



NEWS ROUNDUP

29 December 2022 [08:00 am]

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BUSINESS MIRROR

['Local banks must help mitigate climate risks'](#)

By: VB Cabuag

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CNBC

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By: Jenni Reid

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EURONEWS

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MONGABAY

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PHILIPPINE DAILY INQUIRER

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[Make Sunsets Startup Releases Particles Into The Atmosphere To Change The Climate](#)

By: Dale Arasa

A company tried to reduce sunlight and change the climate by releasing particles into the atmosphere. It sounds like a scheme from a movie villain, doesn't it?

RADYO PILIPINAS

[Pagtatanim ng puno, ipinapanukala na gawing requirement sa pagkuha ng building permit](#)

By: Nimfa Asuncion

Ipinapanukala ni Senador Jinggoy Estrada na isama ang tree planting bilang requirement sa pagkuha ng building permit sa buong bansa.

THE MANILA TIMES

[\[Opinion\] A pivot year for clean energy; a year of climate folly in the South](#)

By: Yen Makabenta

AS it comes to a close, 2022 presents a mixed picture of pluses and minuses on the climate front. In its review of the year, The Associated Press (AP) concluded that "policy, climate and war have made 2022 a pivot year for clean energy."

[Five Pinoys receive Lee Kuan Yew Senior Fellowship in Public Service](#)

FIVE Filipinos were recently inducted into Singapore's highest and most prestigious program, the Lee Kuan Yew Senior Fellows in Public Service (LKYSF). The highly selective program only chooses a limited handful of Senior Fellows each year. Of the 56 leaders from across the world chosen for the Class of 2022, only five hailed from the Philippines — a testament both to the rigorous selection process as well as to the high caliber of the Senior Fellows themselves.

[My wish list for 2023](#)

By: William Dar

THIS year 2022 was indeed a very challenging year for agriculture as the three Cs — the Covid-19 pandemic, climate change and conflicts in geopolitics — impacted the global and local food system in ways that we have never seen before.

[\[Opinion\] Narratives of redemption in 2022](#)

By: Antonio Contreras

In 2022, we began returning to our pre-pandemic lives, not necessarily with the same perspectives in life. Food delivery services will definitely now become an alternative dining modality.

[Unfinished tasks in 2022](#)

By: Ernie Cecilia

The year 2020 was a year of Upheaval. The coronavirus caught almost everybody by surprise, and almost immobilized the whole world as world leaders decided to lock down their countries.

THE PHILIPPINE STAR

[After year of climate disasters, world off-track to curb warming](#)

By: Kelly Macnamara

PARIS, France — Catastrophic floods, crop-wilting droughts and record heatwaves this year have shown that climate change warnings are increasingly becoming reality and this is "just the beginning", experts say, as international efforts to cut planet-heating emissions founder.

THE VISAYAN DAILY STAR

[City Council pushes environmentally friendly holiday celebrations](#)

By: Chrysse Samillano

A resolution urging Bacolodnons to observe an environment-friendly Christmas season was recently approved by the Bacolod Sangguniang Panlungsod.

Information and Knowledge Management Division

BUSINESS MIRROR

'Local banks must help mitigate climate risks'

By: VB Cabuag

The Bangko Sentral ng Pilipinas (BSP) is advocating what it called sustainable central banking strategies to aid in mobilizing efforts that will address environment, social and governance issues.

The BSP said it will follow a three-phase, 11-point strategy on increasing awareness within the organization on sustainability concepts and apply these on its policy mandate as a regulator of the country's banking system.

"We [the Philippines] are a victim. We are very small in terms of [global greenhouse gas] emissions, and we are late in contributing to emissions. Sabi nga eh, small na, late pa, pero kasama [sa apektado]," BSP Governor Felipe Medalla said.

"Now, of course, my answer always has been that: we will be affected. Indeed, all those estimates of vulnerability and damage, we are usually in the orange to the red color in the heat maps. For instance, climate change could very obviously affect food supply," he said.

This, he said, could lead to large supply shocks, supply-driven inflation. The country has to know how to prevent what economists call second-order effects, how supply-shock inflation can become more permanent inflation depending on what the central bank does.

"The other point is that, clearly, it [climate change] will affect how we regulate banks because capitalization requirements should be commensurate to the risks.

The more risky [your activities] are, the more capital you have to put up. And, clearly, climate change will add to the risks," he said.

"So, in other words, even just from the point of view of our standard regulatory approach, we have to make some modifications on how we define credit risk, default risk and all the financial risks that regulated entities face. So, clearly, the regulatory side has to make more adjustments," he added.

Over the course of the program, the BSP's first action is that it will initiate discussions with key government agencies on the conduct of a comprehensive vulnerability assessment, where all sources of climate- and environment-related vulnerability for the Philippine macroeconomy, the financial system and public finances are systematically assessed.

"Such vulnerability assessment will comprise a scenario analysis of climate and socioeconomic change and address both physical and transition risks. It will consider

both short-term and long-term risks, including those traditionally beyond the horizon of the BSP. This may be undertaken through the support of the development partners,” the BSP said.

BSP Deputy Governor Chuchi Fonacier said besides being sound and stable, the central bank aims to have banks and financial institutions that are mindful of the environment and the pressing issues and threats of climate change to price and financial stability.

“Walking the talk, the BSP is also committed to serve as a role model for our regulated entities,” she said.

“As an enabler [in advocating sustainability throughout the financial system], the BSP aims to provide a conducive policy and regulatory environment that enables its supervised entities to take a balanced and proportionate approach in embracing sustainability principles and promoting sustainable finance. As a mobilizer, the BSP leads and shapes the financial institutions’ behavior toward making sustainable investment decisions. As a doer, the BSP adopts the same standards that are set for supervised financial institutions,” Fonacier said.

Medalla, however, said the BSP can only do so much about the environmental issues.

“That is why we call on everyone’s support to help implement the Sustainable Central Banking program and, of course, the rest of society outside central banking must contribute as well. Clearly, what the national government does will dwarf anything that the central bank can do,” he said.

Renewable energy leader lights up El Nido residences

By: Rizal Raoul Reyes

LET there be light...or to be more precise, solar light.

Last month acciona.org, the corporate foundation unit of Spanish sustainable infrastructure and renewable energy leader ACCIONA and Ayala Foundation piloted the “Light at Home: El Nido” project that will bring access to affordable, sustainable and reliable electricity to more than 100 households, and about 10 community centers at Barangay Sibaltan, an off-grid area in the Palawan municipality.

José Gabriel Martín, acciona.org Foundation’s director, said the project is its first in Asia, in partnership with Ten Knots Phils., AirSWIFT, AC Energy and Huawei, with the support of El Nido and Barangay Sibaltan local government units (LGUs).

Martin pointed out that “Light at Home...” will provide households and community centers with 100-percent clean electric energy through solar-home systems. Before that, the households and centers were yet to be connected to the main power grids, as they were dependent on diesel generators and oil lamps for electricity. Even those with smaller solar equipment still find them insufficient to cover their daily requirements.

The director said that their plight would change, as the new solar home systems to be turned over under the project would enable community-members to carry out their educational, productive, domestic or recreational activities more efficiently, reduce their energy expenditure, and avoid the emission of combustion smoke indoors and outdoors. These, he said, will favor their social, economic, and environmental development.

“Luz en Casa, which means ‘Light at Home,’ is the most important acciona.org initiative, having benefited tens of thousands of people, mainly in Latin America, in the last 13 years,” Martin explained. “We are proud to launch it in the Philippines.”

Spanish ambassador to the Philippines Miguel Utray, Ayala Foundation Inc.’s senior director for Social Development Joanna Duarte, ACCIONA’s Regional Director Ruben Camba and LGU officials also attended the inauguration ceremony.

In the Philippines, ACCIONA has established a reputation for pioneering sustainable water treatment and transportation infrastructure. Since its 2016 market entry, the company has been involved in landmark projects, which include the Putatan II and the Laguna Lake drinking water-treatment plants in Muntinlupa City, the Cebu-Cordova Link Expressway cable-stayed bridge, and the Malolos-Clark Railway Line.

CNBC

[Hit by climate change, farmers in Cambodia are risking everything on microfinance loans](#)

By: Jenni Reid

The “microfinance” industry — long touted as a way to help poor, rural communities in developing countries — is pushing tens of thousands of farming families into debt traps as they attempt to adapt to a changing climate, according to a report.

The study, conducted by researchers at a group of U.K. universities, looked at a range of case studies in Cambodia, where it found easy-access loans had caused an “overindebtedness emergency” that was undermining borrowers’ long-term ability to cope with their new environment.

Modern microfinance institutions (MFIs), which are generally small, locally run organizations with a variety of funding sources such as international investors, banks and development agencies, emerged in the 1970s and grew rapidly in the early 2000s. They were promoted as a way to provide financial services, typically small working capital loans but also savings accounts and insurance, to the traditionally unbanked — such as women and people on very low incomes.

In Cambodia, around 61% of people live in rural areas, and 77% of rural households rely on agriculture, fisheries, and forestry for their livelihoods, according to development agency USAID.

Many have seen these traditional livelihoods affected by a mix of climate change, over-development and illegal logging and fishing, with increasing droughts, wildfires and unpredictable rainfall patterns causing crop losses and damage to the ecosystem of Cambodia’s vital Tonle Sap lake.

The establishment of hundreds of MFI branches since the early 2010s, which can be seen advertising services along roadsides around the country of 17 million people, has often harmed rather than helped those affected, the report published in September found.

In its survey of around 1,800 borrowers, roughly half cited feeding their family as their primary motivation.

But the authors say the loans are increasingly being taken up to service existing debt from a mix of formal and informal sources, rather than being put toward climate-adaptive investments. The loans are also seeing farmers put assets including their land up as collateral, even when the loans are high-interest and have short repayment windows.

NGOs estimate around 167,000 Cambodians have sold their land to pay microfinance loans over the last five years.

The level of microfinance indebtedness in Cambodia at the end of 2021 was \$4,213 per capita, more than double gross domestic product per capita. Around 2.6 million people have taken out microloans.

“The debt burden created by the nexus between climate change and microfinance creates enormous challenges for many individuals and communities causing physical and emotional stress,” said Ian Fry, United Nations special rapporteur on human rights within climate change, who also acknowledged microfinance had been promoted by the U.N., World Bank and other international agencies.

Some oversight of the industry does exist. MFIs are required to register with the National Bank of Cambodia, the country’s central bank, which in December 2021 stopped issuing new licenses and told institutions to improve the “quality, efficiency and affordability” of their services. In 2017, it capped microloan interest rates at 18% annually.

The Cambodia Microfinance Association, a trade body, maintains that MFI loans have an overall positive impact in increasing income and land ownership, and has issued lending guidelines to “reduce the risk of excessive debt” for consumers. It has also hit back at critiques of the industry by NGOs and in previous reports. The NBC and CMA did not respond to requests for comment.

Sounding the alarm

The issues surrounding microfinancing institutions in Cambodia — and around the world, from South Africa to India to Mexico — have been highlighted by NGOs and journalists for nearly a decade.

Microfinance institutions globally had an estimated gross loan portfolio of \$124 billion in 2019.

In some cases it has been found to have positive effects. A 2016 book published by the World Bank argued microfinance loans had reduced poverty and increased incomes in Bangladesh, and banking giant HSBC still promotes its funding of microfinance in the country.

But the World Bank, an early and longstanding advocate of microfinance, has also been warning for years of risks including overindebtedness and the growing commercialization of the industry.

In the 30 years of advocacy done by Cambodian human rights NGO Licadho, land-grabbing has been one of the most prolific problems it addresses on the ground, its director, Naly Pilorge, told CNBC by phone.

That's in part a legacy of the murderous Khmer Rouge regime, which banned private land ownership when it ran the country from 1975 to 1979 and left survivors without land deeds in the tumultuous years that followed.

"We started noticing that in rural communities, workers were losing their land because of another problem even when they had secured their land titles — they were losing it to MFIs," Pilorge said. "How can a farmer farm without land?"

People were being forced to migrate and look for alternative work, Licadho found, which was difficult in the Cambodian economy, where agriculture makes up around a fifth of GDP, and the biggest employer is the garment factory sector, which has been hit hard by the Covid-19 pandemic and EU sanctions.

Cambodia was badly affected by the pandemic, with revenue from tourism plunging from its all-time high of \$4.9 billion in 2019 to just over \$184 million in 2021, according to government figures.

Licadho has done four research projects into issues surrounding microfinance to highlight its risks, including one in 2021.

"The numbers didn't make sense. In a country perceived as developing, that struggled with tourism due to Covid, the MFI sector was still growing at 30% each year, and the average loan went from around \$3,000 to \$4,000," Pilorge said.

"Some of the people being offered these amounts have never seen \$500 in cash, let alone \$4,000, so when someone comes and offers it in exchange for their land as collateral it is tempting." Cambodia uses both the Cambodian riel and the U.S. dollar.

Loan forms are complicated to the average person, she added, but "a significant portion are given to ethnic minorities who neither write nor read Khmer. People are signing with a thumb print."

In the capital Phnom Penh, she added, she commonly meets people working seven days a week to pay off spiraling MFI loans.

The 2022 report added its support to prior calls for the establishment of debt relief and interest suspension programs. That should be in tandem with efforts to cancel and restructure the national debt of countries in developing countries, it said.

International responsibility

It also said the international development community should redirect support away from microfinance institutions and into more targeted projects, and argued there needs to be more "robust taxation and regulation of profits, dividends, and capital gains generated by the foreign owners of Cambodian microfinance institutions."

The U.N.'s Ian Fry called on the international finance community to "take strong heed of the recommendations found in this report and seriously rethink their approach to microfinance."

Pilorge also took aim at international governments, financing institutions and investors who fail to prevent funds being funneled toward predatory activities.

"All these international investors, Asian, European, Americans and so on, still perceive MFIs as a positive thing because of the initial concept. It looks good, you get a high return, everybody thinks they are helping poor people. But there have been red flags on every level for 15 years and they have been ignored," she said.

"Investors are happy, they get the interest, the agents get a base salary and commission, and the people who suffer are the poorest."

EURONEWS

['Climate impact' food labels could encourage consumers to eat less red meat, study says](#)

By: Rebecca Anne Hughes

Climate impact labels could persuade people to choose more climate-friendly foods, a study has found.

Providing information about the environmental impact of foods is an effective method of altering consumer choices, the clinical trial by researchers from Johns Hopkins and Harvard universities concluded.

It comes after an Intergovernmental Panel on Climate Change (IPCC) report in April that urged country leaders to encourage people to choose less carbon-heavy diets.

It placed particular emphasis on meat consumption, especially red meat like beef and pork.

Should we be eating less red meat?

Industrial meat is the single biggest cause of deforestation globally and is responsible for annual emissions roughly equivalent to those from every car, truck and plane in the world, according to Greenpeace.

“Animal-based food production, primarily driven by beef production, is responsible for 14.5 per cent of global greenhouse gas emissions and is an important modifiable contributor to climate change,” say the authors of the clinical trial.

Policymakers in the UK and across the world have been discussing how to persuade people to consume less of the carbon-heavy product.

In England, around 85 per cent of agricultural land is given over to grazing pastures for animals like cows or used to grow feed for livestock.

Greenpeace says a 70 per cent reduction in meat production is necessary for the land to be used sustainably.

Can 'climate impact' labelling change food habits?

One trial has looked at whether 'environmental impact' labels on food can persuade consumers to choose more climate-friendly products.

The report, published in the journal *Jama Network Open*, found that people changed their food choices after reading about their environmental impacts.

The study, conducted by researchers from Johns Hopkins and Harvard universities, asked a group of 5,049 adults in the US to order items from a fast food menu.

The participants were shown menus with one of three labels: a quick response code label on all items (control group); a green low-climate impact label on chicken, fish or vegetarian items (positive framing); or a red high-climate impact label on red meat items (negative framing).

The labels on the low-climate impact menu stated, “This item is environmentally sustainable. It has low greenhouse gas emissions and a low contribution to climate change.”

The high-climate impact menu read: “This item is not environmentally sustainable. It has high greenhouse gas emissions and a high contribution to climate change.”

When shown the high-climate impact menu, 23.5 per cent more participants chose a sustainable item compared to the control group.

In the group given the low-climate impact menu, 9.9 per cent more participants opted for a sustainable choice.

Is white meat bad for the environment?

While the clinical trial labelled chicken and fish as sustainable food choices, studies have shown they can also negatively impact the environment.

Intensively produced chicken has been found to pollute rivers while producing soya to feed the animals destroys vast areas of forest.

Farmed and trawled fish is also not necessarily a sustainable option as it can damage marine habitats.

MONGABAY

[Hunting for future-proof marine plants in the acidic waters bathing a volcano](#)

By: Guia Baggi

A stone causeway connects an islet, the famed Aragonese Castle perched atop it, to the island of Ischia off the coast of Naples in southern Italy. Below water, along the islet's northern and southern contours, CO₂ bubbles from volcanic rocks. Across these effervescent strips of seabed, pH ranges from an extreme low of 6.6 to a normal 8.1. Between 7.8 and 7.7, values that according to worst-case climate projections will be common in ocean waters globally by the end of the century, seagrass and macroalgae, or seaweed, dominate the seascape.

Since 2008, scientists from all over the world have been using this area as a natural biogeochemistry lab and a window on the future. Researchers working in these waters, naturally acidified due to the presence of underwater volcanoes, are studying animal and seagrass populations that have inhabited these rocks for generations, among other aspects of local ecology.

"We have photosynthetic organisms like [the seagrass] *Posidonia* and other types of macroalgae, which are already somehow adapted to marine acidification," Marco Munari, a marine ecologist and ecotoxicologist at Zoological Station Anton Dohrn (SZN) in Naples told Mongabay in an interview. Until earlier this year, Munari was coordinator of SZN's Ischia Marine Centre; he has since moved to a different SZN branch in Fano. The local populations of these organisms are already prepared for the stressors that populations in other areas might experience in a not-so-distant future.

At the pH levels projected by 2100 under the most pessimistic emission scenarios, seagrass and seaweed will grow lush. At that level of CO₂ concentration they can maximize their photosynthesis abilities, said Marco Milazzo, an ecology professor at the University of Palermo who works at volcanic seeps in Sicily, about 300 kilometers (186 miles) south of Ischia, and off of Japan.

The problem is that such seagrasses and seaweeds are nearly the only marine organisms that will do better, Munari said.

Since the industrial revolution, the ocean has absorbed about 30% of carbon dioxide emissions from human activities like burning fossil fuels, cement production and changes in land use. This uptake has affected ocean chemistry, decreasing average seawater pH from 8.2 to 8.1. This change might appear minor. But the pH scale is logarithmic, so even variations of 0.1 are significant, and they can unleash a cascade of other changes in seawater composition. In future scenarios of rising CO₂ emissions, declining seawater pH levels are expected to have dire consequences for shell-building organisms such as mussels, clams, sea urchins and corals, including countless tiny organisms that support marine food webs.

Within this context, coastal habitats, such as seagrass meadows, salt marshes and tropical mangroves, have assumed even greater importance. Since 2009, they have been recognized as key ecosystems for pumping carbon dioxide and other greenhouse gases out of the ocean. Like trees and forests on land, these so-called blue carbon ecosystems absorb CO₂ from the environment through photosynthesis, release oxygen and store organic carbon in the sediments. These habitats cover less than 0.5% of the ocean but store half of the carbon that's buried under the seafloor.

However, much of these ecosystems' surface area has been lost to coastal development, water quality issues and other anthropogenic pressures. In the Mediterranean region, the iconic seagrass *Posidonia oceanica* has shrunk by an estimated 34% of its historic area over the last 50 years, according to a 2015 paper mentioned also in a recent review.

"Human activities, such as trawling or the abandonment of fishing nets that with wave motion pull them out ... can be seen as the equivalent of the company deforesting the Amazon to make fine wood," Munari said. By 2030, both the UN and the EU aim to expand conservation and restoration of these CO₂-storing ecosystems.

At Ischia, researchers have been testing whether *Posidonia* populations adapted to the naturally acidic waters could be used for restoration purposes in other places. Previous experiments near volcanic seeps offered evidence that underwater vegetation, through photosynthesis, helps mitigate acidification and buffer its effects on other species. The photosynthetic uptake of dissolved CO₂ and release of oxygen also seems to help make habitats more resilient to heat waves and possibly other stressors, like pollution, recent studies suggest. Currently SZN researchers are conducting lab experiments to see how seagrasses and seaweeds respond to both heat waves and acidification.

They are also planning field experiments with *Cystoseira*, a Mediterranean seaweed that does not live near Ischia's CO₂ vents. They'll install *Cystoseira* from different populations along the vent gradient at Ischia to see how they respond to various levels of acidity, with the aim of identifying populations that might potentially be used as donors in restoration projects.

"By testing the response of various populations to warming, acidification, and pollution, it is possible, for example, to identify populations that are inherently more resilient and consequently more suitable for restoration purposes," Munari said in an email.

In the U.S., scientists have proposed taking seeds of the common seagrass *Zostera marina* from Virginia and planting them farther north in New York waters. The inspiration came from observing how various species are already migrating northward in response to warming. The idea is to help *Z. marina* populations that should be well adapted to Virginia's higher temperatures settle farther north.

Simonetta Frascchetti, an ecology professor at University of Naples Federico II, and Erika Fabbrizzi, a researcher there who just finished her PhD project on macroalgal

forest restoration, said they think it's important to identify populations that can be more resilient than others, especially to temperature anomalies. But Frascchetti's mantra is: Let's restore, restore; but first of all, let's mitigate, mitigate and conserve. Bringing a degraded habitat back to its original condition is extremely costly, she points out, so it's better to prevent degradation in the first place.

As part of her PhD research, Fabbrizzi worked on identifying criteria that may help prioritize sites with better chances of making a successful comeback. Mapping marine habitats and their environmental conditions is a fundamental first step, she said. Moreover, understanding the causes of a habitat's disappearance is key to determining its chances of restoration success.

For instance, in Long Island, New York, where Alyson Lowell is carrying out most of her research on seagrass metabolism and its influences on ocean biochemistry as a PhD candidate at Stony Brook University, light is the factor keeping *Zostera* from performing greater ecological services. Nutrient pollution from a densely populated area like New York can trigger algal blooms that make less light available for seagrass photosynthesis. "In Long Island, for the success of the restoration we have to clean up our water column," she said.

Tackling the major drivers of habitat degradation sounds more urgent than addressing acidification, according to Frascchetti. "In the Mediterranean, *Posidonia* disappears for reasons other than acidification," she said. "We need to pay attention to the causes of its disappearance first."

The sixth IPCC assessment report stated that *Posidonia* might go functionally extinct by 2100, mainly as a result of warming waters.

"Natural systems ... are characterized by very strong resilience," Frascchetti said, in a glimpse of optimism. "Let's build on that; [doing so] is critical to avoiding having an overall desert by the end of the century."

PHILIPPINE DAILY INQUIRER

[DA finds red onions hitting P600/kilo, still assures enough supply](#)

By: Jerome Aning and Jordeene B. Lagare

The price of onion has skyrocketed to P600 a kilo in some public markets, or double last month's level, but the Department of Agriculture (DA) said it was not considering allowing the importation of the commodity because there was still enough supply.

Based on the DA's price monitoring as of Tuesday, prevailing prices of locally produced red onions averaged P500 a kilo, an increase of 150 percent from P200 a year ago.

Local red onions retailed from a low of P460 a kilo at Mega Q Mart in Quezon City to a high of P600 at San Andres Market in Manila and Marikina Public Market in Marikina City.

These prices are way more than the suggested retail price (SRP) for red onions set by the DA at P170 a kilo in October this year, but DA deputy spokesperson Rex Estoperez said at the Laging Handa public briefing on Tuesday that the SRP was only a "guide" and that prices would still be determined by the available supply and the demand from consumers.

"It will be challenging for us to enforce the SRP because if we do so, no vendor will be selling because their (production cost) is high," he added.

The DA official said he visited several markets on Tuesday and saw vendors selling small onions at P480 a kilo and bigger ones at P520 a kilo.

"I asked one retailer if the (the onions) are still selling even if the price is like that, he said there are buyers and they are also waiting for the production (harvest) this coming January," he recalled.

Estoperez could not provide an estimate of the volume of onions expected during next year's harvest season, adding that many farms were still recovering from the effects of typhoons.

He said thousands of hectares remained unplanted due to the high cost of production and the onion farmers were worried since they "do not know when the prices will plummet, when the next typhoon is going to come."

The onion planting schedule starts in September at the earliest until March, while harvesting may start in December until June, the reason that the DA official said more supply could be expected next month.

Overpriced

The Samahang Industriya ng Agrikultura (Sinag) said local red onions in the markets were overpriced and should be sold at only P430 to P450 a kilo.

Citing reports from local producers, the group said the farm-gate price ranged from P250 to P370 a kilo against P150 to P180 during the previous harvest. This is the selling price between farmers and traders or middlemen, with the latter often dictating the pricing.

Estoperez said he and other officials visited onion farms in Nueva Ecija, Tarlac, and Pangasinan provinces before Christmas and found out that farm-gate prices averaged at P300 a kilo.

He noted that onion farmers were currently benefiting from high prices because they were able to recover the cost of production.

“Our onion farmers are not complaining certainly, but are wary because they are being used (by traders) to justify the high retail prices of onions,” said Sinag executive director Jayson Cainglet.

“Obviously, traders are using the influx of imported and smuggled onions that have yet to be apprehended as an excuse to jack up local farm-gate price artificially and justify the current onion prices,” noted Cainglet.

Despite skyrocketing prices, Estoperez said the DA still saw no reason to authorize onion importation as the country was assured of sufficient stock.

The DA last month said that the government was considering the importation of 7,000 metric tons of red onions to stop the spike in the cost of the commodity, but that this would be made only if there was indeed a shortfall.

Estoperez said the DA was concerned about granting importation permits when smuggled onions might be “just around” being concealed, and worse, some traders might continue to import all the way up to the harvest season.

“As of now, we are not considering the importation of agricultural goods, especially onions. We know there is an imperfection in our system. We will need to provide better interventions, especially in the value chain,” Estoperez said, noting that “we have enough supply but just enough to meet our requirement.”

He said that during their trip to the onion-producing areas, it was evident that “interventions” have to be made in the value chain, such as credit, logistics, transportation, cold storage and packaging.

This was also the same situation with the vegetable supply from the Cordillera provinces, he added.

The interventions would have to address food security, climate change resiliency, and putting an end to smuggling at the same time, he said.

Gov't interventions

The aim of government intervention, Estoperez added, was to encourage the farmers to plant more onions, knowing that the government was ready to assist and protect them when needed.

Estoperez said that while the DA welcomed senators' plan to prove alleged manipulation of onion prices, the agency hoped that with its increased budget for next year, it would better determine value chain priorities and interventions "to break the cycle" causing the lack of supply and high prices.

According to the Philippine Onion Industry Roadmap 2021-2025, the Philippines needs to increase its onion production from 229,539 MT to 279,270 MT to achieve self-sufficiency in onions by 2025.

But Statista, a data consumer company, said the total land area being used for onion production in the Philippines has gone down to 19,300 hectares last year from 19,900 ha in 2019.

Only last September, the DA earmarked P100 million to strengthen local onion production, stressing that several interventions would be implemented to boost the industry.

For 2022, the DA allocated P47.48 million for the provision of seeds, seedlings and fertilizers, while P35.67 million was set aside to put up onion production and postharvest facilities, irrigation services and farm equipment.

At least P10.05 million was also allocated for onion production research activities, while 1.4 million was given to finance a package of technology training, according to the DA.

[Make Sunsets Startup Releases Particles Into The Atmosphere To Change The Climate](#)

By: Dale Arasa

A company tried to reduce sunlight and change the climate by releasing particles into the atmosphere. It sounds like a scheme from a movie villain, doesn't it?

Yet, a real-life company claims it can reduce carbon emissions in a specific area by releasing balloons of "reflective clouds" in the atmosphere.

However, experts say the recent project from Make Sunsets is a terrible idea. They warn that it lacks scientific evidence and poses unknown, dangerous risks.

How does Make Sunsets try to cool the planet?

The Make Sunsets website says it was founded in October 2022 and backed by Boost VC and Pioneer Fund.

It creates "reflective, high-altitude, biodegradable clouds that cool the planet" that would allegedly "prevent catastrophic global warming."

Make Sunsets releases a natural compound via reusable balloons to create these clouds.

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It creates "reflective, high-altitude, biodegradable clouds that cool the planet" that would allegedly "prevent catastrophic global warming."

Make Sunsets releases a natural compound via reusable balloons to create these clouds.

Strangely, it puts quotation marks around "really" when stating "they're really effective."

The startup claims a gram of its clouds could offset the warming that a ton of carbon dioxide emissions create in a year.

Moreover, it said its clouds settle back to Earth into compost after three years. Make Sunsets claims every \$1 billion worth of its clouds could cool the world by approximately 0.1°F.

The website does not specify what chemicals it uses to create reflective clouds. However, an MIT Technology Review article says Make Sunsets uses sulfur and similar particles.

The publication also cited potential investors and customers who allegedly said the startup's proposals are not part of a serious scientific effort or a credible business.

Rather, it looked more like an attention grab meant to stir up controversy. MIT spoke to Luke Iseman, the co-founder and CEO, who confirmed that Make Sunsets is an act of geoengineering activism.

Iseman hopes that stirring controversy could compel the scientific field to solve the growing threat of climate change.

"It's morally wrong, in my opinion, for us not to be doing this," he says. Yet, Iseman claims what is important is "to do this as quickly and safely as we can."

What are the problems with Make Sunsets?

Many scientists have been against Luke Iseman's recent project. For example, Shuchi Talati, a scholar in residence at American University, said it could reduce or restrict geoengineering research.

According to MIT Technology Review, Make Sunsets acts like a "rogue" actor. It has no particular knowledge of atmospheric science or its potential effects on the atmosphere.

Releasing its reflective clouds into the atmosphere could have unintended consequences. As a result, public outcry may compel lawmakers to ban research on such a method.

Moreover, Talati says it is hypocritical for the startup to claim it has humanitarian goals. After all, Make Sunsets executes projects without meaningfully coordinating with those who could be affected.

She says, "They're violating the rights of communities to dictate their own future."

Conclusion

You may pay for \$10 cooling credits to have Make Sunset's reflective clouds in your area. However, it has not provided solid evidence that they work.

Did you know this startup was not the first to try this idea? In 2011, Microsoft founder Bill Gates funded a venture that sprays non-toxic calcium carbonate (CaCO_3) dust into the atmosphere.

Still, it faced similar pushback from environmentalists and scientists. Nevertheless, the threat of global warming continues to expand and requires immediate attention.

RADYO PILIPINAS

Pagtatanim ng puno, ipinapanukala na gawing requirement sa pagkuha ng building permit

By: Nimfa Asuncion

Ipinapanukala ni Senador Jinggoy Estrada na isama ang tree planting bilang requirement sa pagkuha ng building permit sa buong bansa.

Ito ay bilang bahagi ng programa ng pamahalaan sa pagrerehabilitate ng kagubatan at sa pagtugon sa epekto ng climate change.

Sa paghahain ng Senate Bill 1444 o ang Green Measures Act, ipinapanukala na dapat munang magtanim ng hindi bababa sa limang halaman at hindi bababa sa tatlong puno ang mga developer bilang requirement sa pagkuha ng building permit.

Kabilang sa sakop ng panukalang batas ang mga aplikante para sa building permit ng mga residential, commercial, industrial, at public building development projects.

Imamandato silang magsumite ng Tree Planting Plan dagdag sa iba pang requirements na tinatakda ng mga lokal na pamahalaan.

Dapat ring tiyakin ng mga magsusumite ng application na maglaan at magpanatili ng lugar na sapat para sa pagtatanim ng mga puno at halaman.

Ang Department of Environment and Natural Resources (DENR), Department of the Interior and Local Government (DILG), at Department of Agriculture (DA) naman ang aatasang magtakda ng bilang ng mga puno na itatanim at, anong species ng halaman ang itatanim.

THE MANILA TIMES

[\[Opinion\] A pivot year for clean energy; a year of climate folly in the South](#)

By: Yen Makabenta

AS it comes to a close, 2022 presents a mixed picture of pluses and minuses on the climate front. In its review of the year, The Associated Press (AP) concluded that "policy, climate and war have made 2022 a pivot year for clean energy."

In its own assessment, however, the Manhattan-based City Journal saw the year as a time of "climate folly" in the developing world.

The public policy magazine and website is unimpressed by the idea that rich countries should hand over money in climate reparations to poor countries as proposed by COP27, and aims to show how such a policy could impoverish a developing country.

Pivot year for clean energy

In its year-end assessment, the AP (Dec. 21, 2022) describes how events and developments in 2022 have somewhat accelerated the tilt toward clean energy.

"For renewable energy companies in India, it's a good time to be in business.

One of India's largest renewable energy firms, Renew Power, will be among the corporations big and small hoping for a piece of a \$2.6-billion government scheme that encourages the domestic manufacturing of components required to produce solar energy. It's the biggest such incentive in India's history.

The company has over 100 clean energy projects across India and has become the world's 10th largest solar and wind energy company in just over a decade.

Other major governments around the world have been green-lighting ambitious renewable energy policies this past year that aim for major expansions of wind and solar energies, along with development of technologies like carbon capture, which captures carbon dioxide, a central cause of climate change, and stores it in the ground.

The United States signed into law the Inflation Reduction Act, the most ambitious climate legislation in US history. The European parliament passed the REPower EU plan to reduce dependence on Russian fossil fuels and fast-forward the transition to clean energy. And China announced ambitious schemes to enable the country to meet its 2030 clean energy goals five years ahead of schedule.

Experts say the task is now to build on this momentum in 2023, strengthen energy grid infrastructure and resolve backend issues which slow down the distribution and transmission of clean energy.

'From an energy perspective, 2022 will go down as a pivot year. For the first time, we have discernible proof that fossil fuel demand after 200 years of growth has reached a peak in 2019, and we are now bumping along a plateau before an inevitable decline,' said Kingsmill Bond, an energy strategist at the Rocky Mountain Institute, a clean energy nonprofit group.

Bond added that the price of clean energy was getting closer to that of fossil fuels and in some cases it was cheaper.

A report by the International Energy Agency said that oil prices rose well above \$100 per barrel in mid-2022, and high gas and coal prices accounted for electricity cost hikes around the world.

Energy analysts say that the global energy crisis triggered by the Russian invasion of Ukraine and increasing climate threats such as the disastrous floods in Pakistan have accelerated the clean energy policies and big-ticket investments that are needed to transition to renewable energy, especially wind and solar energy, around the world.

The sudden lack of access to fossil fuels and supply chain crunches were also other key reasons for the aggressive tilt toward cleaner energy. For example, Russia's sale of gas to Europe was reduced to a trickle.

Despite the positive momentum toward clean energy, there were some pitfalls, too.

'Knee-jerk reactions saw some places shift back to fossil fuels even if it's at a higher price to the taxpayer,' said Vibhuti Garg, a New Delhi-based energy economist at the Institute for Energy Economics and Financial Analysis.

India's coal production increased by about 17 percent from April to November 2022. Bangladesh increased its imports of natural gas and went ahead with opening thermal power plants in the country. Germany, a strong advocate of clean energy, turned to coal and oil to address its short-term power needs.

'It was a good year for renewable energy but sadly, not a bad year for fossil fuels either,' Garg added.

'Currently, the power sector is designed around fossil fuels and suddenly you have all this clean energy coming into the grid,' said Sinha.

'We need more proactive policies that find ways to make room for renewables.'"

Absurdity of climate reparations idea

The City Journal in "Climate folly in the developing world" (Dec. 22, 2022), cites the case of Namibia in Southern Africa to show how wrongheaded climate policy can immiserate a country.

"Namibia's natural beauty, stark desert landscapes, wonderful people, and fascinating flora and fauna can remind an American of the Southwest. To know the country is to wish for its success. Right now, the biggest obstacle to that success is climate change — not its first-order effects but the roadblocks policymakers are erecting in the name of combating them.

Home to about 2.7 million people, yet occupying an area roughly the size of Washington, Oregon and California combined, Namibia boasts natural resources galore. Keeping the economy afloat are a rich coastal fishery; mining of diamonds, uranium, zinc and rare-earth metals; and tourism, supported by game parks, scenery and hunting. By African standards, the country is a success, with a stable government and a per capita GDP (gross domestic product) of about \$8,900. Still, wealth is unevenly distributed: Namibia has the second-highest Gini index in the world, and the very poor are mostly subsistence farmers who do not participate in the cash economy.

As with most developing countries, Namibia's population is growing. Fertility stands at 3.22, well above the replacement rate, though below the African average. The population is young and unemployment is high (roughly 38 percent). Among those lucky enough to have work, roughly 60 percent labor in the service sector. To keep pace with this demographic change, the productive sectors of the economy — manufacturing, mining and natural resources — must grow. Yet GDP growth currently hovers around zero to slightly negative, and per capita GDP has declined by about 10 percent over the last two years.

Growth requires energy, and rapid growth requires abundant energy. But Namibia's per capita energy consumption rate is about 30 million kilojoules per person per year, roughly one-tenth of that in the US. Domestic energy production — about 90 percent of it from hydroelectric dams on the rivers bordering the country — can meet only about one-fourth of present demand. The rest must be imported, which costs money, hinders economic development and holds the country hostage to political turmoil in South Africa and Zimbabwe, its largest energy suppliers.

Namibia can expand its domestic energy sector. Fossil fuels account for only 6 percent of Namibia's total energy consumption, all of which must be imported. Off Namibia's southern coast, however, lie enough reserves of natural gas to power its economy for roughly two centuries at the present energy-consumption rate. Exploration in the eastern part of the country has identified promising oil deposits. Accounting for fracking would probably increase estimates of proven reserves.

Such economic development is unlikely, however, as long as the country follows green imperatives. Namibia is a signatory to both the Kyoto Accord and the Paris Agreement, which oblige participants to reduce emissions of carbon dioxide. The country has formulated an ambitious plan, committing itself to a 90 percent reduction of its carbon emissions by 2027 and to reaching net-zero emissions by 2050. Achieving those goals, though, would have no discernible effect on the global carbon budget. Namibia

presently accounts for just 0.003 percent of global carbon-dioxide emissions. A 90 percent reduction of carbon emissions would lower Namibia's share to 0.0003 percent.

If it so chooses, Namibia could develop its own fossil fuel resources to provide the cheap and abundant power it needs. It could, for example, increase its per capita carbon emissions tenfold (which would bring it up to the level of Bermuda, the Czech Republic and Russia), while having no significant effect on the global carbon budget. Instead, the Namibian government has aggressively expanded solar and wind energy, which presently account for 0.5 percent and 4.7 percent, respectively, of the country's total generating capacity.

Contradictions in climate policy

Is this policy prudent? Only if it's funded by someone else's money. Under the Green Climate Fund (GCF) of the Paris accords, developed-world governments and corporations pay into a fund that redistributes the money to 'support developing countries raise and realize their... ambitions toward low-emissions, climate-resilient pathways.' Though the GCF initially intended to redistribute \$100 billion annually, it has fallen far short of its goals, having pried only about \$10 billion out of the developed nations. Even so, the funds constitute a substantial source of revenue for developing countries.

Namibia currently receives \$110 million annually from the GCF. That sum can offset about 11 percent of Namibia's current trade imbalance. And when money from other 'green' investments are counted, the balance sheet becomes even rosier. The French Development Agency, for example, contributes an additional \$31 million to green projects in Namibia. The German government also contributes to various projects, including \$5 million to build a rural desalination plant to be powered by wind and solar.

Namibia channels its GCF funds through a local government entity, the Environmental Investment Fund (EIF). The EIF distributes the funds to various climate activist groups, which then distribute them to their pet projects. Since the EIF is a government entity, its funding decisions must conform to Namibia's climate policy. One of these programs, Empower to Adapt, has distributed \$10 million to 19 subprojects, all of which must use some form of climate buzzword in their description. Empower to Adapt exists 'to reduce vulnerability and increase resilience of intended beneficiaries through climate smart agriculture practices to ensure food security.' The main activities, though, seem to be meetings, site visits and ceremonies. Considerable effort was directed to raising 'climate-change awareness,' which included writing newspaper articles, arranging radio interviews, running advertising campaigns and composing jingles.

The contradiction of Namibia's climate policy can be resolved with a simple observation: climate policy is not about climate change but about securing climate revenues. If throttling the country's fossil fuel sector is the price to keep that money flowing, so be it. Never mind that it will do nothing to 'fight climate change.'"

Five Pinoys receive Lee Kuan Yew Senior Fellowship in Public Service

FIVE Filipinos were recently inducted into Singapore's highest and most prestigious program, the Lee Kuan Yew Senior Fellows in Public Service (LKYSF). The highly selective program only chooses a limited handful of Senior Fellows each year. Of the 56 leaders from across the world chosen for the Class of 2022, only five hailed from the Philippines — a testament both to the rigorous selection process as well as to the high caliber of the Senior Fellows themselves.

The LKYSF was developed and taught by world-renowned academicians and practitioners, exploring key issues of the decade and significant trends as well as critical insights into upcoming opportunities and challenges.

The Philippines was proudly represented by Environmental and Climate Change Research Institute President and Chairman Glenn Banaguas; Department of Information and Communications Technology Cybersecurity Bureau Director Maria Victoria Castro; Department of Finance Undersecretary Mark Dennis Joven; Securities and Exchange Commissioner Kelvin Lester Lee; and Department of Foreign Affairs Assistant Secretary for Maritime and Ocean Affairs Maria Angela Ponce.

Banaguas is a distinguished scientist and science diplomat, and one of the leading experts in environment, climate change, and disaster risk in Asia. He is also the chairman of the Asean Science Diplomats and the US-Asean Fellows for Science and Technology, and the Climate Diplomat of the EU-Asia Expert Panel for Climate Diplomacy and Environmental Security. He is currently an executive fellow of the Geneva Center for Security Policy in Switzerland and concurrently serves as an adviser and consultant for the United Nations.

Castro has been with the government for more than 25 years. She is the head of the Cybersecurity Bureau of the Department of Information and Communications Technology and former undersecretary of the department.

Joven is the undersecretary for the International Finance Group of the Department of Finance. A CPA Board topnotcher, his services are highly sought-after in the areas of estate planning, corporate reorganizations, cross-border transactions, and tax advocacy. He is a faculty member of the University of the Philippines College of Law. He is licensed to practice law in the Philippines and the State of New York.

Lee is the supervising commissioner of the Markets and Securities Regulation Department and the Information and Communications Technology Department. He spearheaded the establishment of the International Affairs and Protocol Division and PhiliFintech Innovation Office of the Commission.

Ponce is presently the assistant secretary for Maritime and Ocean Affairs of the Department of Foreign Affairs. As the legal adviser of the Philippine Mission to the

United Nations in New York, she commenced her work as vice chairman of the UN General Assembly's Legal Committee in 2018.

My wish list for 2023

By: William Dar

THIS year 2022 was indeed a very challenging year for agriculture as the three Cs — the Covid-19 pandemic, climate change and conflicts in geopolitics — impacted the global and local food system in ways that we have never seen before.

Climate change was already a big problem before the pandemic struck in 2020, and just as the latter was getting contained somehow from the latter part of 2021, the Russia-Ukraine conflict started in early 2022. And while we are seeing lesser cases of Covid-19, the impact of the pandemic on developing economies will take years to resolve. Among the big problems caused by the pandemic are the large amount of sovereign debts that cannot be settled over the short term, derailing economic activity and delivery of basic services.

However, focusing our efforts in resolving the direct impact of the three Cs on our food systems would not be a wise move, as the agriculture sector has been bugged by numerous issues even before climate change became a major challenge to mankind.

Also, a number of Philippine agriculture's challenges are not caused by external factors, like the low budget allocated for it, making it impossible for the Department of Agriculture (DA) and its attached agencies to deliver all the much-needed support to farmers and fishers, especially the smallholders.

So, here is my wish list for Philippine agriculture in 2023 and presented not in order of importance:

1. Continue higher level of budget for agriculture — the first move of President Ferdinand "Bongbong" Marcos Jr. to increase the budget of the DA and its attached agencies to P163.7 billion in 2023, or P46.5-billion higher than 2022's P117.2 billion, is definitely good news. And I hope that in the succeeding years, the DA and its attached agencies, and the other agencies supporting agriculture, like the Philippine Council for Agriculture, Aquatic and Natural Resources Research and Development (Pcaarrd) under the Department of Science and Technology, also be given more budget.
2. Invest more in measures to contain climate change — now that the DA and its attached agencies have a higher budget, it must devote more effort in making the country's farming and fisheries sector more resilient to extreme weather events. Some of the solutions available for that are also "low tech" like small water impounding systems. However, there is also a need to accelerate and invest more in the research of plant varieties that can also resist drought, flooding and strong winds, among others.
3. Local government units (LGUs) do their part in ensuring food security — when the Local Government Code was signed into law in 1991, thousands of agriculture extension workers were devolved to LGUs. However, the need for LGUs to do their part in ensuring food security in their area was still an alien concept then, and times have

changed. Today, with the challenge from the three Cs, LGUs should step up their efforts to make their localities food secure or be sufficient in at least two major food commodities. LGUs should also establish food trading and storage systems, as they need to source other agricultural commodities from other LGUs also and store them for a long period.

State colleges and universities (SCUs) go for scaling up of technologies — SCUs have the potential to become hotbeds of agricultural research for development (not just research and development) or R4D. However, all the R4D outputs of SCUs would be useless if these cannot be scaled up, or lie in the shelves of their libraries. SCUs can also seek partnerships with LGUs and the private sector to scale up technologies for the benefit of small-holder farmers and fishers.

4. Entrepreneurship is a goal not only of the DA but also of SCUs — Eventually, the technologies that SCUs develop and upscale must result in farmers and fishers earning more, making them entrepreneurs. And the technologies SCUs develop should include value-adding and not just improving on-field planting of crops or raising livestock. Pcaarrd already has a program for this called agriculture technology business incubation (ATBI) that involves select SCUs. I wish Pcaarrd would be given a higher budget to widen the coverage of its ATBI program and involve more SCUs.

5. Enable individuals to manage bigger farm sizes — it is almost impossible for an individual farmer to realize good harvest and earnings from a small plot of land unless he or she utilizes technologies like vertical farming, drip irrigation, computerized monitoring of crops, among others, which requires a significant amount of investments. But this is impossible for most smallholders in the agriculture sector.

So, the best solution here is for the government, private sector and civil society to spearhead or take part in consolidating small-holder farmers into viable production units or systems. Under a consolidated system, only one person is tasked as the manager.

Another solution is to assist farmers in getting more lands to develop and manage, especially lands no longer tilled or can be developed for food production.

6. Use science and technology for decision-making — I agree that accurate figures and official statistics be used in the government's decision-making process. And let me add that science and technology also be used in the decision-making process, at least in the fields of agriculture and the climate crisis, among others. One of the best science-based decisions made recently was the approval of Bt eggplant for commercial planting for human consumption, as this will eliminate the use of chemicals to combat the dreaded fruit and shoot borer.

7. More youth enter agriculture — the DA must sustain the Young Farmers Challenge started during the Duterte administration. However, the private sector, the academe and not only SCUs, and civil society should also help in the effort to encourage more young people to become farmers, fishers and agripreneurs. One organization worth

mentioning that is helping get more young people into agriculture is the Philippine Society of Agricultural and Biosystems Engineers that has chapters in SCUs offering agricultural and related courses.

8. "Big brothers" in the agriculture and food industries to take lead in transformation — such industries partnering with smallholders, particularly those in cooperatives, can help to level up productivity and profitability of farmers and fishers. It can also assure farmers and fishers a market for their produce at prices that will benefit both parties. Such partnerships can also facilitate the transfer of know-how and technologies in collaboration with government agencies, LGUs and SCUs. Big companies like Nestlé Philippines, Jollibee Foods, Universal Leaf Philippines Inc. and LionHeart Farms already have such partnerships with small-holder farmers and more should be forged or initiated.

9. Food prices won't push inflation to high levels — the Philippine Statistics Authority (PSA) reported last November that inflation in October this year hit 8 percent or a 14-year high, citing that food and non-alcoholic beverages significantly contributed to the high inflation figure. This means that Filipino consumers paid higher prices for major agricultural commodities. The long-term solution to high food prices is to develop and implement faithfully roadmaps for major agricultural commodities, and make sure the producers also benefit through improved incomes. Let us take note that food producers are also consumers who buy food for themselves and their family.

10. Sustainable Development Goals (SDGs) targets be met — in 2015, all the member states of the United Nations adopted the 2030 Agenda for Sustainable Development, a shared blueprint for peace and prosperity that has the 17 SDGs. All told, the UN member state recognizes that ending poverty and other deprivations must be done holistically with strategies to improve health and education, reduce inequality, and spur economic growth, while also addressing climate change and preserving the oceans and forests.

If all the SDGs are achieved by 2030, the smallholders in the agriculture sector will also be lifted from poverty and be able to produce more food for marginalized sectors. This can be achieved if institutions consciously include the welfare of smallholders in the agriculture sector in attaining all the SDGs. There should be no compromise for that.

In closing this article, let me also add that I also wish for concerted action of all groups comprising society in helping our country achieve what I enumerated in my wish list.

Happy New Year to all!!!

[Opinion] Narratives of redemption in 2022

By: Antonio Contreras

In 2022, we began returning to our pre-pandemic lives, not necessarily with the same perspectives in life. Food delivery services will definitely now become an alternative dining modality.

Hybrid and flexible learning will remain an option despite the bullying by some senators abusing their power over the budget to threaten higher education officials, even forgetting the latter's constitutionally guaranteed rights to having sole power to determine how they teach.

I saw 2022 as the year that I retired from my previous university, and returned to my alma mater. It was a tumultuous transition and homecoming, with my enemies and critics mobilizing, and leaving no stone unturned, including telling lies about me, to prevent my re-employment. Fortunately, God and the universe were on my side. Rank and salary were no longer an issue for me. What mattered most was being granted the opportunity to continue serving the people by teaching minds, touching hearts and transforming lives. And it did not hurt that along the way I was able to prove to my detractors that they could not bring me down. The year was capped by blessings, one of which was when my team of scholars in my school and I were able to receive a very competitive international research grant to inquire into the politics of climate change in the country.

Redemption in the face of adversity was actually the theme of the year, not only for me, but in the larger arena of politics.

Demonized and imaged as the heir apparent of a plundering dynasty, personally trashed even by then incumbent president Rodrigo Duterte, and being accused of being a cheater of academic degrees and a convicted tax evader, Ferdinand Marcos Jr. prevailed with a landslide victory in the May 2022 elections. He is the only post-EDSA president who obtained a majority vote, thereby receiving an undeniable mandate from a people deeply polarized between his supporters and critics. It is too early to tell how his presidency will turn out, but what is clear is that his election is a feat that sealed the return of the Marcoses not only physically in Malacañang, but symbolically in our politics. While it can be argued that they actually never left, since even in their absence the loyalists kept the fervor of loyalty, even blind to some extent, to the Marcoses, Marcos' ascension to the presidency has for all intents and purposes redeemed his family's name.

Another leader whose redemption narrative is compelling is Ukraine's Volodymyr Zelenskyy. While the war in Ukraine is still ongoing, it is already clear that Russia is suffering. Vladimir Putin, Russia's leader, is practically exposed, while Zelenskyy is proving to be the underrated actor-turned-leader who has caused Putin's unraveling. Zelenskyy had experienced being bullied not only by Russia, but even by the US, particularly former president Donald Trump, to become an agent to diminish the

candidacy of now President Joseph Biden lest they withhold military aid. Now, Zelenskyy has become Time's person of the year, and is leading Ukraine into an existential battle against Russia. He has successfully drawn support from European allies, and from the US, where he gave a speech at a joint session of the US Congress that days after rewarded him with a commitment, embedded in its Omnibus 2023 budget bill, of about \$45 billion in aid money to help it in its fight with Russia. Putin's gamble paid off as an opportunity for redemption for Zelenskyy, even as Putin apparently dug his own political grave, where his only remaining weapon is to use force not only on Ukraine but even on his own people.

Another important story of redemption is what happened to the US Democrats in relation to the big lie that was peddled by Trump and his enablers in the MAGA-Republican Party. Doomed by polls and pundits invoking historical patterns who predicted a red wave that would sweep them out of power in the Senate and the House of Representatives in the midterm elections last month, the Democrats overperformed while the cocky Republicans miserably underperformed. Democrats did not just retain the Senate, but even padded their majority by one. While they lost their majority in the House, it was by a small margin, not enough for the Republicans to boast about. And while Democrats are buoyed by their defiance of historical trends, and the rejection by the electorate of Republican election deniers, and the electoral affirmation of Middle America protecting fundamental rights of suffrage and reproductive choice, the Republicans are now saddled with an inherent structural flaw of being used to saying no that they may not be able to govern. House Republicans are now deep into their own internal warfare as they struggle to select their own speaker and fight over whether Trump still has a place in the future of their party. This, even as the Democrats, with the help of some Republicans, were able to pass a budget that saved the US government from a politically damaging closure.

At the heart of this redemption narrative is President Joseph Biden, someone who was obviously underestimated not only by his critics, but even by some in the progressive wing of his own party. Yet quietly, he was able to cobble enough landmark laws, often with slim bipartisan support from moderate Republicans. He was able to steer Congress, through the skillful assistance of House Speaker Nancy Pelosi and Senate Majority Leader Chuck Schumer, to pass laws on infrastructure, climate change and marriage equality law, among others.

They may have different political orientations, and people may either love or hate them. But 2022 is the year that we saw three leaders — Marcos of the Philippines, Zelenskyy of Ukraine and Biden of the US — emerge in the context of redemption narratives over those who demonized them or underestimated them. This does not even include Lula da Silva of Brazil and Anwar Ibrahim of Malaysia.

Unfinished tasks in 2022

By: Ernie Cecilia

The year 2020 was a year of Upheaval. The coronavirus caught almost everybody by surprise, and almost immobilized the whole world as world leaders decided to lock down their countries.

The year 2021 was a year of Survival. That year saw how the old cliché rang loud and true — that "our greatest victory lies not in never falling, but in rising every time we fall." The world, or some parts of it, survived. Some perished, and a few ended up better amid the chaos, confusion, and challenges.

The year 2022 was supposed to be the year of Revival. Health experts found ways to cope and live with the coronavirus. I know of friends being infected by Covid-19 once every quarter, and still moved on to greater heights. Unfortunately, no one can authoritatively predict the end of the Covid-19 pandemic.

While we saw a semblance of normalcy as we end 2022, much must be done. We wish to end 2022 with the hope that 2023 would be better for all.

Covid-19 pandemic

Recent Worldometer data show that Covid-19 infection has reached 662,255,960 globally, while total deaths are at 6,687,234. The same source reported 4,062,191 cases and 65,262 deaths in the Philippines as of Dec. 27, 2022.

Looking back, we saw how the Omicron variant became the variant of concern, until now. As the world started to find ways to cope with the coronavirus and its early variants, the Omicron variant exposed the inequalities in people's access to vaccines, health care and cure all over the world.

Vaccine producers had a heyday, but the poorest countries received only a tiny fraction of the vaccine supply. Unfortunately, these inequalities could have exacerbated the conditions where the variants arise. It's almost saying that "unless all of us are safe, truly none of us is safe."

In 2020, the Philippine health system was almost overwhelmed. By 2022, infection rate and mortality rate went down, and hospitals are no longer overcrowded, but supply chain became an issue in health care. I have a friend who is a supply chain expert. When he got infected with the Covid-19 virus, he almost died. If he did not survive the ordeal, it would have been ironic that a supply chain expert died due to supply chain disruptions caused by the Covid-19 virus.

The lockdowns decimated livelihoods among the poor workers, especially in countries where there are no adequate social protection mechanisms. In the Philippines,

hundreds of thousands of micro, small and medium enterprises (MSMES) closed their businesses and millions of employees lost their jobs.

Hundreds of millions of children were locked out from schools. Learning loss was conservatively estimated at 70 percent on average. Mental health issues have increased as people (workers and students alike) grapple with isolation, job losses, learning loss, and even deaths of families and friends. The World Health Organization (WHO) and the World Bank reported that the Covid-19 pandemic has "pushed half a billion people into extreme poverty, and Unicef says an additional 100 million children are now living with multi-dimensional poverty, creating the worst crisis for children in 75 years."

As we write, no one knows when the Covid-19 pandemic will end. Europe and the United States announced that they have "entered the endemic stage of the Covid-19 outbreak: the virus is widespread, is significantly less fatal than it was in 2020, and is spurring only limited changes in public behavior."

The so-called endemic conditions will likely continue in 2023, "unless immunity-evading new variants emerge. As immunity wanes, however, the next stage remains highly uncertain."

There you go. The worst happened in 2020 when the coronavirus suddenly struck. Scientists and health experts emerged as heroes as they helped arrest the virus' damage in 2021. While there is a lukewarm pronouncement of the pandemic-causing virus turning endemic, the future continues to be uncertain.

A ray of hope is better than none.

Climate change

The world continues to experience extreme weather conditions. Unless global warming is arrested, the worst is yet to come.

According to experts, "the global average temperature in 2022 is estimated at 1.15 (roughly between 1.02 and 1.28) degrees Centigrade (Celsius) higher than the average in the years 1850-1900. The years 2015 to 2022 are likely to be the eight warmest years on record. La Niña conditions have dominated since late 2020 and are expected to continue until the end of 2022."

In 2021, the COP26 (26th Conference of Parties) on climate change in Glasgow, Scotland, failed to produce the commitments to keep temperatures to 1.5 C, threatening the world with tipping points and unpredictable outcomes.

The COP27 at the Sharm el-Sheikh (Egypt) raised some hope as countries agreed to:
1) reduce global greenhouse gas emissions by 43 percent by year 2030 relative to the

2019 level; and 2) set up a "loss and damage" fund meant to help vulnerable countries cope with climate disasters.

After a thorough discussion among 200 delegates in COP27, the European Commission "showed ambition and flexibility to keep the goal of limiting global warming to 1.5 degrees within reach."

It is nice to hear great motherhood statements, but rhetoric and polemics will not solve the climate change issue. As COPs continue to be held among representatives of countries, some of which are the culprits, extreme weather conditions continue to worsen. Recurring droughts in Africa, flash floods in Asia and Latin America, rising sea levels, changing seasons, and threats of new disease outbreaks, shrinking potable water supply, rising food prices — these and many more threaten the lives and livelihood of people all over the world. Sadly, at the center of this all are children who are forced to abandon school in order to find work because whole families are going hungry. Elsewhere in many parts of the world, there is a rise among "climate refugees" but the rich countries are either unaware or uncaring.

I am not a climate scientist or an expert on climate change. But, if our collective goal is only to maintain the high average temperature, or to reduce our release of greenhouse gases that will be accumulated in our atmosphere, or to mitigate the ill effects of extreme weather conditions in areas that are being hit hard, we are not doing much to avert an eventual climate catastrophe.

We now live on a sick planet. The Covid-19 pandemic and climate change are just two of the major challenges that the world leaders failed to resolve in 2022. Perhaps, much has been done, but collectively we should do more!

UN Secretary General Antonio Guterres said, "Making peace with Nature is the defining task of the 21st century."

Despite, or because of, all these (depending on where you sit), we end 2022 with Hope!

THE PHILIPPINE STAR

[After year of climate disasters, world off-track to curb warming](#)

By: Kelly Macnamara

PARIS, France — Catastrophic floods, crop-wilting droughts and record heatwaves this year have shown that climate change warnings are increasingly becoming reality and this is "just the beginning", experts say, as international efforts to cut planet-heating emissions founder.

The year did see some important progress, with major new legislation particularly in the United States and Europe as well as a deal at UN talks to help vulnerable countries cope with an increasing onslaught of devastating climate impacts.

But the goal of keeping warming within a safer limit of 1.5 degrees Celsius since the pre-industrial era appears in peril, with carbon dioxide emissions from fossil fuels—the main driver of global heating—on track to reach an all-time high in 2022.

United Nations chief Antonio Guterres warned world leaders at a climate summit in Egypt in November that humanity faces a stark choice between working together in the battle against global warming or "collective suicide".

They opted to put off the most important decisions for another time, observers say.

This year UN climate science experts issued their strongest warning yet of the dangers facing people and planet, with a landmark report on climate impacts in February dubbed an "atlas of human suffering".

Since then a series of extreme events has illustrated the accelerating dangers of climate change, at barely 1.2C of warming.

Record heatwaves damaged crops from China to Europe, while drought has brought millions to the point of starvation in the Horn of Africa.

Floods super-charged by climate change engulfed Pakistan, affecting 33 million people and causing some \$30 billion in damage and economic losses.

"The year 2022 will be one of the hottest years on earth, with all the phenomena that go with higher temperatures," said climate scientist Robert Vautard, head of France's Pierre-Simon Laplace Institute.

"Unfortunately, this is just the beginning."

This year is on track to be the fifth or sixth warmest ever recorded despite the impact, since 2020, of La Nina—a periodic and naturally occurring phenomenon in the Pacific that cools the atmosphere.

When this phenomenon reverses, potentially within months, the world will likely climb to a "new level" in warming, said Vautard.

Still polluting

Economy-battering climate extremes, which amplified the energy price surge for many countries as a result of Russia's invasion of Ukraine, provided the backdrop to last month's high-stakes UN climate talks in Egypt.

The negotiations did make history, with wealthy polluters agreeing to a fund to pay for climate damage increasingly unleashed on poorer countries.

Pakistani climate minister Sherry Rehman called the move a "down payment on the longer investment in our joint futures".

But vulnerable nations and campaigners said the conference failed to deliver on the emissions reductions needed to curb climate losses and damages in the future.

"COP27 tackled the consequences of climate change, but not the cause—fossil fuels," said Harjeet Singh of Climate Action Network.

To keep the 1.5C limit in play, planet-heating emissions need to be slashed 45 percent by 2030, and be cut to net zero by mid-century.

At 2021 UN talks in Glasgow, nations were urged to ramp up their emissions reduction commitments.

But only around 30 countries have heeded that call, leaving the world on track to heat up by about 2.5C.

'Emergency room'

Guterres decried the failure of the climate talks to address the drastic emissions cuts needed, adding: "Our planet is still in the emergency room."

A crunch meeting in Montreal in December aimed to address another existential crisis facing the planet—biodiversity loss—as human activity gravely damages nature.

Nations agreed on a roadmap to reverse decades of environmental destruction threatening species and the land and ocean ecosystems that provide Earth's life support.

Guterres hailed the deal as a "peace pact with nature", but some environmentalists warned the plan did not go far enough.

A series of potentially crucial climate milestones will stretch through next year.

These will include spring meetings of the International Monetary Fund and World Bank, following "a formal request to look at the international financial system and to review the role of international financial institutions" from the Egypt climate talks, said Laurence Tubiana, who leads the European Climate Foundation.

The next UN climate meeting in November 2023—held in fossil fuel exporter the United Arab Emirates—will see the publication of a "global stocktake" of progress on the 2015 Paris Agreement goal to limit warming to well below 2C, and preferably 1.5C.

Tubiana, a key architect of the Paris deal, said the talks in Dubai will likely be dominated by discussion of the oil and gas industry and its financial contribution.

The issue is likely to create "great tension", she predicted.

THE VISAYAN DAILY STAR

City Council pushes environmentally friendly holiday celebrations

By: Chrysse Samillano

A resolution urging Bacolodnons to observe an environment-friendly Christmas season was recently approved by the Bacolod Sangguniang Panlungsod.

The resolution authored by Councilor Em Ang, chairman of the SP Committee on History, Culture and Arts, said Christmas is one of the most-widely celebrated holidays in the Philippines and the celebrations traditionally begin as early as the first day of December.

Christmas is also the biggest season for retail and commercial activities and such activities generate unnecessary trash, use precious resources, and create a large carbon footprint, it said.

The resolution said Christmas celebrations create more recyclable waste than at any other time of year.

We can each help cut back on the impact of pollution generated during the season by exchanging eco-friendly Christmas gifts, using green Christmas trees, homemade Christmas decorations, LED Christmas lights to save on energy, re-use or recycle wrapping paper, putting gifts in reusable bags and patronizing products of companies or organizations known to implement green practices, it said.

Aside from keeping parties clean, the citizenry can also benefit by segregating bio-degradable, recyclable and unusable wastes as well as holding activities that would promote environmental causes such as tree-planting, the resolution said.

In the midst of the celebrations, Bacolodnons should be responsible in disposing trash, so as not to wreak havoc to our already degraded environment, it said.

Christmas should be a time to give thanks to our Creator for giving us one earth to live in, and the best way to show this gratitude is by being responsible stewards of His creation, the resolution added.

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