



## NEWS ROUNDUP

24 FEBRUARY 2023 [ 07:30 am]

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- CCC meets Batac Farmers to discuss climate risks for agri sector

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#### [UN proposes cutting debt of most vulnerable nations](#)

By: Agence France Presse

PARIS - The UN Development Program proposed reducing the debt of 52 low and middle-income countries, days before G20 finance ministers meet in India.

## **BUSINESS MIRROR**

### [Greening project at UMRBPL to ensure water supply for 500,000 households–DENR chief](#)

By: Jonathan L. Mayuga

Over 500,000 households will benefit from a massive reforestation activity to be jointly implemented by the Department of Environment and Natural Resources (DENR) and the Prime Infra-led WawaJVCo Inc. (WJI) at the Upper Marikina River Basin Protected Landscape (UMRBPL), DENR Secretary Maria Antonia Yulo-Loyzaga said.

## **BUSINESS WORLD**

### [DENR registers over 500 companies seeking to comply with EPR law](#)

By: Sheldeen Joy Talavera

THE Department of Environment and Natural Resources (DENR) said on Thursday that more than 500 companies have registered to comply with Republic Act 11898 or the Extended Producer Responsibility (EPR) Act of 2022, which holds companies responsible for managing the impact of their product packaging over their full life cycle.

## **INTERAKSYON**

### [‘Where is the DENR secretary?’: Gretchen Ho says on its ‘Hug A Tree’ campaign](#)

By: Jeline Malasig

News anchor and television host Gretchen Ho on Tuesday raised a question about a government agency’s annual tree-hugging initiative.

## **MALAYA BUSINESS INSIGHT**

### [Economists urge China to fulfill emissions goals](#)

By: Reuters

SINGAPORE – A team of influential economists has urged China to adopt a new development model based on “wellbeing” rather than GDP growth in order to fulfil its 2060 net-zero emissions goals and head off the mounting threats of climate change.

## **MANILA BULLETIN**

### **[300 IPs opposing Kaliwa Dam march to Malacañang for 9 days](#)**

By: Jel Santos

Around 300 Dumagat-Remontado indigenous people (IP), together with environmental groups and other advocates from the agriculture sector, are currently in the middle of a nine-day protest, marching to Malacañang from General Nakar, Quezon since Feb. 15 to urge the government to stop the Kaliwa mega-dam project.

### **[ELEVENTH HOUR: Managing our climate change fears](#)**

By: Climate Reality Project Philippines

I was always a worrier in our family. I remember when I was little, I would get very scared when it was raining because of the build-up of rainwater and the occasional flooding outside of our main door. The fear would be more intense if my parents were not yet home — the feeling of worry that the heavy rains might wash them over and that they would be unable to go home.

### **[Mining firm re-affirms pledge to sustain programs on climate change, global warming mitigation in Caraga region](#)**

By: Mike Crismundo

BUTUAN CITY – A mining company in Caraga region on Thursday reaffirmed its commitment to continue its program on all-out climate change and global warming mitigation despite a reduced production guidance.

### **[NCR mayors showcase intelligent systems, programs in sustainability forum](#)**

By: Patrick Garcia and Aaron Homer Dioquino

Several mayors in the National Capital Region (NCR) discussed in a forum on Thursday, Feb. 23, technological advancements and sustainability practices aimed at improving the lives of citizens and promoting a cleaner and better future for next generations.

## **MONGABAY**

### [Machine learning makes long-term, expansive reef monitoring possible](#)

By: Basten Gokkon

Machine learning can help conservationists monitor climate impacts across large swaths of marine ecosystems over extended periods of time, a task never possible before.

## **RAPPLER**

### [\[Opinion\] Down with paywalls? Opening science to enhance Philippine climate solutions](#)

By: John Leo C. Algo

A wise woman once said the ultimate purpose of science is in service of the development of society. And certainly enough, most of the things we enjoy today: smartphones, traveling, your favorite meal, the CGI of that third remake of the same superhero movie, and more are made possible through numerous scientific discoveries and innovations.

## **THE MANILA TIMES**

### [\[Opinion\] Rethink 'green' financing](#)

By: Ben Kritz

IN a recent (February 19) commentary for Inter Press Service (IPS), a former regional vice president of the World Bank and fellow of several think tanks makes the argument that "existing international institutions are not delivering on climate change mitigation and finance," and proposes the establishment of an international "Green Bank" to correct the situation.

## **CCC IN THE NEWS:**

### **PHILIPPINE INFORMATION AGENCY**

#### **[CCC meets Batac Farmers to discuss climate risks for agri sector](#)**

The Climate Change Commission PH (CCC) met with the farming community in Brgy. Rayuray, Batac, Ilocos Norte and discussed their observations on environment- and climate-related concerns in the area.

**Information and Knowledge Management Division**

**ABS CBN**

**[UN proposes cutting debt of most vulnerable nations](#)**

By: Agence France Presse

PARIS - The UN Development Program proposed reducing the debt of 52 low and middle-income countries, days before G20 finance ministers meet in India.

The countries which are either in debt distress or at high risk of debt distress, account for more than 40 percent of the world's poorest people and have trouble maintaining essential services in the face of debt servicing costs.

"The countries most burdened by debt and lack of access to financing are also being battered by multiple other crises – they are among the most affected by the economic impact of Covid-19, poverty and the accelerating climate emergency," UNDP Administrator Achim Steiner said.

"The time has come to address the deepening chasm between rich and poor countries, to change the multilateral landscape, and to create a debt architecture that is fit for purpose in our complex, interconnected and post-Covid world," he added.

The UNDP called for a 30 percent reduction on the value of the public external debt stock of these nations in 2021, which it said could help save up to \$148 billion in debt service payments over 8 years.

An additional \$120 billion in savings could also be generated by refinancing middle-income countries' bond debt to official creditor rates.

The call follows a plan unveiled by UN Secretary-General Antonio Guterres to boost spending by nations on sustainable development goals, with dealing with debt one of the issues identified.

The 17 sustainable development goals include eliminating poverty and hunger, access to clean water, and action to mitigate climate change.

## **BUSINESS MIRROR**

### **[Greening project at UMRBPL to ensure water supply for 500,000 households–DENR chief](#)**

By: Jonathan L. Mayuga

Over 500,000 households will benefit from a massive reforestation activity to be jointly implemented by the Department of Environment and Natural Resources (DENR) and the Prime Infra-led WawaJVCo Inc. (WJI) at the Upper Marikina River Basin Protected Landscape (UMRBPL), DENR Secretary Maria Antonia Yulo-Loyzaga said.

“This particular endeavor will actually ensure that we will be supplying over 500,000 households in the East soon, and we’re very grateful that some of our work in terms of keeping our forest whole in generating blue forest will be part of the work of this group as well,” Loyzaga said in a statement.

The country’s chief steward of the environment and natural resources has committed to the reforestation of a 1,800-hectare area in the UPMRBPL during the signing of a memorandum of understanding (MOU) with Prime Infra-led WawaJVCo Inc. (WJI) Chairman Enrique K. Razon Jr., February 20, in Makati City.

The partnership aims to integrate water security, watershed protection, and forest carbon and biodiversity management in the area.

UMRBPL is a 26,126-hectare basin that was declared a protected area in 2018. It straddles territories belonging to the city of Antipolo, and the municipalities of Baras, Rodriguez, San Mateo, and Tanay, all in Rizal province.

The basin plays a vital role in regulating the flow of water toward the highly urbanized National Capital Region and provides ecosystem services such as protection from floods and landslides.

Under the MOU, both parties will conduct joint site assessments, surveys, mapping, and planning activities in line with the mandate of the DENR, and Prime Infra’s Environmental, Social, and Governance framework that integrates sustainability thinking in resource management and decarbonization strategies.

The DENR, in its mission to integrate strategies for science-based, risk-informed, ethical, and equitable stewardship of the country’s environment, has agreed to design,

develop, and establish afforestation, reforestation, and revegetation programs within UMRBPL based on internationally accepted voluntary carbon standards.

WJI, in turn, supports this by handling activities based on science-based interventions that complement the National Climate Change Action Plan and the Philippine Biodiversity Strategy and Action Plan of the national government.

The partnership also affirms the commitment of DENR and WJI to exert only the best practices in stakeholder consultations with the involvement of the local community and indigenous peoples.

“This MOU for environmental stewardship between government and the private sector reflects the commitment of both parties to develop and implement science-based strategies in support of sustainable development,” said Razon Jr.

WJI is the developer and operator of the Wawa Bulk Water Supply Project in Rizal province designed to deliver reliable water supply of at least 518 million liters per day to Manila Water and the Metropolitan Waterworks and Sewerage System.

## **BUSINESS WORLD**

### **DENR registers over 500 companies seeking to comply with EPR law**

By: Sheldeen Joy Talavera

THE Department of Environment and Natural Resources (DENR) said on Thursday that more than 500 companies have registered to comply with Republic Act 11898 or the Extended Producer Responsibility (EPR) Act of 2022, which holds companies responsible for managing the impact of their product packaging over their full life cycle.

“Since we launched the EPR program, more than 500 private companies have registered. We also hope to simplify the entire process. I’m hopeful with the EPR program, having heard the willingness of the private sector to be part of the program,” Environment Undersecretary Carlos Primo C. David said during a Stratbase ADR Institute briefing.

“After we collect all the plastics collected by the producers themselves, what do we do with it? Maybe one alternative, beyond recycling, is waste-to-energy,” he said.

According to Mr. David, among the projects being proposed to the DENR are reclamation, offshore wind power, offshore quarrying, and waste-to-energy projects.

Apart from reclamation, he noted that the rest are new .so there is a need to develop systems for project evaluation and monitoring once they are in operation.

Environment Management Bureau Director Gilbert C. Gonzales noted that the “linear” approach of waste management must shift to a “circular economy” model, which minimizes waste and incentivizes recycling.

Climate Reality Project Philippine Branch Manager Nazrin D. Castro said that shifting to the circular economy model “can help avoid excessive consumption, waste, and use of fossil fuels by using, reusing, repairing, and recycling existing materials and products.”

According to a survey conducted by Pulse Asia, 8 out of 10 Filipinos expressed a preference for products and services produced by firms that they believed to be environmentally responsible.

“Given this message, there is at least one challenge and this is for firms to satisfy this preference by providing products and services within the reach of consumers,” Pulse Asia President Ronald D. Holmes said.

## INTERAKSYON

### ['Where is the DENR secretary?': Gretchen Ho says on its 'Hug A Tree' campaign](#)

By: Jeline Malasig

News anchor and television host Gretchen Ho on Tuesday raised a question about a government agency's annual tree-hugging initiative.

The "Woman In Action" host quote tweeted a post from the Department of Environment and Natural Resources about officials and personnel of the DENR Central Office joining the nationwide launch of the "Hug A Tree" campaign last February 14.

"Not sure what good 'tree hugging' brings to the environment," Gretchen wrote on February 21.

"But I would love to know DENR's actions and voice on the Masungi Georeserve, Philippines being tagged as the #1 ocean plastic polluter, mining in Sibuyan island, etc++," she added.

"Where is the DENR secretary?" Gretchen continued with a thinking face emoji.

On that day, the DENR's Twitter account shared a picture of DENR Undersecretary for Policy, Planning and International Affairs Jonas Leones, DENR Undersecretary for Finance, Information Systems and Climate Change Analiza Rebuelta-Teh and DENR Climate Change Service Director Elenida Basug hugging a tree.

In its description, the DENR said that the tree is a "century-old rain tree," known for being a wide canopied tree with a large symmetrical umbrella-shaped crown. In the picture, it has no leaves.

The agency said that the annual "Hug A Tree" campaign is a three-day event organized by its Forest Management Bureau "to inspire more Filipinos to take part in the country's greening efforts and to raise awareness on the benefits of trees to communities and the environment."

In a different Facebook post, the DENR said that the campaign promotes "the importance of conserving trees by hugging centennial and indigenous tree species and conducting tree-growing activities" in the country.

It also said that tree-hugging has “social or health benefits” which can be derived from nurturing trees.

According to DENR, the initiative can increase one’s overall well-being and a person’s level of oxytocin or the hormone responsible for feeling calm, among others.

The DENR previously released infographics talking about the activity’s benefits.

The DENR also said the activity aims to “raise awareness of the importance of the tree-hugging movement.”

Other environmental concerns

Meanwhile, Gretchen’s post in response to the initiative was “liked” by 10,600 Twitter users. It has also earned over 2,370 retweets so far.

“I mean, she has a point,” a Twitter user commented.

Another Filipino claimed that what SB19 member Justin de Dios did had “more sense” than the DENR’s tree-hugging activity.

“Mas may sense ang ginawa ng batang ‘to, nagpakahirap mag-hiking sa Masungi para makapag-tree planting. Iba [diyan] hug2x [hug hug] lang tapos picture2x [picture picture],” the Twitter user said in response to the post.

Last February 21, Justin shared that he participated in a tree-planting activity at the Masungi Georeserve in Rizal.

“I hope this video helps bring awareness that we should conserve and protect our natural resources dahil ito ang sasalba sa atin sa panahon ng sakuna,” he said on his YouTube vlog.

The “Save Masungi Movement” also agreed with Gretchen’s post and told the DENR to “protect Masungi” instead of hugging trees.

“#handsoffmasungi,” it said in a Facebook post.

The movement also shared a link to its petition appealing DENR Secretary Toni Yulo-Loyzaga and President Ferdinand Marcos Jr to stop the planned transfer of the Bureau of Corrections headquarters to its site.

The proposal drew concerns about potential damage to the Upper Marikina watershed, which plays a critical role in the climate crisis fight by being a buffer against storms and regulating water flow toward Metro Manila.

Meanwhile, other points that Gretchen raised in her tweet is the country's reputation as the largest contributor of ocean plastic waste in a 2021 research article.

According to Lourens J.J. Meijer and team, the Philippines was estimated to emit 31% of the ocean's plastic.

Their research said that countries with smaller geographical area, longer coastlines, high rainfall, and poor waste management systems are more likely to wash plastics into the sea.

Gretchen in her tweet also mentioned the mining exploration activities in Sibuyan Island by the Altai Philippines Mining Corporation, which aimed to extract nickel ore.

Residents successfully stopped the initiative which they said would disrupt the island's intact ecosystems and local livelihoods.

Sibuyan Island has been called the "Galápagos of Asia" because it is isolated from the Philippine archipelago.

The volcanic islands of Galápagos, which lie 600 miles off the coast of Ecuador, are famous for a wealth of unique plants and animals found nowhere else in the world.

## MALAYA BUSINESS INSIGHT

### [Economists urge China to fulfill emissions goals](#)

By: Reuters

SINGAPORE – A team of influential economists has urged China to adopt a new development model based on “wellbeing” rather than GDP growth in order to fulfil its 2060 net-zero emissions goals and head off the mounting threats of climate change.

In a report published on Thursday, the team – which includes two former chief economists of the World Bank – also called on China to cap total fossil fuel consumption and establish a detailed “pathway” for reducing emissions.

The report and its recommendations have already been submitted to the Chinese government. Co-author Nicholas Stern, chair of Britain’s Grantham Research Institute on Climate Change and the Environment, told reporters he hoped it would play a constructive role in China’s 2026-2030 “five-year plan”.

The old development model drove rapid growth in China over the last four decades, but is putting the world at “grave risk”, the report said.

China is aiming to bring emissions to a peak by 2030, though it currently remains unclear at what level they will peak. Stern said it needed to set a specific numerical target in order to bring “clarity” to its decision-making.

The report also called on China to give greater prominence to public transport and set a timetable for the elimination of fossil-fuel vehicles. China should also promote low-carbon agriculture, including plant-based meat and dairy, it said.

China began experimenting with “green GDP” in 2005 as concerns mounted about the environmental damage done by rapid industrialization. A 2006 government report concluded that environmental losses amounted to 3 percent of total GDP, but critics believed the actual figure was much higher.

Though the green GDP project was cancelled in 2009, China promised in 2013 to abandon a “growth at all costs” model and said GDP would no longer be the sole criteria on which officials would be assessed.

Some provinces have recently resumed efforts to create new indicators reflecting the environmental costs of development, with central China’s Hubei using a pilot “gross

ecosystem product” that can be applied to individual districts, rivers or development projects.

China is home to 16 of the 20 global regions most vulnerable to climate change, data showed on Monday.

## MANILA BULLETIN

### [300 IPs opposing Kaliwa Dam march to Malacañang for 9 days](#)

By: Jel Santos

Around 300 Dumagat-Remontado indigenous people (IP), together with environmental groups and other advocates from the agriculture sector, are currently in the middle of a nine-day protest, marching to Malacañang from General Nakar, Quezon since Feb. 15 to urge the government to stop the Kaliwa mega-dam project.

Dubbed “Alay Lakad Laban sa Kaliwa Dam”, the protest will cover 150 kilometers and pass through Quezon, Laguna, and Rizal as part of the IPs’ move to reiterate their call against the construction of the New Centennial Water Source–Kaliwa Dam Project (NWCP-KDP) in the borders of Rizal and Quezon Province.

“We mobilized today to emphasize our firm opposition against the construction of the New Centennial Water Source–Kaliwa Dam Project—which we see as anti-people and anti-environment. We have been fighting against this project for decades, under the rule of the late dictator Ferdinand Marcos Sr. and we continue to do so under his son’s new regime,” said indigenous Dumagat Kakay Tolentino, spokesperson of the Network Opposed to Kaliwa-Kanan-Laiban Dam.

The NWCS-KDP, a project proposed by the Metro Manila Waterworks and Sewage System (MWSS), is being sold as a “solution” to the water problem of Metro Manila, the country’s capital region. The environmental and conservation group STOP Kaliwa Dam Network, on the other hand, pointed out that solving the water crisis in Metro Manila must not bring dangers to local residents who rely on the Kaliwa River and the Kaliwa Watershed Forest Reserve for clean water, food, livelihood, and protection from climate impacts.

“Defense of ancestral lands and waters is integral in realizing Indigenous Peoples right to self-determination. Submerging almost a hundred hectares of lands will cause irreparable loss of sacred sites, forests, biodiversity and communities in a crucial time we are battling against planetary devastation due to climate change,” stressed International Indigenous Peoples Movement for Self-Determination and Liberation (IPMSDL) Global Coordinator Beverly Longid.

Construction saw fast-tracking last year, according to the proponents of the dam project, because of IPs gave their consent to the project. The Indigenous Dumagats, however,

said otherwise. The group also aims to gather 500,000 signatures by February 23 and has so far generated 200,000 signatures.

“Our online signature petition to stop Kaliwa Dam has reached 200,000. It coincided with the arrival of our members of indigenous group Dumagat-Remontado who have walked for nine days,” Stop Kaliwa Dam Project Convenor and Save Sierra Madre Network Inc. Executive Director Convenor Conrad Vargas said.

The Dumagats also acknowledge the water crisis and the need for a solution, but for IPs and environmental activists, the rights of IP, environmental protection, and the people’s right to clean water should not conflict with each other, rather alternative solutions should be sought to provide the needs of the people whilst safeguarding their rights.

“We can clearly see that these mega projects and huge foreign investments are linked to the increasing conflicts, harassments, criminalization and worst the murder of Indigenous Peoples in these communities,” Longid said.

## ELEVENTH HOUR: Managing our climate change fears

By: Climate Reality Project Philippines

I was always a worrier in our family. I remember when I was little, I would get very scared when it was raining because of the build-up of rainwater and the occasional flooding outside of our main door. The fear would be more intense if my parents were not yet home — the feeling of worry that the heavy rains might wash them over and that they would be unable to go home.

I distinctly remember a time when I was praying and crying so hard for my father to get home from his work outside of Baguio, as I was gazing outside the window and looking at the rushing flood water from the streets. I did not know and understand climate change then, but I was aware that we were responsible for the flooding due to the cutting of trees in Baguio and the amount of waste that we generate. It was an overwhelming feeling of fear, worry, guilt, and helplessness which I recently felt again after the onslaught of severe tropical storm Paeng in the Philippines.

Eco-anxiety is characterized as the overwhelming feelings of fear and worry about the climate change impacts and the effects of extreme disasters and weather events, affecting our way of life and daily functioning. It can also be associated with feelings of guilt about our actions that impact the environment, as well as feelings of helplessness, and even hopelessness in fighting climate change.

When we celebrated National Mental Health Month last October, I asked Climate Reality Leaders (those who have completed the Climate Reality Leadership Corps training) from Luzon for tips on how to cope with eco-anxiety:

“To cope with eco-anxiety, we must accept the true purpose of our being alive. In my younger days being an orphan, I suffer a lot from anxiety and there I learned from the famous author Leo Buscaglia who says, “To accept death is to accept life and truly live.” We must live each day as if it is the last and do what we can now with hope and full dedication. Remember that the state of the environment will be passed on to the next generation and doing whatever we can no matter how small is very important.

Love yourself, live life, and share that love with others and the earth.”

– David D’Angelo, 2021 Global Training

## [Mining firm re-affirms pledge to sustain programs on climate change, global warming mitigation in Caraga region](#)

By: Mike Crismundo

BUTUAN CITY – A mining company in Caraga region on Thursday reaffirmed its commitment to continue its program on all-out climate change and global warming mitigation despite a reduced production guidance.

In a statement released on Thursday, Feb. 23, this mining company in Agusan del Sur has also re-affirmed its pledge to the Department of Environment and Natural Resources (DENR) to continue with all their environment preservation and protection aimed at environmental enhancement and also to widen their contribution to the mitigation of the climate change and global warming.

The top management of Philsaga Mining Corporation (PMC) based in Bayugan III, Rosario, Agusan del Sur also committed not to reduce its Corporate Social Responsibility spending despite a decline in revenues.

Contribution to the mitigation of climate change, reforestation, cleaning of rivers, creeks and waterways, support to the 13 elementary schools and 6,500 students, 40 scholars, etc., among other things, must not be sacrificed, said PMC President Atty. Raul C. Villanueva in an interview with The Manila Bulletin on Thursday.

“Aside from extending livelihood and employment to our communities, we believe that everyone must share in the responsibility of caring for the environment and mitigate climate change,” the company’s top official stressed.

The company president declared these despite a possible reduction of its precious metal production from 84,000-89,000 ounces to 74,000-78,000 ounces owing to upcoming change of major equipment and remedial activities to ensure better operations moving forward.

Meanwhile, DENR 13 Regional Executive Director (RED) Nonito M. Tamayo was happy with the re-affirmation made by the top management of the company for the protection of the environment.

“The full support of the company is a big plus factor in our environment preservation and protection while also continuously extending assistance to communities, especially to the highland people,” the region’s top DENR official said.

With this, RED Tamayo also expressed his willingness to be of aid to PMC should the company need his help in relation to other environmental programs of the government.

He commented that with the excellent track record of PMC through all these years on environmental protection and preservation, RED Tamayo assured to be ready and will always be ready and willing to extend his hand to help.

The company has been noted for continuing the tree planting program for the past several years. The company is targeting more than 8,000 tree seeds to plant this year.

“Yes, our tree planting program is continuing without let-up,” said PMC Vice-President Engr. Ferdinand A. Cortes.

The company already planted more than 1,254,334 tree seedlings of various tree species, including fruit trees and giant bamboos in their 2,081.27 hectares tree plantation in Agusan del Sur province and neighboring areas.

## [NCR mayors showcase intelligent systems, programs in sustainability forum](#)

By: Patrick Garcia and Aaron Homer Dioquino

Several mayors in the National Capital Region (NCR) discussed in a forum on Thursday, Feb. 23, technological advancements and sustainability practices aimed at improving the lives of citizens and promoting a cleaner and better future for next generations.

Makati City Mayor Abby Binay, Quezon City Mayor Joy Belmonte, and Valenzuela City Mayor Wes Gatchalian attended the Liveable Cities Lab 2023 spearheaded by Liveable Cities Philippines in partnership with League of Cities of the Philippines and Globe Telecom.

Bacolod City Mayor Albie Benitez, Celeste Dy-Donato of Geodata Systems Technologies, Inc. and Engr. Gerhard Tan of Globe Telecom also graced the said forum.

“As the country faces a number of challenges related to urbanization and economic development, intelligent cities will become increasingly important in the Philippines. Technology and Innovation will play a critical role in addressing challenges in urban management and sustainable economic growth in all our cities. By using technology to improve various aspects of urban life, intelligent cities can enhance livability, workability, and sustainability for their residents,” Liveable Cities said.

“For these reasons, we have decided to devote all our Liveable Cities Labs this year to the rise of intelligent cities in the Philippines. Through our scheduled series of 9 Labs and at least 3 LocalLabs, we will be exploring different ways of building more intelligent systems for our cities – from Mobility to Public Health, Resilience, GovTech, and other aspects of modern urban management,” it added.

### Makati City

Aside from showcasing Makati’s sustainability innovations and technological improvements in healthcare, connectivity, and transportation, Binay said the city government will also launch the digitalization of the city’s Makatizen Card to its citizens to further help them access their data conveniently even without the need of their physical cards.

The Makatizen Card was created in 2017 through the partnership of the city government and Globe Telecom’s subsidiary G-Xchange, Inc. (GX), and iBayad Online Ventures

Inc. to provide residents with a multipurpose ID that functions as a valid government ID and ATM card.

The card is linked to a GCash mobile wallet number that allows users to purchase goods, send or receive money, and pay bills on-the-go.

During the height of the pandemic, the city government and Globe Telecom used the Makatizen Card to create contactless solutions to efficiently disburse P2.7 billion in economic aid to its more than 500,000 residents, making it the first city in the country to implement the cashless distribution of financial assistance through a mobile wallet.

The partnership provided a digital disbursement facility for the expanded Makatizen Economic Relief Program which provided relief to city residents affected by the Covid-19 pandemic.

Instead of manually disbursing the financial aid through city hall employees or through physical disbursement facilities, the LGU used the GCash platform to efficiently and safely provide aid to its constituents. This reduced the risk of transmission of the disease, as it limits physical contact among people.

Through the said feature, the city released P364 million to over 72,000 residents in just one day since its implementation.

“Coming March, we are planning to transform the Makatizen card into a virtual card by going digital. The Makatizen card will soon be conveniently accessed through a smart phone or any internet-enabled device, making it easier for residents to access government services and programs,” Binay said.

The mayor explained that the move will not just streamline the government’s processes in providing fast and efficient public services to its residents but also to ensure transparency of government transactions and prevent corruption in the city government.

The launching of the card’s digital version will also make detecting users who abuse the card’s functions much easier.

Binay said Makatizen Card holders can learn how to download the digital version of the card via online and on social media services such as TikTok.

She added that Makatizen Lingkod Bayan Caravans will be deployed in each barangay in the city for the information dissemination of the system to its residents.

## Quezon City

Quezon City Mayor Joy Belmonte shared that she prioritizes preventing corruption when doing transactions with the city government departments as they launch initiatives utilizing technology to provide better services to the residents.

“I would like to make sure that all of the money that should go to the city must go to the city because it should go to the people so that the lives can improve,” Belmonte said.

With this, the mayor said that they automated different services in city government departments, which also led to positive results including better local revenue generation, lesser requirements and processing time for residents, and high levels of client satisfaction.

The mayor showcased the QC e-Services Portal that digitalized almost 100 percent of the city’s frontline or social services such as business permit renewal tax payment, application for scholarships, occupational permits, birth registration, financial assistance, Covid-19 vaccinations, among others.

The platform aims to organize and streamline the government processes, making it faster and more efficient. It reduces red tape in dealing with the local government. It can be accessed through: <https://qceservices.quezoncity.gov.ph/>

“Intelligent cities are often associated with words like data, inter-connectivity, technology, and digitalization. I will not disagree. However, it is important to stress that intelligent cities are first and foremost about people, specifically about improving their lives in the most efficient possible way,” the mayor said.

Belmonte said that 74 QC e-Services kiosks manned by trained personnel were placed in different parts of the city to assist the citizens.

Meanwhile, Belmonte also said that about one million out of the three million population of the city have already applied for the “QCitizen ID (identification card).”

The identification cards, launched in 2021, are equipped with quick response codes and unique numbers which allows the local government to track, and ensure better and right allocation of services to the citizens.

Innovations for peace and order, disaster response, education, climate change and food security, violence against woman and children, and communication were also presented by the mayor during the event.

Belmonte said the city governmental also conducted about 209 caravans in different areas in the city since July 2022, providing access for around 249,000 citizens to medical and dental services, pet vaccination, scholarship and housing applications.

#### Valenzuela City

Valenzuela City Mayor Weslie “Wes” Gatchalian shared that the city government will be launching more features of its recent innovation for social services called the “DotBot.”

DotBot, the first artificial intelligence (AI)-powered social service platform in the Philippines launched last Tuesday, Feb. 21, assists residents for various City Social Welfare and Development Department (CSWDO) services (including burial and medical assistance, transportation, and application of certificate of indigency) through Facebook Messenger.

The mayor said that through the system, they aim to provide convenience for their clients, decongest the city hall or shorten the queues of applicants, and educate the people on the requirements of the services they will avail.

Gatchalian added that the platform is currently in its first phase and only answers inquiries of the city residents about the requirements and the locations where they can apply for the assistance they needed.

Aside from City Hall, residents can also apply for the assistance in 27 Sentro ng Sama-samang Serbisyo (3S) satellite offices after they inquired regarding the documentary requirements using DotBot.

The mayor said they are expecting around 5,000 clients monthly to benefit from the system.

He added that the second phase of the DotBot, which is set to be launched by the end of this year, will let residents upload their documentary requirements online; allow social workers to conduct validation and quickly advise clients on their eligibility for the services; and create an online database for the documents of the clients.

According to the mayor, the third phase of the system, which will be launched in 2024, will enable electronic disbursement of various assistance through e-wallets such GCash and Paymaya.

They are also planning to explore the possible migration or inclusion of the system to other communication application (e.g. Viber and Whatsapp) to expand its coverage of service.

He said that the city will still conduct manual disbursement for those who don't have access to technology, as well as house-to-house disbursements for senior citizens and persons with disabilities.

Gatchalian said the city government is already utilizing technology in providing services to residents for years and presented some of their digitalized platforms for education, business permit/tax payment renewal and Covid-19 contact tracing.

“My administration aims to make the city of Valenzuela known not only as an industrial city but as a livable city with the purpose of giving Valenzuelanos a comfortable life for their families,” the mayor said.

## MONGABAY

### [Machine learning makes long-term, expansive reef monitoring possible](#)

By: Basten Gokkon

Machine learning can help conservationists monitor climate impacts across large swaths of marine ecosystems over extended periods of time, a task never possible before.

The Delta Maps machine learning tool provides a new way to assess which reefs might be best-suited for survival and which play a key role in delivering larvae to others, and therefore should be targeted for preservation efforts, according to researchers in a paper published recently in the journal *Communications Biology*.

The authors write that while this method could revolutionize monitoring of sea surface temperatures at scale, previously measurable only through satellites or remote infrared instruments, it won't obviate the importance of on-site monitoring.

"The approach we propose, which converges machine learning tools and physical understanding of oceanography and climate variability, can be applied to any ocean from equatorial to mid latitudes, to assess the spatio-temporal evolution of marine ecoregions and their connectivity — and connectivity changes over time," Lyuba Novi, a postdoctoral fellow at Georgia Tech's School of Earth and Atmospheric Sciences and one of the duo who developed the method, told Mongabay in an email.

The scientists used the tool to examine the impacts of climate change on the connectivity and biodiversity in the Pacific Ocean's Coral Triangle, the planet's most diverse and biologically complex marine ecosystem. They mapped out the regions within the Coral Triangle that share the same dynamic and connectivity, and then separated the time periods based on major climate events, such as El Niño, La Niña, and neutral or "normal" times.

The Coral Triangle is a patch of the western Pacific that encompasses the waters around the Philippines, Indonesia, Malaysia, Papua New Guinea, the Solomon Islands and Timor-Leste. A 2018 report by the Intergovernmental Panel on Climate Change (IPCC) estimated that 70-90% of coral reefs will decline as temperatures exceed 1.5° Celsius (2.7° Fahrenheit) of warming above pre-industrial levels, and that 99% of corals will be lost with 2°C (3.6°F) of warming.

“Of course, each ecosystem is different and an oceanographic understanding of the system is necessary to assess which components may be important for it,” Novi said.

The researchers found that climate dynamics impacted biodiversity by affecting the currents in the equatorial Pacific. Their findings also showed that changes due to El Niño and La Niña events allowed for significant genetic exchanges between the Indian and Pacific oceans and enabled the ecosystems to survive through a variety of different climate scenarios.

“One of the striking discoveries has been to find that ENSO [El Niño Southern Oscillation] has not only a detrimental effect on coral survivorship, but it has also a strong positive impact in terms of larval transport and biodiversity maintenance across the area,” study co-author Annalisa Bracco, a professor and associate chair for research at Georgia Tech’s School of Earth and Atmospheric Sciences, told Mongabay in the same email.

“Recognizing this role for ENSO allowed us to interpret within a climate variability context the evolution of species richness in the Indo-Pacific through geological times, which was outside the original goal of our project and a very interesting discovery,” she added.

Novi and Bracco also noted that the Coral Triangle had more opportunities for rebuilding biodiversity, thanks to the region’s dynamic climate component, than anywhere else on the planet. This is crucial as conservation experts and authorities around the world work to identify which ecosystems need the strictest monitoring and protection.

“Biologists collect data in situ, which is extremely important,” Bracco said in a statement. “But it’s not possible to monitor enormous regions in situ for many years — that would require a constant presence of scuba divers. So, figuring out how different ocean regions and large marine ecosystems are connected over time, especially in terms of foundational species like coral, becomes important.”

They said they plan to present their findings to the U.S. National Oceanic and Atmospheric Administration (NOAA), and hope to add information about other stressors, such as sources of pollution, overfishing maps, and others, to improve the outcome and potentially develop a monitoring system for seasonal to annual time scales.

“Alone may or may not be sufficient, but in conjunction with in-situ monitoring we believe will revolutionize coral monitoring,” Bracco said.

**RAPPLER**

[\[Opinion\] Down with paywalls? Opening science to enhance Philippine climate solutions](#)

By: John Leo C. Algo

A wise woman once said the ultimate purpose of science is in service of the development of society. And certainly enough, most of the things we enjoy today: smartphones, traveling, your favorite meal, the CGI of that third remake of the same superhero movie, and more are made possible through numerous scientific discoveries and innovations.

Yet science as a broad field has had a reputation of being exclusive. Mentioning the word “science” or “math” alone would evoke in many people their difficulties in studying those subjects during their school days.

But the perceived inaccessibility goes beyond that. Let’s use the climate crisis as an example. No problem can be solved without having the proper data and evidence to understand it, and that issue is no exception.

Through the work of experts worldwide for decades, there is now a consensus understanding of the climate crisis being a product of excessive greenhouse gas emissions from burning fossil fuels like coal and gas. There has also been enough progress in identifying the different impacts and solutions that we can see which path to take to address this global threat.

Yet there is so much that we still need to know. In some cases, the research already exists, but it remains inaccessible.

Over 60% of climate-related research articles published in the past decade require paid subscriptions just to be accessed. These studies contain methodologies, outcomes, and other information that may be applicable to addressing similar issues in highly-vulnerable nations like the Philippines, but instead remain locked behind the current boundaries of closed science.

Adding to this problem is the fact that many scientists from developing nations face more institutional challenges than those from high-income countries. These include a lack of access to funding opportunities, perceived prestigious scientific journals, and technologies and equipment, indicators of the reality that persists within the modern scientific community.

This is part of the rationale for the advocacy of open science, or making scientific research more accessible, transparent, and reproducible for the benefit of all sectors of society. It can apply to all stages of the research process, including making produced data more accessible, removing paywalls to published studies, and allowing a more inclusive peer-review process to ensure the research is done properly.

Mainstreaming open science practices is crucial for enhancing the implementation of climate solutions, especially in a country as highly-vulnerable as the Philippines. For example, involving a local community near a forest intended as a study site would likely lead to the integration of local knowledges into the analysis of data and even stronger monitoring process, all of which could result in more robust findings for the study.

Such practices can be observed whenever a typhoon or other kind of climate-related disaster hits the country. Sharing information about the situation in affected communities through traditional or social media (i.e., casualties, environmental damages) allows not only more urgent humanitarian responses, but also scientists to identify research questions for further understanding numerous aspects of a climate change impact at a local setting.

Data availability has always been a problem in the Philippines, especially when it comes to informing policies and solutions at the national and local level. For an issue as critical to our sustainable development as the climate crisis, open science practices could reduce the odds of research findings becoming outdated quickly and make papers more accessible for policymakers to use in their decision-making (assuming they are willing to listen to evidence in the first place).

The truth should be free

Yet it must be recognized that making open science more popular in the Philippine context, including through the lens of climate action, comes with the challenges associated with the science and technology (S&T) industry itself. Some of these issues such as low salaries, heavy workloads, and lack of funding opportunities for conducting research have triggered many of our brilliant minds to leave the country and practice their trades abroad for decades.

Another issue is that scientists themselves do not have as strong of a presence within many science policymaking spaces. There are mechanisms set up for including technical experts in climate-related policymaking in the Philippines, as evidenced by the

National Panel of Technical Experts and leading climate scientists being part of the Philippine government delegations to recent global climate negotiations.

Yet these have not always translated to the level of climate action that our country needs, although the bulk of the blame on that would be more on other systemic issues. Nonetheless, scientists must be at the forefront of advocating for popularizing open science in the Philippines.

A stronger presence in the public eye should influence policymakers to pay more attention and allot more resources towards strengthening our S&T sector, which should pave the way for open science practices to be adopted more throughout the country. It would also help in lessening the exclusive reputation of the field in general, which would steer the Philippines closer to its goals related to both climate action and sustainable development.

It must be mentioned that there are pros and cons to open science. While the inclusivity aspect has been highlighted already, it might also place more burden on researchers to pay for their publication fees and lower the overall quality of publications. Yet these can be remedied through developing a set of rules and standards for the protection of all stakeholders involved while still spurring the renaissance of the Philippine S&T sector that is vital for us to survive and thrive in the era of the climate emergency.

## THE MANILA TIMES

### [\[Opinion\] Rethink 'green' financing](#)

By: Ben Kritz

IN a recent (February 19) commentary for Inter Press Service (IPS), a former regional vice president of the World Bank and fellow of several think tanks makes the argument that "existing international institutions are not delivering on climate change mitigation and finance," and proposes the establishment of an international "Green Bank" to correct the situation.

This point of view is, of course, completely wrong, and the perspective that spawned it is actually the reason why "climate finance" seems to be in such an unsatisfactory state.

The author of the commentary is Dr. Hafez Ghanem, an economist and development specialist who served for a time as the World Bank's regional vice president for Eastern and Southern Africa. Now semi-retired, he is a nonresident senior fellow in the Global Economy and Development Program at the Brookings Institution, senior fellow at the Policy Center for the New South, and distinguished fellow at the Paris School of Economics. Besides apparently being quite the fellow, Dr. Ghanem has about 40 years' experience in development economics, and his views are not to be taken lightly. That does not mean, however, that they cannot be completely off-base, which is the case here.

Dr. Ghanem's argument is that existing institutions such as the World Bank, other multilateral development banks (MDBs), and entities such as the Global Environment Fund (GEF) and the Green Climate Fund (GCF) are not doing enough to fund climate adaptation and mitigation needs, particularly for the "Global South," using the woke-ish but still somewhat out of fashion term for the world's poorest nations. The current level of funding is about \$200 billion, but Dr. Ghanem asserts that the "Global South" alone needs about \$2 trillion per year to keep up with the changing climate — and that is excluding other development needs such as public health, education, and social services, which Dr. Ghanem surprisingly suggests is a choice the world may and probably will have to make.

A large part of the problem, according to him, is that the "Global South" is badly underrepresented in existing institutions, and he cites the World Bank as an example. Despite the World Bank "doing most of its business in Africa," the 10 largest African countries among the bank's 189 members only have a combined 3.5-percent share of

the voting power in the bank. The G7 countries control 39.8 percent, while other donors control 14.9 percent.

Dr. Ghanem's proposed solution to marshal the needed financial resources and distribute them more equitably is to establish an international Green Bank, which would focus solely on climate change-related lending and grant financing. He explains: "I believe that the Green Bank should be a public-private partnership where private corporations, foundations and civil society organizations are invited to participate in its capital together with sovereign states. I am calling for a tripartite approach where countries of the Global South have the same voice, same voting rights as those in the Global North and the private sector."

The inclusion of the private sector is a major point. Private sector resources will be needed, both for the massive amount of funds required as well as the technical expertise to carry out climate change projects. As it is now, he says, "there is no voice from the private sector because the owners of, say, the World Bank and the African Development Bank are all sovereign states." The idea, then, is that the Green Bank would complement existing institutions by supporting private green investment through equity contributions, loans and guarantees, allowing other institutions to redirect their "scarce resources to social and development assistance."

There are three problems with this sunshine-and-rainbows idea, but to be fair to Dr. Ghanem, some of the shortcomings in his thinking are common to the entire development institution ecosystem when it comes to "climate funding."

First, the idea is simply impractical, and actually rather superfluous. As of the last time, I attempted to do an inventory of the various climate-dedicated funding institutions and facilities (a few months ago), there were well over 100, everything from stand-alone global-scale funds such as the GEF and GCF, to multiple funding facilities created by the various MDBs, multilateral groups such as the G7, G20 and Asean, and individual national governments. And contrary to what Dr. Ghanem asserts, almost every one of them has a dedicated office for "non-sovereign" or "private sector" business; even those that do not would certainly not turn away any private sector entity interested in contributing in some way. Rather than assessing where this vast array of tools may be falling short and correcting that, the proposed solution would simply sweep all that away and create essentially the same thing again; it is a lazy and impatient approach to problem-solving that would fit right in with how the Philippine legislature does business, come to think of it.

Second, Dr. Ghanem may be a first-rate economist, but he seems to have a rather tenuous grasp of business. Every climate fund and funding institution is a business; there is a reason the big ones have the word "bank" in their names. Certainly, they do not have a profit motive, and the way in which shareholder value is defined is rather different than in the world of free enterprise, but the principles of management and governance — with the goal being financial stability and growth — still apply. That does not mean making the beneficiaries of the business its managers, which is precisely what Dr. Ghanem proposes in giving "countries of the Global South a voice" in governance; despite stating in so many words in the paragraph immediately preceding that, "A development bank that is controlled by its borrowers is not a good idea."

The borrowers are absolutely important stakeholders, and their needs should guide the business activity. On the other hand, the benefactors who provide the funds to meet those needs have a reasonable expectation that their money will be spent well, and the way they intend it to be spent. That is why the biggest shareholders in a corporation, the people with the most skin in the game, so to speak, have the biggest influence on how it is run, and why leadership at MDBs reflects where the biggest contributions come from.

Finally, Dr. Ghanem's rather narrow focus is a manifestation of a much bigger flaw in thinking about "climate finance" generally. The climate crisis has become so pervasive and acute that there is virtually nothing within the realm of development finance — be it health, education, fiscal management, infrastructure, food, energy, social support for disadvantaged populations — that does not involve climate response in some way. Take a look at any project proposal or brief published by the World Bank or the Asian Development Bank (ADB), for example; every one will address environmental impact and climate response in some fashion. Even if there is no particular impact, it is at least considered, and the very great majority of initiatives, the world being what it is, do have some impact.

Thus, perhaps the best thing that institutions and government entities of all sizes can do, if they really mean to make headway on the world-sized problem of climate adaptation and mitigation, is to do away with the notion of "climate finance" altogether. When it comes right down to it, everything is now "climate finance," and the sooner the world stops trying to separate "climate" from everyone's everyday life, the more effective our efforts will be.

## CCC IN THE NEWS:

### PHILIPPINE INFORMATION AGENCY

#### [CCC meets Batac Farmers to discuss climate risks for agri sector](#)

The Climate Change Commission PH (CCC) met with the farming community in Brgy. Rayuray, Batac, Ilocos Norte and discussed their observations on environment- and climate-related concerns in the area.

CCC Vice Chairperson and Executive Director (VCED) Robert E.A. Borje and Commissioner Rachel Anne S. Herrera visited the showcase area of the Philippine Rice Research Institute (PhilRice) in Barangay Rayuray, Batac, Ilocos Norte.

According to PhilRice OIC Director Mary Ann Baradi, drought-resistant crops are tested in Barangay Rayuray in response to the water supply problem affecting agriculture in Ilocos Norte.

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