

31 JAN 2019

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DAY : **Thursday**

DENR

IN THE NEWS

Strategic Communication and Initiative Service



Department of Environment and Natural Resources
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THE EXPORT OF PHILIPPINE PROGRESS
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 THE NATION'S LEADING NEWSPAPER

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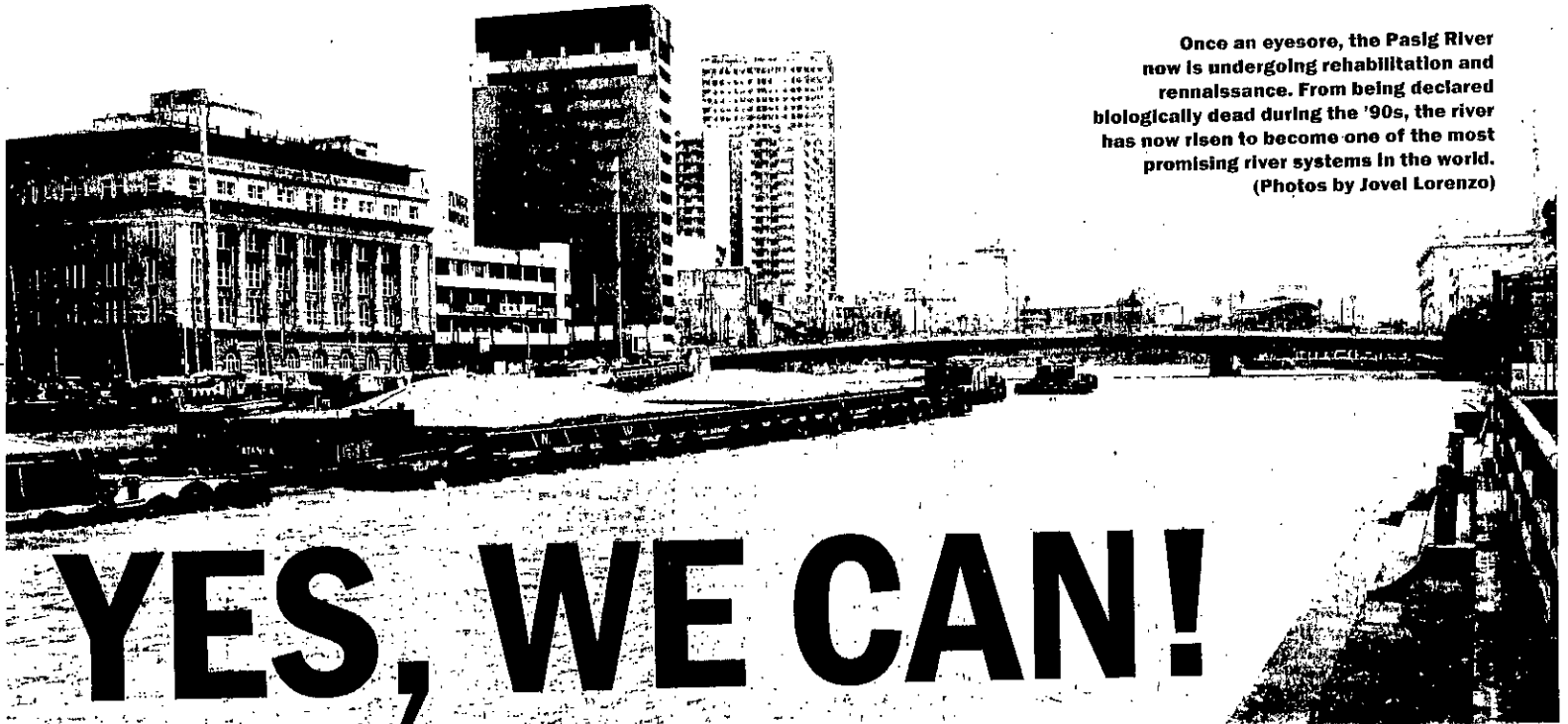
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Go Green, send us an email at
 EnvironmentMB@gmail.com

Once an eyesore, the Pasig River now is undergoing rehabilitation and renaissance. From being declared biologically dead during the '90s, the river has now risen to become one of the most promising river systems in the world. (Photos by Jovel Lorenzo)



YES, WE CAN!

Cleaning up a body of water is not impossible; Pasig River proves it can be done

Text by **JOHANNES L. CHUA**
 and **MAE LORRAINE RAFOLS LORENZO**

In the past few days, news about the successful cleanup of Manila Bay is all over the press and social media. After the government inter-agency and volunteers' cleanup last Sunday, photos of what appeared to be Manila Bay's beachfront emerged, showing a clean slate so strikingly different from its previous filthy condition.

Prior to Manila Bay, a lot of people are not aware that a major transformation has already happened with another major body of water in Metro Manila, the Pasig River.

For years, the Pasig River had to live through a bad reputation. People regarded it as one of the filthiest and smelliest bodies of water in Metro Manila – a sorry state for a river that played a crucial role in the country's history and culture.

Today, however, after more than a decade of dedicated rehabilitation programs, the Pasig River is finally rising from the dead – literally. From being declared biologically dead during the '90s, the river has now risen to become one of the most promising river systems in the world.

Serious rehabilitation

Year 1999 saw the creation of the Pasig River Rehabilitation Commission (PRRC), the government arm

tasked with the revival of the Pasig River. It was created under Executive Order No. 54 of former President Joseph Estrada, with the aim of reviving the river's once pristine condition and to support and sustain aquatic life, making the river a favorable "avenue" for public transport and tourism.

The PRRC went straight to the problem at hand – how to clean the wa-



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Yes, we can!

ters of the Pasig River. Data gathered regarding the river's water condition showed that 70 percent of the waste collected from the waters came from domestic and human waste from informal settlers living by the river, while 20 percent are industrial waste.

To counter this, dredging via Underwater Placement with Over-depth Capping (UPOC) was done to dispose the contaminated materials. This involved the construction of a pit located underneath the seabed, and wherein cell blocks are used as dumping ground of sediments dredged from below the Pasig River.

Thanks to the dredging, the first part of the rehabilitation process was considered a success - water quality greatly improved and scientists noticed that marine life, which declined during the end of World War 2, slowly returned after the dredging activity started. River depth improved significantly - from four meters to six meters - allowing the river to act as a catch basin during flooding around Metro Manila.

When former DENR Secretary Gina Lopez became the chairperson of PRRC, the focus of the cleanup shifted along the creeks or esteros which lead

towards the main body of water.

In time, 47 esteros were identified to be directly connected to the river. Among those, 17 have been rehabilitated - informal settlers around the area were relocated and turned the creek side into mini parks to encourage the community to take care of the area. Four river tributaries connected to Pasig River are also currently being rehabilitated to further improve the river system.

After years of improvement, the people behind the river's development were able to keep more than 18,719 informal settler families from coming back and contribute to the waste, and

about 22 million kilograms of solid waste have also been removed from the river and properly disposed.

International recognition

The rehabilitation's success reverberated across the globe. In 2018, the Pasig River was given the inaugural Asia Riverprize Award by the International River Foundation (IRF) in Sydney, Australia. This was given during the 21st International Riversymposium (IRS).

The International River Foundation is an NGO based in Brisbane, Australia. It draws upon large networks and builds new ones to revive the world's rivers through multi-sectoral partnerships around the world. IRF facilitates education, recognition, and collaboration for individuals, communities, and ecosystems to benefit from sustainably managed rivers.

On the other hand, the Riverprize Award is the world's foremost citation in river basin management. It recognizes

and rewards organizations making waves in the sustainable management of the world's rivers.

The IRF recognized the PRRC's efforts not only in helping revive the Pasig River, but also establishing 37,471.68 linear meters of environmental preservation areas. The Pasig River was chosen over other rivers around the world and beat entries such as China's Yang Tze River.

Continuous improvement

To date, the PRRC continues the river cleanup, this time focusing more on "estero" cleanup and aligning with other government projects such as the Manila Bay rehabilitation. Recently, it held cleanup activities at Manila's BASECO and Estero de Magdalena to coincide with the Manila Bay cleanup last Sunday.

Executive Director Jose Antonio E. Goitia, pledged PRRC's unwavering commitment in the recently conducted inter-agency meeting to help clean Manila Bay by intensifying the restoration and management of the Pasig River and its tributaries.

The group organized the inter-agency community cleanup at the bay area of Barangay 649 in BASECO since it is geographically located at the confluence of the Pasig River and Manila Bay.

With efforts such as these, it is indeed not impossible to wake up one day to see Manila Bay back in its former glory. One just has to look at the Pasig River to know that it is doable, that a dying body of water can become a river of renaissance.



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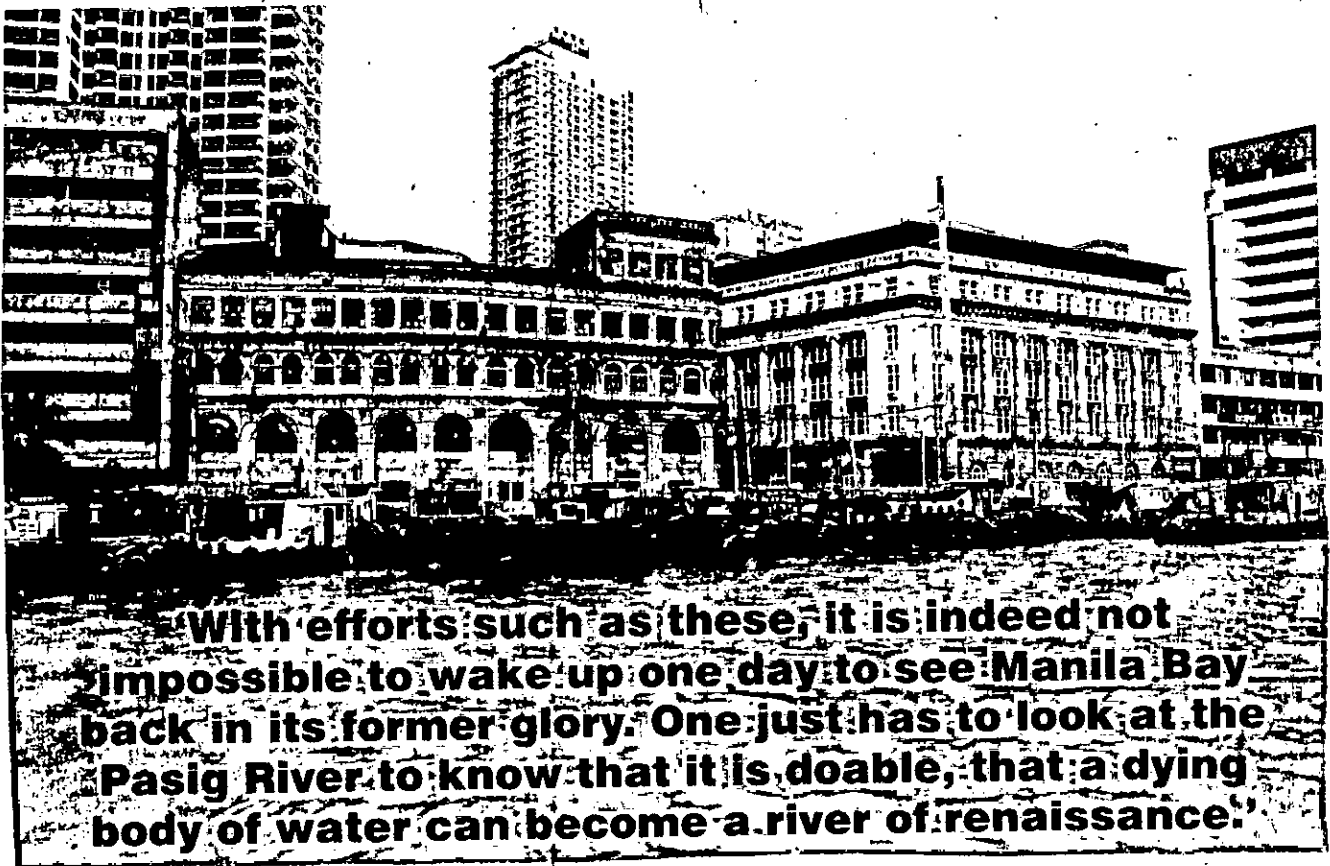
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Yes, we can!



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The PRRC team receives the Riverprize Award for the Pasig River rehab.



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Rehab zeroes in on Baywalk

By Kuhlín Geslío Gacula

The shoreline between the Manila Yacht Club and the US Embassy, more popularly known as the Baywalk, will be temporarily closed to give way to the ongoing Manila Bay rehabilitation.

Environment Secretary Roy A. Cimatu, head of the inter-agency task force in charge of the clean-up and rehabilitation of the bay known for its famed sunset, said the closure will last for a week or two. No specific schedule for the closure was given.

Cimatu said the government is prioritizing the said stretch to prevent

untreated effluent flowing out of three existing sewage outfalls from directly discharging into the bay.

"It's our first target," he said, adding two of the three sewage outfalls would be connected to a third outfall which, in turn, would be linked to a treatment facility.

The effluent would be treated in the facility before flowing into Manila Bay.

Last week, the Manila Zoo, which connects to the Estero de San Antonio Abad, one of the bay's sources of pollution, was earlier closed by the city government to pave the way for the construction of a sewage treatment plant.

Cimatu clarified that the promenade

would remain open so that the public can do leisurely activities, such as strolling, jogging, and watching Manila Bay's famous sunset.

Signs, markers and other means of delineating the target area would be installed so the public can be guided accordingly, he added.

Last Sunday, the "Battle of Manila Bay" officially commenced aimed at improving the quality of its water.

Data from the DENR showed that the level of coliform bacteria in the target area's waters is already more than one million most probable number (MPN) per 100 milliliters. The safe level is 100 MPN per 100 milliliters only.



PROMENADERS will still get a glimpse of the famed Manila Bay sunset despite the closure.



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Rehab zeroes in on Baywalk

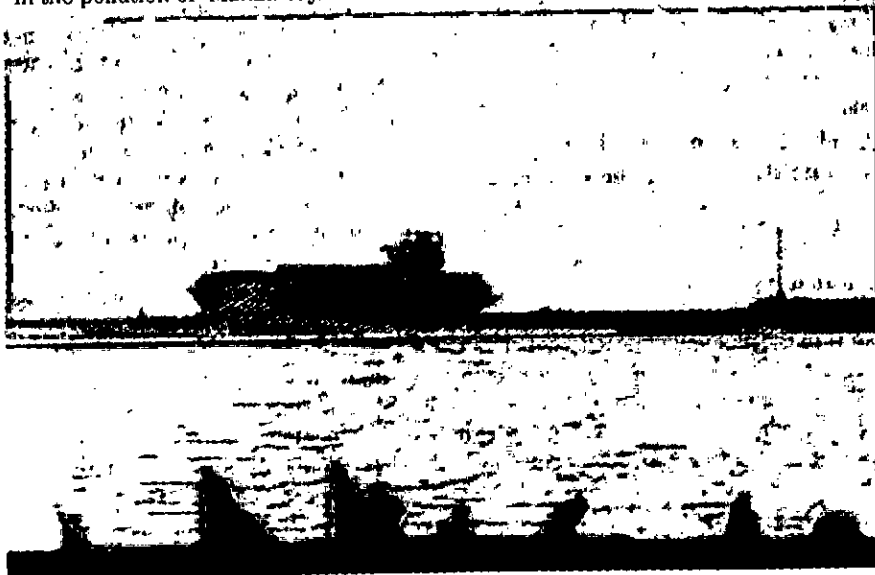
Thousands of volunteers and agencies take part by collecting trash scattered around the bay, as part of the first leg of a rehabilitation program seen to last years.

Cimatu clarified that the promenade would remain open so that the public can do leisurely activities, such as strolling.

Meanwhile, former Presidential adviser on political affairs Francis Tolentino who is running for a senatorial seat in this year's midterm elections said the government should not single out a few establishments in the pollution of Manila bay.

Appearing at the weekly press forum "Kapihan sa Manila Bay" on Wednesday, Tolentino said the DENR should also trace the source of pollutants by inspecting the 273 esteros all over Metro Manila who contributes to Manila Bay's present conditions.

"Instead of putting the blame on Aristocrat restaurant and other establishments near the Bay, we must also trace all water passing to the 273 esteros all over Metro Manila coming from households, offices and factories that also contribute to the pollution of the bay. We should stop seeing trees but instead look at the entire forest" Tolentino said.



FILE PHOTO



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'Stretch of shoreline' closed to public

MANILA Bay's shoreline between the Manila Yacht Club and the US Embassy will be closed to the public temporarily for rehabilitation and cleaning, an official has said.

"We'll close that stretch hopefully in about one to two weeks," Environment Secretary Roy Cimatu said Tuesday on the sidelines of the Wood Summit in Mandaluyong City.

In other developments:

- The Environment department said Wednesday there will be no eviction and relocation of the squatters along the Manila Bay "in the meantime" but the agency plans

to put up a communal septic tank and waste water treatment facility to ensure that human waste does not end up in the bay.

- The Pasig River Rehabilitation Commission is opposing the proposals to postpone the rehabilitation of Manila Bay.

In a statement Wednesday, PRRC Executive Director Jose Antonio Goitia said postponing the rehabilitation would result in the degradation of the condition of Ma-

nila Bay and the Pasig River, as well as the prolonged exposure of the squatters to inhumane conditions.

Cimatu said the promenade will remain open so that the public can continue strolling, jogging and watching Manila Bay's famous sunset.

Signs, markers and other means of delineating the target area will be installed so the public can be guided accordingly, he said.

Last Sunday, Cimatu led the start of Manila Bay's rehabilitation that aims to improve the quality of its water.

Cimatu said the rehabilitation of the shoreline from the US Embassy to the Manila Yacht Club was a priority to prevent untreated effluent flowing out of three sewage outfalls from directly discharging into

Manila Bay.

He said two of those outfalls would be connected to the third outfall which, in turn, would be linked to a treatment facility.

The effluent would be treated in the facility before flowing into Manila Bay. "It's our first target," he said.

Data from the DENR showed that the level of coliform bacteria in the target area's waters is already more than one million most probable number per 100 milliliters. The safe level is 100 MPN per 100 milliliters only.

Experts said coliform bacteria is found in human and animal feces. Water contaminated with coliform bacteria has the potential to cause disease.

PNA, with Rio N. Araja



DILG rejects call to postpone Manila Bay rehabilitation

By JONATHAN L. MAYUGA. [@jonlmayuga](#)

An official of the Department of the Interior and Local Government (DILG) has rejected the call of the Makabayan bloc to postpone the rehabilitation of Manila Bay.

"We wish to emphasize that Manila Bay is in critical condition. Actually, the bay is in ICU [intensive care unit]. We cannot afford an additional day of delay. Giving in to Makabayan will only make matters much worse," DILG Assistant Secretary and Spokesman Jonathan Malaya said in a news statement released on Wednesday.

In a related development, the Laguna Lake Development Authority (LLDA) launched on Wednesday a massive inspection of commercial establishments in the cities of Pasay and Manila as part of the bay rehabilitation program.

A total of 14 teams composed of at least five members each were dispatched by the LLDA to conduct water sampling.

Each team is also armed with proper identification, inspection evaluation report, waste-water sampling form, pre-inspection report and refusal of entry form.

LLDA General Manager Jaime C. Medina said cease and desist orders and notices of violation will be issued by the LLDA to business establishments who fail to meet effluent standards for SB water quality.

Calling it a saturation drive, the massive inspection activities came days after the Duterte administration launched the Battle for Manila Bay, an ambitious P47-billion, a seven-year rehabilitation program to save Manila Bay.

According to Malaya, the rehabilitation of Manila Bay is an order not only by President Duterte, but by the Supreme Court which dates back in December 2008 with the issuance of a writ of continuing mandamus to the agencies led by the Department of Environment and Natural Resources, including the DILG.

"Instead of asking for a postponement, the Makabayan bloc should [instead] do their part in helping the government fight the 'Battle of Manila Bay.' The administration has exercised the political will to do what is right. Now it's our turn to do our part," he said.

They added that the Makabayan Bloc's rationale for postponement "to undertake first a comprehensive and holistic study and a genuine and democratic program that will sincerely rehabilitate the bay" has already been done by both the DENR and the DILG and it only needs to be implemented.

He said Interior Secretary Eduardo M. Año is set to meet with Metro Manila mayors to discuss ways on how to expedite the social preparation and transfer of squatter residents to in-city and provincial resettlement sites.

"Secretary Año also seeks to mobilize the cooperation of NCR [National Capital Region] mayors in monitoring business establishments and other polluters. The support of our LGUs is crucial in the success of our rehabilitation plan," said Malaya.

The DILG is urging all local governments around Manila Bay to set a good example to private establishments—residential and commercial ones—on the compliance with the Clean Water Act and Ecological Solid Waste Management Act.

All establishments, particularly those in the Manila Bay area, must ensure that they are connected to sewer lines or have their own sewage treatment plants for proper wastewater disposal, he said.

Malaya also criticized the Makabayan bloc's claim that the rehabilitation plan will pave the way for the implementation of 40 reclamation projects. "Again this is clearly misinformation. There is no place for reclamation in the rehabilitation program. In fact, Secretary Año is personally opposed to reclamation projects," he said.

"With everyone's support, we can cleanup Manila Bay, we can sustain it, and we can preserve the revived Manila Bay for future generations," he added.



DILG laments bloc's call to postpone Manila Bay rehab

By JUN I. LEGASPI

THE Department of Interior and Local Government (DILG) lamented the Makabayan Bloc's call for the government to postpone the Manila Bay Rehabilitation program to pave the way for more "study and consultations."

"We wish to emphasize that Manila Bay is in critical condition. Actually, the bay is in ICU. We cannot afford an additional day of delay. Giving in to Makabayan will only make matters much worse," said DILG Assistant Secretary and Spokesperson Jonathan Malaya.

Malaya said that they cannot further postpone the rehabilitation because it

has been ordered not only by the President but by the Supreme Court way back in 2008 when it issued a Writ of Continuing Mandamus to the DENR and the DILG, among others.

"This major government undertaking is in compliance with the writ of the Supreme Court. We wish to remind them that on 18 December 2008, the Supreme Court ordered 13 government agencies (referred to as mandamus agencies) to 'clean up, rehabilitate, and preserve Manila Bay, and restore and maintain its waters to SB level to make them fit for swimming, skin diving, and other forms of contact recreation,'" he said.

He said that "instead of asking for a postponement,

the Makabayan Bloc should instead do their part in helping the government fight the 'Battle of Manila Bay'. The administration has exercised the political will to do what is right. Now it's our turn to do our part."

"Unfortunately, it would seem that the Left in Congress has given in to big business and special interests who will be adversely affected by the closure of businesses and other entities found to be violating environmental laws. Again, they have politicized this supposedly bipartisan issue to gain votes ahead of the party-list elections," he added.

Malaya said that Makabayan's rationale for postponement which is to undertake first a "comprehensive and holistic study" and

a "genuine and democratic program that will sincerely" rehabilitate the bay has already been done by both the DENR and the DILG and it only needs to be implemented.

The DILG spokesperson said that DILG Secretary Eduardo M. Año is set to meet with all Metro Manila mayors tomorrow to discuss ways to expedite the social preparation and transfer of informal settlers to in-city and provincial resettlement sites.

"Secretary Año also seeks to mobilize the cooperation of NCR mayors in monitoring business establishments and other polluters. The support of our LGUs is crucial in the success of our rehabilitation plan," said Malaya.

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DILG rejects solons' call to delay Manila Bay rehab

The Department of Interior and Local Government (DILG) said the massive rehabilitation of over-polluted Manila Bay "cannot be postponed".

DILG Assistant Secretary and spokesman Jonathan Malaya issued the statement after the Lower House's Makabayan bloc called on the government to postpone the Manila Bay rehabilitation program to pave the way for more "study and consultations."

"We wish to emphasize that Manila Bay is in critical condition.

Actually, the bay is in ICU. We cannot afford an additional day of delay. Giving in to Makabayan will only make matters much worse," said Malaya.

Malaya stressed the inter-agency group which includes the DILG cannot put off the rehabilitation because it has been ordered not only by the President but by the Supreme Court way back in 2008 when it issued a Writ of Continuing Mandamus to the DENR and the DILG, among others.

"This major government under-

taking is in compliance with the writ of the Supreme Court. We wish to remind them that on 18 December 2008, the Supreme Court ordered 13 government agencies (referred to as mandamus agencies) to 'clean up, rehabilitate, and preserve Manila Bay, and restore and maintain its waters to SB level to make them fit for swimming, skin diving, and other forms of contact recreation,'" he said.

He said that "instead of asking for a postponement, the Makabayan bloc should instead do their part

in helping the government in the 'Battle of Manila Bay'. The administration has exercised the political will to do what is right. Now it's our turn to do our part."

Malaya said that Makabayan's rationale for postponement which is to undertake first a "comprehensive and holistic study" and a "genuine and democratic program that will sincerely" rehabilitate the bay has

already been done by both the DENR and the DILG and "it only needs to be implemented".

DILG Secretary Eduardo M. Año is set to meet with all Metro Manila mayors Thursday (January 31) to discuss ways to expedite the social preparation and transfer of informal settlers to in-city and provincial resettlement sites. **(Chito A. Chavez)**



EDITOR TIMOTHY ROY C. MEDINA



MMDA PERSONNEL collect trash at the shores of Manila Bay along Roxas Boulevard in Manila on Jan. 12.

PHILIPPINE STAR/KRIZ JOHN ROSALES

DoF launches sewage treatment plant amid Manila Bay cleanup

THE Department of Finance (DoF) said that its office along Roxas Boulevard in Manila has commissioned and launched a P2.8 million state-of-the-art sewage treatment facility, in line with the government's efforts to rehabilitate the Manila Bay.

"The DoF Building's sewage treatment facility discharges effluent into the Manila Bay that is classified as Class C, which is fit for fishing and the propagation and growth of fish and other aquatic resources. This is the minimum standard of the DENR for water being discharged into the bay. We are now conducting tests to check what still needs to be done so that our STP can meet the Class B requirement, which is fit for bathing and swimming," Alvin P. Diaz, DoF Director, said in a statement on Tuesday.

Last Sunday, the DENR issued cease and desist orders to three establishments allegedly releasing pollutants into Manila Bay, and served notices of violation to six businesses that do not have proper sewage treatment plants (STPs). The DENR earlier called on government offices to comply with environmental laws and serve as models especially for the ongoing rehabilitation of Manila Bay.

Mr. Diaz said that DoF's refurbished building has a number of environment-friendly features such as LED lighting

systems and efficient air conditioning, which it held up as a model for other government establishments up for renovation.

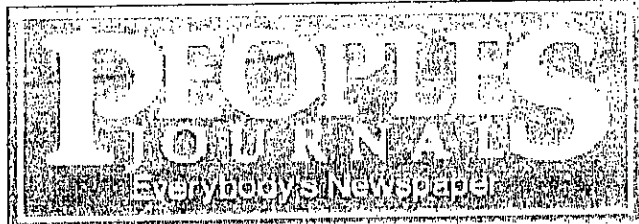
"Even the impressive glass envelope in front of the building serves a purpose other than to be aesthetically pleasing. The glass cladding cuts the noise entering the building and also reduces the heat which makes it energy efficient," Mr. Diaz said.

"We are currently working for the DENR's issuance of a discharge permit that will validate DoF's compliance with existing rules and regulations," Mr. Diaz noted.

According to Mr. Diaz, the STP is self-maintaining, thus does not generate maintenance costs.

Mr. Diaz added: "The advantage of having an STP is that you are able to regulate and control effluent water, making sure that it is in compliance with the government requirements, and thus contributing to the preservation of our marine resources."

"Among the government agencies with their STPs are the City Hall of Caloocan, Casimiro Henares Hospital in Rizal, Antipolo Hospital, Langhari Public Market in Malabon, and the Molino Public Market in Bacoor, Cavite, to name a few," Mr. Diaz said. — **Reicelene Joy N. Ignacio**



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DU30 urged to compel water firms to put up STP

By Jester Manalastas

THE Manila Bay clean-up and rehabilitation are useless if the two water concessionaires will continue dumping the sewage into the water system.

Buhay party-list Rep. Lito Atienza also urged President Rodrigo Duterte to compel the Manila Water Company (MWC) and Maynilad Water Services Inc. (MWSI) to comply with its contractual obligation of fully implementing the Metro Manila Sewerage Treatment System (STP).

"Mr. President you will fail unless you force the two water concession-

aires today to deliver the waste water treatment facilities that is part of their obligation under their contracts," Atienza said in a press briefing.

Atienza, a former secretary of the Department of Environment and Natural Resources (DENR) and Manila Mayor, said MWC and MWSI were allowed to collect at least 20 percent environmental fees in the water bills of Metro Manila water users to finance the projects. The fee would guarantee that sewage thrown into Manila Bay will be considerably reduced of toxins and dangerous pollutants.

"So far they have collected hundreds of billions of pesos but they have not complied with their responsibilities in putting up treatment plants," Atienza lamented. He said MWC and MWSI should stop collecting environment fees until the treatment plants are put up and fully operational.

Meanwhile, the House Makabayan bloc urged the DENR to suspend the Manila Bay rehabilitation "until a comprehensive and holistic study on the socio-economic impact on affected marginalized sectors has been diligently carried out."

Anakpawis Rep. Ariel Casilao, Bayan Muna Rep. Carlos Zarate, ACT

Teachers Reps. Antonio Tinio and France Castro, Gabriela Reps. Emmi de Jesus and Arlene Brosas, and Kabataan Rep. Sarah Elago filed House Resolution No. 2452 stressing the need to study the impact of the Manila Bay rehabilitation on the livelihood of poor sectors.

However, Interior and Local Government Assistant Secretary and Spokesperson Jonathan Malaya said postponing the "Battle for Manila Bay" for another day would only make matters worse, adding that Manila Bay is in "Intensive Care Unit" (ICU) and the agencies tasked for the herculean task could not afford for an

additional day of delay.

Malaya said this major undertaking is in compliance with the writ of mandamus issued by the Supreme Court for the 13 government agencies to clean up, rehabilitate and preserve Manila Bay and restore its waters to pristine condition fit for swimming and other forms of contact recreation.

Malaya said DILG Secretary Eduardo M. Año is set to meet with all Metro Manila mayors tomorrow to discuss ways to expedite the social preparation and transfer of informal settlers to in-city and provincial resettlement sites. **With Joel dela Torre**



Battle of Manila Bay a catalyst for action

COMMENTARY

ERNESTO M. ORDOÑEZ

On Jan. 27, I was at the Battle of Manila Bay. It was an inspiring event led by Secretary Roy Cimatu. It is a catalyst for united action to address effective water governance on a broader scale.

In that event, I saw the government and the private sector (business and civil society) unite to address the long pestering problem of water. Water affects every sector of society and significantly impacts our daily lives.

Bonbon Gomez, a "balik-bayan" who returned from a 28-year stay in the United States, joined a Manila bay cleanup. He said: "I saw the "bayanihan" spirit in action—something I have missed during my long stay abroad."

It is this bayanihan spirit of public-private partnership that is now needed to address the bigger picture of our national water crisis. Consider the following water indicators in the Philippines:

- 70 deaths every day from water-related causes

- 67 percent rate of intestinal worm infestation

- 5.7 million hectares of denuded forest

- 300,000 hectares of lost mangrove

- 4 percent rain harvesting (compared to India's 60 percent in key areas)

- 34 water-related government agencies not coordinated

- No full-time personnel or equipment for 18 major river basins with critical watersheds

- Misallocation of resources

- Corruption

The Philippines is part of a larger global water crisis. The World Economic Forum has listed water as the biggest global risk in terms of potential impact in the next decade. One-third of the world population lives in water-stressed areas. By 2030, water demand will outstrip supply by 40 percent. Experts said the next big war would be on water, as has been happening in Syria.

The private sector has recently been very involved in holding its own conferences regarding water governance. Examples are the Philippine Chamber of Commerce, Management Association

of the Philippines, Water Alliance, Water Links, European Chamber of Commerce and Industry, and Arangkada, which is supported by the Joint Foreign Chambers.

Since the agriculture sector consumes more than 70 percent of our water, agriculture-based coalitions have been discussing water issues and their recommended solutions. Examples are: the Alyansa Agrikultura led by Arsénio Tánchuling (42 federations and organizations representing small farmers and fisherfolk), Philippine Chamber of Agriculture and Food led by Danny Fausto (organizations from 34 different product sub-sectors representing agribusiness), Coalition for Agriculture Modernization in the Philippines led by Emil Javier and Ben Peczon (various universities and research institutions representing academe and science), Pambansang Kilusan ng mga Kababaihan sa Kanayunan led by Rebecca Miranda (organizations present in 34 provinces representing rural women) and Agrifisheries 2025 led by Roberto Amores (organizations from different sectors pursuing an

agreed upon agriculture and fisheries vision for 2025).

Already engaged in water projects are the Girl Scouts and Boy Scouts of the Philippines, Rotary Clubs and several civic, social and religious organizations. The private sector Movement for Water Security (MWS) provides added momentum to all these efforts. The MWS mission is "to increase and expand private sector initiatives, promote coordination and synergy within the private sector, and fully support government in their programs to achieve water security."

The Battle of Manila Bay has begun. It should catalyze urgent and united public-private sector programs and solutions to address our water crisis, especially in areas that face the greatest risk from climate change. *Carpe diem—seize the day!* INQ



The author is Agriwatch chair, former secretary of presidential programs and projects, and former undersecretary of agriculture and trade and industry. Contact is agriwatch_phil@yahoo.com

FIRST PERSON

ALEX MAGNO

Swimmable

Environment Secretary Roy Cimatu proudly announced, after the clean-up of Manila Bay commenced the last weekend, that the waters would be "swimmable" by yearend. I nearly fell off my seat.

Coliform levels at the bay are 4,000 times above acceptable standards. Dirty water from the waterways of our dirty megalopolis flows into the bay around the clock. Hundreds of thousands of informal settlers, commercial establishments and factories dump trash every day. Mega-Manila, after a century, remains without an effective sewerage treatment facility capable of returning only clean water to the bay.

There are a thousand parts in the solution to the cesspool that Manila Bay has become. Cimatu, it seems, has yet to wrap his mind around the immensity of the problem. It will not be enough to just send in a few hundred "volunteers" and expect the bay to be swimmable.

True, Cimatu and his multi-agency team have done a good job cleaning up the cesspool that Boracay had become. But cleaning up Boracay is a piece of cake compared to the huge task to bringing Manila Bay to life. The small tourist island could be shut down, a sewerage system installed and everything tightly policed. We cannot shut down the entire metropolis until Manila Bay is cleaned up.

The first task to cleaning up the bay is to clean up Laguna de Bay, itself as dirty. We had the chance a few years ago to begin doing this. After two years of hard negotiations, the Belgian government agreed to finance the dredging of Laguna de Bay. A full 30 percent of the cost came in the form of grants. The rest came in the form of truly soft loans.

But former president Noynoy Aquino screwed this up. Without even reading the contract, negotiated during the Macapagal-Arroyo years, he trashed it. The Belgian contractor signed for the project sued in the international arbitration court and won. Now we pay the contractor billions in damages and still miss the opportunity to clean up the lake.

We cannot clean up the bay without cleaning up all the waterways draining into it. That is a million times more difficult than just having some volunteers rake up trash on the shoreline. Unless the Pasig River and all the esteros become clean enough to host marine life in them, the Bay cannot be cleaned. This will take many years and a lot of unwavering persistence.



Water treatment

Rep. Lito Atienza, of the pro-life and pro-environment Buhay Party-list, is a walking compendium about what ails the bay. In his previous incarnations as mayor of the City of Manila and DENR Secretary, he has been trying to get Manila Bay cleaned.

When he served as DENR Secretary, Atienza was dragged to the Supreme Court by a network of environmental groups seeking a continuing mandamus against the national government to force the latter to clean up the bay. He surprised both the court and the petitioners by siding with the petition.

Part of the continuing mandamus was the imposition of a fine of P100,000 per day against the two water concessionaires until they treat the water drained into the bay. No one has tried collecting that fine to this day.

For decades, when government controlled water distribution in the metropolis, it failed to build a water treatment facility. When water distribution was privatized in 1998, the contract called for the two concessionaires to treat sewerage.

The concession contracts are due to expire in 2022. Manila Water has submitted a plan for the treatment of sewerage that will be completed in 2037. Maynilad, when the Lopezes controlled it, volunteered to purchase trucks that would suck up the muck from septic tanks without any indication about where the waste will be drained.

Meanwhile, both concessionaires charge consumers an "environmental charge" every month. This is now the time to ask the concessionaires, who took out hefty loans with sovereign guarantees, what they have done with the "environmental charges." This is material to the effort to clean up Manila Bay.

We are eons away from the manner Singapore has invested in treating its water. Before finally being discharged into the sea, Singapore's treats the water until it is completely potable.

Political will

Nevertheless, Atienza believes that only Rodrigo Duterte can possibly begin cleaning up the bay. No one else has the commitment, the mindset and the political will to get this historic cleanup going.

To really get this complex task of cleaning up the bay going, Atienza proposes that the President call the water concessionaires to the carpet and order them to build sewerage treatment facilities or face non-renewal of their lucrative contracts. Only Duterte can force the oligarchs to meet their obligations to the public.

It is bad enough that the Mega Manila area, with its teeming millions, has no suitable sanitary landfill for its trash. It is worse that, in addition, we have no sewerage treatment facilities. Somewhere along the Navotas shoreline, garbage is being dumped in some badly designed landfill that contributes to polluting the bay.

We have to solve the problem of proper waste disposal if we are to begin cleaning up the bay. There is yet no solution at hand.

We cannot talk about cleaning up the bay in blissful isolation. We have to address all the parts of the problem simultaneously.



Department of Environment and Natural Resources
STRATEGIC COMMUNICATION INITIATIVES SERVICE

Manila Standard

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Manila Bay cleanup



POP GOES
THE WORLD
JENNY
ORTUOSTE

FOLLOWING the more or less successful rehabilitation of Boracay is the massive cleanup done last weekend of parts of the Manila Bay, restoring to the area its sandy, beachy glory.

The before and after photos are remarkable. The formerly garbage-strewn shores are now pristine, full of tourists romping and building sand castles. *"May buhangin pala dito!"* a netizen commented on Twitter.

The cleanup was led by the Department of Environment and Natural Resources, with similar efforts to be exerted in Pampanga, Bulacan, Nueva Ecija, Bataan in Region III, and Cavite in Region IV-A.

To maintain cleanliness, the Department of the Interior and Local Government, through its Memorandum Circular 2019-09, requires 5,714 barangays along and near Manila Bay to perform followup cleaning on a weekly basis, complete with documentation.

A Supreme Court continuing mandamus from December, 2008 orders local governments and agencies to "reduce the amount of solid waste ending up in bodies of water and waterways which lead to the Manila Bay," in a bid to "reduce the pollution levels in Manila Bay to an acceptable range," according to Ralf Rivas in Rappler.

He added that "the mandamus will only be lifted once fecal bacteria content is brought down to less than 100 units per cubic meter," the 'swimmable' level. Current bacteria levels are "as high as 1 billion units per cubic meter," according to DENR.

Manila Bay's new look is the result of the efforts of 5,000 volunteers and government workers who took away 45.59 tons of trash in 11

garbage trucks last Sunday (Jan. 27), Day 1 of the rehabilitation program.

Why did Manila Bay's condition deteriorate so badly over the years?

For one, previous government officials ignored the environmental impact of the 40,000 families living near the area. Their regular activities, said DENR, caused much of the pollution in the bay.

For another, establishments in the area that were draining polluted water into the bay were not compelled to desist. Several have now been shut down for violating the Clean Air and Water Act of 2004.

And for some reason, the local government and agencies responsible for the maintenance of cleanliness in the area were neglectful. Instead of regularly cleaning up the shoreline, they allowed it to degenerate into an unsightly trash dump.

Considering that the mandamus was issued 10 years ago, why is it only now that we got results on this matter?

The administration's iron hand in the Boracay rehab served as an example and inspiration to some, showing that such actions can be undertaken with the exertion of political will. Kudos are due to DENR Secretary Roy Cimatu, who wielded a strong arm in getting the Manila Bay cleanup accomplished.

Philippine Star's Bobit Avila said in a recent column that in a meeting with government officials, Cimatu took a "no nonsense approach" and did not accept excuses. He "presented a comprehensive action plan" with short-, medium-, and long-term components, to cost P47 billion with P36 billion of that allocated to implement the transfer of and provide allowances and housing for informal settlers along waterways, including esteros around the city.

The plan sounds good. In fact, so does anything to do with cleaning up the environment in urban areas to mitigate risk during inclement weather and provide healthier surroundings.

Turn to A5

Manila...

From A4

However, several sectors are asking for a suspension of the program. Some progressive lawmakers said more studies need to be done regarding the impact of the cleanups on marginalized communities living in the area.

Urban poor group Kadamay (Kaalipunan ng Damayang Mahihirap) attributed a nefarious motive to the rehabilitation—that it could be a coverup for land reclamation projects. The group's chairperson Gloria "Ka Bea" Arellano said Tuesday in the statement that behind it all is a plot to sell territory to large corporations "gaya sa China."

Just as in Boracay, environmental cleanups come at a human cost. In Boracay, jobs were lost, income was lost. In terms of economics the province has not regained its former

footing. Some claim that drainage constructions were not properly carried out.

Similarly, the proposed transfer of settlers from Manila Bay and other waterways causes concern for their livelihood and future.

In the Boracay and Manila Bay cleanups, swift decision led to quick action that gave positive results. But underneath, resentments are festering, just like the garbage that not too long ago was rotting on the shores of Manila Bay.

Still, it is undeniable that much progress was made in bringing Manila Bay back to some semblance of its former beauty. Let's hope this is not a 'ningas-cogon' effort and that Cimatu's plan will eventually make the waters of the bay good for swimming again.

*** My Manila is the Pearl of the West Philippine Sea. FB and Twitter: @DrJennyO



Department of Environment and Natural Resources
Strategic Communication Initiatives Service

THE EXPONENT OF PHILIPPINE PROGRESS
SINCE 1900

MANILA BULLETIN

THE NATION'S LEADING NEWSPAPER

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Loni Santiago
SKP
MANILA BULLETIN
JANUARY 31, 2019



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Editorial

The battle to clean up Manila Bay finally underway

The “Battle for Manila Bay” will be won in seven years, the Department of Environment and Natural Resources (DENR) said Monday.

Seven years is such a long time. It is six and a half years longer than it took to clean up Boracay. It is also four years longer than the remaining three years of the Duterte administration. But the great big fact is that the cleanup is finally beginning.

It has been over a hundred years since the three and a half centuries of the Spanish colonial period ended with Admiral Dewey’s victory over the Spanish fleet in the bay and Metro Manila began its steady expansion. And all during this period, Manila Bay has been continuously polluted from all sides, but mostly from the Pasig River carrying the wastes from all of Metro Manila.

No wonder, the Supreme Court found it necessary to issue an order in 2008 directing 13 government agencies led by the DENR “to clean up, rehabilitate, and preserve Manila Bay, restore and maintain its waters to make them fit for swimming, scuba diving, and other forms of contact recreation.”

That key phrase “contact recreation” was there because Manila Bay, even then, was not fit for human contact of any kind. Swimming was forbidden, wading in the bay’s waters could cause infection and disease, because the waters were full of coliform bacteria from all the wastes pouring into it. This level was measured recently at 330 million MPN (most probable number) per 100 milliliters, when the acceptable level is only 100 MPN per 100 milliliters. Some areas of the bay are said to have as much as a billion MPN.

The DENR was able to clean up Boracay in six months. It will need seven years for Manila Bay.

Phase 1 of the program calls for the clean-up of esteros, reduction of the fecal coliform level, and requiring all government, commercial, industrial, educational, and other establishments to have their sewage treated. And planning will start for the relocation of some 233,000 informal settlers -- squatters -- who now dispose of their wastes directly into the streams and rivers flowing in to the bay.

Phase 2 will involve the rehabilitation of old sewage lines in the entire National Capital Region, continuing relocation of squatters, and completion of sewage treatment facilities by Metro Manila’s two private water concessionaires -- Manila Water and Maynilad.

Phase 3 will be a continuing education and information campaign, sustained law enforcement and monitoring, and completion of Metro Manila’s sewage system.

The Manila Zoo was among the first establishments ordered closed until it is able to have an adequate waste processing system, instead of directly dumping it into the bay. Several other establishments -- restaurants and hotels and other residences -- were issued notices of violations and cease-and-desist orders.

And this is only the beginning. The national government has set aside P47 billion for the cleanup project, with the local governments around the bay expected to set aside funds for their own programs.

The Duterte administration will be remembered for many things, notably its all-out anti-drugs campaign and soon, its massive infrastructure program “Build, Build, Build.” Its “Battle for Manila Bay” will take its place beside these programs as the hallmarks of decisive governance.



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EDITORIAL

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15 PABRIKA SA BULACAN IPINASARA NG DENR

LABING-LIMANG pabrika sa Bulacan ang ipinasara ng Department of Environment and Natural Resources (DENR) dahil sa nilikhang polusyon.

Ang mga pabrika na binigyan ng closure order ng DENR ay matatagpuan sa Marilao at Meycauayan City. Matatagpuan sa mga nasabing lugar ang maraming leather tannery.

Natuklasan ng DENR na direktang nagtatapon ng kanilang waste water sa ilog ang

mga ipinasarang pabrika na dumidiretso sa Manila Bay.

Ayon kay DENR-Environment and Management Bureau Director Lormelyn Claudio, 12 leather and tannery firms sa Meycauayan ang pinadalhan ng cease and desist order at 3 naman sa bayan ng Marilao.

Nagbabala si Claudio sa iba pang kompanya na mahuhuling lumalabag sa environmental law na kanila rin itong ipasasara.

DANNY GRAVADOR



Manila Bay rehab, pangmatagalan –DENR

NI ELLSON A. QUISMORIO

Tiniyak kahapon ng Department of Environment and Natural Resources (DENR) sa mga miyembro ng Kamara na magtutuluy-tuloy ang ongoing rehabilitation ng Manila Bay kahit tapos na ang administrasyong Duterte.

Binati ni Deputy Speaker, Sorsogon 1st District Rep. Evelina Escudero ang DENR sa mga pagsisikap nito na linisin ang sikat na bahagi ng tubig, ngunit nagtataka rin kung magtatagal ba ang pagsisikap o hanggang tatlong taon lamang ito

"I'd like to congratulate the DENR for what they are doing right now. However, my problem is...after three years, what will happen? Sustained ba itong program na ito for years to come? Baka after three years wala na and we go back to the same problem all over again?" tanong niya sa resource persons sa pagdinig ng House Committee on Ecology kaugnay sa usapin.

Magugunita na inilarga ni Pangulong Rodrigo Duterte ang P42 bilyon na tatlong taong Manila Bay rehabilitation plan ng DENR nitong nakaraang buwan.

"The reason why I asked is, every time we change administrations, there is also a change of policy and plans. So I just hope this program would be embraced [by future administrations]. I hope it's a permanent thing," Escudero.

Positibo ang naging tugon ni Assistant Secretary Daniel Darius Nicer ng DENR-Anti-Corruption Office, ang opisina na namamahala sa rehabilitasyon.

"Even if the initial funding is only up to three years, we expect to lay down activities that would be sustained perhaps long into the future, 10 years and beyond. So we're looking at a long-term effort here, not just for the first three years," sinabi ni Nicer, isang abogado.

Ipinaliwanag niya na ang rehabilitation plan ay binubuo ng tatlong parte. "The first part is the cleanup, the second one is the rehabilitation and resettlement, and the third one is the education and sustainment."

"Once we set the system in motion, it is [meant to continue] perhaps for the rest of our lives," matapang na pahayag ni Nicer.

Sinabi naman ni Quirino lone district Rep. Dakila Cua, chairman ng Ecology panel, kay Nicer na maaaring magpagpasa ng batas ang congressmeng para gagawing polisiya ng DENR ang paglilinis sa Manila Bay.

"We can legislate. We can offer our support to legislate so that it goes beyond our term, our generation, to see to it that we would protect Manila Bay," ani Cua.

"We appreciate your long term vision," tugon ni Nicer.



Department of Environment and Natural Resources
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CLEAN UP DRIVE SA MGA ESTERO SA METRO

HINHIKAYAT ngayon ang mga local government units mag-ing ang Department of Environment and Natural Resources (DENR) na isamang tutukan at linisin ang mga estero sa buong Metro Manila.

Ayon kay dating MMDA Chairman Francis Tolentino, hindi sapat at solusyon na ipasara na lamang ang mga establisimiyento sa paligid ng Roxas Boulevard kung saan ang 273 na estero sa buong Met-

ro Manila ay napababayaan din.

Sihabi pa niya sa isang forum, na liban sa pagbabawal sa mga restaurant at gusali sa Manila at Pasay na basta magtapon ng basura at drainage facilities sa Manila Bay, patuloy silang pangaralan at mahigpit na ipatupad ang maayos na waste and water facilities ng mga ito.

Paliwanag ni Tolentino huwag lamang dapat nakatuon ang mga opisyal ng gobyerno sa mga business establish-

ment sa paligid ng Manila Bay gaya ng sa Aristocrat kundi dapat lahat ng mga gusali sa Metro Manila na naglalabas din ng dumi na babagsak din sa bagong linis na bay.

Nanindigan siya na dapat magkaroon ng political will ang mga opisyal ng gobyerno at tutukan ang lahat ng mga estero sa Metro Manila at karatig lawigan upang tuluyang maiwasan o mabawasan ang dumi na mapupunta sa Manila Bay.

PAUL ROLDAN



EDITORIAL

Sinimulan na sa wakas ang laban para linisin ang Manila Bay

ANG "Battle for Manila Bay" ay mapawawagian sa loob ng pitong taon, sirabi ng Department of Environment and Natural Resources (DENR), nitong Lunes.

Matagal na panahon ang pitong taon. Anim at kalahating taon itong mas matagal kumpara sa isinagawang paglilinis sa Boracay. Apat na taon ding itong mas matagal kumpara sa nalalabing tatlong taong termino ng administrasyong Duterte. Ngunit ang pinakamalaking katotohanan ay sa wakas nasimulan na ang paglilinis sa Manila Bay.

Mahigit isandaang taon na ang nakalilipas mula nang magwakas ang tatlo at kalahating siglong pananakop ng mga Espanyol nang magapi ni Admiral Dewey ang puwersa ng mga Espanyol sa look at nagsimula ang tuluy-tuloy na pagpapalawak ng Metro Manila. Sa panahong ito, patuloy na napuno ng polusyon ang Manila Bay mula sa iba't ibang bahagi, ngunit karamihan ay dulot ng ilog Pasig na nagdadala ng mga dumi mula sa buong Metro Manila.

Kaya hindi na katak-taka ang naging desisyon ng Korte Suprema na maglabas ng isang kautusan noong 2008, na nagbibigay-direktiba sa 13 ahensiya ng pamahalaan sa pamumuno ng DENR "to clean up, rehabilitate, and preserve Manila Bay, restore and maintain its water to make them fit for swimming, skin diving, and other forms of contact recreation."

Ang susing parirala na "contact recreation" ay inilagay dahil ang Manila Bay, noon pa man, ay hindi ligtas sa anumang aktibidad ng tao. Mahigpit na ipinagbabawal ang paglangoy, ang pagtatampisaw sa tubig ng look ay maaaring magdulot ng impeksyon at sakit, dahil ang tubig ay binubuo ng mga coliform bacteria mula sa iba't ibang uri ng dumi na ibinubuhos dito. Kamakailan lamang, umabot na sa 330 million MPN (most probable number) kada 100 milliliters, gayong ang tinatanggap lamang na label ay 100 MPN kada 100 milliliters. Ilang bahagi ng look ang sinasabing umaabot sa bilyong MPN.

Nagawang malinis ng DENR ang Boracay sa loob ng anim na buwan. Pitong taon ang kinakailangan para sa Manila Bay.

Ang unang bahagi (Phase 1) ng programa ay para sa paglilinis ng mga estero, pagbabawas ng fecal coliform level at ang pag-uutos sa lahat ng pamahalaan, komersyal, industriyal, pang-edukasyon at iba pang establisyemento na magkaroon ng sariling sewage treatment. At sisimulan na rin ang pagpapalano para sa reloksyon ng nasa 233,000 informal settlers — mga iskuwater — na sila ngayong direktang nagtatapon ng kanilang mga dumi sa mga sapa at ilog na dumadaloy patungong look.

Bahagi naman ng Phase 2 ang rehabilitasyon ng mga lumang sewage lines sa buong National Capital Region, pagpapatuloy ng reloksyon ng mga iskuwater, at pagtapos sa sewage treatment facilities ng dalawang pribadong water concessionaires ng Metro Manila — ang Manila Water at Maynilad.

Ang Phase 3 ay ang patuloy na kampanya para sa pagbibigay edukasyon at impormasyon, pagpapantili ng pagpapatupad ng batas at pagbantay, at ang pagtapos sa Metro Manila sewage system.

Isa ang Manila Zoo sa mga unang establisyemento na ipinag-utos ang pagsasara hanggat hindi ito nagkakaroon ng sapat na waste processing system, sa halip na direktang itapon ang mga dumi nito sa look. Ilang pang establisyemento — mga restaurant at hotel at iba pang residente — ay binigyan din ng abiso ng paglabag at cease-and-desist orders.

At ito ay simula pa lamang. Naglaan na ang pamahalaan ng P47 bilyon para sa proyektong paglilinis, kasama ng mga lokal na pamahalaan sa paligid ng look na inaasahang magtatabi ng pondo para sa kanilang sariling programa.

Maaalala ang administrasyong Duterte para sa maraming bagay, ang malawakang kampanya laban sa ilegal na droga, at ang malapit nang malawakang programang pang-imprastruktura na 'Build, Build, Build'. Ang "Battle for Manila Bay" ay tatatak din bukod sa mga programang ito bilang tanda ng disididong pamamahala.



OPINION

TONIGHT

TINGNAN NATIN



By VIG REYES

BUKAS ay nasa pang-32 buwan na sa Malacañang si Pangulong Rody Duterte, pero nandiyan pa rin ang problema sa illegal na droga na nagpapasakit sa ulo ng mga awtoridad.

Malala talaga ang problema bago pa maupo si Pangulong Duterte.

Pero determinado ang Administrasyong Duterte na wakasan ang problema.

Ang kailangan lang ay tumulong ang lahat para makawala na tayo sa impluwensiya ng "drug monster."

Kaya naman natutuwa tayo na sa Ninoy Aquino International Airport (NAIA) ay hindi nagpapabaya ang mga taga-Bureau of Customs (BoC).

Sinisiguro ni NAIA district Collector Carmelita

"Mimel" M. Talusan na walang makalulusot na kontrabando sa paliparan.

Lahat ng mga dumarat-ing na kargamento sa mga NAIA terminal ay "thoroughly checked."

Kasama ang mga taga-Philippine Drug Enforcement Agency (PDEA) sa pagbusisi sa mga shipment.

Sinabi ni Collector Talusan na mahigpit ang ginagawang screening.

"This is to ensure all air parcels, baggage, and shipments arriving in the airport are cleared from any illegal substances and unauthorized import of other controlled chemicals," ayon kay Talusan.

Sa loob lamang ng sampung buwan ay nakapag-rehistro ang BoC-NAIA ng tatlumpong drug seizures.

Hindi pa kasama diyan ang mga nasakoteng wildlife na tangkang ipuslit palabas ng bansa.

Tumutulong ang BoC sa Department of Environment and Natural Resources (DENR) para matigil ang illegal wildlife trade.

Sa tingin ng mga na-

kakakilala kay Coll. Mimel, mahirap lumusot sa NAIA ang mga kontrabando.

Nandiyan ang mga x-ray machine, K9 o trained dog at eagle-eyed na mga BoC personnel.

Laging ipihapa-alala ni Talusan, anak ni dating BoC Depcom Julita Singson Manahan, ang kahalagahan ng tapat na serbisyo sa bayan.

At tama naman si Collector Talusan.

Nasa kamay ng mga nagpapatupad ng batas ang tagumpay ng mga programa ng gobyerno.

Ang kailangan lang ay patuloy na ugnayan ng mga namumuno at kanilang mga tauhan.

Mabuti naman at naglakas loob ang Administrasyong Duterte na linisin ang Manila Bay.

Hindi biro ang "clean-up and rehabilitation" ng makasaysayang Manila Bay, na pinapangunahan ng DENR.

Hindi kagaya ng Boracay Island, maraming bayan, syudad at probinsya ang nakakasaklaw sa Ma-

nila Bay.

Malalaking bahay-negosyo rin ang apektado sa ginagawang paglilinis.

Kailangang may sapat na political will ang mga ahensiyang naatasang maglilis sa Manila Bay.

Naniniwala tayo na habang nasa Malacañang si Pangulong Duterte ay susunod ang lahat sa kumpas ng gobyerno.

Dapat magsama-sama tayo sa proyektong ito.

Pati mga kritiko ng administrasyon ay dapat makiisa sa paglilinis dahil para ito sa kapakanan ng susunod na henerasyon ang ginagawa ng gobyerno.

Huwag din kalimutan ang mga sasakyang pandagat na nagtatapon ng kani-kanilang basura sa dagat.

Sa inyong lahat na nakatoka sa clean-up ng Manila Bay, lalo na sa DENR, Saludo kami sa inyo!

(Para sa inyong komento at suhestiyon, tumawag o mag-text sa #0921-4765430/email: vicreyesjr08@yahoo.com. ilagay lang ang buong pangalan at tirahan.)



Founded March 11, 1993

The Manila Times

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CLEANING THE COASTS Forty-one volunteers from MemoExpress conducted a coastal cleanup drive in partnership with Haribon Foundation last weekend. Help protect our seas and join a coastal cleanup activity at the Las Piñas-Parañaque Critical Habitat and Eco-Tourism Area by calling (02) 421-1209. HARIBON PHOTO



Founded 1859

The Manila Times

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Department of Environment and Natural Resources
STRATEGIC COMMUNICATION INITIATIVES SERVICE

31 JAN 2019

Region 2 sets fight vs illegal logging

BY LEANDER C. DOMINGO

TUGUEGARAO CITY, Cagayan: In a move to intensify its campaign against forest destruction in Cagayan Valley (Region 2), the Department of Environment and Natural Resources (DENR) regional office here is reviving a task force to stop the denudation of former thickly forested areas in the region.

Lawyer Antonio Abawag, newly appointed DENR-Cagayan Valley executive director, said he had ordered the reactivation of the Regional Anti-illegal Logging

Task Force (RAILTF) that was created under Executive Order 23.

Abawag said the newly-reactivated RAILTF team would again come into action soon to stop illegal

logging activities in the Cagayan Valley region.

Cagayan Valley, which, according to the DENR, had become a transshipment point for illegal products, comprises the five provinces of Cagayan, Isabela, Quirino, Nueva Vizcaya and the island province of Batanes.

Earlier, an expanded executive committee meeting at the Narra Hall in the DENR-Cagayan Valley office here, Abawag discussed priority directives to intensify the campaign against forest destruction in the region.

The regional task force pursuant to Anti-illegal Logging Task

Force Resolution 2011-003 will be chaired by the DENR regional executive director with the Department of the Interior and Local Government regional director as vice chairman.

Representatives from the Armed Forces of the Philippines and the Philippine National Police based in Cagayan Valley will also sit as members of the regional task force.

Abawag said he would meet with the task force in February to formulate anti-illegal logging operations that would include the training of partners to be deputized for forest activities.

"We will shift other forest rang-

ers activities from forest development to forest protection," he said, adding DENR lawyers would also participate in the anti-illegal logging operations, particularly in the filing of cases.

Abawag has also instructed DENR field officials not to recommend new lumber dealer permits for his approval.

"This time, we will not renew permits of lumber dealers with records environment violations," Abawag said.

He has also ordered the conduct of stock inventory of lumber dealers and that he would not release apprehended conveyances used in transporting

illegal forest products.

Meanwhile, Abawag said he would also intensify the integration of mining and environmental programs, into the priorities of DENR Region 2 office.

With this, he also ordered the creation of environment and natural resources law enforcement task force composed of DENR technical personnel and consultant lawyers, and staff from the Environmental Management Bureau, and the Mines and Geosciences Bureau.

"We will see to it that the task force will immediately act on any violation of environmental laws," Abawag said.



COMMUNITY EFFORT ALL FOR A CENTURY-OLD TREE

MARIKINA FOLK SAVE STORM-TOPPLED SYMBOL OF THEIR GRIT

By **Jhesset O. Enano**
@JhessetEnanoINQ

On a stormy September afternoon last year in Barangay San Roque, Marikina City, a tornado formed over the river and swept across the street, hurling debris and battering structures that stood in its path.

Stepping out of their homes and shops later to see the damage, residents were particularly disheartened to see a cherished feature of the local urban landscape violently toppled and seemingly beyond saving.

The century-old acacia tree lay on its side, the trunk blocking JP Rizal Street, half of the roots unearthed and exposed.

It felt like the end for one of the enduring witnesses to Marikina's history, particularly the growth and struggles of its footwear industry. The tree had stood for years, like a loyal guardsman, just outside the city's Shoe Museum.

It had also endured countless storms for decades—notably "Ondoy" which unleashed killer floods in the city in 2009—that residents somehow considered it a symbol of their own survival and resilience.

The value they attached to it was given official expression in 2016 when the Department of Environment and Natural Resources recognized it as one of the last two "heritage trees"

Marikina had managed to preserve.

On Sept. 14, 2018, however, a "buhawi" spawned by Typhoon "Ompong" (international name: Mangkhut) on Marikina River tore through San Roque, strong enough to uproot the tree.

Stories, memories

Even in the ensuing power blackout, word quickly spread about what happened to the acacia, that within hours no less than Mayor Marcelino Teodoro came to personally see how bad the damage was.

"There was a woman (at the site) and she was sad," Teodoro recalled. "She started telling me her story relating to that tree, then more people came to me to share their own memories: That they used to play around it when they were kids and hung around it in the late afternoons as they got older."

Almost as tall as a three-story building, the acacia provided rest and shade for Marikina folk and visitors alike, a cool spot for hailing a jeepney or tricycle.

Strollers going to the Our Lady of the Abandoned Church and Kapitan Moy Residence, two of the local historic sites promoted by the city, could enjoy an oxygen break under its lush canopy.

Teodoro, hearing the residents' stories, knew that the local government "cannot simply give up" and let the tree die just like that. "Some people were already asking us for a piece of the trunk or a branch, but I said no because we will try to save it."

To the rescue

And so the Marikeños went to work. Among the first responders was Darrell John Felipe, a human resource management officer at City Hall who also heads the Marikina Bonsai Club.

"I already knew that it was

worth saving, most especially because this tree is a witness to our history," said Felipe, who was there when a team performed first-aid measures by covering the exposed roots with cloth and applying sealant on the trunk's "open wounds" to prevent further moisture loss.

Root inducers were used and—instead of raising the fallen trunk back to a vertical position—circular riplaps were built to support it on two points, the adobe sourced from the Marikina River.

Felipe said bonsai techniques had since been used to revive the acacia.

Today, new growths of green can be seen sprouting from the massive trunk.

To further protect the tree, this time from man-made injuries, the city government is strictly enforcing a 1997 ordinance penalizing unauthorized cutting, pruning and other activities that can damage trees grown in public spaces.

Highly appreciated

All these efforts didn't go unappreciated by longtime residents like Pedro Mangulabnan, 83, a retired shoemaker who—until he died in December last year—could be seen spending an hour or more next to the tree almost every day to check its health.

Sometimes, Mangulaban could also be heard reminding City Hall personnel who happened to be passing by that the soil was already parched and the tree needed watering, according to his daughter Emily, who herself had spent playful times in the tree's shade as a girl.

These communal experiences, Teodoro said, made the tree a certified Marikina treasure. "It represents (our) resiliency as it was the community itself that nursed it back to life. It is a reminder that whatever happens, whatever calamity we face, we will continue to rise and life will always find a way to sprout." INQ



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Marikina Folk save Storm-Topped Symbol of Their govt



TREASURED ACACIA The "heritage tree" after suffering the wrath of Typhoon "Ompong" on Sept. 14, 2018 (left), and after it was restored in front of Marikina City's Shoe Museum. —NIÑO JESUS ORBETA, JHESSET ENANO



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Malungon sows new trees on vital riverbank

THE municipality of Malungon, Sarangani, recently held a massive planting of bamboo seedlings along the watersides of Barangay Upper Lumabat River to help rehabilitate the critical riverbanks which have become a source of flash flood in the town's lowlands in recent years.

Some 5,000 bamboo seedlings were planted at a 4.2-km stretch, which was participated in by municipal officials and employees, local police, civil society groups, people's organizations and local townsfolk.

The Malungon municipal government also signed a memorandum of agreement with the Barangay Upper Lumabat barangay council for the bamboo growing project, which will also be a potential income-generating project.

According to Mayor Maria Theresa Constantino, who led the activity, the undertaking is part of the municipality's

environmental protection program for sustainable development.

A landlocked town in northeastern Sarangani, it was awarded last year for being the Best Municipal Disaster Risk Reduction and Management Council during the Gawad Kalasag Awards of the Provincial Disaster Risk Reduction and Management Council.

The bamboo reforestation is part of the 11th Slang Festival, which showcases the way of life of the Blaan and Tagakaulo indigenous people through dance, music and sporting events.

A first-class municipality, Malungon is a touristic town known for the ecotourism and cultural sites such as the Lamlifew Cultural Village and School of Living Traditions, the Kalon Barak Skyline Ridge, and a couple of agri and farm tourism sites.



EDITORIAL

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Disaster management

FEW candidates for the Senate this election are taking up safety and disaster management as platform issues, although these matters are very important to the life of the nation.

Landslides, for instance, have become normal occurrences whenever there are typhoons and storm, even these are not even in the category of super typhoon.

Mudslides, landslides and massive soil erosion are environmental problems that have long years of gestation. Decades of ecological degradation, cutting of trees, mining, industrial development and even large-scale treasure hunting, have loosened the soil in mountain sides. Also, the lack of honest-to-goodness tree-planting campaigns by the government contributed to the further environmental meltdown.

'While there is no such national land use policy yet, which should be institutionalized into a law, the best that government can do is to enact local ordinances on zoning and implement these measures strictly.'

At the Kapihan sa Manila Bay breakfast forum yesterday in Remedios Circle, Manila, former presidential political adviser Francis Tolentino said because of lack of legislation and implementation, homeless people especially those in the provinces had to build their shelters even in 35-degree slopes.

They know that this practice is against the law, but they still insist on it, and local government regulators are lax in implementing ordinances, he pointed out, adding that the situation becomes a tragedy waiting to happen, as evidenced by the landslides in Naga, Cebu and in Itogon, Benguet.

Tolentino has been advocating for a National Land Use Act to delineate the general policies of land use nationwide, but Congress, up until now, has not favorably acted on it.

While there is no such national land use policy yet, which should be institutionalized into a law, the best that government can do is to enact local ordinances on zoning and implement these measures strictly.

Also, contingency plans on earthquake rescue and rehabilitation should always be rehearsed, reviewed and updated, making the citizenry aware that safety of the community is paramount.



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BRACING FOR FLOODS

PAMPANGA'S FLOATING SHELTERS ARE LIFELINES IN TIMES OF DISASTER

By **Tonnete Orejas**
 @ttorejasINQ

MASANTOL, PAMPANGA—Three floating shelters, accompanied by vegetables gardens on a buoy, were launched last week as evacuation centers for 160 families in two villages that straddle the farthest end of the 265-kilometer Pampanga River and the mouth of Manila Bay.

The village council, led by Barangay Captain Bernardo Yumang, and the Pampanga Coastal Emergency Response, headed by Felimon Viray, opened the centers at Sepung Malicaban and Sepung Nigui at Barangay Nigui and Alwang Malicaban at Barangay Balibago.

These would serve as their lifelines in times of floods and other emergencies. These were

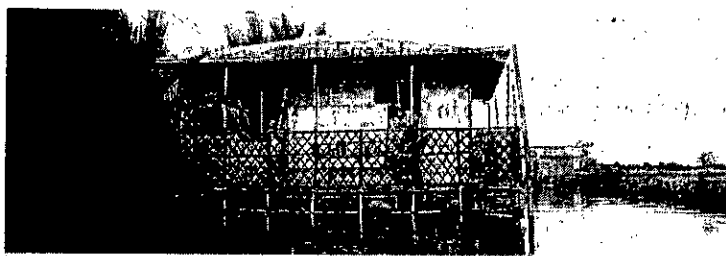
done through the project called iM Safe (Innovation in Masantol Shelter Against Flood and Emergencies) of the Center for Emergency Aid and Rehabilitation Inc. (Concern).

The lead funder of the centers is AWO International, a German professional association for development cooperation and humanitarian action.

"We'll take care of these," said Francisco Borja, a resident of Sitio Malikaban, when Jakob Littman, AWO head representative in South Asia, handed him a symbolic key.

Safety

Yumang said the floating shelters would help residents, especially children, women, the elderly and persons with disabilities, to immediately put



RECYCLED ITEMS Plastic drums and used water bottles are recycled to build floating shelters and vegetable gardens in flood-prone areas in Masantol, Pampanga. — **TONNETTE OREJAS**

themselves to safety.

These are anchored near a thick patch of mangoves. Houses stand beside narrow tributaries where grounds are protected from erosion by bamboo stacks.

The dike, where residents evacuate during floods, is a 20-minute ride by motorized banca. Floods in these parts reach be-

tween 1.52 and 3.04 meters, according to Yumang.

After Typhoon "Ondoy" in 2009, Concern first built a permanent evacuation center beside the dike at Barangay Nigui in 2010 for residents on the left bank of the Masantol side of Pampanga River.

Some community leaders

said the 14-km dike, built for the flood-control component of the Japanese funded Pampanga Delta Development Project (PDDP), had failed to protect them from floods.

The widening of the mouth's river to 750 m had displaced some 7,000 families in Macabebe and Masantol towns by the time the PDDP was completed in 2003.

Although paid for right-of-way, most of them rebuilt their houses, schools and churches on the dike's high water channel.

"The floating shelters are a pioneering project for us. These are also the first on the northern side of Manila Bay. We designed these because of the distance between the remote sitios and the dike, and considering the hazards of strong winds and high tides coming from Manila

Bay," said Mercy Cepe, acting executive director of Concern.

The shelters float on 84 empty plastic drums, which carry the 8-by-8 m bamboo floor, including the enclosed space made of plywood held together by a collapsible light steel frame.

Septic tank

A drum is made into a septic tank, which when filled, is buried. Another drum collects and purifies rainwater.

The facility relies on solar energy to run eight lightbulbs, an electric fan, a bluetooth speaker and charger for mobile phones.

A pair of floating gardens, spanning 7-by-2 m each, is tended with tomatoes and eggplants growing on organic fertilizer, making vegetables handy during calamities. **INQ**



Founded 1859

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Mondelez PH joins recycling group

MONDELEZ Philippines has strengthened its commitment to recycling by joining the Philippine Alliance for Recycling and Materials Sustainability (PARMS), which is in line with the snack company's recently announced global commitment to make all packaging recyclable by the 2025.

Mondelez Philippines has joined PARMS together with other corporations in the country to invest in a P25-million residual plastic recycling facility that will address the need to recycle plastics. PARMS has partnered with the Parañaque local government, with the locality serving as the pilot site for the recycling program. Collection of plastic waste through seven schools in the city has already begun. These plastic wastes will be turned into ecobricks or recycled building bricks that will be turned over to the schools for their use in facilities improvement.

"Globally, we work to ensure our products are not only delicious but are made with ingredients that are sustainably sourced, produced and delivered, with

positive impact along the supply chain," explained Mondelez Philippines Country Director Ashish Pisharodi.

"We welcome Mondelez Philippines to PARMS and commend their commitment to a zero waste Philippines," said PARMS Founding President Crispian Lao. "With their support and the entire PARMS collective, we are one step closer to realizing our goals to educate, inspire and spur action from our community to recycle plastic."

To date, 98 percent of the total waste generated from Mondelez Philippines' manufacturing plant in Sucat, Parañaque, are either recyclable or recycled, such as glass bottles or paper cartons. It also works with third-party partners to use product waste for animal feeds. Inside its plant, there is a materials recovery facility that properly handles, segregates and shreds packaging waste, and sent to a cement-industry partner to be used as co-fuel.

In October 2018, a global commitment was made by parent company



Mondelez Philippines has joined the Philippine Alliance for Recycling and Materials Sustainability (PARMS) in support of the company's global commitment to make all their packaging recyclable by 2025. Confirming this commitment are (left) Mondelez Philippines Country Director Ashish Pisharodi and PARMS Founding President Crispian Lao. CONTRIBUTED PHOTO

Mondelez International to ensure that by the year 2025, all packaging used for its products will be recyclable.

Mondelez Philippines has been operating in the Philippines for the past 56

years and provided the domestic market with favorite snack products such as Tang powdered beverage, Eden cheese, Cheez Whiz, Oreo cookies and Cadbury Dairy Milk chocolate. THE TIMES

50 M tons of 'e-waste' thrown away yearly

By PIA LEE-BRAGO

Around 50 million tons of electronic waste are thrown away each year and pose a serious threat to the environment and human health worldwide, according to a new United Nations report.

Highlighting the rising challenge posed by mountains of discarded electronics, seven UN entities have come together to launch the report to offer some solutions to a behemoth-sized problem that is making the world sicker and adding to environmental degradation.

The joint report, titled "A New Circular Vision for Electronics -- Time for a Global Reboot," calls for a new vision for e-waste based on the "circular economy" concept, where a regenerative system can minimize waste and energy leakage. The report supports the work

of the E-waste Coalition, which includes the International Labor Organization (ILO); International Telecommunication Union; United Nations Environment Program (UN Environment); United Nations Industrial Development Organization (UNIDO); United Nations Institute for Training and Research; United Nations University and Secretariats of the Basel and Stockholm Conventions.

"E-waste is a growing global challenge that poses a serious threat to the environment and human health worldwide," said Stephan Sicars, director of the Department of

Environment at the UNIDO.

To minimize this threat, UNIDO works with various UN agencies and other partners on a range of e-waste projects, all of which "are underpinned by a circular economy approach."

According to the report, a deliberative process must be instilled to change the system, one that collaborates with major brands, small and medium-sized enterprises, academe, trade unions and civil society.

ILO Director-General Guy Ryder said, "Thousands of tons of e-waste are disposed of by the world's poorest workers in the worst of conditions, putting their health and lives at risk."

"We need better e-waste strategies and green standards as well as closer collaboration between gov-

ernments, employers and unions to make the circular economy work for both people and planet," Ryder said.

Despite growing e-waste, "A New Circular Vision" points to the importance of technologies from the so-called Internet of Things -- a network of devices that contain electronics and the connectivity that allows them to exchange data -- to cloud computing advances, which can all result in smarter recycling and tracking of e-waste.

"A circular economy brings with it tremendous environmental and economic benefits for us all," said Joyce Msuya, acting executive director of UN Environment. "Our planet's survival will depend on how well we retain the value of products within the system by extending their life."



Trusted Since 1898

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Environmental threats dominate global risks landscape

(Second of two parts)

BY the time this part reaches the press, the Annual Meeting of the World Economic Forum in Davos, Switzerland, has already concluded.

In the first part published last week, The Global Risks' Report 2019 defined global risk "as an uncertain event or condition that, if it occurs, can cause significant negative impact for several countries or industries within the next 10 years."

Aside from extreme weather events (floods and storms, among others), failure of climate change mitigation and adaptation, and major natural disasters (earthquakes, tsunamis and volcanic eruptions, among others), the other environmental threats that we will discuss in today's column include man-made environmental damage and disasters (oil spills and radioactive contamination, among others), and biodiversity loss and ecosystem collapse.

Man-made environmental damage and disaster

Disruptions in the global waste disposal and recycling supply chain occurred in 2018. A year before, in

2017, China put a halt to a lot of the plastic waste that foreign countries like the United States sent to its shores for disposal. The ban exposed weaknesses in the domestic recycling capacity of many western countries. Plastic waste built up in the United Kingdom, Canada and several European states. Based on the research article of the New Materials Institute, University of Georgia titled, "The Chinese import ban and its impact on global plastic waste trade," and published in *Science Advances* in June 2018, an estimated 111 million metric tons of plastic waste would be displaced by the new Chinese policy by 2030.

Southeast Asian countries are fast becoming leading destinations for the world's plastic waste. Recent reports have shown an increase in plastic waste import in Malaysia, Indonesia and Vietnam. Just recently, the Philippines, which has yet to adopt an Extended Producer Responsibility policy, took a decisive action to return the shipment of mixed wastes totaling 6,500 tons misdeclared as "plastic flakes" and without proper importation permits to South Korea.

Armed with an approved budget of P47 billion, the Department of Environment and Natural Resources launched on Sunday The Manila

Bay Rehabilitation, now dubbed as the modern-day "Battle for Manila Bay." In the words of Environment Secretary Roy Cimatu: "The Manila Bay is not a lost cause. With the commitment and determination of every individual to do his share in this rehabilitation, there is no doubt that we will win this battle."

Biodiversity loss and ecosystem collapse

The increasing pace of biodiversity loss is a significant concern. The Living Planet Index, part of The Living Planet Report 2018, "is a measurement of the state of global biological diversity based on population trends of vertebrate species from around the world, just much the same way that a stock market index tracks the value of a set of shares or a retail price index tracks the cost of a basket of consumer goods." From 1970 to 2014, the 16,704 populations of 4,005 species declined by 60 percent in abundance, which means that the population abundance of monitored mammals, birds, reptiles, amphibians and fish have, on average, dropped by more than half in little more than 40 years. Species are faring much worse in freshwater systems and in tropical



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Environmental threats . . .



ALL ABOUT CHOICES

LUDWIG O. FEDERIGAN

realms. Freshwater populations declined by an average of 83 percent, while realms — large regions separated by major barriers to plant and animal migration and therefore characterized by distinct assemblages of species — declined by between 23 percent and 89 percent. The biggest drivers of biodiversity decline are habitat loss and degradation and overexploitation — which accounts for at least two-thirds of all threats — invasive species and disease, population and climate change.

The Global Risks Report 2019 emphasized that, in the human food chain, loss of biodiversity affects health and socio-economic development, with implications for well-being, productivity and even regional security. "Human health ultimately depends on ecosystem services that are made possible by biodiversity and its products. Biodiversity provides humans with food and water; and materials for shelter, cloth-

ing, and medicines, among other basic needs for survival. Forests indirectly contribute to human health and safety by regulating climate and disease, purifying air and water, and preventing soil erosion," said Theresa Mundita Lim PhD, executive director of the Asean Center for Biodiversity, in a workshop last year.

Micronutrient malnutrition affects as many as 2 billion people. It is typically caused by a lack of access to food of sufficient variety and quality. Jessica Fanzo of the Bloomberg School of Public Health at Johns Hopkins University and a co-author of the report titled "Food in the Anthropocene: the EAT-Lancet Commission on healthy diets on sustainable food systems," said that: "The agriculture sector has for a very long time focused on a few staple products — maize, rice, wheat — and has not really focused on fruits and vegetables. The agriculture sector has been successful in feeding the world; it has not been successful in feeding the world well." Maize, rice and wheat provide nearly half the world's plant-based calories.

Climate change exacerbates the risks. Increased levels of carbon dioxide in the atmosphere are affecting the nutritional compo-

sition of staples such as rice and wheat. "In 2017, climate disasters — mainly drought — were also major triggers of food crises in 23 countries, two-thirds of them in Africa, and were responsible for pushing some 39 million people into acute food insecurity," according to the Global Report on Food Crises 2018. Research suggests that by 2050, this can lead to zinc deficiencies for 175 million people, protein deficiencies for 122 million, and loss of dietary iron for 1 billion.

As the impact of environmental threats increases, it will become increasingly difficult to treat these threats as externalities that can be ignored. Collective national and international action is needed to internalize and mitigate the impact of human activity on our natural systems.

The 14th Edition of The Global Risks Report is published by the World Economic Forum with the Marsh & McLennan Companies and Zurich Insurance Group as strategic partners; and the National University of Singapore, Oxford Martin School, University of Oxford and the Wharton Risk Management and Decision Processes Center, University of Pennsylvania, as academic advisers.