





April 05, 2021	Headline
Date	Editorial Column
1 of 2	Opinion
Page	Feature Article

DENR issues guidelines on management of lands formed adjacent to water bodies

By DENRPublished on April 4, 2021

QUEZON CITY, Apr. 4 -- The Department of Environment and Natural Resources (DENR) has released a set of guidelines on the disposition of lands formed by accretion adjacent to agricultural areas, and management of river islets and dried creeks and river beds.

Secretary Roy A. Cimatu signed DENR Administrative Order (DAO) 2020-16 as he recognized the urgent need to revisit and improve policies and procedures pertaining to the survey, disposition, and management of public lands on unstable and impermanent land forms.

The DAO is pursuant to Executive Order No. 192 or the Reorganization Act of DENR of 1987, Republic Act No. 9729 otherwise known as the Climate Change Act of 2009, Republic Act No. 10121 known as the Philippine Disaster Risk Reduction and Management Act of 2010, Public Land Act, and Civil Code of the Philippines.

"Although there are already laws related to the disposition of public lands, it is still necessary to expand and establish several guidelines related to water and land for compliance and awareness of stakeholders," Cimatu said.

The guidelines support the basic duty of the government in ensuring the "efficient conservation, management, development, safety, security, equitable distribution and use of the country's environment and natural resources."

"DAO 2020-16 was issued to strengthen rules on the protection and management of the environment, mitigate possible illegal developments, intervene environmental degradation and essentially uphold the safety of Filipinos in terms of land use," Cimatu said.

The DENR guidelines state that all islets, such as sandbars and delta shall not be subjected to any mode of titling, unless declared as open for disposition through a law enacted by the Congress or presidential proclamation.

DENR defined islets as small islands formed by actions of the sea, river, or other bodies of water, which are unstable and impermanent in nature. Meanwhile, dried creeks and river beds shall not be alienated since these belong to the State as property of public dominion pursuant to Article 502 of the Civil Code of the Philippines.

The DENR regional office, through the Community Environment and Natural Resources Office (CENRO), Mines and Geosciences Bureau (MGB), and designated divisions from the regional offices shall assess and determine the physical and biological conditions, including ecology, geology, topography, hydrology, soil quality, and exposure to environmental and climate risks of the lands.

In extreme cases, these areas may be designated as no-build zone areas, it added.

Meanwhile, lands formed by accretion within a block classified as agricultural land may be opened for disposition in accordance with the provisions of Commonwealth Act 141, as amended, or the Public Land Act, and Section 2, Chapter 2 of Book II, Title II of the Civil Code of the Philippines.





April 05, 202	1 Headline
Date	Editorial
Date	Column
2 of 2	Opinion
Page	Feature Article

DAO 2020-16 states that if the lot is already titled, the land owner shall have the land surveyed and approved, and proceed to the courts for acquisition.

However, if the lot is still untitled, the land shall be surveyed and approved for administrative titling. The claimant of the lot may opt to consolidate the untitled lot for the filing of public land application.

In addition, lands formed within non-navigable or non-floatable lakes and rivers "shall be governed by the provisions of Article 465 of the Civil Code."

The DAO said that disposition of these lands shall be subject to additional clearance or certification from the MGB regional office.

The CENRO shall secure the clearance or certification to determine the physical and geological condition of the area and whether it is fit for habitation or human settlement.

Under the implementation of these guidelines, the law on easements under Article 51 of Presidential Decree 1067 or the Water Code of the Philippines and DAO 99-21 and 92-13 shall also be strictly observed. (DENR)

Source: https://pia.gov.ph/press-releases/1071404





April 05, 2021	
Editorial	
Date	
1 of 1 Opinion	
Page Feature Artic	le



#OnThisDay in 2018: Sinang-ayunan ni Pangulong Rodrigo Duterte ang pagpapasara sa Boracay sa loob ng anim na buwan para linisin ang naturang isla.

BASAHIN ang kaugnay na ulat: https://bit.ly/3djNdUR



1.5K Comments 128 Shares





April 05, 2021	Headline
Date	Editorial Column
1 of 1	Opinion
Page	Feature Article

Eco-friendly search engine Ecosia starts planting trees in Aklan

Published April 4, 2021, 2:38 PM by Richa Noriega

The search engine Ecosia, which is described as environment-friendly company for planting a tree for every search entered into its site, has identified a forest in Aklan as the first site of its project in the Philippines.

In a Facebook post on Tuesday, March 30, the Berlin-based website said it has already made partnership with local non-government organizations for planting of as many trees in Panipiason, Madalag, Aklan.



Ecosia said it identified native trees such as abaca (Musa textilis) for its project, saying the reason is that native trees naturally grows in the upland forests of Panipiason. In the case of abaca, it stated that it provides livelihood opportunity for the local residents.

"The Akeanon-Bukidnon indigenous peoples of Aklan have long relied on the harvest and trade of abaca fibers from the abaca plant as a major source of income," Ecosia said.

"The planting of native trees in their landscape will not only diversify the landscape, but lead to healthier forests and sustained livelihoods for communities," it added.

The Ecosia is an environment-friendly search engine, in which profits are being used to plant trees worldwide. It was launched in December 2009 and has planted over 60 million trees since June 2019.

Source: https://mb.com.ph/2021/04/04/eco-friendly-search-engine-ecosia-starts-planting-trees-in-aklan/





April 05, 2021	Headline
Date	Editorial Column
1 of 2	Opinion
Page	Feature Article

Learning, Enjoying, and Earning from Agro-Forestry (Native Trees, Part IV)

Published April 5, 2021, 12:12 AM by Jaime Laya



AS LOVELY AS A TREE A tree in Mariveles, Bataan, 1830. French scientist Cyrille Pierre Theodore Laplace was here 191 years ago and went deer hunting in Bataan. Voyage Autour du Monde ...

(Paris, 1833).

Forest tree nursery owner Gerardo "Geff" Cedeño, whom I met virtually on Facebook, gave me a quick rundown on Philippine hardwoods. I've always assumed that their wood is great for buildings and furniture. It was therefore an eyeopener that many can and should be significant recurring income sources.

The commercial value of coffee, pili, and cashew trees is already recognized, but much can still be done, like cultivating them in large orchards as is being done elsewhere for macadamias, almonds, pistachios, pecans, hazel nuts, etc.

We have other trees of similar commercial potential like kalumpít and balobo that are unknown to most.

In seven years, kalumpít (*terminalia macrocarpa*) begins to produce up to a ton of purple-blue fruits rich in nutrients and antioxidants that can be made into jam, jelly, juice, and *champóy*. Cedeño also attests to kalumpít's delicious and refreshing dark red juice that tastes like lemonade and that has the consistency of mango juice. He feels it can easily compete with imported orange and lemon juice. It is not delicate and fruits year after year without needing any flower-inducing spray. A full-grown tree is 15 to 20 meters tall with a trunk one meter in diameter. Planted eight meters apart, one hectare can accommodate 150 trees yielding up to 150 tons of fruit annually.

Balobo (Philippine almond) trees start bearing fruit after eight to 10 years. Its kernels are two centimeters in diameter and can be snack food, ingredients of chocolate and protein bars, or mixed with oats in a breakfast cereal. A hectare can be planted to about 240 trees that will yield some 100 to 150 kilos of nuts each or 30 to 35 tons per hectare.

Other species are suitable for sustained and long-term tree farming.

Cedeño considers yakál sapluñgan as "King of Philippine Forests." It is the fastest growing dipterocarp that rises to 55 meters and expands to two meters in diameter. Unfortunately, it is a prime logging target. Similarly vanishing is lapnisan, also called agarwood, that is apparently among the world's most expensive.

Kamagóng (*diospyros blanco*) or mabolo (as it is better known) is in demand for its remarkably shiny and heavy black wood. It bears fruit after 12 years. Peach-like in size and velvety fuzz but a light maroon in color, the fruit is crunchy and tastes like apples when half-ripe and like tiesa (another tropical fruit) when ripe.





April 05, 2021	Headline
Date	Editorial Column
2 of 2	✓ Opinion
Page	Feature Article

Daó (*dracontomelon dao*) is a large tree, 30 meters tall and two meters in diameter. The wood is a beautiful brown and yellow and a favorite for furniture and paneling. Its yellow fruits are as big as children's marbles and have a sweet-sour taste. They are made into dehydrated sweetened candy (*champóy*) in Vietnam.

Amugis (*koordensiodendron pinnatum*) is a medium-size tree that grows to 25 meters high and one and a half meters in diameter. Its red wood is extremely hard, water-resistant and is a sinker. Only a superman can hammer nails on it and once in, the nail is almost impossible to pull out. It has been used as floor, beams, stairs, doors, and door and window jambs. Its fruits are yellow, like siniguelas in size, and with a sweet-sour taste.

The katmón (*dillenia philipinensis*) tree is relatively small, growing 15 meter high and 90 centimeters diameter. Its flowers are a lovely white and red and its fruits can be made into candy like Vicks, to ease colds, fevers, and itchy throats. The fruits are shaken with pieces of unrefined sugar cones (*panochá*) and cooked with mashed onions.

Dulitan (*palaquium montanum*) grows to 35 meters tall and expands to a diameter of one and a half meters. It produces medium strength lumber useful for general woodwork, house construction, boat paneling. Its fruits look like and are as tasty as star apples though with more seeds.

Early in the American Regime, Bureau of Forestry in Charge George Patrick Ahern cited akle (albizia acle) as the Philippines' prime wood because it looks like walnut. Cedeño is amused by the comparison. Ahern reportedly wrote that walnut is their best wood and therefore akle is our best because it's like walnut. In truth, akle may be exceptional but in beauty, grain, strength, and durability, nothing—neither akle nor walnut—comes close to supa, kamagóng, ypil, or molave.

Only the non-renewable timber value of our forests has been appreciated and the term agroforestry remains a foggy concept—nice to say but operationally unclear. We have banana and pineapple plantations; coconut, coffee, and mango orchards; and whatever bamboo and Bolivian mahogany tree farms were organized with government encouragement. Other countries, however, have entire countrysides of olives, dates, persimmons, oranges, lemons, almonds, lychees, cherries, et.al. that contribute heavily to GDP and Balance of Payments. We can do the same. In addition to crops and short-lived trees and instead of harmful alien trees like mahogany, we can pursue the long-term commercial possibilities of our native trees, starting with low-hanging fruits as it were, like making pili and cashew into important recurring export earners.

Cedeño tells me that decades ago, Japan planted cedars that are now full grown. They now harvest the trees while planting more to benefit the still unborn. Similarly, Bavaria's forests in Germany have been farmed—planted, harvested when mature, and planted again in a continuing cycle—to high-value but slow-growing trees. Obviously, the thinking of both countries is long-term, realizing that decades of patient nurturing and protection are needed to yield the unique, beautiful, and valued, and that the welfare of future generations has to be in the mind of the present.

A few billions—not even trillions—can cloak much of our presently useless bald mountains with trees that will help ease this generation's thirst, prevent erosion and floods, and yield some of the world's best timber and other benefits for our own grandchildren.

Comments are cordially invited, addressed to walangwala888@gmail.com

Source: https://mb.com.ph/2021/04/05/learning-enjoying-and-earning-from-agro-forestry-native-trees-part-iv/





April 05, 2021	Headline
	Editorial
Date	Column
1 of 3	✓ Opinion
Page	Feature Article

Renewable Energy, a revisit

April 4, 2021 | 10:35 pm



Introspective

by Romeo L. Bernardo



PCH. VECTOR/ FREEPIK



(First of two parts)

In my column a decade ago, "Renewable energy – reality check" (https://www.fef.org.ph/fef/renewable-energy-reality-check/) I chided the private proponents of new renewable energy (RE) technologies (solar, wind, and biomass), the National Renewable Energy Board (NREB), and multilateral institutions for pushing an expensive Feed in Tariff (FIT) program on the Philippines on the grounds that we need to do this as our contribution to averting a climate change catastrophe. This notwithstanding our global carbon emission contribution being a rounding error (0.3 of 1%), and our RE mix then at 42% of total power generation capacity, is four times the global average.

I noted in my article then that this would have burdened us with 20-year supply contracts with power costs that were equivalent to P10 to P25 per kWh, twice to five times avoided cost. This is not even counting the cost of ancillary power standby to cover for RE intermittency (when there is no wind or when it is cloudy) and their needed transmission and distribution infrastructure.

Thanks to the advocacy on behalf of consumers and taxpayers by the Foundation for Economic Freedom, the PCCI, and the wise intervention of then-Senate Energy Committee Chair Serge Osmena, the final FIT rates were negotiated down substantially.





April 05, 2021	Headline
	Editorial
Date	Column
2 of 3	✓ Opinion
Page	Feature Article

Fast forward 10 years to today, and we find that just counting the direct cost of FIT subsidy payments to RE providers now runs at P20 billion annually. For perspective, this is the equivalent to conditional cash transfer social assistance for 10 million poorest people in 2019, and is around the annual budgets of each of the following executive departments: Environment and Natural Resources, Finance, Foreign Affairs, Justice, and Science and Technology. And P20 billion is an annual number; for the long run cost, multiply this by 20 years, the contract period.

Since then the prices for solar, especially of solar panels, have dropped; is it now time to embrace them unqualifiedly? And should government mandate them through quotas like Renewable Portfolio Standards (RPS), excise taxes like the recent coal tax insertions in TRAIN 1 (see my column https://www.bworldonline.com/gravy-train-leaving-common-sense-isnt/), or restrictions on building new fossil plants?

Consider: if indeed the drop in RE prices and technology improvements now make them commercially competitive with fossil fuels as contended by their champions, there should be no need for more subsidies, direct or hidden: No FIT, no quotas and no taxes and bans on coal. (Riding on this lobby are the advocates of natural gas, passing it off as green and renewable, even while gas has half the carbon footprint of coal, and is not renewable.)

Precisely because such non-technology neutral government interventions are an override on market competition, they have the effect of raising the cost of power, particularly immiserating for a country like the Philippines that has yet to develop a manufacturing base to absorb the millions of jobless. Manufacturing requires base load plants which today, setting aside controversial nuclear plants, can only be driven by fossil fuels.

How high is that cost burden now? To illustrate further, compare the current FIT rates for solar and wind of P8 to P10 per kWh for 20 years versus the competitively bidded cost of P4.15/P4.26 per kwh in the recent CSP bidding of Meralco. ("SMC units submit lowest bids for 1,800 MW Meralco supply deal," Feb. 20).

And what have we got to show for this heavy cost? Very little. This conclusion is validated by a study of Dr. Josef Yap, "Evaluating the Feed-in Tariff Policy in the Philippines" (https://papers.csm.com/sol3/papers.cfm?abstract_id=3520401) that even with energy subsidized through the FIT, end users still face a net higher cost, despite this so-called merit order effect of RE. (Any power supply contract with lower marginal cost than peaking plants will have identical effect, and is not unique to RE).

Moreover, solar and wind generation together only account for 2.4% of total generation. The bulk of our RE still comes from traditional renewables, hydro and geothermal (20%) that do not enjoy, nor lobby for, such subsidies or quota mandates.

This heavy public cost of supporting such expensive RE is mirrored at the global level in states and countries that embraced such policies versus those who didn't.

Electricity prices in RE-supportive California rose five times more than the rest of the US. German electricity prices rose 51% from 2006-2018, and now stands at twice the level of France which is mostly nuclear powered. In Fact, Germany now depends on France to stabilize their RE-heavy and thus unstable grid.

Don't get me wrong about RE. It has a role in energy provision for the Philippines – it already does! But poorly designed public policies to promote RE can have damaging effects on how our energy markets work, and that has led to higher prices for Filipinos, poor use of public funds, and misinformation about the necessary role thermal energy has in powering this country's economy. If the government wants to play a role, just be sure to do so only where it is needed, and follow the Hippocratic oath of our caring doctors and nurses when designing public policy: "Do no harm"





Apri	1 05, 202	21		Headline
1	-			Editorial
Date			Column	
	3 of 3		\checkmark	Opinion
	Page			Feature Article

Climate Change Adaptation Vs Mitigation

On the point about "only where it is needed" let's consider adaptation versus mitigation, and what makes sense for the Philippines. In Paris in 2015, the Aquino administration committed our country to reduce our greenhouse gas emissions by 70% by 2030, an ambitious, costly and unrealistic target. The Climate Change Commission said the country needs to spend \$12 billion to \$15 billion, or P584 billion to P730 billion, to reduce up to 70% of its emissions. A staggeringly large number equivalent to 3.25% to 4% of our GDP.

This likely does not even fully reflect the higher cost of power and the cost of managing intermittency discussed earlier. And as I argued, THIS yields very little for the country and our people. (Maybe except green bragging rights? But that is like asking a poor man to wear an Armani suit which he cannot afford and which is inappropriate for his tropical climate just so he can look fashionable in the eyes of the world.)

I have been following the FaceBook page of Finance Secretary Sonny Dominguez, newly designated chairman of the Climate Change Commission. An astute fiscal manager of our country's scarce resources who deeply cares for our people, he quickly pivoted away from the climate change mitigation chorus and into grounded actionable climate change adaptation programs.

And I quote:

"Why does the Philippines focus more on climate adaptation rather than mitigation?

"Despite the Philippines being one of the lowest contributors to global GreenHouse Gas Emissions (GHGs) at around 0.3%, we are still one of the most vulnerable countries to the effects of climate change.

"This is why our climate action efforts focus more on climate adaptation rather than mitigation. We need to adapt and be prepared for the harmful effects of natural disasters (e.g., typhoons, drought, rising ocean temperatures, etc.) brought about by climate change." (Source: Department of Finance FaceBook page.)

Amen!

The Climate Change Commission may have reaffirmed, even strengthened, its 2015 commitments, perhaps before Secretary Dominguez assumed its chairmanship. My appeal: please review and align with your most recent sound pronouncements, Secretary Sonny?

(Part 2 of this column will discuss the energy trilemma, the need to balance energy security, energy equity/affordability, and energy sustainability using the World Economic Forum framework, regulatory philosophy and practice under EPIRA, and a suggested RE transition roadmap for the Philippines).

Romeo L. Bernardo was finance undersecretary during the Cory Aquino and Fidel Ramos Administrations. He is currently GlobalSource Partners Philippine Adviser (globalsourcepartners.com). He is also an independent director in the largest renewable energy company in the Philippines.

Source: https://www.bworldonline.com/renewable-energy-a-revisit-pt1/





April 05, 2021	Headline
Date	Editorial Column
1 of 1	Opinion
Page	Feature Article

Nakakasirang karbon pinatitigil ng mga lider ng simbahan

(Pilipino Star Ngayon) - April 5, 2021 - 12:00am

MANILA, Philippines — Muling iginiit na tuldukan na ang patuloy na pagtatayo at paggamit ng nakasisirang 'coal' o karbon bilang enerhiya sa bansa.

Ito ang panawagan ng mga lider ng Simbahan at kabataan sa bayan ng Atimonan sa lalawigan ng Quezon.

Ang panawagan ay isinagawa sa online devotion session nitong Holy Week na tinawag na 'Daan ng Krus tungo sa Pagbabagong Ekolohikal (Way of the Cross towards Ecological Conversion) ng Our Lady of Angels Parish sa Atimonan, na inspirasyon sa 2019 Pastoral Letter on Ecology ng Catholic Bishops' Conference of the Philippines at Pope Francis's encyclical Laudato Si'.

Sa pahayag ni Monsignor Noel Villareal of the Our Lady of Angels Parish muling iginiit na tuldukan na ang pagtatayo at pagpopondo sa mga proyektong 'coal plants' dahil sa panganib nitong malilikha sa climate change, at masamang impak sa kapaligiran, lalo na sa kalusugan ng sambayanan.

Ang preserbasyon aniya ng 'natural world' at proteksyon sa karapatan ng sambayanan, maging sa mga bagong henerasyon na mamuhay sa malinis na kapaligiran ay bahagi at parsela ng kanilang tungkulin bilang katiwala ng Paglikha at Lumikha.





April 05, 2021	Headline
Date	Editorial Column
1 of 1	Opinion
Page	Feature Article



Ayon kay Dr. Ted Herbosa, National Task Force Against COVID-19 medical expert, na titingnan niya kung hindi na kaya ng mga ospital at kung ganito ang sitwasyon ay hindi muna nila aalisin ang ECQ.

ECQ mananatili hangga't 'di bumababa ang COVID-19 cases

Gemma Garcia (Pilipino Star Ngayon) - April 5, 2021 - 12:00am

MANILA, Philippines — Hanggang hindi bumababa ang bilang ng kaso ng COVID-19 ay mananatili sa Enhance Community Quarantine (ECQ) ang Metro Manila at mga kalapit na lalawigan.

Ayon kay Dr. Ted Herbosa, National Task Force Against COVID-19 medical expert, na titingnan niya kung hindi na kaya ng mga ospital at kung ganito ang sitwasyon ay hindi muna nila aalisin ang ECQ.

Paliwanag ni Herbosa ito ay bilang proteksyon ng health system ng bansa kung saan halos punuan na ang lahat ng mga ospital lalo na sa NCR at may mga kwento na rin umano silang naririnig na naghihintay ng ilang araw ang mga pasyente at namamatay na sa mga tent sa labas ng mga ospital.

Sa ngayon ay nasa 1.4 hanggang 1.8 ang reproduction number ng bansa mula sa 1 o mas mababa pa na ideal na bilang nito.

Idinagdag pa niya na ang test positivity rate ay bababa kapag naa-isolate ang isang super spreader at makakapagpababa ng hawaan.

Sa ngayon ay hinahanap nila ang mas mababa pa sa 5% para tumigil ang pagkalat ng virus.

Source: https://www.philstar.com/pilipino-star-ngayon/bansa/2021/04/05/2088895/ecq-mananatili-hanggat-di-bumababa-ang-covid-19-cases





April 05, 2021	Headline
Date	Editorial Column
1 of 1	Opinion
Page	Feature Article

PH lists 11,028 new COVID-19 cases, highest single-day recoveries at over 41,000

By <u>CNN Philippines Staff</u> Published Apr 4, 2021 4:27:59 PM



Metro Manila (CNN Philippines, April 4) — Over 11,000 more people nationwide tested positive for COVID-19, while around 41,000 more infected patients have gotten well — the country's highest daily rise in recoveries, the Department of Health reported on Sunday.

Figures showed the nationwide case tally rose to 795,051 with 11,028 newly confirmed infections. These do not include the latest data from five testing laboratories which have yet to submit their reports.

Of the total count, the DOH said 135,526 or 17% are active cases. Of these currently ill patients, 97.4% have mild symptoms, 1% have no symptoms, 0.6% are critical cases, 0.6% are severe, and 0.36% are moderate.

The country also recorded an all-time high increase in recoveries with 41,205 more patients cleared of COVID-19. This broke the previous record of 40,397 survivors set on August 16 of last year. The total recoveries have now surged to 646,100, which accounts for 81.3% of all those infected.

Meanwhile, the death toll grew to 13,425 after the disease killed two more people. Both of these cases were previously tagged as recoveries and were reclassified as deaths after final validation, the DOH said.

The department also noted it removed 20 duplicates from its data, including eight survivors, after final validation.

Based on the case bulletin, the latest daily positivity rate reached 22.7% as of noon of April 3. This means at least 1 in 5 individuals tested on the same day was found positive for the coronavirus.

Among Filipinos abroad, the Department of Foreign Affairs counted one new COVID-19 infection, bringing the number of active cases in that sector to 5,297 while raising the tally to 16,406. Recoveries remained at 10,060, while deaths also stayed at 1,049.

Globally, cases have hit over 130.7 million, with over 2.8 million fatalities and 74.1 million survivors, according to data from the Johns Hopkins University.

Source: https://cnnphilippines.com/news/2021/4/4/PH-covid-cases-highest-daily-recovery-tally.html





April 05, 202	Headline Headline
	Editorial
Date	Column
1 of 4	✓ Opinion
Page	Feature Article

PAGKAKAISA, TULUNGAN HINDI PAMUMULITIKA ANG KAILANGAN LABAN SA PANDEMYA



April 5, 2021 @ 1:36 AM 4 hours ago

SA nakalipas na walong araw, mga Bro, nakita natin ang nakatatakot na pagdami ng mga nagkakasakit sa coronavirus disease 2019 o COVID-19 bagama't may isa na sumingit na medyo kaunti at may iba pang pagliit ngunit mula naman sa marami.

Heto ang rekord.

Noong Marso 28, 2021, may 9,450 na tinamaan; Marso 29 – 10,002; Marso 30 – 9,287, Marso 31 -6,107, Abril 01 – 8,911, Abril 2 – 15,298 at Abril 3 – 12,546.

Nakatatakot ang rekord dahil mabilis na dumami ang nagkasakit makalipas ang matagal na panahon sa Pebrero at unang bahagi ng Marso na naglaro lang sa 1,000-2,000 ang nagkakasakit.

Sa patay naman, may 11 noong Marso 28, 16 – Marso 29, 5 – Marso 30, 106 – Marso 31, 6 – Abril 1, 17 – Abril 2, 103 – Abril 3 batay sa rekord na lumabas sa internasyunal na panahon.

Itong mga patay na 106 at 103 ang nakababahala at masakit mang sabihin, kahit papaano kakaunti lang ang patay sa ibang mga araw.

Paano kung maningil si kamatayan, kung maniningil nga, sa higit na maraming nagkakasakit?

Idalangin na lang natin na hindi kakalawit si kamatayan ng marami sa mga malalaking bilang ng nagkakasakit sa loob lamang ng isang araw.

PAANO NGA PALA DUMAMI?

Kanya-kanyang paniniwala ang mga sumusubaybay sa nagaganap na kalagayan, partikular ang pagdami ng mga nagkakasakit.

Paliwanag ng isang grupo, nananalasa na ang mga variant o bagong anyo ng COVID-19 kaysa orig na virus nito.

Ayon sa mga eksperto sa loob at labas ng bansa, kabilang sa mga variant ang galing sa Brazil, South Africa at United Kingdom at meron na umanong Philippine variant.

Nasa 60 porsyento umanong nakahahawa ang mga variant at higit pang mabagsik kaysa orig.

Sa Europe, ang UK variant ang nananalasa at nasa 60-70% na umano ang nagkakasakit dito at mas kokonti na ang tinatamaan ng orig na virus.





April 05, 2021	Headline
	- Editorial
Date	Column
2 of 4	✓ Opinion
Page	Feature Article

Sa US naman, nananalasa ang Brazil variant na hinahaluan na rin ng UK variant at nasa 25% na mula sa mga nagpopositibo ang tinatamaan ng nasabing mga variant at dahilan din ng paglobo muli ng COVID-19 kina Uncle Sam.

Sabi naman ng ibang grupo, kulang na kulang ang bakuna at inooberteyk na tayo ng paglaganap ng pandemya na sana'y mapigilan kung meron tayong sapat na suplay nito.

Ayon naman sa iba, dumami ang nahahawaan dahil sa pinagsama-samang paglabag o pagbalewala sa mga health protocol gaya ng 'di pagsusuot ng face mask at face shield, social distancing, paglilinis ng kamay at iba pa.

Ayon naman sa iba, ang pagbubukas ng ekonomiya at pagtitipong maramihan sa mga simbahan, pabrika, opisina, lugar pasyalan at iba pa ang isang dahilan.

Sinasabi naman ng iba na nakasama rin ang pagbiyahe nang dumaraming pampublikong transportasyon na wala nang kontrol sa social distancing ng mga pasahero, pagiging kulob ng lahat sa mga may air condition at kawalan ng kontrol sa mga border ng bawat lugar.

Nakasama rin umano ang pagpapatigil ng ilang sistema ng COVID-19 testing gaya ng antigen test na gamit na gamit ng mga local government unit at paggamit lang ng reverse transcriptase-polymerase chain reaction o RT-PCR at saliva test ang pinayagan.

Nakatutulong umano ang antigen test nang malaki noon dahil naihihiwalay sa lipunan ang mga positibong asymptomatic at dinadala ang mga ito sa mga quarantine facility o sa home quarantine.

Kung tutuusin, tama naman ang lahat ng ito.

MGA VARIANT AT PHILIPPINE GENOME CENTER

Sa gitna ng mga pangyayari, itong mga variant ay malamang na isa sa pinakamalaking dahilan ng mabilis at maramihang hawaan.

Maaaring nagaganap sa mahal kong Pinas ang pagdami ng mga variant, lalo na kung iisipin na marami sa mga nagdadala ng variant ang galing sa ibang bansa, gaya ng ating mga oversease Filipino worker at iba pang mga Pinoy na umuuwi.

Ayon sa mga dayuhang eksperto, dapat nang itrato ang mga variant na hiwalay na COVID-19 bagama't may lahi pa rin ang mga ito ng orig na virus.

Kung ganoon, dapat na umaksyon ang mga kinauukulan.

Isa sa mga dapat na pagtuunan ng pansin ang pagpapalakas ng Philippine Genome Center na siyang tumutuklas ng mga variant.

Kasama sa pagpapalakas dito ang pagbuhos ng pondo upang may magastos sa mga reagent o kemikal na ginagamit ng center at pagparami ng mga tauhan at mga gamit ng mga ito sa pagsusuri o genome sequencing kung tawagin.

Tama lang ito dahil may gumagawa na ng mga bakuna na higit na nakatuon sa mga variant kaysa laban sa orig na virus.

Isa na sa mga bakuna, halimbawa, ang Novavax na nakatuon laban sa South African variant.





April 05, 2021	Headline
1	Editorial
Date	Column
3 of 4	✓ Opinion
Page	Feature Article

Ito kasing South African variant ay may kakayahang umiwas-pusoy sa immune system na bantay natin laban sa pandemya at ang Novavax ang dinidebelop laban sa nasabing variant.

Kung malaman ng PGC na South African variant ang mananalasa, mairerekomenda ang Novavax at hindi ang AstraZeneca na waepek sa nasabing variant.

Kailangang tiyakin ng pamahalaan ang pagpapalakas sa PGC bilang katuwang ng buong pamahalaan laban sa pandemya.

Know your enemies, alamin ang kanilang mga kahinaan at kalakasan, upang mapagtagumpayan o matalo sila.

HEALTH WORKERS PALAKASIN DIN

Umiiyak na ang mga pribadong ospital sa pagkaubos umano ng kanilang mga doktor, nars at iba pa dahil sa COVID-19, pagod, kamatayan at iba pa.

Marami sa mga nars sa pribadong ospital ang nakasama sa 82 nang patay at mahigit 15,000 nang nagkakasakit sa mahigit isang taon nang pandemya.

Dahil na rin sa liit ng sahod ng mga nars sa mga pribadong ospital, marami ang lumulundag sa mga pampublikong ospital na nagpapasahod ng mas malaki at may mas tiyak na kaseguruhan sa trabaho.

Gayundin na marami sa nasa 30 nang namatay na doktor ang nasa mga pribadong ospital at kasama rin ang mga nabubuhay sa napiperwisyong mahigit 15,000 health worker.

Isa sa mga hiling ng mga pribadong ospital ang pagpapadala ng pamahalaan ng ayuda na mga nars at doktor upang makaagapay sila sa mga tumatakbo sa kanila na mga pasyente.

Umaapaw na ang mga pampublikong ospital at may mga pribadong ospital na pupwede pang tumanggap ng mga pasyente pero kulang na kulang na sila ng mga tauhan.

Dito natin naalaala ang libo-libong pumasa sa mga board o licensure examinations na mga doktor, nars, medical technologist, technicians, midwife at iba pa taon-taon at libo-libo rin ang mga hindi pa pumapasa ngunit malinaw na graduate sa health profession.

Tiningnan natin ang rekord mula 2016 hanggang 2021, may nasa 40,000 na bagong doktor at may 45,000 na bagong nars at iba pa ang libo-libong ibang health professional gaya ng mga medical technologist at iba pa.

Nasaan na ba ang mga ito, mga pumasa at graduate hindi lang sa panahon ni Pangulong Rodrigo Duterte kundi sa naunang mga administrasyon.

Baka naman nag-abroad, nag-iba ng trabaho, natakot ma-COVID-19 at iba pa ang marami sa mga ito?

Magandang hanapin ang mga available na health professional, kasama ang mga hindi pa nakapapasa na pupwedeng gawing paramedics.

layuda ang mga ito sa mga pampubliko at pribadong ospital upang makatulong sa giyera laban sa pandemya.





April 05, 2021	Headline
<u> </u>	- Editorial
Date	Column
4 of 4	✓ Opinion
Page	Feature Article

Ang mga bed capacity at mga gamit ay madaling magawan ng paraan subalit kung kulang ang mga tagapag-alaga nating health professionals, saan tayo patutungo?

LAHAT NG PWERSA PAGSAMA-SAMAHIN. PAMUMULITIKA KALIMUTAN

Hindi mananaig ang pandemya at kaya nating lumaban hanggang magtagumpay kung pagisahin natin ang lahat ng ating lakas bilang isang bayan.

Suportahan natin ang pambansang pamahalaan, gaya ng ginagawa ng mga local government unit at pribadong kompanya, ang pagbili ng mga bakuna sa labas ng COVAX facility ng World Health Organization na hirap na hirap bumili at magdeliber ng mga bakuna sa atin at iba pang mahihirap na bansa.

Kilalanin natin ang mahalagang ambag ng mga pribadong ospital sa giyera at punuan ang kanilang mga pagkukulang sa pamamagitan ng boluntaryong pagpunta sa kanila at pagrehistro sa pamahalaan para sa kaukulang ayuda.

Kasing halaga ng bakuna ang pagsusuot ng face mask na 90 porsyento umanong pamigil sa paglaganap ng virus, variant man o orig, at dapat na isama ang iba pang patakaran sa health protocol.

Gaya ng nasabi natin, patatagin natin ang PGC sa trabaho nito bilang katulong ng pamahalaan sa pagkilala sa mga virus upang malaman ang mga dapat na gawin sa mga ito.

Obligahin natin ang ating mga sarili na tumulong, makiisa sa lahat ng hakbang laban sa pandemya, maliit man o malaki ang ating maiaambag, kasama ang pagsunod sa mga pinaiiral na kwarantina.

Hindi dapat na manaig ang pamumulitika na ang isang anyo nito ay paggawa ng lahat ng bagay para hindi magtagumpay ang kasalukuyang pamahalaan sa giyera at pabagsakin ito sa anomang panahon, kasama ang nalalapit nang eleksyon sa 2022.

United we stand, divided we fall, 'ika nga ng iba.

Source: https://www.remate.ph/pagkakaisa-tulungan-hindi-pamumulitika-ang-kailangan-laban-sa-pandemya/





April 05, 2021	Headline
	Editorial
Date	Column
1 of 2	Opinion
Page	Feature Article

Locsin 'considering a demarche' after China says Julian Felipe Reef is part of its territory

ARS-CRN News

Posted at Apr 04 2021 11:59 AM | Updated as of Apr 05 2021 02:29 AM

PH defense chief tells China its claims don't stand on solid ground

MANILA (**2ND UPDATE**) - Philippine Foreign Affairs Secretary Teodoro Locsin, Jr. said Sunday he is "considering a demarche" or a political step, even as he already filed a diplomatic protest, after China said that Julian Felipe Reef in the West Philippine Sea is part of its territory.

"Coming and going fishing makes no claim of possession per se; it is only when Chinese embassy claimed the area as Chinese territory-as evidence by the swarm- that it becomes problematic. Considering a demarche," Locsin said on Twitter, without specifying.

Manila's top diplomat, who just met with Chinese Foreign Minister Wang Yi last Friday in Fujian, China, lodged a diplomatic protest last March 21 over the presence of around 200 Chinese ships at the Julian Felipe Reef (Whitsun Reef), which is within the Philippines' exclusive economic zone, off Palawan province.

Meanwhile, Chief Presidential Legal Counsel Salvador Panelo said the Philippines "has sovereign rights over the subject area and intrusion thereof is deemed an intrusive and unacceptable act on those rights."

Panelo said it is "indisputable" that the reef, approximately 175 nautical miles west of Bataraza town, Palawan, is "within the exclusive economic zone of the Philippines based on the United Nations Convention on the Law of the Sea and pursuant to the ruling by the Permanent Court of Arbitration."

If not resolved, the dispute, he added, could drive a wedge between the two countries who have boasted robust ties since President Rodrigo Duterte won the election in 2016.

Panelo said: "While we recognize the historical and cultural ties with China that has evolved into a productive relationship, its present territorial incursions is producing an unwelcome stain in their bond and may trigger unwanted hostilities that both countries would rather not pursue, as destructiveness consequences are not only undesirable, they are abhorrent as well and anathema to the peace of the region."

Thanks to China helping the Philippines acquire COVID-19 vaccines, relations between the two governments were strengthened further.

But Panelo said that charity didn't mean Manila was ignoring the issue on the reef, of which Manila said it would be "fiercely protective."

"Even as we appreciate the humanitarian gesture of our neighbor, we will not be blinded however by any act done by it in violation of international law and in derogation of our sovereign rights," he said.

The ships, which the Philippines describe as maritime militia, were first seen in the area on March 7, and are believed to have spread out to other features in the West Philippine Sea.

Chinese officials said the ships are fishing vessels and the reef, which they call Niu'e Jiao, is part of China's Nansha Islands.

"It is completely normal for Chinese fishing vessels to fish in the water and take shelter near the reef during rough sea conditions," the Beijing's embassy in Manila reiterated on Saturday.

Its latest statement was made in response to the instruction of Philippine Defense Secretary Delfin Lorenzana earlier in the day for the Chinese ships to leave.

Lorenzana, in a reply Sunday, said China should "refrain from conducting activities that disturb regional and international peace and security."

"Its nine-dash line claim is without any factual or legal basis. This, together with its so-called historical claim, was flatly and categorically rejected by the arbitral tribunal," he said in a statement.





April 05, 2021	Headline
Date	Editorial Column
2 of 2	Opinion
Page	Feature Article

"The Philippines' claims stand on solid ground, while China's do not. China should respect Philippine sovereignty over the Kalayaan Islands, and its sovereign rights over its Exclusive Economic Zone as defined by UNCLOS and affirmed by the arbitral award."

China's sweeping claims in the South China Sea had been declared as having no legal basis by an international arbitration court in 2016.

"Oddly, if it is a strategy and not idiocy then swarming accomplishes nothing; they were doing this in consonance with claim of traditional fishing. Chinese were doing this in 1s, 2s and 3s," Locsin said.



Retired Supreme Court Senior Associate Justice Antonio Carpio had warned that the presence of the Chinese ships at the Julian Felipe Reef may be a prelude to occupation and building of military bases as China did on Mischief Reef, also in the West Philippine Sea, in 1995.

Locsin did not say if he discussed the Julian Felipe Reef incident with Wang, although the Chinese embassy said both sides conveyed "their commitment to promote effective implementation... of the Declaration on the Conduct of Parties in the South China Sea."

The DoC, signed in 2002 by China and the Association of Southeast Asian Nations, of which the Philippines and three other claimants to the sea are members, provides that the parties "exercise self-restraint in the conduct of activities that would complicate or escalate disputes and affect peace and stability."

Vice President Leni Robredo said on her radio show on Sunday that Lorenzana's strong statement, as well as the filing of diplomatic protest by the Department of Foreign Affairs, give her assurance that the administration is not abandoning the country's sovereignty in the West Philippine Sea.

"Mas na-bother ako sa statement ni Sec. Roque na parang sinabi niya, na non-issue naman," Robredo said, referring to Presidential spokesman Harry Roque.

(I was more worried over the statement of Sec. Roque that it's a non-issue.)

"Napakahalaga ng ating sovereignty. Hindi ito ipinagpapalit sa kahit anong consideration, kasi ito ay hindi lang para sa ating nandito ngayon. Pero para 'to sa mga susunod na henerasyon sa atin. So mahalaga kung papaano aaksyon yung leadership," she added.

(Our sovereignty is very important. This should not be swapped for any consideration, because this is not just for us who are alive now. But this is also for our next generation. So, it's important how our leadership acts on this.)

Several countries have also criticized China's recent incursion in the West Philippine Sea.

Source: https://news.abs-cbn.com/news/04/04/21/locsin-considering-a-demarche-after-china-says-julian-felipe-reef-is-part-of-its-territory?fbclid=IwAR0pCYApUb9As8-wVRWgt_yjuFgVBUAXjvchBkg4ue_Fz51kKOvokVLYE1E





April 05, 2021	Headline
	Editorial
Date	Column
1 of 1	Opinion
Page	Feature Article

Lorenzana; Julian Felipe Reef, iginiit na sa kanila rin

Abril 4, 2021 2:37am GMT+08:00



Tinawag ng Chinese Embassy sa Manila na "perplexing" ang naging pahayag Defense Secretary Delfin Lorenzana matapos igiit ng kalihim ng Pilipinas na dapat umalis na sa Julian Felipe Reef ang mga barko ng Tsino na pinaniniwalaan na mga sibilyang ginagamit ng kanilang hukbo ang mga sakay.

Ayon sa China, bahagi ng kanilang historical claim ang Julian Felipe Reef alinsunod sa mapa nilang nine dash line, kahit pa ang naturang lugar ay pasok sa exclusive economic zone ng Pilipinas sa ilalim ng United Nations Convention on the Law of the Sea.

Ang Julian Felipe Reef, na tinatawag na Niu'e Jiao ng Chinese ay nasa layong 175 nautical miles ng Bataraza, Palawan.

"China is committed to safeguarding peace and stability in the waters and we hope that authorities concerned would make constructive efforts and avoid any unprofessional remarks which may further fan irrational emotions," nakasaad sa pahayag ng embahada ng China.

Ayon sa China, bahagi umano ng kanilang Nansha Islands o Spratlys sa South China Sea ang Julian Felipe Reef., at dati na raw itong pinapangisdaan ng mga Tsino at kublihan ng kanilang mga barko kapag masama ang panahon.

"The Chinese fishermen have been fishing in the waters for their livelihood every year. It is completely normal for Chinese fishing vessels to fish in the waters and take shelter near the reef during rough sea conditions. Nobody has the right to make wanton remarks on such activities," giit ng China sa pahayag.

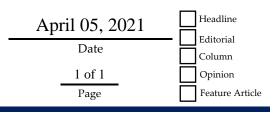
Una rito, sinabi ni Lorenzana na dapat umalis na ang natitirang 44 Chinese vessels sa Julian Felipe Reef.

"I am no fool. The weather has been good so far, so they have no other reason to stay there. These vessels should be on their way out. Umalis na kayo diyan," ani Lorenzana patungkol sa paliwanag noon ng embahador ng China na nagkukubli lang sa lugar ang mga barko dahil sa masamang panahon.— FRJ, GMA News

Source: https://www.gmanetwork.com/news/balitambayan/balita/782344/china-kinontra-ang-hirit-ni-dnd-sec-lorenzana-julian-felipe-reef-iginiit-na-sa-kanila-rin/story/?fbclid=IwAR08cyH1VJM1-JSo5Md6b8QE3ZClZtK6MugAs2Azh-dH26GuQnpxVSTruXQ









Project 17: Solving Singapore's food waste problem

Project 17: Solving Singapore's food waste problemClose

Singapore imports 90% of its food and 744,000 tonnes of this was wasted in 2019.

Seventeen-year-old Shan wants to find out about possible solutions to the problem. He says that looking into the issue opened his eyes to the "sheer scale of food wastage", but he learned that tackling waste can help the community as well as saving food.

This video is part of Project 17, a BBC World Service series produced in partnership with the Open University, in which 17-year-olds around the world look at progress on the UN's 17 Sustainable Development Goals.

Filmed by Md Shukor Bin Kasmuni, Produced by Eleanor Layhe, Edited by Woody Morris

Find more programmes and videos from BBC World Service here.

Source: https://www.bbc.com/news/av/world-asia-pacific-56606143





April 05, 2021	Headline
	Editorial
Date	Column
1 of 4	Opinion
Page	Feature Article

Sweden Axes Bill Gates-funded Harvard Experiment Aiming To DIM THE SUN To Fight Climate Change Amid Outcry From Activists

Sunday, April 4, 2021 People's Tonight17



RT, Guest Waking Times

SWEDEN 'S space agency has called off a geoengineering experiment to determine whether blotting out the sun with aerosols could reverse global warming. Funded by Bill Gates, the project stoked fierce opposition from eco groups.

Proposed by researchers at Harvard University, the Stratospheric Controlled Perturbation Experiment, or SCoPEx, ultimately planned to release a cloud of calcium carbonate – more commonly known as chalk dust – into the atmosphere from a high-altitude balloon to study its effects on sunlight reaching Earth. The project proved too controversial, however, and on Wednesday the Swedish Space Corporation (SSC) said that a test flight set for June would not move forward.

"The scientific community is divided regarding geoengineering, including any related technology tests such as the planned technical balloon test flight from Esrange this summer," the SSC said in a statement on Wednesday.

SSC has had dialogues this spring with both leading experts on geoengineering and with other stakeholders, as well as with the SCoPEx Advisory Board. As a result of these dialogues and in agreement with Harvard, SSC has decided not to conduct the technical test flight planned for this summer.

Asked at a 2010 TED talk about what "emergency measures" mankind could implement to fight climate change should all else fail, Gates suggested solar geoengineering could be an "insurance policy."

"There is a line of research on what's called geoengineering, which are various techniques that would delay the heating to buy us 20 or 30 years to get our act together. Now that's just an insurance policy, you hope that you don't need to do that," he said, adding that the idea might be "kept in the back pocket."

Keith, a professor of applied physics at the Harvard School of Engineering and Applied Sciences, told Reuters the SSC's decision to scrap the experiment was "a setback," but noted that the project could move to the US if the troubles continue in Europe. Until then, the researchers say they will continue to lobby for SCoPEx in Sweden, hoping to generate public interest and support.

The experiment could find traction in the States, as a report published last week by the National Academies of Sciences, Engineering and Medicine called on the government to devote between \$100 million and \$200 million to solar geoengineering projects, including technology to dim out the Sun, over the next five years.





April 05, 2021	Headline
_	Editorial
Date	Column
2 of 4	Opinion
Page	Feature Article

Human-Pig Chimera Alert — Human Muscle Tissue Growing in Adult Pigs Paul Seaburn

"THE generated intraspecies chimaeras were viable and displayed normal histology, morphology and function. Human:pig chimaeras generated with TP53-null human induced pluripotent stem cells led to higher chimaerism efficiency, with embryos collected at embryonic days 20 and 27 containing humanized muscle, as confirmed by immunohistochemical and molecular analyses. Human:pig chimaeras may facilitate the production of exogenic organs for research and xenotransplantation."

Science-speak is often so confusing that it makes seemingly horrific things less so, but one phrase in the opening abstract of a new study jumps out in a way that anyone can understand – "*Human:pig chimaeras.*" The chimera (or chimaera) of Greek mythology was a monstrous fire-breathing hybrid creature made from parts of a lion, goat and serpent. Modern-day chimeras are creatures, organisms or tissue that are one body with two sets of cells and two different sets of DNA. A whole-body chimera is created when two embryos merge at a very early stage and the two embryos develop as one being. This can occur in humans when a fetus absorbs a dead fraternal twin. For comparison, a hybrid is the offspring of two different species with each of their cells containing DNA from both species — mules (horse-donkey) and ligers (lion-tiger) are examples.

Classic chimera

Human-pig chimeras in the U.S. were first created in 2017 by placing human cells in pig embryos. In a few, the cells grew into muscle and organ cells before the embryos were destroyed. The goal was to eventually grow human organs in pigs for transplanting, and more experiments involving human-rodent and human-chimpanzee chimeras allegedly occurred in China and Japan. On the other hand, these experiments in the U.S. have been tightly regulated and are quite rare. Recently, researchers at the University of Minnesota focused on some less complex but just as needed tissue – muscles to replace those lost in accidents, combat or surgical procedures. That focus resulted in the creation of more human-pig chimeras with one new twist – the embryos were allowed to grow to full term!

"It is important to note that we demonstrate that the human donor cells are located only where the pig skeletal muscle [now genetically deleted] once was. The human donor cells do not migrate to the brain or to the reproductive cells of the pig."

Mary Garry, associate professor of medicine at the University of Minnesota's Cardiovascular Division and co-author of the study published in the journal Nature Biomedical Engineering, answers in Inverse the chimera-elephant-in-the-room question – the human stem cells were implanted in pig embryos that had the genes required to develop pig skeletal muscle tissue removed via CRISPR gene editing. Because of that, they never strayed to the pigs' brains or reproductive organs. Also, these were adult-derived stem cells, not embryonic stem cells.

You know what this means?

That still left a lab full of human-pig chimeras running around. Transplanting their human muscles is not yet technologically feasible nor ethically approved — Garry estimates that both will happen in the next 3 to 5 years in the U.S. What about outside the U.S.? We've already seen that regulations don't matter in some countries and money talks in just about all of them. Could human-pig chimeras be supplying organs already somewhere else? That needle is moving quickly on the probability meter. Organ transplants of all kinds are in short supply, even in countries with illegal or look-the-other-way harvesting. Do the benefits outweigh the risk of unethical development or an accidental escape into the normal population? Is there a twisted scientist with the goal of creating a real Orwellian "Animal Farm" or Seinfeldian Pig Man?





April 05, 20	21 Headline
	Editorial
Date	Column
3 of 4	Opinion
Page	Feature Article

Stranger things have happened ... and they're not going to stop.

Mysterious Universe

Terrifying Tyrannosaurus Rex Lookalike Unearthed in Patagonia Jocelyne LeBlanc

A newly discovered dinosaur that looked similar to a Tyrannosaurus rex terrorized Patagonia about 80 million years ago. The fossil was discovered in Argentina's Bajo de la Carpa Formation and the dinosaur's braincase was exceptionally well preserved as it was surprisingly uncrushed.

The discovery of the fossil came as a complete surprise by researchers who were already in the area conducting another dig at a site called La Invernada which is located close to the city of Rincón de los Sauces in Neuquén Province. The researchers were at the site digging up an ancient sauropod dinosaur and that's when they noticed other bones sticking out of the ground that belonged to a completely different species.

This new species has been called Llukalkan aliocranianus — Llukalkan means "the one who causes fear" in the indigenous Mapuche language, and aliocranianus is Latin for "*unusual skull*". And it definitely would have caused fear as it had a strong bite, large claws, and exceptional hearing.



Llukalkan aliocranianus looked similar to a Tyrannosaurus rex.

Llukalkan aliocranianus, which was part of a dinosaur family called abelisaurids, would have measured at least 5 meters in length (16.4 feet), and looked similar to a Tyrannosaurus rex with short arms. It did, however, have many differences from the T-rex, such as its unusually short, deep skull that often contained horns, bumps, and crests.

Its most notable feature was its tiny air-filled sinus that was located in the middle ear zone. This was very unusual as it has never before been seen in any other type of abelisaurid. This would suggest that the species probably had different and much better hearing than other abelisaurids. In fact, their hearing may have been similar to that of today's crocodiles.

In an email to CNN, Federico Gianechini, who is a paleontologist at the National University of San Luis, Argentina, and the lead author of the study, explained this in further detail, "A peculiarity of this dinosaur is that it has cavities in the ear area that other abelisaurids did not have, which could have given this species different auditory capacities, possibly a greater hearing range. This, together with its keen sense of smell, would have given great capabilities as a predator to this species."

They ended up being wiped out by the infamous dinosaur-killing asteroid that struck Earth around 66 million years ago. This was unfortunate for the species as it seemed to have been thriving during that time. Ariel Mendez, who is a paleontologist from the Patagonian Institute of Geology and Palaeontology, Argentina, and a co-author of the study, reiterated this by stating, "These dinosaurs were still trying out new evolutionary pathways and rapidly diversifying right before they died out completely."





April 05, 2021	Headline
Date	Editorial Column
4 of 4	Opinion
Page	Feature Article



The study was published in the Journal of Vertebrate Paleontology where it can be read in full.

A picture of the fossil and an image of what Llukalkan aliocranianus would have looked like 80 million years ago can be seen here. MU

Newly discovered T. rex lookalike with an unusual skull terrorized Patag... Katie Hunt, CNN

With a powerful bite, keen sense of hearing and huge claws that it may have used to stab prey, Llukalkan aliocra...



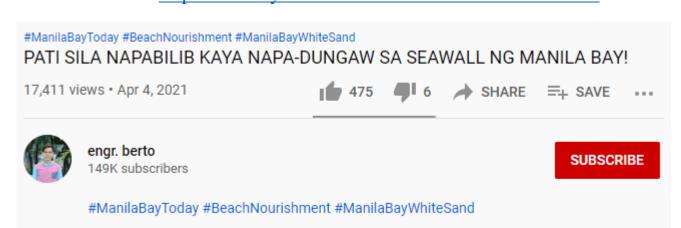




pril 05, 2021	Headline
Date	Editorial
Date	Column
1 of 1	Opinion
Page	Feature Article



Source: https://www.youtube.com/watch?v=4fmFxfR21CA



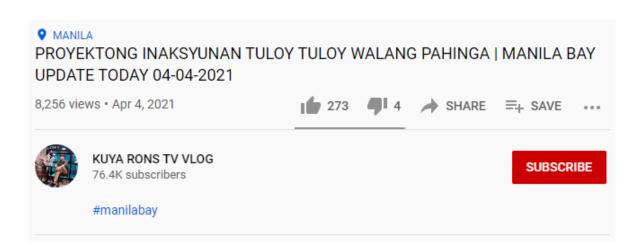




pril 05, 2021 📙	Headline
Date	Editorial
Date	Column
1 of 1	Opinion
Page	Feature Article



Source: https://www.youtube.com/watch?v=cJfUkVQNXyo



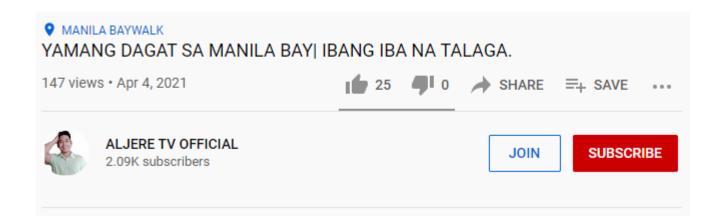




pril 05, 2021	Headline
Date	Editorial Column
1 of 1	Opinion
Page	Feature Article



Source: https://www.youtube.com/watch?v=6E NQBaEkb4







pril 05, 2021	Headline
	Editorial
Date	Column
1 of 1	Opinion
Page	Feature Article



Source: https://www.youtube.com/watch?v=ww789OAeows



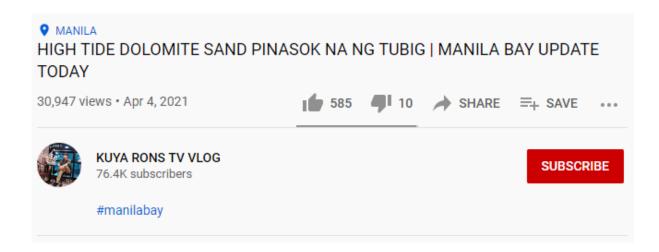




pril 05, 2021	Headline
Date	Editorial
1 of 1	Column Opinion
Page	Feature Article



Source: https://www.youtube.com/watch?v=sKuJkCisnyw







pril 05, 2021	Headline
Date	Editorial
1 of 1	Column Opinion
Page	Feature Article



Source: https://www.youtube.com/watch?v=PbU8fTxt8us

#Savemanilabay #Battleformanilabay #Manilabayupdate

DUMAONG NA! GOODNEWS TO! GRAY SAND IBABAGSAK NA! PHASE 3 NA? ABANGAN! MAY MALAKING MAGAGANAP!

12,126 views • Apr 4, 2021





→ SHARE

≡₊ SAVE



Vincent Tabigue 136K subscribers

JOIN

SUBSCRIBE

#Savemanilabay #Battleformanilabay #Manilabayupdate #Manilaupdate #DENR #MMDA #DPWH #DOTR #Savepasigriver #Savemarikinariver #Savetullahanriver #Tatakduterte #Dutertelangmalakas #Buildbuildbuildprogram

SHOW MORE

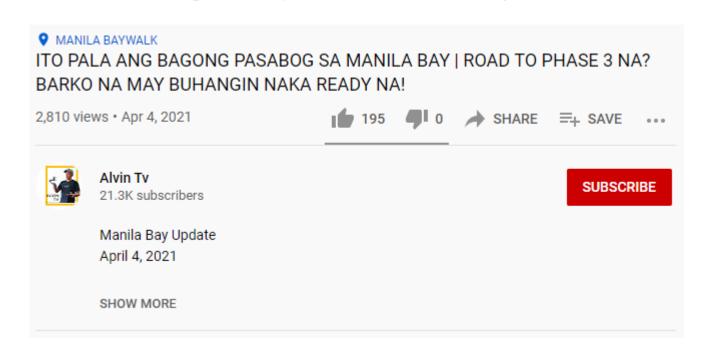




pril 05, 2021	Headline
Date	Editorial
1 of 1	Column Opinion
Page	Feature Article



Source: https://www.youtube.com/watch?v=Mg-B7rRnwfQ



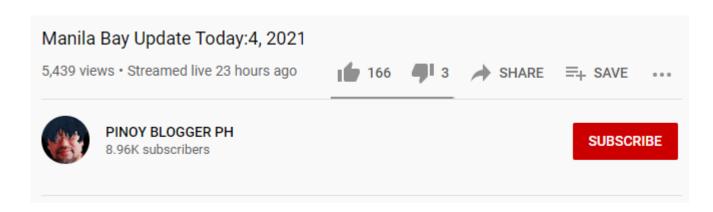




pril 05, 2021	Headline
Date	Editorial
1 61	Column
1 of 1	Opinion
Page	Feature Article



Source: https://www.youtube.com/watch?v=z_5NWj1wmAU



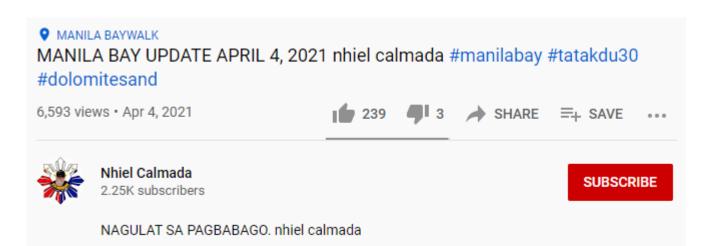




pril 05, 2021	Headline
Date	E ditorial
Date	Column
1 of 1	Opinion
Page	Feature Article



Source: https://www.youtube.com/watch?v=-lFMmgps9c4



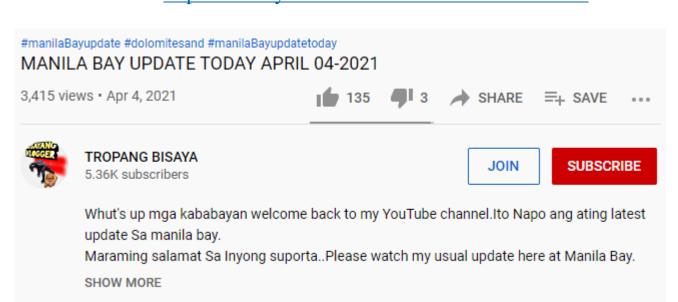




pril 05, 2021	Headline
Date	Editorial Column
1 of 1	Opinion
Page	Feature Article



Source: https://www.youtube.com/watch?v=JiYkvd6HtfE



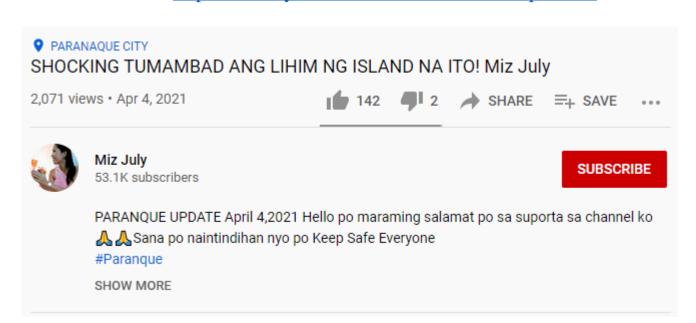




pril 05, 2021	Headline
Date	Editorial Column
1 of 1	Opinion
Page	Feature Article



Source: https://www.youtube.com/watch?v=ZCdfp_t9s9k







April 05, 2021	Headline
	Editorial
Date	Column
1 of 1	Opinion
Page	Feature Article



Source: https://www.youtube.com/watch?v=iuGnrX_t4bU

