

28 MARCH 2022, MONDAY



NEWS ALERTS

STRATEGIC COMMUNICATION AND INITIATIVES SERVICE



Recycling facility for e-waste launched

By **Jed Macapagal** - March 28, 2022

Several groups have rolled out a new electronic waste (e-waste) recycling facility that would be safer to the humans and to the environment.

Globe Telecom Inc., the United Nations Industrial Development Organization, the Department of Environment and Natural Resources, Integrated Recycling Industries, Inc., the Ecological Waste Coalition of the Philippines and the local government unit through the Global Environmental Facility are jointly undertaking a community-based treatment, storage and disposal (TSD) facility for e-waste in Dampalit, Malabon.

The project will give training to informal recyclers on the associated risks to human health and the environment of e-waste.

Once fully operational this month, the facility aims to process at least 15,000 cathode ray tubes (CRTs) or glass video displays from computers and television sets.

The facility will directly benefit the livelihood of several residents in barangays Dampalit and Longos in Malabon and Capulong in Manila that will collect and dismantle unwanted electrical and electronic equipment such as CRT televisions, refrigerators, electric fans and mobile phones to salvage precious metals and other valuable parts they can sell.

The facility is also meant to avoid the exposure and improper handling of toxic materials found on e-waste like polybrominated diphenyl ether, bromine and other heavy metals like mercury, lead, cadmium, barium and beryllium.

The TSD will also benefit six active garbage trader groups and two junk shops in Dampalit as well as associations of waste recyclers with more than 50 active members in total in Longos and Capulong.

The TSD in Malabon is the second community-based facility for e-waste. The first facility was created in Barangay Bagong Silang, Caloocan City last year.

In 2019, the UN Environment Program reported that only 20 percent of e-waste is recycled, many of which by hand in developing countries, exposing workers to hazardous and probable carcinogenic substances with the other 80 percent ending up in landfills that contribute to pollution.



Mga Pinoy dapat na makiisa sa Earth Hour – Palasyo

ni [Lolet Abania](#) | March 26, 2022



Hinimok ng Malacañang ang lahat ng mga Pilipino na makiisa sa isasagawang Earth Hour ngayong taon, na sadyang mabuting paalala o “good reminder” ito sa mga kaganapan na dulot ng climate crisis.

Itinakda ang Earth Hour ng alas-8:30 ng gabi ngayong Sabado, kung saan hinihikayat ang mga Pinoy na magpatay ng kanilang mga non-essential lights o mga ilaw ng isang oras para maipakita ang kanilang pagmamahal at pakikiisa para protektahan ang ating planeta.

“The Philippines is highly vulnerable to the effects of climate change,” pahayag ni acting Palace Spokesman Martin Andanar.

“This year’s Earth Hour is a good reminder that climate change and global warming are real issues that we need to pay more attention to and require urgent action,” dagdag ni Andanar.

Ayon sa opisyal, dapat na mag-participate dito ang mga kababayan para maipakita ang kanilang suporta sa ganitong gawain, habang inilarawan ito ni Andanar bilang, “active involvement in shaping our future.”

Sa isang report ngayong buwan ng Intergovernmental Panel on Climate Change ng UN (United Nations), na siyang top global climate science authority, ibinabala nito na ang heat waves, droughts o tagtuyot, at extreme rainfall o matinding pag-ulan ay magiging mas madalas pa sa mga darating na dekada habang ang temperatura ay patuloy na tataas.

“[Already], increasing weather and climate extreme events have exposed millions of people to acute food insecurity and reduced water security,” batay sa panel.

Ayon pa sa UN climate change panel, “the global carbon dioxide emissions must reach net zero by 2050 if global warming is to be limited to 1.5 degrees Celsius to curb disastrous impacts.”



NegOcc renews vow to protect environment

By Nanette Guadalquiver [March 27, 2022, 3:33 pm](#)



EARTH HOUR. Representatives of various youth organizations in Negros Occidental join the observance of Earth Hour 2022 at the Provincial Capitol grounds in Bacolod City on Saturday night (March 26, 2022). Initiated by the Provincial Environment Management Office, the event was highlighted by the lighting of candles formed into the 60+ symbol and the switch-off of lights from 8:30 p.m. to 9:30 p.m. *(Photo courtesy of PIO Negros Occidental)*

BACOLOD CITY – The province of Negros Occidental has renewed its commitment to protect the environment during the observance of Earth Hour 2022 at the Provincial Capitol grounds here on Saturday night.

Joined by representatives from 14 youth organizations, the event, themed “Shape Our Future”, was highlighted by the lighting of candles formed into the 60+ symbol, which is the campaign’s main logo, and the switch-off of lights from 8:30 p.m. to 9:30 p.m.

In a video message, Governor Eugenio Jose Lacson said the people must recognize their part in causing the problem of climate warming and accept the responsibility to do what needs to be done.

He noted the hour-long lights-off shows the Negrenses are not just aware of the gravity of climate change and its impact on the planet, but also prepared to do their active part to change the course of environmental destruction.

“Let this undertaking be the start of the many measures we are going to take to protect our habitat. Not only for ourselves, but most importantly for our children and the generations next,” he added.

In her message at the program, lawyer Julie Ann Bedrio, head of the Provincial Environment Management Office, said the Earth Hour is not just an event, but a symbolic coming together of earth advocates.

“This is a symbol of unity to combat all forms of destructions against our planet and our steadfast commitment to continue the fight for a greener and healthier Mother Earth,” she added.

She also said the Earth Hour is not just a one-hour event in one day, but an everyday commitment to attain a healthier environment and more sustainable earth.

“As stewards of our planet, we must all take action and make it an everyday decision to save the environment. Together, let us shape the future,” Bedrio said.



Youth representatives Josh Eusebio of Bacolod Youth Coalition for Democracy discussed the climate justice agenda; Nicole Wong of Linghod led the commitment sharing; and Bianca Montilla of Youth for Climate Hope responded to the call to action.

Observed every fourth Saturday of March, the Earth Hour aims to encourage people, governments, and businesses to recognize their ecological footprint and start thinking about how to take responsibility for managing it in a more sustainable way, and also to seek out the facts about climate change and its impact on the earth and people's lives.

According to earthhour.org, "everyone has a part to play in shaping a new future for people and planet, from taking individual steps towards living sustainably to urging companies and governments to help build a nature-positive and carbon-neutral future." **(PNA)**



Poll bets, supporters told: Ditch plastic water bottles

[Elizabeth Marcelo](#) - The Philippine Star March 28, 2022 | 12:00am



Photo from Pixabay shows plastic bottles.

Image by Matthew Gollop from Pixabay

MANILA, Philippines — Environmental watchdog EcoWaste Coalition yesterday urged candidates and their supporters to help lessen plastic pollution by bringing water in reusable non-plastic containers during caravans, motorcades, rallies and other campaign sorties.

“We are one with the refill and reuse movement in urging everyone to ditch single-use plastic water bottles,” EcoWaste Zero Waste campaigner Jove Beno said in a statement.

The group pointed out that aside from adding to plastic pollution, the production of disposable water bottles consumes fossil fuel, which contributes to climate change.

“Bringing water in a reusable container every time you go out will cut your consumption of bottled water and help in reducing fossil fuel use and the resulting pollution that is warming and toxifying the planet,” Benosa said.

The EcoWaste cited a study by London-based market research company Euromonitor International, which showed that the global consumption of plastic bottles continues to rise.

Based on the Euromonitor research, from 300 billion in 2004, plastic bottles sold in 2016 increased to 480 billion, and estimated to have reached 583.3 billion in 2021. Around the world, one million plastic bottles are sold every minute, the research showed.

“Poll candidates and their supporters who brave the sweltering heat should carry a refillable water bottle, preferably a non-plastic container and stay hydrated all day long,” Benosa said.

The EcoWaste warned the public against reusable painted tumblers and other containers with high lead content.



The climate crisis and migration

[Amy E. Pope](#) - The Philippine Star March 28, 2022 | 12:00am

Typhon Rai, locally known as Odette, smashed the Philippines four months ago, sweeping through 11 of the country's 17 regions, destroying or damaging over 2 million houses, far eclipsing that of Typhoon Haiyan in 2013. Approximately 32,200 people remain displaced, mostly in evacuation centers.

The road to a full recovery will be long and full of challenges. Yet returning from my field visit to Siargao, I was inspired by the bayanihan spirit. From the community where people are assisting their neighbors to rebuild their houses, to the intervention led by local government units, mayors, governors and national level counterparts, the desire to recover and help one another in times of a crisis is palpable and something that will stay with me long after my visit.

This typhoon, however, must serve as a wake-up call to the international community. The Global Climate Risk Index 2020 ranks the Philippines as the second most vulnerable country in the world affected by climate change despite being one of the smallest contributors to CO2 emissions.

More than 60 percent of the Filipino population resides in coastal areas and will be forced to move with one-meter sea rise brought about by global warming – that equates to 60 million people having to move by the end of this century. As President Duterte warned in his address during the 76th United Nations General Assembly, “The risks and burden of a warming climate are simply not the same for everyone. ... But here we are now at a critical tipping point, where failure to act leads to cataclysmic consequences for the whole of humankind.”

Knowing that climate impact is inevitable and recognizing that failure to act will be cataclysmic, there are three things we must do now to prepare for and mitigate the impacts of climate change on human life.

First, we have seen time and again that human mobility is inextricably linked to climate change. Nowhere is that more evident than in the Philippines. Migration is one of the coping mechanisms of affected Filipinos facing climate crisis, either as a choice or a force of circumstance.

We must acknowledge that the protection of the most vulnerable should be at the forefront of our climate action, and collectively build migration into our climate change mitigation measures.

National and regional policies must include more migration adaptation measures, and resources are needed to address and prevent displacements while increasing people's resilience, especially in the most vulnerable countries.

Second, it is imperative to ensure that adaptive migration as a solution is safe, informed and desired. For instance, IOM is working closely with the Philippine government and communities on planned relocation and transitional sites in typhoon affected areas. Through the generous support from donors such as USAID, Australia, Japan, Canada, UN Central Emergency Fund and Germany, IOM is providing critical shelter assistance, hygiene and sanitation, camp coordination and camp management, health and COVID prevention and mental health and psychosocial services. While essential, these actions are primarily reactive. Our actions in the field today can and should be a pathway towards managing climate vulnerabilities. They must be done proactively and strategically in a contextually grounded manner and with strong community engagement.



Finally, we need to harness the power of the estimated 10 million Filipinos living abroad to strengthen climate resilience locally. The Philippines is a country that has for decades made the most out of migration. Since the 1980s, overseas Filipino workers (OFWs) have been hailed as bagong bayani (modern-day heroes). In 2019, remittances from OFWs reached a record high of \$33.9 billion, equivalent to nearly 10 percent of the country's gross domestic product (GDP). With one of the largest diasporas in the world, we need to leverage this support and direct these financial contributions to build back better using the lessons learned from past climate emergencies – such as building four-corner roofs over home in typhoon-prone areas to protect these rebuilt communities from future devastation.

As the cost of the climate crisis is reaching irreversible heights, I depart the Philippines reflecting on the devastating impacts of Typhoon Rai and the future of the communities in the Philippines. While the bayanihan spirit gives me hope, we now need bold collective action to build the resilience of communities at risk, to protect the most vulnerable and to ensure that migration remains a choice rather than a necessity.

* * *

Amy E. Pope is Deputy Director General of the International Organization for Migration.



Greenpeace calls on next admin to put climate justice into policy

BY JONATHAN L. MAYUGA MARCH 28, 2022

ENVIRONMENTAL group Greenpeace has called on the next administration to put climate justice at front and center of policy agenda as the Philippines officially now becomes a super-typhoon hotspot.

This as the Philippine Atmospheric Geophysical and Astronomical Services Administration (Pagasa) recently said super typhoons are no longer aberrations but are the new normal.

Based on the new definition of typhoons by Pagasa, the Philippines experienced 7.5 times more super typhoons from 2016 to 2021 than previously recorded.

Pagasa changed the classification of super typhoons from cyclones that exhibit maximum sustained winds of at least 220 kilometers per hour to 185 kilometers per hour.

“Based on the old definition, the Philippines encountered only two super typhoons from 2016 to 2021. With the new definition, 14 of the 39 typhoons that passed the country in the last six years can be classified as super typhoons.”

Greenpeace Campaigner Virginia Llorin said possibly six of the average 20 typhoons experienced every year in the Philippines can now be classified under the super-typhoon category.

“This is just the tip of the iceberg,” Llorin said. “Science is telling us that we need to prepare for worse scenarios ahead. And without meaningful and urgent climate action, we need to prepare for the worst.”

The Intergovernmental Panel on Climate Change (IPCC) report released earlier this month revealed that climate risks are appearing faster and will get worse sooner than previously assessed, and that they have been disproportionately affecting people in highly vulnerable geographies.

Impacts on communities that are least responsible for the climate crisis and least able to cope are also more severe. In the Philippines, the climate crisis has been costing Filipino communities their lives and livelihoods for decades, and according to data from the government, damages from climate impacts has cost the country around P506 billion in the past decade.

Greenpeace said that climate will be the defining issue of the next administration. The next president will serve during the decade which is the most crucial window for climate action if we are to avoid the worst impacts of the climate crisis, according to Llorin.

“Filipinos are already suffering from climate impacts and it will get worse,” she stressed.

According to Llorin, the climate crisis impacts very fundamental issues namely food, water and energy security, poverty, injustice, health, migration, security and our fundamental rights to life, health, among others.

“To secure all these and ensure Filipinos are able to live decent lives free from fear or want, means that climate needs to be the primary lens in government policymaking and implementation,” she said.

Source: <https://businessmirror.com.ph/2022/03/28/greenpeace-calls-on-next-admin-to-put-climate-justice-into-policy/>



Water

[DEMAND AND SUPPLY](#) - [Boo Chanco](#) - The Philippine Star March 28, 2022 | 12:00am

Water is one truly basic need that we take for granted. We think we have an abundance of it so we do not give it much thought... until our faucets run dry.

This happens yearly about this time of the year. But we should worry about Metro Manila being over 95 percent dependent on Angat Dam. Angat is in an earthquake prone zone. If it cracks, we have no real alternative source.

Various administrations have been talking about alternative water sources for decades, but have not gone beyond talking. The Duterte administration is no different.

For a while, Duterte was talking about finally getting the Kaliwa-Kanan River dam project going. It is expected to add 600 million liters per day (MLD) to the capital's water supply.

In 2011, MWSS, under its then chairman Gerry Esquivel, launched the New Centennial Water Source project. Based on the feasibility studies and detailed engineering designs prepared in 2014, the integrated system would generate additional water sources to ensure water security for Metro Manila. Laiban is the only remaining nearest surface water source for Metro Manila.

But the Kaliwa Dam project is dead in the water. China was supposed to finance the project, but nothing came out other than a lot of press releases.

There were problems, including the concerns of indigenous people living in the area. But those problems have been there for the longest time. There must be solutions if there is political will.

While it is just to address the concerns of the indigenous Dumagats, they also cannot hold hostage over 20 million other Filipinos in NCR and adjacent provinces who need a new water source. I thought the tough talking Duterte would be the president who would score a breakthrough here. It didn't happen.

So here we are, once again looking at a water shortage this dry season. Customers of Maynilad will likely feel the pinch more. Indeed, they are already suffering enough to call on authorities to do something.

Maynilad's area has been problematic from the start. It is larger and it comprises the older part of Metro Manila with a lot of leaky pipes.

If the Angat water level goes down perilously this dry season to make a reduction in water allocation mandatory, Maynilad may have problems meeting their customers' water requirements.

It probably won't be as bad for those in the area served by Manila Water because it should have learned its lesson from the shortage in 2019. It has also started operations of its Cardona Treatment Plant to clean water from Laguna de Bay.

The Cardona Plant has a capacity of 50 MLD. Manila Water is also planning to put up an integrated water supply facility (East Bay Project) in Pakil, Laguna with a 250 MLD capacity.

Maynilad also has a water treatment facility along Laguna de Bay. Its Putatan I Plant (with a capacity of 100 MLD) in Muntinlupa City consists of dissolved air flotation, biological aerated filtration, ultra-filtration, reverse osmosis, disinfection, and oxidation of certain compounds.

Maynilad is also putting up its Putatan II Plant with a capacity of 150 MLD.

It isn't as if the two water concessionaires are not doing their share. Indeed, if MWSS didn't insist that the government would be responsible for sourcing water and the private company



merely for distribution, things today might have been better.

Because of its proximity, Laguna de Bay is a readily available and accessible water source for the growing population of Metro Manila. But that lake is a big open sewer.

There is a need to reduce the pollution of the lake by establishing sewage treatment facilities, deepen the lake to increase its water holding capacity, and reforest its denuded watershed to lessen its sedimentation.

Cleaning up the water of Laguna de Bay is expensive, more so than the raw water the water companies get from Angat and could get from a potential facility in Kaliwa/Laiban.

One other thing going for Manila Water is Ricky Razon taking over from the Ayalas. This means it can benefit from the Wawa Dam project that Razon initiated some years ago.

Wawa Dam in Montalban is expected to produce 80 MLD starting October this year. The balance to provide a total 518 MLD will be available in 2025.

I remember Dondi Alikpala, an expert on water, telling me that while water shortage is a concern in Metro Manila, we must not forget that for the rest of the Philippines, less than 50 percent even have household connections.

Most of our countrymen still live with pila and balde on a daily basis. Even in major cities like Bacolod and Iloilo, only about 30 percent of families are connected to the water utility.

Groundwater extraction, specially in Metro Manila, has only made problems worse – with subsidence causing the city to sink and not too slowly too. Manufacturing concerns that use a lot of water should be required to make provisions for more efficient use of the resource.

A good example is San Miguel Corporation, which two weeks ago announced they were able to save 27 billion liters of water and are still working to reduce their water use by 50 percent by 2025.

To reduce drawing from scarce water sources, SMC president Ramon Ang said they utilize several methods, including the use of sea water, water recycling, and rainwater harvesting for cooling machines, cleaning, and other utility, non-product water usage.

SMC has mandated that all its newly-built facilities be fitted with rainwater collection systems. A number of older facilities are also being retro-fitted to increase rainwater harvesting and to replace leaking underground pipes with above-ground, easy to monitor installations.

SMC's program should be made mandatory for all manufacturing concerns in the country. A law to that effect should be passed.

We have to take this water problem seriously and urgently. Renewable water resources are constant while population growth continues. Add to that climate change. Unless we do something now, the quality of life in this country will deteriorate with each passing day.

Boo Chanco's email address is bchanco@gmail.com. Follow him on Twitter [@boochanco](https://twitter.com/boochanco).



HEADLINE

Poop paper

Published 7 hours ago on March 28, 2022 12:10 AM

By [WJG](#)



Toilet paper is made from wood pulp, and manufacturers of the hygiene product use recycled paper to minimize cutting down trees. Alternative raw material sources for the product like bamboo and sugarcane are also being tapped to conserve trees.

A Danish company, meanwhile, has a different approach in addressing the environmental impact of toilet paper consumption. Copenhagen-based LastObject produces reusable toilet paper called LastTissue.

The product is a hybrid handkerchief and disposable wet wipe in silicone packs. Made from cotton, the tissue is washable 520 times, according to the LastObject website. Each pack is designed to dispense six clean tissues while holding used ones in a separate compartment of the pack.

LastObject co-founder Nicolas Aagaard said LastTissue eliminates buying and disposing of sanitary items every day.

“If we can create an item that replaces a single-use item, then potentially we can replace a thousand of a single-use item,” Aagaard said.

Americans are the number one users of toilet paper. The most sustainable toilet cleaning practice, however, is using a bidet and water.

Google’s offices in California have toilets fitted with bidets. The technology company recently started removing sanitary water hoses in toilets of its offices to the dismay of employees.

Google’s facilities professional Edgar Tovar explained that the company is complying with building rules requiring tenants to adopt recycled water systems “which cannot support bidets.”



If building codes disrupt the use of bidets, Americans can still rely on traditional toilet paper for their sanitary routine. Using toilet paper may not suffice though in the case of a landlord who reportedly tried to evict one allegedly annoying renter at his Brooklyn apartment building in a nasty way.

The 52-year-old woman renter had veteran off-duty correction officer Nigel Escalona, 44, arrested on 17 March and charged with criminal mischief and illegal eviction.

The complainant accused Escalona of breaking into her room, changing its locks and sending two men to bring out her belongings.

Worst, on 4 March, she allegedly saw Escalona running out of her bedroom and found “poop smeared on the door and door frame, as well as on the bathroom doorknob and faucet,” the New York Post reported citing a police statement.

The fecal vandalism required more than toilet paper to clean.



Phivolcs to keep Taal under Alert Level 3 amid smaller explosions

(Philstar.com) - March 27, 2022 - 12:12pm



This handout photo taken and received on March 26, 2022 from the Philippine Volcanology and Seismology (PHIVOLCS) shows the Taal volcano, which sits in a picturesque lake in Batangas province, after an eruption sent ash and steam hundreds of metres into the sky.

Handout / Philippine Volcanology and Seismology / AFP

MANILA, Philippines — The Philippine Institute of Volcanology and Seismology maintained its Alert Level 3 notice over Taal Volcano on Sunday.

It may take another two weeks of observation before the institute updates its alert level.

“Ang alert level number 3, ibig sabihin, merong magmatic activity. Ang magma ay nag-i-intrude o umaakyat papunta sa crater ng dahan-dahan at ang pag-dampi o interaksyon ng mainit na magma o tubig ay sanhi ng mga pagsabog,” Philippine Institute of Volcanology and Seismology Director Renato Solidum Jr. [told ABS-CBN’s “TeleRadyo Balita” on Sunday.](#)

(Being on alert level number 3 means there is magmatic activity. Magma intrudes or rises into the crater slowly and the touch or interaction of hot magma or water causes the explosions.)

Phivolcs said it [recorded 14 volcanic earthquakes in the past 24 hours](#), which included 10 volcanic tremor events that lasted for two to three minutes and four low-frequency volcanic earthquakes.

Taal Volcano also had two phreatomagmatic eruptions, which resulted from the interaction of molten rock and water, at 4:34 a.m. and 5:04 a.m. on Sunday.

“These events produced 800 meter- and 400-meter-tall plumes, respectively, from the Main Crater that drifted southwest,” Phivolcs said in its Sunday bulletin.

Two-week observation

“Kung mananatili lang sa mga maliliit na explosion, pwede po natin i-maintain ang alert level sa number 3. Kung kaya tumigil na ang kaniyang aktibidad at pahupana batay sa trend sa loob ng dalawang linggo, pwede nating ibaba into Alert Level 2,” Solidum said.

(If it only has small explosions, we can maintain the alert level under number 3. If its activity stops and if it calms down based on its trend within two weeks, we can downgrade it to Alert Level 2.)

Meanwhile, the institute said it may raise the alert level to 4 if it observes more magma rising to the crater, volcanic earthquakes, volcanic gas, and if there is an inflation.



Solidum said it is possible that the Taal Volcano may have a stronger eruption ever under an Alert Level 2 warning.

“Nakaumang ‘yung mga magma sa ilalim. Kung umakyat ito, iyon ang mag-tri-trigger ng mas malakas na pagsabog. Pero ‘yung persistence at possibility ng pagsabog ay nandiyan kahit nasa Alert Level 2,” Solidum said.

(The magmas are at the bottom. If it climbs, that will trigger a stronger explosion. But the persistence and possibility of an explosion will be there even if we put the notice at Alert Level 2.)

Phivolcs said Taal Volcano has been logging a high level of sulfur dioxide content, which signals that magma is close to the surface, in the past several weeks before its gas content went down.

“Posible namang ganoon lang na mababa ang talagang inilalabas o posibleng may pagkabara ng konti So in July of last year, ganoon din ang nangyari na mataas ang sulfur dioxide and then several weeks after nagkaroon ng mga pagsabog,” Solidum said.

(It is possible that the emissions were really low or that there was a slight blockage. So in July of last year, the same thing happened when the sulfur dioxide was high and then explosions came several weeks after.)

Taal Volcano had a [phreatomagmatic eruption in July last year with a 1-kilometer plume](#), prompting the institute to raise an Alert Level 3. The volcano last erupted in January 2020, [prompting the evacuation of thousands](#).

“Mukhang ganito ang nagiging pattern sa Taal Volcano na habang marami pang gas ang nari-release, sa isang banda ay maganda ito dahil hindi magiging katulad ng January 2020 eruption pero nandiyan pa rin at kung bumabara ay magkakaroon pa rin ng pagsabog,” Solidum said.

(This seems to be the pattern in Taal Volcano that while more gas has been released, on one hand it is good because it will not be like the January 2020 eruption, but if it is still there and if it clogs then there will still be an eruption.)

Weekend eruptions

Taal Volcano, located in the Batangas province and is considered the second most active volcano in the country, has been under Alert Level 2 for months before its eruption this weekend.

Phivolcs said the volcano also had a small eruption last week Friday at around 2 a.m. It recorded another phreatomagmatic eruption on Saturday between 7:22 a.m. to 8:59 a.m.

There were as many as [66 discrete explosion events recorded](#) on Saturday morning.

The institute warned further eruptions were possible, with residents in nearby towns ordered to evacuate. The “high-risk barangays” identified were Bilibinwang and Banyaga, Agoncillo and Boso-boso, Gulod and those in the eastern part Bugaan East, Laurel.

“Communities around the Taal Lake shores are advised to remain vigilant, take precautionary measures against possible airborne ash and vog and calmly prepare for possible evacuation should unrest intensify,” Phivolcs said in its Sunday bulletin.

Source: <https://www.philstar.com/headlines/2022/03/27/2170252/phivolcs-keep-taal-under-alert-level-3-amid-smaller-explosions/amp/>

28 MARCH 2022, MONDAY



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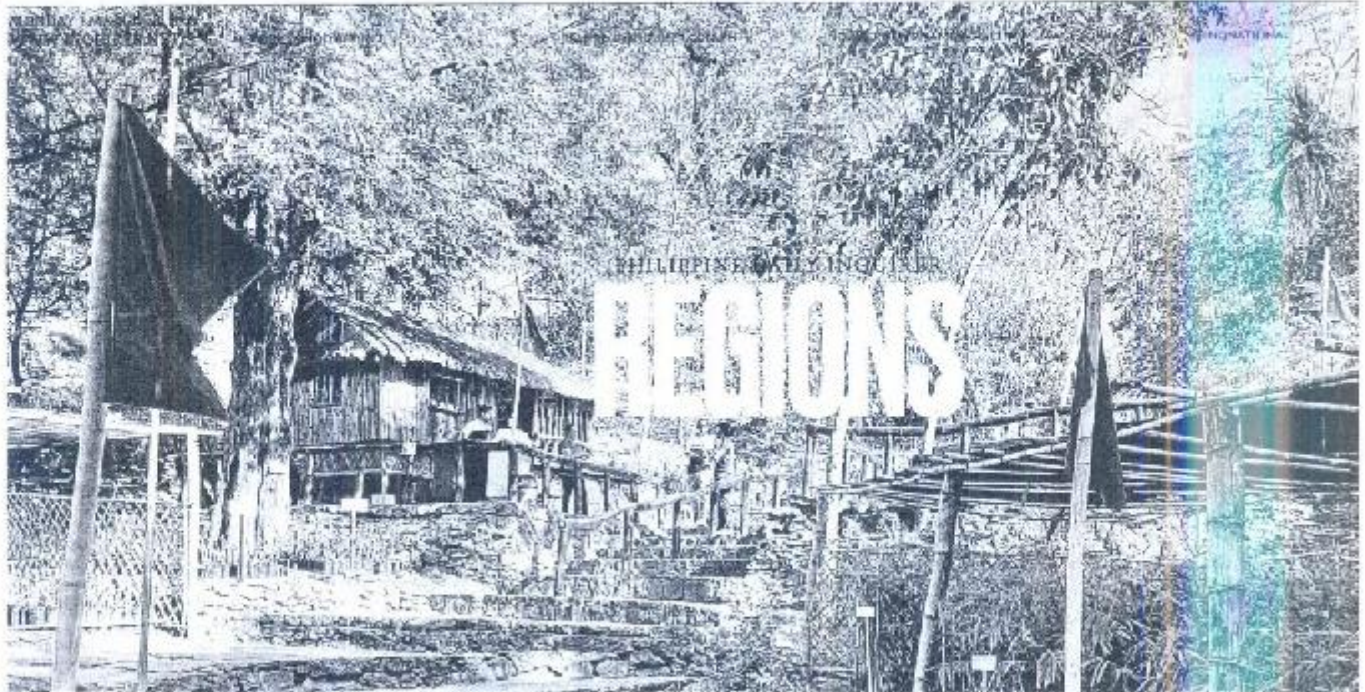
STRATEGIC COMMUNICATION AND INITIATIVES SERVICE



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PATHWAY Bamboo stalks are grown along the sides of the pathway of the nursery that the Department of Environment and Natural Resources has established inside Mt. Arayat, Pampanga, in this photo taken on March 21. **—TONETTE OREJAS**

NURSERY FOR MANILA BAY BAMBOO PARKS RISES ON PAMPANGA'S MT. ARAYAT

by **Tonette Orejas**
@tonetteorejas

ARAYAT, PAMPANGA—Imagine the coastlines of Manila Bay, spanning some 190 kilometers, planted with thick, tall bamboo shrubs.

In the case of Pampanga province and the rest of Central Luzon, whose rivers drain to Manila Bay, the possibility of reforesting the embankments has increased after the Department of Environment and Natural Resources (DENR) in the province and region made a new source of bamboo stalks in the middle of the COVID-19 pandemic in November 2021.

The DENR's new nursery

sits on a 7,000-square-meter lot inside Mt. Arayat National Park.

Abandoned by the then Bureau of Forestry in the 1980s, it was reclaimed by the DENR in August last year which started developing the nursery in November to propagate 20,000 bamboo stalks every six months, said DENR provincial head Laudemir Salac.

Seed money

Surrounded by tamarind trees and located 74 meters above sea level in Barangay San Juan Baño of Arayat town, the nursery is mildly shaded and flood-free.

Little springs provide irrigation, but an old empty swim-



FORESTERS These two foresters are among 12 personnel taking care of the bamboo nursery inside Mt. Arayat National Park in Pampanga, in this photo taken on March 21. **—TONETTE OREJAS**

The DENR was one of 13 government agencies ordered by the Supreme Court in a mandamus issued on Dec. 18, 2008, to clean up, rehabilitate and preserve Manila Bay.

According to the high court, the DENR must also restore and maintain its waters to a level fit for swimming, skin diving and other forms of recreation.

Seventeen main rivers in the Central Luzon provinces of Bataan, Bulacan, Nueva Ecija, Pampanga and Tarlac as well as in Calabarzon's Cavite, Laguna and Rizal drain to Manila Bay. The Manila Bay area covers eight provinces and 178 local government units in the National Capital Region, Cen-

tral Luzon and Calabarzon. Its drainage area covers 1,994 square km (199,400 hectares) while its coastline measures about 190 km, the DENR said.

Pampanga Agricultural State University (PSAU), which has maintained a bamboo nursery since 2006, is the DENR's partner in the nursery, which grows 20 species and multiplies the "bayog" and "tinik" varieties. PSAU has made best practices in bamboo propagation and production that increase survival rate and shelf life, the Department of Science and Technology said in a 2019 report.

Salac said local governments in Pampanga could get bamboo stalks by June this year. ■

ing pool is waiting to be converted into a small impounding dam.

So far, P600,000 was spent on developing the project named "Pilot Bamboo Production Nursery," using the P1-million seed money derived from the Manila Bay rehabilitation program, DENR Regional Executive Director Paquito Moreno said on Thursday.

The provincial DENR has 12 foresters, including Salac, managing the nursery.

"This is the first bamboo nursery in Central Luzon that focuses on stream bank protection. The bamboo planting for the linear parks comes after coastal cleanups," Salac said.



Rehab deal for Siargao mangroves signed

A memorandum of agreement (MOA) for the rehabilitation of mangroves that were damaged by Typhoon Odette in Siargao, Surigao del Norte has been signed between the Department of Environment and Natural Resources (DENR) and the Jaime V. Ongpin Foundation Inc. (JVOFI).

During the signing of the MOA on March 15, DENR acting Secretary Jim Sampaña and JVOFI president Reinaldo Bautista Jr. agreed to conduct a three-year post-disaster restoration and rehabilitation of the 143 hectares of mangrove forests in Siargao Island's municipalities.

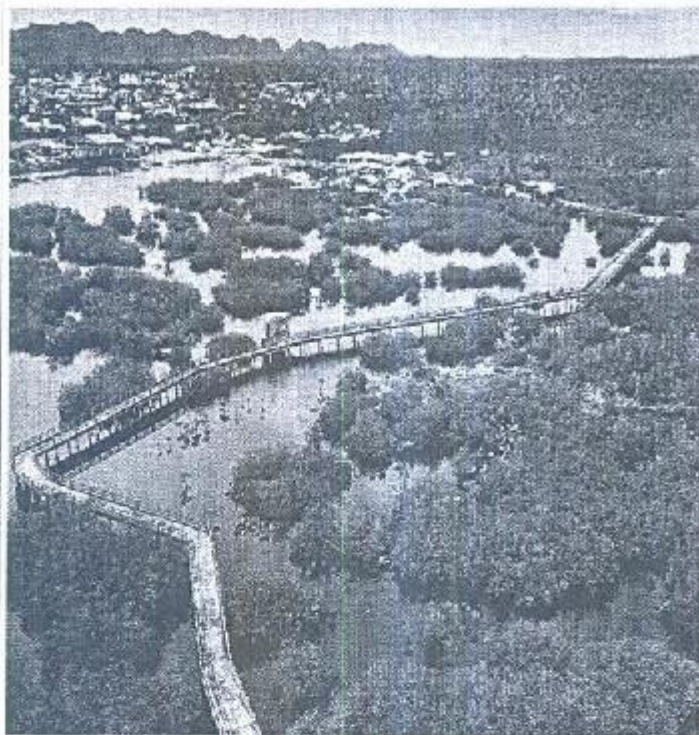
Under the MOA, the JVOFI will provide P10 million to cover the cost of restoration and rehabilitation of storm-damaged mangroves, particularly in the towns of Del Carmen, Dapa, General Luna, San Benito and Socorro.

The DENR-Caraga will coordinate with the provincial and community environment officers for the determination of the mode of planting and maintenance.

- Elizabeth Marcelo



Partnership to rehab Siargao mangroves



Highly diverse mangrove forest. Siargao is home to hundreds of flora and fauna, accounting for 19 out of 54 known mangrove species in the world.

DEPARTMENT of Environment and Natural Resources (DENR) and the Jaime V. Ongpin Foundation Inc. (JVOFI) have signed a memorandum of agreement for the restoration and rehabilitation of mangroves in Siargao, Surigao del Norte that was severely affected by typhoon Odette last year.

The parties agreed to conduct a three-year post-disaster restoration and rehabilitation of 143 hectares of mangrove on Siargao.

Under the agreement, JVOFI will provide P10 million to cover the cost of restoration and rehabilitation of storm-damaged mangroves particularly in the municipalities of Del Carmen, Dapa, General Luna, San Benito and Socorro. The foundation will also implement solid waste management activities in the island.

DENR regional office in Caraga, together with the Provincial Environment and Natural Resources Office in Surigao del Norte and

Community Environment and Natural Resources Office in Dapa will serve as project implementers.

The government, under the agreement, will also conduct the identification and delineation of the 143-hectare mangrove site and determine the mode of plantation establishment, protection, and maintenance.

Siargao is home to hundreds of flora and fauna with a highly diverse mangrove forest, accounting for 19 out of 54 known mangrove species in the world.

The government is bent on adding and preserving mangroves plantation as it serves as a natural sea barrier as well as a carbon sequestration mechanism apart from being a sanctuary for fish and other marine life.

JVOFI is a non-government organization that ensures the promotion of conservation, protection, rational management and utilization of critical ecological resources in the country.



Recycling facility for e-waste launched

BY JED MACAPAGAL

SEVERAL groups have rolled out a new electronic waste (e-waste) recycling facility that would be safer to the humans and to the environment.

Globe Telecom Inc., the United Nations Industrial Development Organization, the Department of Environment and Natural Resources, Integrated Recycling Industries, Inc., the Ecological Waste Coalition of the Philippines and the local government unit through the Global Environmental Facility are jointly undertaking a community-based treatment, storage and disposal (TSD) facility for e-waste in Dampalit, Malabon.

The project will give training to informal recyclers on the associated risks to human health and the environment of e-waste.

Once fully operational this month, the facility aims to process

at least 15,000 cathode ray tubes (CRTs) or glass video displays from computers and television sets.

The facility will directly benefit the livelihood of several residents in barangays Dampalit and Longos in Malabon and Capulong in Manila that will collect and dismantle unwanted electrical and electronic equipment such as CRT televisions, refrigerators, electric fans and mobile phones to salvage precious metals and other valuable parts they can sell.

The facility is also meant to avoid the exposure and improper handling of toxic materials found on e-waste like polybrominated diphenyl ether, bromine and other heavy metals like mercury, lead, cadmium, barium and beryllium.

The TSD will also benefit six active garbage trader groups and two junk shops in Dampalit as well

See RECYCLING > Page A2

RECYCLING

as associations of waste recyclers with more than 50 active members in total in Longos and Capulong.

The TSD in Malabon is the second community-based facility for e-waste. The first facility was created in Barangay Bagong Silang, Caloocan City last year.

In 2019, the UN Environment

Program reported that only 20 percent of e-waste is recycled, many of which by hand in developing countries, exposing workers to hazardous and probable carcinogenic substances with the other 80 percent ending up in landfills that contribute to pollution. - *Jed Macapagal*



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Water

Water is one truly basic need that we take for granted. We think we have an abundance of it so we do not give it much thought... until our faucets run dry.

This happens yearly about this time of the year. But we should worry about Metro Manila being over 95 percent dependent on Angat Dam. Angat is in an earthquake prone zone. If it cracks, we have no real alternative source.

Various administrations have been talking about alternative water sources for decades, but have not gone beyond talking. The Duterte administration is no different.

DEMAND AND SUPPLY



BOO CHANCO

For a while, Duterte was talking about finally getting the Kaliwa-Kanan River dam project going. It is expected to add 600 million liters per day (MLD) to the capital's water supply.

In 2011, MWSS, under its then chairman Gerry Esquivel, launched the New Centennial Water Source project. Based on the feasibility studies and detailed engineering designs prepared in 2014, the integrated system would generate additional water sources to ensure

water security for Metro Manila. Laiban is the only remaining nearest surface water source for Metro Manila.

But the Kaliwa Dam project is dead in the water. China was supposed to finance the project, but nothing came out other than a lot of press releases.

There were problems, including the concerns of indigenous people living in the area. But those problems have been there for the longest time. There must be solutions if there is political will.

While it is just to address the concerns of the indigenous Dumagats, they also cannot hold hostage over 20 million other Filipinos in NCR and adjacent provinces who need a new water source. I thought the tough talking Duterte would be the president who would score a breakthrough here. It didn't happen.

So here we are, once again looking at a water shortage this dry season. Customers of Maynilad will likely feel the pinch more. Indeed, they are already suffering enough to call on authorities to do something.

Maynilad's area has been problematic from the start. It is larger and it comprises the older part of Metro Manila with a lot of leaky pipes.

If the Angat water level goes down perilously this dry season to make a reduction in water allocation mandatory, Maynilad may have problems meeting their customers' water requirements.

It probably won't be as bad for those in the area served by Manila Water because it should have learned its lesson from the shortage in 2019. It has also started operations of its Cardona Treatment Plant to clean water from Laguna de Bay.

The Cardona Plant has a capacity of 50 MLD. Manila Water is also planning to put up an integrated water supply facility (East Bay Project) in Pakil, Laguna with a 250 MLD capacity.

Maynilad also has a water treatment facility along Laguna de Bay. Its Putatan I Plant (with a capacity of 100 MLD) in Muntinlupa City consists of dissolved air flotation, biological aerated filtration, ultra-filtration, reverse osmosis, disinfection, and oxidation of certain compounds.

Maynilad is also putting up its Putatan II Plant with a capacity of 150 MLD.

It isn't as if the two water concessionaires are not doing their share. Indeed, if MWSS didn't insist that the government would be responsible for sourcing water and the private company merely for distribution, things today might have been better.

Because of its proximity, Laguna de Bay is a readily available and accessible water source for the growing population of Metro Manila. But that lake is a big open sewer.

There is a need to reduce the pollution of the lake by establishing sewage treatment facilities, deepen the lake to increase its water holding capacity, and reforest its denuded watershed to lessen its sedimentation.

Cleaning up the water of Laguna de Bay is expensive, more so than the raw water the water companies get from Angat and could get from a potential facility in Kaliwa/Laiban.

One other thing going for Manila Water is Ricky Razon taking over from the Ayalas. This means it can benefit from the Wawa Dam project that Razon initiated some years ago.

Wawa Dam in Montalban is expected to produce 80 MLD starting October this year. The balance to provide a total 518 MLD will be available in 2025.

I remember Dondi Alikpala, an expert on water, telling me that while water shortage is a concern in Metro Manila, we must not forget that for the rest of the Philippines, less than 50 percent even have household connections.

Most of our countrymen still live with *pila* and *balde* on a daily basis. Even in major cities like Bacolod and Iloilo, only about 30 percent of families are connected to the water utility.

Groundwater extraction, specially in Metro Manila, has only made problems worse - with subsidence causing the city to sink and not too slowly too. Manufacturing concerns that use a lot of water should be required to make provisions for more efficient use of the resource.

A good example is San Miguel Corporation, which two weeks ago announced they were able to save 27 billion liters of water and are still working to reduce their water use by 50 percent by 2025.

To reduce drawing from scarce water sources, SMC president Ramon Ang said they utilize several methods, including the use of sea water, water recycling, and rainwater harvesting for cooling machines, cleaning, and other utility, non-product water usage.

SMC has mandated that all its newly-built facilities be fitted with rainwater collection systems. A number of older facilities are also being retro-fitted to increase rainwater harvesting and to replace leaking underground pipes with above-ground, easy to monitor installations.

SMC's program should be made mandatory for all manufacturing concerns in the country. A law to that effect should be passed.

We have to take this water problem seriously and urgently. Renewable water resources are constant while population growth continues. Add to that climate change. Unless we do something now, the quality of life in this country will deteriorate with each passing day.

Boo Chanco's email address is bchanco@gmail.com. Follow him on Twitter @boochanco



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Manila hemp vs plastic in the circular economy

Not everything needs to sound to be clever, or charming, or likeable all the time. Sometimes we need to just be able to say things to one another. We need to hear things. - Don't Look Up

We all aspire for correctness in the use of money, material, and mandate.

Alas, while there seems to be nothing we can do about how money and mandates are abused or misused by some leaders we put in office, we can choose to use indigenous, renewable, and environment-friendly raw materials in support of local growers, their families, and communities.

Abaca - an indigenous and abundant plant - can help address plastic pollution and deforestation while promoting climate protection and the shift towards a circular economy, according to Francheska Zaide, co-owner of material solutions company Orera Technology.

Not only is abaca the most abundant in the Philippines; it also helps us achieve our main goal of promoting CE," Zaide said during the Bounce Back Greener online forum Environmental Management Bureau in June last year.

CE is a waste- and resource use-minimizing economic model for sustainable production and consumption. It generally requires keeping products and materials in use as long as possible.

This model is the emerging alternative to the prevailing linear economy which involves collecting raw materials for processing into products customers buy, use, and eventually dispose of as waste.

The plant (*musa textilis nee*), source of a world-famous fiber - Manila hemp - offers itself as an eco-friendly alternative to plastic and paper materials.

Abaca has potential for CE application as the Philippine Fiber Industry Development Authority said this material is durable and recyclable.

"Abaca papers can be recycled several times more than paper from wood or other natural fibers," PhilFIDA said.

It added that abaca is the strongest natural fiber on earth and possesses qualities superior to those of other materials, making it a favorite of var-

PED XING

deftwrit@gmail.com



ious industries worldwide.

It said abaca has non-slipping characteristics, superior tensile strength and mechanical properties, and is not damaging to the environment and can even be made into organic fertilizer.

The country supplies some 87 percent of global abaca demand for producing cordage, specialty paper, textile, furniture and fixtures, handicraft, novelty items, meat casing, cosmetics and skincare products as well as grocery bags, according to PhilFIDA.

Abaca also has automotive, construction and other industrial applications, PhilFIDA added.

Catanduanes, Davao Oriental, Northern Samar, Lanao del Sur and Davao del Sur are the country's top abaca-producing provinces, it said.

But there's no stopping the Bangko Sentral from issuing plastic money next month.

In fact, the first batch of peso banknotes is set to arrive in the country shortly.

Gov. Benjamin Diokno said in early December last year that the BSP and the Reserve Bank of Australia and its subsidiary - Note Printing Australia - have reached an agreement for the production of the polymer P1,000 banknotes.

Australia is the first country to issue a full series of banknotes using polymer as material, and it has produced and supplied polymerized banknotes to other countries.

"The P1,000 notes will begin circulating in mid-2022," the BSP chief said, adding that the policy-making Monetary Board has begun discussing possible use of polymer banknotes

as early as 2028.

Diokno added that the polymerized banknotes would be in circulation along with the paper banknotes.

BSP Deputy Gov. Mamerto Tangonan said 500 million P1,000 polymer notes or P500 billion would be in circulation between 2022 and 2025.

Tangonan said the P1,000 note is the most widely circulated paper money, comprising 30 percent of Philippine cash in circulation.

"Second reason is among the various denominations we have, it is the denomination most frequently counterfeited. Not that it's in danger of losing its security and integrity, but among the various denominations, it is the most counterfeited. So, it is best to focus the test in that P1,000 denomination," he added.

Among the reasons of the BSP for pushing the use of polymer notes is the frequent touching and sanitizing of objects, including paper currency and coins during this period of pandemic.

Diokno said polymer banknotes are less susceptible to viral and bacterial transmission, and can be sanitized without damaging the banknotes, qualities critical to government effort to curb the resurgence of Covid-19 infections.

They are harder to be counterfeited due to complexity of their printed images and the advanced technology used in incorporating security features.

They are also more durable and could last 2.5 to four-times longer than paper money as these are water- and dirt-resistant.

Overall production costs for polymer banknotes are lower, and they are more sustainable and environment friendly as they have lower carbon footprint, lower water and energy usage, and less environmental toxicity.

"The shift to polymer of other denominations will be based on the result of the circulation of the 71,000 polymer banknote," the BSP chief said.

"Should results of the circulation be positive, the proposal would be for a continued and more expanded use of polymer to include other denominations," he added.

Behold God's glory and seek His mercy.

Pause, ponder, act, and pray, people.



Microplastics found in human blood

MICROPLASTICS, tiny pieces of plastic less than 0.2 of an inch (5mm) in diameter, have been found in human blood for the first time.

Scientists in the Netherlands took blood samples from 22 anonymous healthy adult donors and analyzed them for particles as small as 0.00002 of an inch.

The researchers found that 17 out of the 22 volunteers (77.2 per cent) had microplastics in their blood, a finding described as "extremely concerning."

Microplastics have been found in the brain, gut, the placenta of unborn babies and the feces of adults and infants, but never before from blood samples.

Study author Professor Dick Vethaak at Vrije Universiteit Amsterdam in the Netherlands described their findings as a "breakthrough result".

The study, published in the journal *Environment International*, tested for five types of plastic—polymethyl methacrylate (PMMA), polypropylene (PP), polystyrene (PS), polyethylene (PE), and polyethylene terephthalate (PET).

Researchers found that 50 per cent of the blood samples contained polyethylene terephthalate (PET). This was the most prevalent plastic type in the samples.

PET is a clear, strong and lightweight plastic that is widely used for packaging foods and beverages, especially convenience-sized soft drinks, juices and water.



Meanwhile, just over a third (36 per cent) contained polystyrene, used in packaging and storage, while nearly a quarter (23 per cent) contained polyethylene, from which plastic carrier bags are made.

Only one person (5 per cent) had polymethyl methacrylate and no blood samples had polypropylene.

Alarmingly, the researchers found up to three different types of plastic in a single blood sample.

Differences between who had microplastics in

their blood and who didn't may have been due to plastic exposure just before the blood samples were taken.

For example, one volunteer who tested positive for microplastics in their blood may have recently drunk from a plastic-lined coffee cup.

The health effects of ingesting microplastics are currently unclear, although a study last year claimed they can cause cell death and allergic reactions in humans.

According to another 2021 study, microplastics can cause intestinal in-

flammation, gut microbiome disturbances and other problems in non-human animals, and they may be causing inflammatory bowel disease in humans. Another study published last year found microplastics can deform human cell membranes and affect their functioning.

The study was commissioned by Common Seas, a pressure group that drives for new policy to tackle plastic contamination.

Dr. Fay Conceiro, Senior Research Fellow at the University of Portsmouth, said that previous attempts to measure microplastics in the blood have likely had contamination of samples through plastics in air or from equipment.

"The paper is actually a method paper to show that it is possible to determine plastic in blood, and how to do it. Limitations to the paper are that it is only a sample from 22 people and there is no data on what exposure levels those individuals may have had," Dr. Conceiro said. He suggested that there's an 'urgency' to do more research in this area.

A 2019 study has already suggested that people unintentionally consume tens of thousands of these particles every year.

A World Wide Fund (WWF) report, also published in 2019, suggested we're all unintentionally ingesting enough plastic to fill a cereal bowl (125 grams) every six months. (DailyMail)



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Greenpeace calls on next admin to put climate justice into policy

ENVIRONMENTAL group Greenpeace has called on the next administration to put climate justice at front and center of policy agenda as the Philippines officially now becomes a super-typhoon hotspot.

This as the Philippine Atmospheric Geophysical and Astronomical Services Administration (Pagasa) recently said super typhoons are no longer aberrations but are the new normal.

Based on the new definition of typhoons by Pagasa, the Philippines experienced 7.5 times more super typhoons from 2016 to 2021 than

previously recorded.

Pagasa changed the classification of super typhoons from cyclones that exhibit maximum sustained winds of at least 220 kilometers per hour to 185 kilometers per hour.

"Based on the old definition, the Philippines encountered only two super typhoons from 2016 to 2021. With the new definition, 14 of the 39 typhoons that passed the country in the last six years can be classified as super typhoons."

Greenpeace Campaigner Virginia Llorin said possibly six of the average 20 typhoons experienced every year in the Philippines can

now be classified under the super-typhoon category.

"This is just the tip of the iceberg," Llorin said. "Science is telling us that we need to prepare for worse scenarios ahead. And without meaningful and urgent climate action, we need to prepare for the worst."

The Intergovernmental Panel on Climate Change (IPCC) report released earlier this month revealed that climate risks are appearing faster and will get worse sooner than previously assessed, and that they have been disproportionately affecting people in highly vulnerable geographies.

Impacts on communities that are least responsible for the climate crisis and least able to cope are also more severe. In the Philippines, the climate crisis has been costing Filipino communities their lives and livelihoods for decades, and according to data from the government, damages from climate impacts has cost the country around P506 billion in the past decade.

Greenpeace said that climate will be the defining issue of the next administration. The next president will serve during the decade which is the most crucial window for climate action if we are to avoid the

worst impacts of the climate crisis, according to Llorin.

"Filipinos are already suffering from climate impacts and it will get worse," she stressed.

According to Llorin, the climate crisis impacts very fundamental issues namely food, water and energy security, poverty, injustice, health, migration, security and our fundamental rights to life, health, among others.

"To secure all these and ensure Filipinos are able to live decent lives free from fear or want, means that climate needs to be the primary lens in government policymaking and implementation," she said. *Jonathan L. Mayuga*



MAYNILAD PLANTS 5,000 MANGROVES TO CELEBRATE WORLD WATER DAY 2022

WEST Zone concessionaire Maynilad Water Services, Inc. (Maynilad) recently planted 5,000 mangrove propagules in the Manila Bay coastal area of Cavite province as part of its World Water Day 2022 celebration. The photo shows a volunteer from the Cavite Provincial Environment and Natural Resources Office (PENRO) planting mangrove propagules during Maynilad's recent planting activity in Barangay Sineguelasan, Bacoor City.

Under its "Plant for Life" reforestation and afforestation program, Maynilad plants mangroves every year along coastal areas with the help of community and employee volunteers. Mangroves protect from storm surges, serve as habitat for fish, and help reduce climate change impacts by contributing to carbon sequestration.

Maynilad is set to plant a total of 10,000 mangrove propagules this year to cover four hectares of shoreline, bringing its total mangroves planted to 217,500 since 2013. Total carbon credits earned thus far has reached 12,000 tons of CO₂, which is equivalent to emissions of around 2,500 gasoline-powered vehicles for one year removed from the atmosphere.

The Maynilad "Plant for Life" activity in Cavite this year is done in partnership with the PENRO and the local government of Bacoor City.





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Protecting forests, conserving water



BY JONATHAN L. MAYUGA

ESTABLISHED through a United Nations General Assembly resolution on November 28, 2012, the 21st of March of each year has been declared as the International Day of Forests. Meanwhile, highlighting the importance of freshwater, the annual World Water Day is observed on March 22.

It is, hence, no surprise that both occasions are observed in March, when as the peak of the dry season in the Philippines, the water supply is an issue.

It also highlights the interconnectivity of forest and water which is essential to human survival.

Rich natural resources

THE Philippines is blessed with vast forest cover and water resources. Of the 30 million hectares total land area, 15 million ha are classified as forestland.

Ironically, however, only around 7 million ha are covered with forest.

Likewise, the Philippines has abundant water resources. But water accessibility—or where and when they are needed remains a challenge.

Threatened resources

MASSIVE deforestation and degradation particularly in some of the country's critical watersheds are strongly being felt in terms of water scarcity.

Aggravated by the impacts of climate change, water levels in natural or even man-made reservoirs go down faster than normal, especially during the dry season.

As demand for water grows, the country's groundwater resources are not spared. The demand for water inevitably grows along with population and rapid urbanization.

National Greening Program

RECOGNIZING the need to rehabilitate the country's open, degraded and denuded forests to combat climate change, help reduce hunger and poverty, and consolidate all reforestation or greening efforts of the government, the private sector, academe and other institutions, then President Benigno

C. Aquino III signed Executive Order 26, series of 2011 to plant 1.5 billion trees in 1.5 million ha of lands of the public domain from 2011 to 2016.

On November 12, 2015, or a year before the National Greening Program (NGP) expired, Aquino signed Executive Order 193 to rehabilitate all the remaining unproductive, denuded and degraded forestlands estimated at 7.1 million hectares from 2016 to 2028.

Under the Duterte administration, the Department of Environment and Natural Resources (DENR), the lead implementing agency of the program, experienced huge budget cuts, compelling the agency to tap private sector support to the massive tree-planting activities.

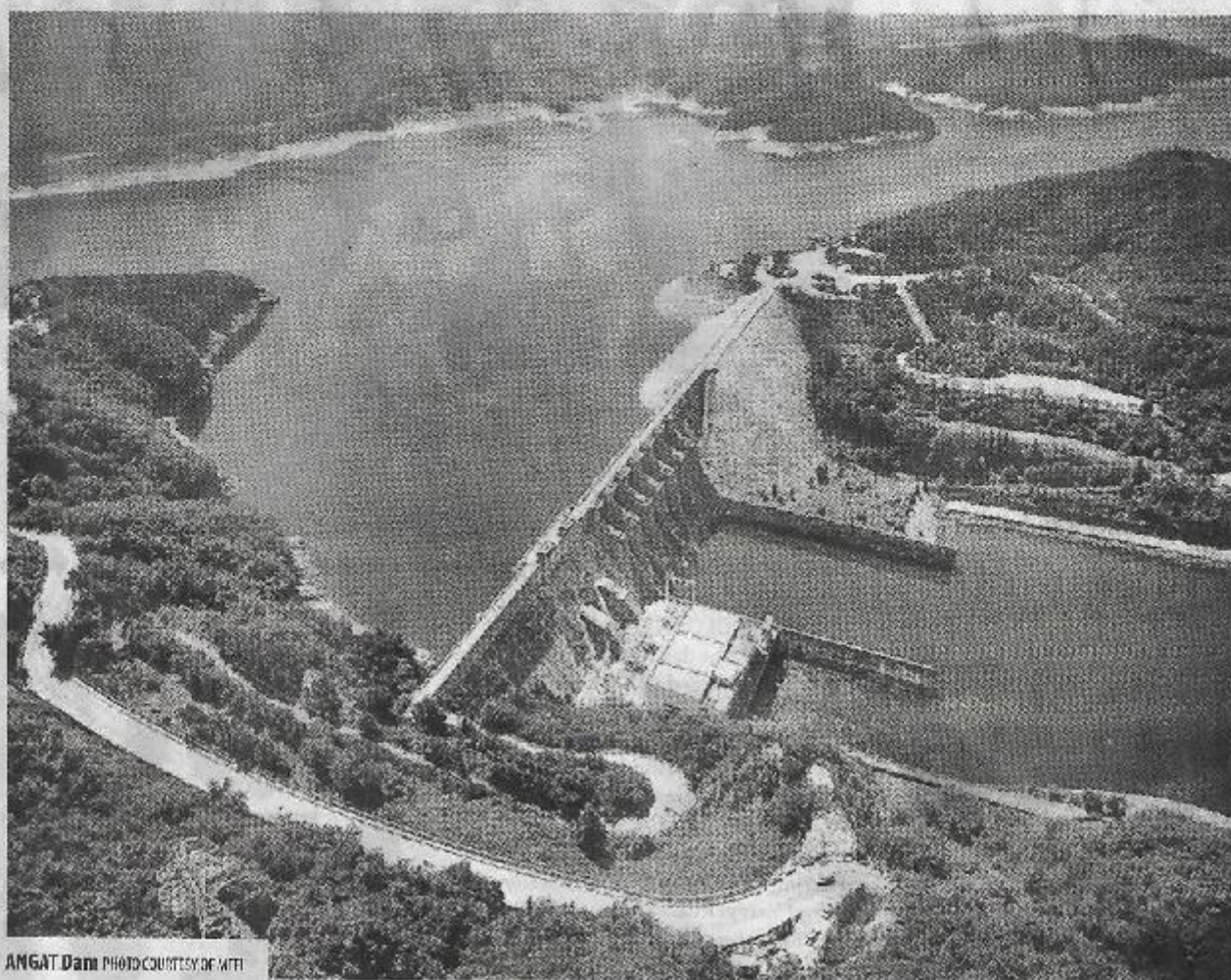
As of December 2020, around P49 billion has already been allotted for the program to cover the remaining unproductive, denuded and degraded forestlands nationwide.

Last year, the budget for the NGP was P3.158 billion. It was slashed down to P2.265 billion for this year.

Saving critical watersheds

CLIMATE change and deforestation have an adverse effect on the country's watershed, particularly on the water quality of raw water at Angat Dam, said Roman Corpuz, manager at Watershed Management Division of Metropolitan Waterworks and Sewerage System (MWSS), in a pre-recorded video shown during the inauguration and opening of the Million Trees Nursery and Eco Learning Center in Quezon City on March 18.

Corpuz cited an incident in November 2020, at the height of Typhoon Ulysses (international name Vamco), when water



ANGAT Dam PHOTO COURTESY OF WTI

Turbidity severely affected the operation of private water concessions.

The impact of water turbidity on water reservoirs, he said, is severe that the operation of water treatment facilities resulted in slow and low production of clean and safe water during that time.

This pushed the MWSS to be committed to saving critical watersheds, according to new MWSS Chief Leonor "Bobby" Cleofas during the same event.

Cleofas noted the fact that the agency's Annual Million Tree Challenge (AMTC) aims to address the problem besetting not only the seven critical watersheds—namely Angat, La Mesa, Ipo, Kaliwa, Laguna Lake, Untray and Upper Marikina—and now even Laguna de Bay, but also other degraded forests that need rehabilitation.

"The MWSS mandate is for us to be able to supply a sustainable water supply to the whole MWSS service area and provide sewerage and sanitation services. But equally important is the protection of the watershed; making sure that we have a healthy watershed for us to have sustainable water," she told the BusinessMirror.

Public-private partnership

IN the Philippines, stories of public-private partnerships highlight the effort to protect and conserve forest and water.

Such is the case of water privatization—when the government and the private sector partnered to deliver safe drinking water to Metro Manila way back in 1997.

Then under the administration of President Fidel V. Ramos, the Philippines, through the MWSS privatized waterservices by engaging the services of Maynilad Water Services Inc. and Manila Water Corp.

In 2017, Reynaldo Velasco, former chairman and administrator of the MWSS, launched the AMTC, a reforestation program to plant a million trees every year for five years in seven critical watersheds.

He then issued the challenge to the MWSS water concessionaires and set the ambitious reforestation target.

Proponents of the AMTC were able to surpass the target by 200,000 trees, planting a total of 5.2 million trees by February 28 this year.

In the pre-recorded video, Velasco attributed the record-low water level

at Angat in 2017 to the environmental degradation in the Angat watershed.

"When I took over sometime in 2017, I realized that there was already a lot of tree-cutting in the watershed. It is affecting the water level in Angat. We encountered one of the lowest in terms of the level of Angat to about 156 meters [above sea level]. The critical level is actually 180 meters," he said.

Sustaining partnership for the environment

TO sustain the gains of AMTC, the proponents of the project decided to establish the Million Trees Foundation Inc. (MTFI), the institution behind the establishment of The Million Trees Nursery and Eco Learning Center.

"We have gone far ahead. We now have an office made of two retrieve container vans with root docks, a gift shop and the Yakal Coffee Shop," Velasco shared.

"Most of the wood that we used to make the chairs, the benches, and tables, were all salvaged from the stockyard of the MWSS," he said.

Velasco underscored the valuable help and support of the private sector in achieving the ambitious target of the



AMTC and ensuring the sustainability of the endeavor beyond 2022.

"Now, we are targeting to plant 10 million more trees until 2030," he said.

As for the 5 hectare government property where the Tree Nursery and Eco Learning Center now sits, Velasco said there is a plan to develop the area.

"We have bigger plans for the Center. This is just the first phase. Moving on, the next phase is to build a Watershed Academy Building and a Water Trail to make the small space a multi-purpose area that is open to the public, open to students and researchers where they can embrace not only planting trees but the reality of climate change, and also to love Mother Earth more," he said.

"MTFI will be knocking on the doors of institutional partners, and we are confident that they will support the Million Trees Foundation," he ended.

Business sustainability

JERIC Sevilla, communications head at Manila Water, the private water contractor of the MWSS in the East Zone of Metro Manila and a supporter of the MTFI, said in the video that it is vital for the company to protect the environment that sustains its business, especially against the backdrop of the worsening impact of climate change.

"Climate change is very important in terms of the impact we are feeling right now. Droughts are very common; rainfall patterns are some sort of distorted and our watersheds, which sustain the raw water supply, are very important for us to protect," he said.

"There is only one way in which we are going to be able to reforest the watershed area and that is to plant more trees to ensure that there will be watersheds in the future," he said.

For her part, Anette H. De Ocampo, senior assistant vice president and head of Corporate Affairs and Communication at Maynilad, said nowadays, especially during summer, we experience extreme heat which cause the dam level to go down faster than normal. "Definitely, AMTC can help address the concern of climate change because tree-planting is the most effective way if not the only way to address deforestation. Also, AMTC is also able to reach out to the various stakeholders through its programs to the public and private sector," she said in the video.



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DILG urges: Ensure a clean Manila Bay

After almost 11 years, we can now see that we are slowly, but surely winning the battle for Manila Bay

BY MAR SUPNAD

CITY OF SAN FERNANDO, Pampanga – The Department of the Interior and Local Government (DILG) in Central Luzon has called on various government agencies to be always frontliners in achieving a clean and healthy Manila Bay.

DILG regional director Karl Caesar Rimando underscored that Central Luzon has been showing positive results and stories of accomplishments from the shared advocacy of protecting, maintaining and preserving the bay.

"We had sacrificed so much tears, blood, and sweat in cleaning the miles of waterways in our country. Hours, days, and years had already passed in our continuous dialogues with those living near the rivers and seas. It has been years of training our LGU (local government units) and our communities in the different aspects of taking care of our environment," said Rimando during the MANILA BAYani Awards and Incentives (MBAI).

"After almost 11 years, we can now see that we are slowly, but surely winning the battle for Manila Bay," he added.

Recently, personnel of the Provincial Environment and Natural Resources Office in Bataan led by Raul Mamac, proceeded all the way to the historic Corregidor Island where they conducted massive cleanup and collected tons of wastes there.

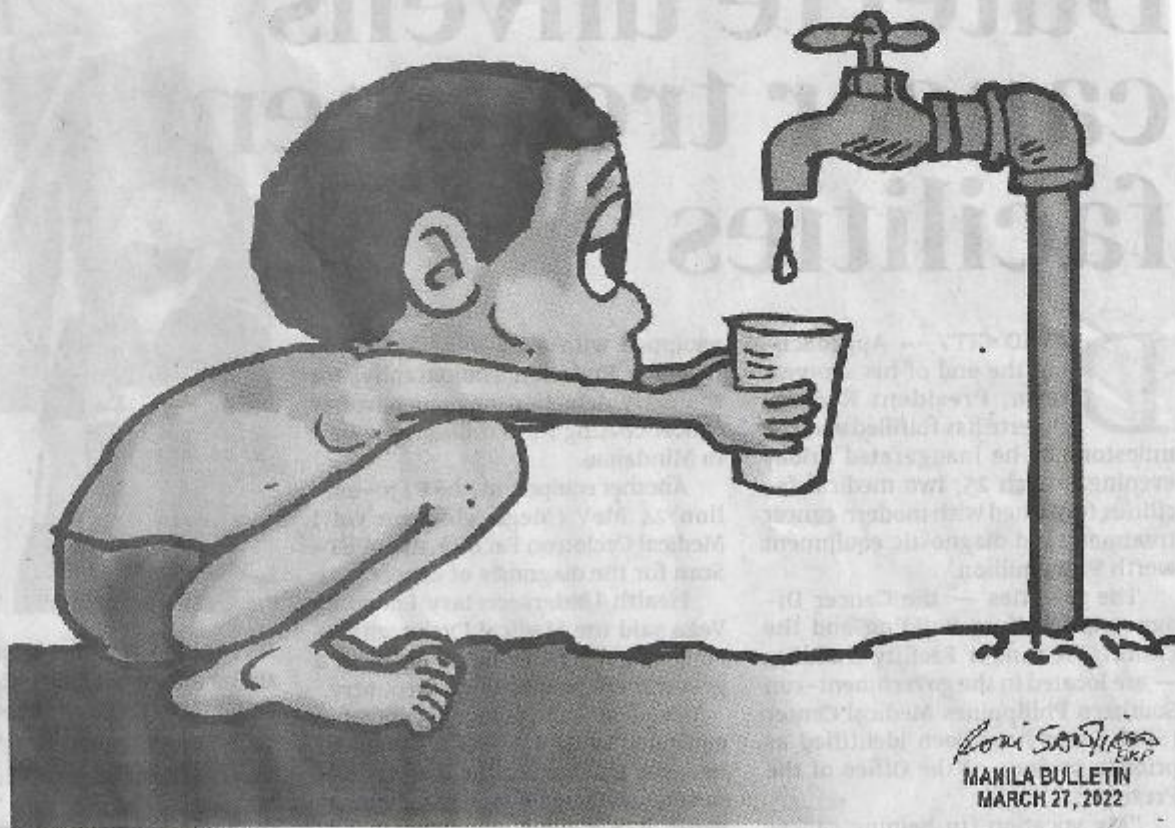
Working what he called from "ridge to reef," Mamac and his men were constantly launching clean up drive from the rivers in the mountains go down to the seashore, making

the coastal areas of Bataan one of the cleanest in the country.

The MBAI is in line with the Manila Bay Clean-Up Rehabilitation and Preservation Program which aims to restore the water quality of the bay in accordance with the Supreme Court Mandamus in 2016.

With this, Rimando lauded the efforts of Central Luzon LGU behind the exceptional environmental management practices reinforced in the past years and urged LGU and partner government agencies to remain in the frontlines until the country achieves its dream of a clean and healthy Manila Bay.





Roni Sanjaya
MANILA BULLETIN
MARCH 27, 2022

Remember to 'waste no water'

Water is life. So, if water is life, then easy access to fresh water is a basic right that each and every person in this world must enjoy. The reality, however, is far from it.

United Nations data revealed that 2.2 billion people in the world have no access to safe water. It is an alarming number considering that we are now living in a world that is more technologically advanced than before. If a basic right to clean water could not be guaranteed by governments, how are other rights safeguarded?

Sounding this alarm is the UN as it marked last March 22, 2022 as World Water Day. An annual event held since 1993, this year focused on the importance of freshwater, specifically groundwater — an invisible resource with an impact visible everywhere.

"World Water Day is about taking action to tackle the global water crisis. A core focus is to support the achievement of Sustainable Development Goal 6: Water and sanitation for all by 2030," said the UN in a statement. It added that the focus is groundwater — "water found underground in aquifers, which are geological formations of rocks, sands, and gravels that hold substantial quantities of water. Groundwater feeds springs, rivers, lakes, and wetlands, and seeps into oceans. Groundwater is recharged mainly from rain and snowfall infiltrating the ground. Groundwater can be extracted to the surface by pumps and wells."

Cities and communities around the world, including a majority of countryside areas of our country, rely on groundwater as it supplies a large proportion of the water used for drinking, sanitation, food production, and industrial processes. Add to that, groundwater is also critically important to the healthy functioning of ecosystems, such as wetlands and rivers.

The UN called on all nations to protect water



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THE DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
MANILA BULLETIN
THE NATION'S LEADING NEWSPAPER

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TITLE: *Combating FO WASTE AND WATER*

PAGE *22*

sources from overexploitation, which it defined as "abstracting more water than is recharged by rain and snow — and allowing pollution to deplete this resource, thus putting extra costs to process water, or to entirely prevent its use."

World Water Day was conceived way back in 1992, the year in which the UN Conference on Environment and Development in Rio de Janeiro took place. That same year, the UN General Assembly adopted a resolution mandating March 22 of each year as World Water Day. In the Philippines, the celebration started in 1996 when then President Fidel V. Ramos issued Administrative Order No. 258 instructing all pertinent government agencies to join the global observance.

This year, the Department of Environment and Natural Resources (DENR) marked the occasion with the gathering of policymakers and experts for the 1st National River Basin Summit, with a theme aligned with the UN. The summit documented best practices and lessons learned from various river basin initiatives crucial to the country's need for sustainable integrated river management practices for implementation within the 421 principal river basins.

The UN also used the occasion to call on everyone — you and me included as we use water — to help raise awareness on the importance of protecting and sustainably using groundwater and all our sources of water. It could start by simply preventing water wastage at all cost and letting go of activities that utilize this precious resource irresponsibly.

As long as we are thirsty and there is a glass of clean, pure water available in front of us, some of us may never even care about this issue. But what happens when the river runs dry? Or when climate change destroys the flow of fresh water? Or when you turn on the shower and no water drops on your head? Or when suddenly, a glass of water is worth a pound of gold?



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Supporting front-liners in the war against pollution



Miguel Sabaño —PHOTOS BY GREGG YAN



Sherwin Salazar



Arles Gozar



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THE SUPPORTING PHOTOS UNDERLINE THE MAIN POINT PAGE 2-2

By Vanessa B. Hidalgo
@hidalgovINQ

So what did a marine scientist and an explorer find when they descended into the Emden Deep in the Philippine trench? Nope, there were no ancient sea monsters or undiscovered fossils of dinosaurs. But they found trash. A lot of trash.

Located in the Philippine trench with a depth of about 10,400 meters, Emden Deep is a unique marine feature east of Mindanao. Yet Filipino oceanographer Deo Florence Onda and American explorer Victor Vescovo found that they were not alone in the third deepest point in the world during their mission on March 23, 2021.

Fellow "travelers" already started their descent ahead of them: plastic bags and packaging, stuffed toys and even clothes. What was even more surprising was that the plastic materials were still intact. Vescovo saw that these things did not degrade even if they were in the deep parts of the ocean.

It remains unclear how such human debris reached Emden Deep. Onda says that with ocean currents, some of it could have come from other Pacific Islands, or from coastal communities near the Philippine trench.

This comes as no surprise as much of the planet is already drowning in discarded plastic. It is, without a doubt, a pressing environmental issue that requires humanity's utmost attention. In a recent report by the National Geographic, "plastic pollution is most visible in developing Asian and African nations, where garbage collection systems are often inefficient or nonexistent."

A 2021 report from the World Bank has said that plastic plays a vital role in the lives of poor and middle-income families in the Philippines as it provides low-cost consumer goods to this segment through sachets, or the "ring" culture.

But the "sachet economy" contributes to the worsening problem of marine plastic pollution. The World Bank estimates that the Philippines consumes 163 million pieces of sachets every day.



Supporting waste pickers and recycling facilities converts a significant portion of waste, which would otherwise be dumped in landfills or in our rivers and seas, into useful products

Thomas Bell
Project Aseano manager

an epoch completely dominated by humans marked on the fossil record not by fossilized bones, but plastic.

Circular economy

In order to address the mismanagement of plastic waste, the World Bank proposes that the Philippines must transition into a circular economy. It says the country should pivot toward a plastic value chain approach to evaluate its plastics recycling industry and its role in supporting a circular economy. It identifies major challenges, market drivers and opportunities for scaling up recycling efforts via targeted public and private sector interventions.

Instead of discarding recyclable plastic products, it says these should be upcycled into valuable materials.

Regional organizations such as the Partnerships in Environmental Management for the Seas of East Asia (Pemsea), is pushing for an integrated solution to coastal and marine problems, including marine plastic pollution. They seek out Pinoy waste pickers and junk shops to help turn the tide of the insufficient solid waste management in their own way.

"To decisively address plastic waste management, we need to include waste pickers and recyclers as major stakeholders," says Aimee Gonzales, executive director of Pemsea.

Sherwin Salazar, a 38-year-old *mangungalakal* or waste picker, considers a junk shop in Dasmariñas, Cavite, as his office. It has been his main source of income since he was 12.

While other kids dreamed of the latest toys or video games, Sherwin "hunted for treasure" in Cavite's garbage dumps. "I was still in school when I started pawing through old lots,

In a global scale, according to the pioneering analyses of plastics, the world's scientists calculated that humanity has produced 8.3 billion metric tons of plastic, 75 percent or 6.3 billion MT of which became plastic waste. Along with discarded metal, rubber, paper and glass, the vast majority of plastic waste materials lie in landfills or float silently in our rivers, lakes and oceans.

There's so much plastic lying around that scientists are proposing this era to officially be termed the Anthropocene,



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FILE: SUPPLY-DING PHOTOS UNDER MEMPHIS WITH PUNYON PAGE 3-3

Project Aseano funds sustainable measures to recycle, curb plastic waste



UP FOR RECYCLING Plastic bottles are sold at P10 per kilo



MOST VALUABLE FINDS Copper wires are sold at P355 per kilo

dumps and river banks in a never-ending search for *bakal*, *bote*, *plastik* at *dyaryo* (scrap metal, bottles, plastic and newspapers). I used a big old sack that weighed so much," he recalls.

"Since I worked hard, I was taken in by a junk shop, where I earned around P100 daily," he adds.

From using a brawny sack to collect his "treasures," Sherwin now owns a motorized tricycle, which brings him to nearby cities like Tagaytay. "Most Filipinos think *pangangulakal* is nothing more than a dirty job, but it's far better than working in other jobs like construction.

You become your own boss and control your time so if you put in the hours and effort, you can make a surprising amount of money. These days, I make anything from P1,000 to P1,500 daily. Yesterday I made P1,200, even more than a call center agent," he says.

By exploring the garbage of others, Sherwin was able to provide for his family and send his children to school. "The life of a waste picker is definitely dirty, but if you meet life's challenges head-on and ask for a little help

from above, then it's really rewarding," he says.

Enabling recycling

On the other hand, Arles Gozar is turning trash into cash. Arles runs the Angela Mae junk shop in Dasmariñas, Cavite. He employs nine to 15 part-timers to help pick and pack garbage that waste pickers bring to junk shops.

"Many people in this area don't have jobs. By employing people even part-time, my tiny junk shop helps provide for them and their families. The garbage of others provides a good life for our family—I can even help my relatives from the province when they're down and out, because we have a little extra," he says.

Every few minutes, a new picker brings in choice pickings in exchange for cash. Most valuable of all is *tanso* or copper, sold at P355 per kilogram, followed by *sihak* or hard plastic (P15/kg), *bakal* or scrap metal (P14/kg), *yero* or corrugated iron sheets (P11/kg), *bote* or plastic bottles (P10/kg), *lata* or tin cans (P8/kg) and *karton* or cardboard (P4/kg).



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TITLE: SUPPORTING FRONT LINERS AGAINST WASTE POLLUTION PAGE 4-4

Junk shops like Arles' provide a vital solution in the world's quest to minimize waste—by recycling, upcycling or otherwise making use of items, which would otherwise be bound for landfills and dumpsites. Less trash means less garbage flowing down rivers whenever a dumpsite floods.

Junk shops are thus part of the solution to pollution. "We're of course business owners first, but in our own small way, we're doing what we can to help keep our country clean," says Arles.

While reducing waste, recycling provides livelihood opportunities to some of the world's poorest communities.

Miguel Sabaño, 57, once relied on nearby brackish-water fishponds for food and livelihood. This changed when some of Cavite's fishponds were converted into offshore gambling centers. Miguel and many others found themselves unemployed. "Now all we have are these scrap rubber tires," he says.

Making use of their time when no better jobs like construction arise, Miguel and the residents of his community while away the hours ripping out endless rows of polyester or nylon threads, which give motorcycle tires and inner tubes their pliable structure. They use an array of tools—rusty pliers, converted nail cutters, even their bare hands to tear and pluck off threads, which form tiny piles by their feet.

Once cleaned, the tubes and tires sell for P20/kg, enough for about half a kilogram of rice. A long day's work might yield two kilograms of processed rubber. "It's not a lot, but having rice today spells the difference between life and death for some people," he says.

Being large and durable,

rubber tires take anywhere from 50 to 100 years to decompose naturally. Instead of being dumped into landfills, they can be shredded and turned into chips, powder, cement or fuel. Used tires can also be turned into tables, chairs, garbage bins, plant pots, sandals and other useful products, providing further income for communities which can find creative uses for them.

Sherwin, Arles and Miguel all play a key role in combating waste. They are considered front-liners in the environmental battle against plastic pollution. Waste pickers, recyclers and junk shops may be among the dirtiest jobs in the world but they play a major role in sustainability.

Sustainability advocate

"Supporting waste pickers and recycling facilities converts a significant portion of waste, which would otherwise be dumped in landfills or in our rivers and seas, into useful products. These cottage industries also support the lives and livelihoods of thousands of Filipinos," explains Thomas Bell, who manages Pemsea's Project Aseano.

Project Aseano aims to develop and promote sound and sustainable measures to reduce the impacts of plastic pollution and their implications on socioeconomic development and the environment. The project focuses on the city or municipal level, with Cavite's Imus River as one of two project sites.

According to the Environmental Management Bureau, Cavite generated an average of 1,514 tons of waste daily in 2018, 22 percent or 333 tons of which could still be recycled. The Imus River traverses the highest waste-generating cities in Cavite—Bacoor, Dasmariñas and Imus, making it a conveyor belt for plastics flowing out to Manila Bay.

Funded by the Norwegian Development Program to Combat Marine Litter and Microplastics, Aseano is led by the Norwegian Institute for Water Research and the Center for Southeast Asian Studies Indonesia in close collaboration with the Pemsea Resource Facility and Association of Southeast Asian Nations (Asean) Secretariat under the purview of the endorsing Asean sectoral body, the Asean Working Group on Coastal and Marine Environment.

The results of the project will be synthesized into a local government training manual, tool kit and best practices handbook of policy, monitoring tools and technologies for plastics management that can be used as a reference by local governments in Cavite, the rest of the Philippines, plus the entire Asean region. inq.com.ph



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Microplastics found in human blood—study

Traces of PET from drinking bottles, polystyrene from food packaging detected

PARIS—Scientists have discovered microplastics in human blood for the first time, warning that the ubiquitous particles could also be making their way into organs.

The tiny pieces of mostly invisible plastic have already been found almost everywhere else on Earth, from the deepest oceans to the highest mountains as well as in the air, soil and food chain.

A Dutch study published in the *Environment International* journal on Thursday examined blood samples from 22 anonymous, healthy volunteers and found microplastics in nearly 80 percent of them.

Half of the blood samples showed traces of polyethylene terephthalate (PET) plastic, widely used to make drink bottles, while more than a third had polystyrene, used for disposable food containers and many other products.

"This is the first time we have actually been able to detect and quantify" such microplastics in human blood, said Dick Vethaak, an ecotoxicologist at Vrije Universiteit Amsterdam.

"This is proof that we have



EVERYWHERE Researchers say microplastics could enter the human body via a lot of sources even through drinking water kept in plastic containers or bottles. —AFP

plastics in our body—and we shouldn't," he told *Agence France-Presse*, calling for further research to investigate how it could be impacting health.

"Where is it going in your body? Can it be eliminated? Excreted? Or is it retained in certain organs, accumulating maybe, or is it even able to pass the blood-brain barrier?"

The study said the microplastics could have entered the body by many routes: via air, water or food, but also in

products such as particular toothpastes, lip glosses and tattoo ink.

"It is scientifically plausible that plastic particles may be transported to organs via the bloodstream," the study added.

Vethaak also said there could be other kinds of microplastics in blood his study did not pick up—for example, it could not detect particles larger than the diameter of the needle used to take the sample.

The study was funded by

the Netherlands Organization for Health Research and Development as well as Common Seas, a United Kingdom based group aimed at reducing plastic pollution.

Proof

Alice Horton, anthropogenic contaminants scientist at Britain's National Oceanography Centre, said the study "unequivocally" proved there was microplastics in blood.

"This study contributes to the evidence that plastic particles have not just pervaded throughout the environment, but are pervading our bodies too," she told the Science Media Center.

Fay Couceiro, reader in biogeochemistry and environmental pollution at the University of Portsmouth, said that despite the small sample size and lack of data on the exposure level of participants, she felt the study was "robust and will stand up to scrutiny."

She also called for further research.

"After all blood links all the organs of our body and if plastic is there, it could be anywhere in us." —AFP



Scientists find microplastics in blood for first time

PARIS, France (AFP) — Scientists have discovered microplastics in human blood for the first time, warning that the ubiquitous particles could also be making their way into organs.

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"This is the first time we have actually been able to detect and quantify" such microplastics in human blood, said Dick Vethaak, an ecotoxicologist at Vrije Universiteit Amsterdam.

"This is proof that we have plastics in our body — and we shouldn't," he told AFP, calling for further research to investigate how it could be impacting health.

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Naglinis ang mga kagawad ng BFP, BJMP at local government ng Pasay City sa Manila Bay partikular sa likod ng Manila Film Center upang mapanatili ang kalinisan ng Manila Bay. (Jonas Sulit)



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TEMPERATURE RISES FROM -51C TO -12C

THINNING ANTARCTIC ICE SHELF CRUMBLES AMID INTENSE HEAT WAVE

An East Antarctica ice shelf disintegrated this month following a period of extreme heat in the region, according to scientists.

Satellite images show the 1,200-square-kilometer Conger Ice Shelf collapsed completely on or around March 15.

"Possible it hit its tipping point following the #Antarctic #AtmosphericRiver and heat wave too?" asked Natinal Aeronautics and Space Administration (NASA) Earth and Planetary Scientist Catherine Colello Walker on Twitter on Friday,

sharing images of a white expanse crumbling into shards over the dark ocean.

Ice shelves, permanent floating sheets of ice attached to land, take thousands of years to form and act like levees holding back snow and ice that would otherwise flow into the ocean, causing seas to rise. The March heat wave, with temperatures reaching 40 degrees Celsius above normal in parts of East Antarctica, was tied to the atmospheric river phenomenon, said Peter Neff, a glaciologist at

the University of Minnesota.

This process creates columns hundreds of miles long that carry water vapor from the tropics, creating an effect Neff described as "a fire hose of moisture."

Incredibly variable

"The (Antarctic) climate is incredibly variable but this was off scale," Neff said. "This was at least twice as extreme of a warming event as we would have expected."

Temperatures in the region normally sit around -51 C at

this time of year, but they were around -12 C earlier this month.

They have now gone back to normal, Neff said.

Surrounded by vast oceans and buffered by winds that tend to protect it from large warm air intrusions, the frozen continent is responding more slowly to climate change than the Arctic, which is warming at three times the rate of the rest of the world.

For decades

In the last century, East Antarctica barely warmed at

all, but some regions have been affected and the continent lost an average of 149 billion tons of ice per year from 2002 to 2020, according to NASA. The loss of the Conger Ice Shelf is the latest example of changes afoot.

"This poor little ice shelf was just hanging on for dear life in this really warm coastal climate and it had been thinning and getting damaged over the last few decades," said Neff.

The Conger shelf was splintering long before the heat wave, and its demise shows the

Antarctic system is sensitive to atmospheric changes, but the event itself is not a cause for concern, said Ted Scambos, a senior research scientist at the University of Colorado Boulder.

A small glacier behind where Conger used to sit may now flow faster and unload a little more ice into the sea, he said.

"If it was in your back yard it'd be huge ... but by Antarctic standards and by sea level standards its a tiny area," he said. —REUTERS



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Republic of the Philippines
Department of Environment and Natural Resources
COMMUNITY ENVIRONMENT AND NATURAL RESOURCES
CALAGA

NOTICE

Notice is hereby given that the Community Environment and Natural Resources Office in Calaga, Malagas will accept oral or written bids not later than 10:00 AM on April 29, 2022 for the lease for Industrial Port purposes of the tract of land herein below described:

Location	Dty. San Rafael, Calaga, Batangas
Description	Abandoned Lease Application No. 061307-4
Area	3.457 apts
Applied for by	Hercules Mining and Development Corp. represented by Nihil S. Pascual


The right to lease the land will be awarded to the person offering the highest annual rental, which shall not be less than three per centum (3%) of the value of land plus one per centum (1%) of the value of the proposed and/or existing improvements. In order that a person may be entitled to participate in a bidding, he must be a qualified public land applicant and must, before the commencement of the same, make a deposit of equivalent to three (3) months rental. Only deposit in cash, money order, money, warrant, certified checks, cashier's checks or manager's check can be accepted. A person bidding in representation of another may do so under a duly executed power of attorney. During the bidding, the bidder has to make an additional deposit every time his bid is raised. To complete the three (3) months rental, otherwise such bid as raised shall not be accepted. This right is reserved to reject any or all bids.

FEB 15 2022


Date

[Signature]
NICHOLAS AMATORIO
CONROMBER





Department of Environment and Natural Resources
ENVIRONMENTAL MANAGEMENT BUREAU
2201 Compost, Vargas Avenue, Alabang, Quezon City 1155
Tel. No. (02) 8539-4378
Website: www.denr.gov.ph Email: emrb@denr.gov.ph



NOTICE OF PUBLIC HEARING

On the ENVIRONMENTAL IMPACT ASSESSMENT (EIA) REPORT of the PROPOSED NICKEL LATERITE MINING PROJECT of 4D VENTURES AND DEV'T INC. located in Barangays Pantukan and Adlay, Carrascal, Surigao del Sur and Barangay Cagdianao, Claver, Surigao del Norte.

Notice is hereby given to all parties who wish to give their opinion regarding the implementation of the PROPOSED NICKEL LATERITE MINING PROJECT to attend an on-line Public Hearing that is scheduled as follows:

Date	Time	Zoom Details
05 April 2022	9:00AM	Meeting ID: 859 2713 1165 Passcode: 443997
	<i>Registration starts at 8:30 AM</i>	

This Public Hearing is being conducted in connection with the 4DVI's application for Environmental Compliance Certificate (ECC). The Environmental Impact Statement (EIS) of the aforementioned project is being reviewed by the Environmental Management Bureau (EMB) of the Department of Environment and Natural Resources (DENR).

The following is the project information:

Proposer	4D Ventures and Dev't Inc.
Project Name	Proposed Nickel Laterite Mining Project
Project Location	Barangays Pantukan and Adlay, Carrascal, Surigao del Sur and Barangay Cagdianao, Claver, Surigao del Norte
Nature of the Project	Resource Extractive Industry
Extraction Rate	5,000,000 MT/Year
MPSA 323-2018-SXIII Area	2,520.9851 hectares

All interested parties who wish to attend or participate in this on-line Public Hearing should preferably confirm their attendance/ participation through the above Zoom platform.

Likewise they may give their opinion(s) in a concise position paper submitted to the ENVIRONMENTAL IMPACT ASSESSMENT AND MANAGEMENT DIVISION (EIAMD) of this Office through email or email at eiamd@denr.gov.ph, three (3) days before the Public Hearing schedule.

The project's EIS and Executive Summary for the Public are downloadable at our website: www.eis.emb.gov.ph (kindly access the Notice of Public Hearing/ Consultation link found in our website) while copies will be available at the following offices:

<p>EMB-CARAGA Purok3, Bgy. Anabago, Butuan City</p>	<p>MPDO-Carrascal Municipal Hall, Poblacion, Carrascal, Surigao del Sur</p>	<p>MPDO-Claver Municipal Hall, Claver, Surigao del Norte</p>
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For more details, please contact the EIAMD Division of this Office at telephone numbers (02) 8539 4378 local 115 and look for the project case handler: Engr. Joel G. Polintan or at this email: joel.polintan@denr.gov.ph.

Joel Polintan

Protect the environment... Protect life.

28 MARCH 2022, MONDAY



NEWS ALERTS

COVID-19 NEWS

STRATEGIC COMMUNICATION AND INITIATIVES SERVICE

Philippines records 330 new COVID-19 cases; death toll now over 59k

ABS-CBN News

Posted at Mar 27 2022 09:42 PM



People spend time at a park in Marikina on March 16, 2022 as Metro Manila and other areas remain under COVID-19 Alert Level 1 as the country's fresh COVID-19 tally continues to drop. Jonathan Cellona, ABS-CBN News

MANILA - The Philippines recorded 330 additional COVID-19 cases on Sunday, the second lowest daily tally so far this year, based on the government's tracker.

Of the fresh infections, 84 are from Metro Manila.

The country's total cases climbed to 3,676,991, of which 42,835 are active. ABS-CBN Data Analytics Team head Edson Guido said the number of active infections is the lowest since Jan. 5.

The Department of Health also logged 131 new deaths due to the disease, raising the total to 59,015.

A screenshot of a Twitter post by Edson C. Guido. The tweet text reads: "BREAKING: DOH reports 330 new cases today, the 2nd lowest daily tally so far in 2022. DOH also reports 131 new deaths. The number of active cases (42,835) is the lowest since January 5. NCR with 84 new cases today." Below the text is a dashboard titled "Nationwide Cases Data" showing: Total Cases: 3,676,991; Active Cases: 42,835; Recovered: 3,575,141; and Deaths: 59,015. Below the dashboard is a line graph titled "Weekly Cases by Date of Onset of Illness" showing a peak in late February and early March. The tweet is timestamped "6:50 PM · Mar 27, 2022" and has 275 likes and 8 replies.



The Philippines confirmed its first COVID-19 case in January 2020 in a Chinese woman who arrived from Wuhan City, China where the disease is believed to have first emerged.

Some 65 million or 72.81 percent of the target 90 million people in the country have been fully vaccinated against the respiratory disease. Of those who received their primary series, 11.7 million have received their booster shots.

The government aims to ramp up vaccination in other provinces so these could achieve Alert Level 1, officials earlier said.

Only then will the country further deescalate its alert level, according to Health Undersecretary Maria Rosario Vergeire.

The Philippines will likely keep Alert Level 1 as the lowest step in COVID-19 restrictions until President Rodrigo Duterte's term ends, said Health Secretary Francisco Duque.



METRO

1.2M pediatric vax from Pfizer arrive

Published 2 hours ago on March 28, 2022 04:50 AM

By [Gab Humilde Villegas](#)



The Philippines received 1.2 million doses of Pfizer vaccine over the weekend for pediatric inoculation, according to the National Task Force against coronavirus disease 2019 (Covid-19).

Since the country's initial vaccine rollout in February 2021, the country has received more than 242 million doses of vaccines procured by the government.

Despite the growing number of children who have been vaccinated, Health Undersecretary Myrna Cabotaje stated in an interview that the government will continue its push to encourage more parents and guardians to have their children vaccinated.

"The first thing we do is we orient our health care workers then we continue to provide information to mothers and others who can influence them," she said.

"We've observed that the children themselves encourage their playmates and we can see from the mothers of those vaccinated that the campaign is turning out well," she added.

More than 738,000 minors aged 5 to 11 years old have been received two Covid-19 vaccine doses, according to the latest Malacañang data, with 8.89 million children aged 12 to 17 years old also fully vaccinated.

In total, 65.5 million people have been properly immunized in the country.

Meanwhile, the Philippine National Police (PNP) announced that nearly all of its staff had been completely vaccinated against the Covid-19.

According to the most recent figures as of Sunday, 224,460 out of 224,668 PNP members, or 99.02 percent of the force, have been properly vaccinated.

Only 1,641 (0.73 percent) of the total are partially vaccinated, while 567 (0.25 percent) are unvaccinated. 158,255 cops (71.14 percent) have received booster shots among the completely vaccinated.

On Sunday, the PNP reported no new cases, bringing the total number of current infections to six.

Since the beginning of the pandemic two years ago, the PNP Health Office has reported 48,858 cases, 48,724 recoveries and 128 deaths. The most recent fatality was on 11 February.

Source: <https://tribune.net.ph/index.php/2022/03/28/1-2m-pediatric-vax-from-pfizer-arrive/>

28 MARCH 2022, MONDAY



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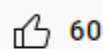
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