carlos Oppus and Operations Manager Paul Cabacungan, PHILSSA National Coordinator Benedict Balderrama, ValPONet Chair Erlinda Mosqueda, Arch. Angelus Sales of TAO-Pilipinas, FDUP Executive Director Maricel Genzola, and both Engr. Paulo Genzola and Ms. Teresa Prondosa also from FDUP. Finally, Ms. Rhea Aguilar of PHILSSA presented DRCHOA with five emergency vests from FEP to support the community's efforts in disaster preparedness. (TRJ)

YPs represent TAO at the Manila Architecture Festival



UST students visit the booth of TAO-Pilipinas, Inc. (Photo by: Abbie Vinluan of Arkitrato)



TAO-Pilipinas' interns man the booth during the exhibit. (Photo by: Jacquie Brizuela of Arkitrato)

ON MARCH 9, 2018, TAO-Pilipinas was invited by UST Architecture Network (Archinet) to participate at its first Manila Architecture Festival. The festival was organized by Archinet as an educational and networking event for architecture students and professionals working in the field. It featured talks, workshops, exhibits, and networking booths of various

organizations and institutions including international embassies and local NGOs. These activities took place on the last day of the UST College of Architecture Week at the UST open field from 8am until 5pm.

Five UST College of Architecture students who are also former Young Professional (YP) interns of TAO-Pilipinas

volunteered to manage the booth of the organization. Tending TAO's station were Kristine Culaba, Herculhes Ebol, Christian Eroid Enriquez, Mariel Laciste, and Niña Joy Macaranas. They showcased the various publications and projects of TAO including materials such as guidebooks for the construction of concrete houses and houses made from alternative materials,

manuals on community planning and community-based training, posters about seismic retrofitting and Project Pagbangon. Brochures of the organization were also given to students participating in the event. The YPs helped spread TAO's advocacy to the UST College of Architecture student body and to other participants of the Manila Architecture Festival. (Kristine Culaba)

TAO at forum about CSO Presence on Social Media

ON MARCH 3, 2018, TAO Executive Director - Arlene Lusterio and Research and Publications Program Staff - Rosanne Aldeguer attended the "Forum on Building a More Effective and Credible CSO Presence on Social Media" at St. Joseph's College, Quezon City. This activity was hosted by Philippine Misereor Partnership Inc., Kaalagad, Lapis.PH, Kapetheo, Laiki Agora, AMRSP-JPICC, Maryhill School of Theology, DLSU-TRED, and NASSA/CARITAS Philippines.

In light of the government's and large corporations' use of social media to steer public opinion and drown out critical voices, various CSOs gathered on this day to understand the

power of social media, seeking to maximize its use for the promotion of advocacies and reshaping of values.

The morning session consisted of lectures by Dr. Maria Diosa Labiste (UP College of Mass Communication) on Silencing Critical Voices: Social Media as State Machinery and Public Platform, and by Mr. Gary Granada (Lapis.PH) on Dissecting Citizen Journalism: How CSOs Fare in Social Media. The afternoon session was a brainstorming activity for strategies to gain more visibility and to amplify CSOs' voices in social media. The day ended with a resolution to band together to form a social network that will support each others' organizations. (RMBA)



Invited speakers for the forum are Dr. Maria Diosa Labiste of UP College of Mass Communication (top) and Gary Granada of Lapis.PH (bottom)

(un)THESIS-ing 101

by Christian Eroid Enriquez

Christian Eroid Enriquez is a 5th year graduating architecture student from University of Santo Tomas. He did his OJT last year with TAO-Pilipinas and also participated in the 2017 YP Workshop on Social Housing. For his undergraduate thesis, he proposed "Combo-Home Building System: A Grassroots Approach to Community-based Incremental Residential Development". He is currently busy with graduation activities and finishing the technical drawings of his thesis which he plans to present to the community he worked with.

"It's easy to solve a problem that everyone sees, but it's hard to solve a problem that almost no one sees" - Tony Fadell

DOING AN UNDERGRADUATE thesis caps off the five-year-long journey of an architecture undergraduate student. For some people, they treat it as their last shot to give their best; for others, it is another chance of redeeming themselves through their on-point thesis topic. While some are striving for something greater, other people are also just aiming to pass, wanting to end their "architorture" experience.

At first, like any other student in my batch, I was also uncertain about the topic that I would want to pursue. Coming from a school culture where there is an unwritten rule that the level of complexity is dictated by the typology, the number of buildings or the size of the lot, choosing a topic related to community development and social architecture is a risk that I dared to take.

Coming from a humble environment in the province and growing up with a nearby informal settlement as a kid, I was exposed to bad architecture at a very young

age. This exposure has made me question the true essence of architecture and design in general. We've never been asked to design anything that is for the community during my undergraduate years but my exposure to a resettlement site in St. Martha Estate in Bocaue, Bulacan opened my eyes.

Joining the team of graduate students from the University of Tokyo and enduring the unfavorable environment just to document and analyze the current housing conditions of families relocated by the national government have made me question what we are doing in architecture school. I was deeply struck seeing people live in inhumane shelter but try their best to make their house a home. This has led me to a search, looking for what 'social architecture' really means.

In this pursuit, I came across several organizations and institutions that have been raising these causes for years now. TAO-Pilipinas, an NGO that provides technical assistance for the urban poor,



Eroid together with his fellow intern, Herculhes Ebol, finishes the illustration for the construction manual of the CBRC.

served in the panel during the technical consultation on the St. Martha Estate community kitchen project; Base Build Foundation, who are advocates of bamboo construction, presented alternative material and building systems; and the Vincentian Foundation, an initiative of the congregation of St. Vincent de Paul, helping different communities through their charity programs, among others.

From that experience, I was hooked in understanding community architecture better and that eventually led me in joining the Young Professionals Workshop of TAO-Pilipinas and then applying as an intern for their internship program. This exposed me to another level of social architecture by directly providing technical expertise to the communities. Knowing the foundation and the organized system of doing community development work were instilled in us during the program. Experiencing community consultations, site visits and documentation, research, and data analysis, and production of final technical drawings have been a great foundation that I later applied in my undergraduate thesis.

Through the help of Ar. Rizalito Mercado, our university professor, and the Vincentian Foundation, I was able to meet a group of farmers in typhoon-hit Brgy. Awao, Compostela Valley, Mindanao who are planning to

build their new community. I have tried a different approach in determining the topic for my undergraduate thesis. Instead of doing a typology-based project and looking for a specific site, I opted to do a community-based project where the final typology is not yet determined. The Community-Based Needs Assessment later determined the final typology/scope of my thesis topic. After doing a focus group discussion with the Awao Farmers Community and Savings Association (AFaCSA), conducting a Participatory Design Workshop and Household Documentation, what was established was the need for designing a new community that is less vulnerable to disasters with provisions for incremental expansion.

Combo-Home Building System: A Grassroots Approach in Community Based Incremental Residential Development in Compostela, Valley is a planning and building methodology in addressing the needs of rural communities and aims to address the urgent need for a habitable home but still allowing provisions for future expansions based on the families' growing needs. The project could be divided into three different approaches:

- (a) **Assessment System** that aims to shorten the period of site planning by incorporating digital simulations in the site and



Eroid presents his design scheme for the community-based resource center (CBRC) of Masagana to the community.

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(un)THESIS-ing... *(continued from page 10)*

using algorithms and basic coding principles to give a faster analysis based on the parameters set;

(b) Grassroots approach/ Community Participatory approach that uses various research methodologies like questionnaires, existing house mapping and documentation, participatory design workshops, and focus group discussions that allow the researcher to come up with data-driven design solutions based on the actual conditions that are rooted on the community's needs; and lastly

(c) Incremental Building Construction that maximizes locally available materials in the community, applies construction principles and techniques in improving the architectural elements of the house, and considers the incremental development of the house expansions.

By doing the Participatory Design Workshop patterned after the system that TAO-Pilipinas has been using on their projects, I was able to get a grasp of what the community really needs. As designers, sometimes we tend to propose solutions based on what we think will work and not based on what might actually work. The workshop has taught me that some solutions are just simple changes that do not need space rocket technology. Asking the users what they really need is sometimes the best solution that a designer could do in his research. Even though technical professionals are familiar with the theories and studies that help us present new ideas, the community can still always propose alternative solutions that we tend to miss because we are not looking at the same angle where they are coming from. If I will be asked one

lesson among the hundreds of learning that TAO-Pilipinas has taught me, my answer will always be to ask and listen to the community; doing so will always keep you on the right track.

Conducting my own version of the workshop will not be possible without the guidance of the Participatory Workshop Manual from TAO-Pilipinas. I did not do my workshop alone; I was assisted by my friend Herculhes Ebol (who is also a former TAO-Pilipinas intern) and Ar. Mercado, who is really passionate about Social Architecture. I was already expecting that the workshop will not be that easy considering the added difficulty of having a language barrier. Doing this workshop is not a walk in the park. It is typically done by a team of 5 or more so we needed to exert extra effort juggling the materials preparation, workshop explanation, photo and video documentation, among others. We are thankful to the community for lending their time and allowing us to know them better through the workshop. Community involvement is also a factor that the researcher should consider if he/she is doing a participatory workshop. It's a good thing that the people of AFaCSA are really passionate and eager in doing this project with us. Being involved in a Community Workshop with TAO-Pilipinas beforehand really prepared us in conducting our own version using the same approach that they have taught us.

Braving the crowd and choosing a different project and approach in tackling my thesis topic was a risk. Some professors have warned me saying that 'housing' is too risky, it's either you do it well or you fail. Others said that community architecture is not that noticeable if you want to stand out among the hundreds of students in my batch. Some people raised their eyebrows upon hearing that it is a



Erold facilitates the community briefing of Awao Farmers Cooperative and Savings Association (AFaCSA).



Facilitators and workshop participants pose for a group photo showing the outputs of the participatory design workshop.

community-based project, and some received it as, 'ahhh para sa bayan'.

Maybe the greatest challenge that I have faced in doing my undergraduate thesis is the inner fight between doing something safe and adhering to the standards of what an undergraduate thesis generally should be, or doing something different and uncertain. I took a leap of faith and followed the latter. I always believe this principle in life where if you are doing the right thing and it gives you inner peace and happiness and your loved ones are proud of you, you are on the right track. No matter how I felt underappreciated or not fully understood, I still pursued my study. I always kept in my mind what iPod creator Tony Fadell said, 'If you are not having doubt, you're not pushing the boundaries far enough'. And that's my ultimate goal before I leave the College and the University, to push boundaries and look at things with a different perspective.

Housing and Social Architecture is worthy to be

discussed and researched on. It is not just about a house; it is about somebody's home and it will serve as a shelter for a growing family. If there is a piece of Architecture that will have a great impact on one's development, it is his own house. I want to make a statement that thesis projects should not be a choice between what is good and what is significant but rather, it should be good because it is significant.

Community development work is not everyone's cup of tea. Some people opt to pursue other ways of practicing their craft after their student life. But in my opinion, one must experience engaging in the community at least once in their entire life. Who knows, maybe you might experience the same enlightenment that I have experienced. At the end of the day, success and fulfillment vary from one person to another, and for some, they have found it in helping in the betterment of other people's lives.

Maybe, it is your ikigai.

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.resourcecenter.tao-pilipinas.org>. You may call Angel Sales at 287-6446 / 436-7301 or email lib@tao-pilipinas.org to schedule your visit.

Title: **Carbon Zero: Imagining Cities That Can Save the Planet**

Author: **Alex Steffen**

Publisher: **Creative Commons (2013)**



In his book, Alex Steffen argues that humanity needs to achieve zero carbon emissions to avert the catastrophic effects of climate change. By “zero carbon” he means no net emissions are produced, a carbon neutrality that entails a significant cut in current emissions so that “greenhouse gases generated can be balanced through other actions that draw carbon dioxide out of the atmosphere”. To achieve this quickly, Steffen maintains that a shift to renewable energy sources is not enough but pushes for a swift reduction of

our dependence in energy use.

The author also explains that we are living in a planet that is becoming overwhelmingly urban and looks at climate change not purely as an energy problem but a cities problem. In that context, he sees how we design and build our cities as climate solutions and key areas for innovation. Steffen envisions what will make carbon zero cities possible is when we lower energy use by 90% and we meet the remaining 10% energy demand with clean energy.

The book leads us to reexamine our lifestyles by introducing us to consumption-based footprinting as the best approach to see the impact of our emissions and to envision carbon zero cities. Its author points out some innovative ways to lower the carbon footprints of our consumption. One idea he cites is that of collaborative consumption and sharing that can turn existing surpluses or unused capacities into services (e.g. car-sharing and shared workspaces). Another best urban practice he discusses is the concept of compact, higher density walkable neighborhoods that lessens consumption of energy for transportation. Steffen argues that “designing-out energy and materials use within a city will create further reductions all the way down the supply chains that serve that city”.

In shelter design and construction, he advocates for passive design strategies to lower energy use, prefabricated buildings that lessen construction waste, retrofitting to bring existing building stock up to low-emission standards, and smart energy systems. He likewise emphasizes “density as the foundation of all truly green buildings” as evident in smaller, compact homes using fewer resources to build and consuming less energy to live in.

Overall, the book is the author’s attempt to outline a pathway towards a sustainable future, a solid overview of carbon zero cities. What he offers us is a sketch of that vision - a framework but not a clear and detailed blueprint. There is not even an existing city that he cites as a model for that vision. Nevertheless, his book is a hopeful call to action to save the planet. And in a way, he passes the baton to built environment professionals to flesh out and implement that vision for their own cities. (GRM)

Title: **Traffic: Why We Drive the Way We Do (and What It Says About Us)**

Author: **Tom Vanderbilt**

Publisher: **Knopf (2008)**

Tom Vanderbilt’s book is intuitively titled and yet is filled with counterintuitive lessons. Foremost is that traffic jams are not primarily caused by bad highway design but by flaws in human nature. He explains that driver fatigue, using cell phones while driving and rubbernecking at roadside incidents are just some leading causes of distraction-related crashes. Moreover, studies show that careful jaywalking can be safer than crossing at marked crosswalks. They also found that drivers pass cyclists more closely in streets with bicycle lanes and tend to give cyclists more space as they pass on streets without one.

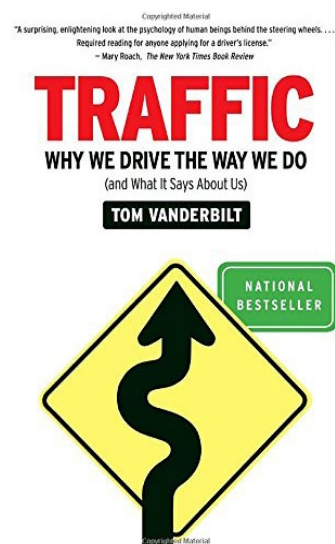
Vanderbilt explains these and more in entertaining detail and even has fun in how the chapter headings are named, such as *Why You’re Not as Good a Driver as You Think You Are*; *Why Ants Don’t Get into Traffic Jams and Humans Do*; and *Why More Roads Lead to More Traffic*.

As a reader who has only ever been in the passenger seat, this book is especially enlightening as it dives into the human psychology and behavior of drivers behind the steering wheel. As an urban planner, it is very informative as Vanderbilt gives an in-depth look into traffic congestion and introduces the reader to a variety of traffic professionals, from engineers, specialists in vision and safety, to experts in queues. The author notably features Dutch traffic engineer Hans Monderman who is recognized for pioneering “psychological traffic calming” and the shared space concept in street design.

Thought-provoking too are the author’s investigation on *Traffic as Culture* and on people’s attitudes toward traffic regulations. Cultural patterns emerge as Vanderbilt examines traffic behavior in the cities of London, New York, Copenhagen, Delhi and Shanghai. Traffic becomes a form of cultural expression. Studies also uncover that people resist following traffic laws in countries that rank poorly in the corruption index. So the least corrupt nations are the safest places in the world to drive.

My most surprising take away from the book is on the risks of safety, when Vanderbilt’s exhaustive research on vehicular accidents and collisions show that “increased feelings of safety can push us to take more risks, while feeling less safe makes us more cautious.” In the chapter aptly named *When Dangerous Roads are Safer*, he reveals that intersections with traffic lights are actually more dangerous than roundabouts which to us seem chaotic and unsafe.

This nearly 400-page book would be a lot to absorb in one reading but nevertheless is truly an enjoyable read. Surprisingly, even skimming through the 90-page Notes section turned out to be an engaging perusal. (The section, certain to excite research and trivia junkies, elaborates on points made in the main pages and provides well-cited references to related work.) Beyond the theories and science of traffic, this book gives us a better understanding of human nature and our built environment. (GRM)



TAO Coffee Table Book Will Be Available in June



THIS COMING JUNE, THE MUCH AWAITED COFFEE table book published by TAO-Pilipinas will be available for purchase. This coffee table book marks TAO's 16th year, and documents TAO's journey towards sustainable human settlements development.

Entitled "*TAO-Pilipinas architects in the margins*", the book highlights TAO's unique participatory approach in taking on various projects that require the skills of technical planning and design professionals. From resettlement, to rehabilitation, to education - this book captures their triumphs, failures, and the lessons that came with them; sharing a rich body of knowledge that hopes to inspire others to take the path less travelled.

This hardbound book is available for purchase at Php1,500.00. As we only printed limited copies, please email rp@tao-pilipinas.org to order and reserve your copy. Delivery charges are not yet included.

This coffee table book is made possible through the support of MISEREOR and Christian Aid. The following is the book details:

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Now that the 6-month closure of Boracay has been enforced, how do you think will the government handle the clean-up of Boracay?

Disclaimer: The views and opinions presented do not necessarily reflect the views of TAO-Pilipinas, Inc.

"I think the 6-month closure is a good idea set in a bad timing! Although toughness is required for such a decision, I don't think this government is capable of the clean-up of Boracay if only manual and conventional facilities and methods are to be employed. The building of a water treatment plant can be done but what kind of performance will it serve? The widening of roads and clearing of encroachments are ordinary tasks that can be done everyday with strict implementation and proper compliance. The drainage rehabilitation and sewer separation is not an easy task. It does not require an expert but the system should be set for it to work properly with regular maintenance and upgrading. Still basing on media reports for the sewer discharge is that they will just extend the pipes to hundreds of meters towards the sea hoping the "treated" water will not anymore be on a dangerous level of toxicity and declared safe for human beings. Thus, the Boracay clean-up will just be another "charged to experience" project, being the government as the implementor."

- ARCH. CESAR ARIS, 48, PROJECT ARCHITECT

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DEFEND INTER-GENERATIONAL PEOPLE'S RIGHTS TO A BALANCED AND HEALTHFUL ECOLOGY.

RECOGNIZE AND UPHOLD THE RIGHTS OF NATURE!

Sama-samang sakay, lakad, at layag para sa Sangnilikha



Philippine Misereor Partnership, Inc.



CATHOLIC BISHOPS' CONFERENCE OF THE PHILIPPINES
NASSA/Caritas Philippines



Ang SALAKYAG para sa Sangnilikha 2018 ay bahagi ng isang pambansang kampanya na mananawagan para sa proteksyon at konserbasyon ng ating kapaligiran. Nais din nitong iangat ang kamalayan ng tao sa mga negatibong epekto ng pagmimina at pagbabago ng klima, gayun din ang mga paglabag sa karapatang pantao sa mga komunidad na may pagmimina.

Ipinapanawagan din nito ang pagsasabatas ng mga panukalang may kinalaman sa pangangasiwa ng ating likas na yaman at kalikasan gaya ng Alternative Minerals Management Bill (AMMB), National Land Use Act (NLUA), at Forest Resource Bill (FRB) na kasalukuyang nakabinbin sa Senado at Kongreso, upang panagutin ang mga dambuhala at mapangwasak na mga minahan, ito ay panimula rin ng kampanya para sa Karapatan ng Kalikasan.

SAKAY AT LAKAD

May 28 @Zamboanga City 9AM to 3PM Press Conference & Send-Off Program; @Ipil Ritual/Send-off program, Radio Interview

May 29 @Dipolog 3PM to 5PM Salubong Program & 6PM Press Conference; @Davao Davao Region Cluster Environment Forum, Davao Region Cluster Caravan to CDO

May 30 @Iligan 10:30AM to 12NN Short Program & Caravan to CDO; @Cagayan De Oro 3:30PM to 6PM Salubong, Courtesy Visit to Gov. Yevgeny Emano, Press Conference, Program with Mayor Moreno as guest; KIDMACO Cluster Mini Caravan (Koronadal, Gen-San (with Program), Davao, Tagum, San Francisco, to Butuan)

May 31 @Butuan 11:00AM to 12NN Salubong Program in Plaza Center

June 1 @Surigao City 8:00AM to 8:30AM Short Program; @Ormoc Program and Memorial mass @Palo, Leyte Salubong for Layag Contingent 3PM and Sakay Contingent arrives (4:30PM), Main Program (6PM to 8PM) organized Eastern and Central Visayas Contingent

June 2 @Legazpi, Albay 8:00PM Ritual/Program;

June 3 @Legazpi, Albay 7:00AM Caravan from Daraga Seminary to St. Agnes Academy for Salubong, 8:30 -10am Environmental Forum/Salakyag Forum at St. Agnes Academy, @Naga Meet and greet at Kadlan, Caravan/Motorcade to Naga, 6:00pm Program and Presscon

June 4 @Iloilo Negros and Panay Cluster and Semirara Island Community Convergence in Ilo-ilo Pandan, Antique Program and Send-off

June 4 @Lucena 11AM Lunch and Salubong Program, Convergence of Marinduque Contingent with Main Contingent; @Baguio Northern Luzon Cluster Ritual/Send-off Program

June 5, 2018 @Quezon City Baguio/Northern Luzon arrival at DENR; Main Contingent 9:00am Park Quezon Circle, Walk to DENR, Salubong program, 11am Press Conference, Dialogue with DENR Secretary Roy Cimatu, Caravan to UST

@Manila Arrival at UST, March from UST to Mendiola, Program, Dialogue with Pres. Duterte, Media Interview, Dialogue with Senators & Representatives to push the bill on rights of nature.

LAYAG

May 31, 2018 @Homonhon, Guian 8AM to 11AM Briefing/Orientation, Mass & Blessing at Pagbabangnan, Ritual at Magellan's landing (tossing flowers into the sea); Mini fluvial from Pagbabangnan to Cagusan, then to Guian Boat Terminal; 3PM to 7PM Arrival in Guian Boat Terminal and Program with LAMRAG; @Manicani, Guian 4:00PM Mass and blessing of pumpboat at Hamorawon

June 1, 2018 @Manicani, Guian Fluvial to Guian Boat Terminal; @Guian Boat Terminal 5AM Start Fluvial Parade to Palo, Leyte

@Palo, Leyte Salubong for Layag Contingent 3PM and Sakay Contingent arrives (4:30PM), Main Program (6PM to 8PM) organized Eastern and Central Visayas Contingent



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