NEWS ROUNDUP
21 JANUARY 2026 | 08:00 am

- Damage to the ocean nearly doubles economic cost of climate change, new study finds
- Building a cleaner, more resilient energy future through GEOP
- Urgent call to protect biodiversity as illegal wildlife trade surges
- Mangroves matter
- Holistic climate action pushed to address climate change
- Balancing the three pillars of sustainability

CCC IN THE NEWS:

- Classrooms as frontlines: Why climate education is now a test of national resilience
- CCC highlights Vice Governors' role in risk governance
- CCC urges water utilities to align ops with national climate goals

ABC

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By: Julia Jacobo

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MANILA BULLETIN

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PHILIPPINE DAILY INQUIRER

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PHILIPPINE INFORMATION AGENCY

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By: Debbie E. Gasingan

Addressing climate change is not a one-size-fits-all approach. Dr. Romeo Gomez Jr., a biologist and a professor at the Benguet State University (BSU), said a variety of strategies must be combined to create a more holistic response.

THE MANILA TIMES

Balancing the three pillars of sustainability
By: By J. Albert Gamboa

When Filipinos hear the word “sustainability,” the first thing that comes to mind is usually environmental protection. Images of tree planting, cleanup drives and renewable energy projects often dominate the conversation. While these are vital, sustainability as a principle must be understood in a much broader context. It is not limited to environmentalism; rather, it encompasses three inseparable pillars: economic, social and environmental.

CCC IN THE NEWS:

DAILY TRIBUNE

Classrooms as frontlines: Why climate education is now a test of national resilience
By: Secretary Robert E.A. Borje

We often speak of education as our first line of defense against climate change. But a nation cannot defend itself with a weapon that is being steadily dismantled.

PHILIPPINE DAILY INQUIRER

CCC highlights Vice Governors' role in risk governance

The Climate Change Commission (CCC) highlighted the critical role of Vice Governors in strengthening risk governance and building climate-resilient communities during the 103rd Year-End National Assembly of the League of Vice Governors of the Philippines (LVGP).

PHILIPPINE NEWS AGENCY

CCC urges water utilities to align ops with national climate goals
By: Marita Moaje

The Climate Change Commission (CCC) has urged water utilities and other essential service providers to align their operations and investments with the Philippines' national climate commitments to strengthen climate resilience.

Information and Knowledge Management Division

ABC

Damage to the ocean nearly doubles economic cost of climate change, new study finds
By: Julia Jacobo

Scientists have factored damage to the ocean into the social cost of carbon for the first time -- finding it nearly doubles the economic impact from climate change.

Ocean damage from climate change -- dubbed the "blue" social cost of carbon -- causes the global cost of carbon dioxide emissions to society to nearly double, according to new findings by researchers at the Scripps Institution of Oceanography at the University of California San Diego.

The researchers calculated an additional $46.2 per ton of carbon dioxide -- amounting to a total of $97.2 per ton of carbon dioxide, a 91% increase, according to the study, published Thursday in Nature Climate Change. Global carbon dioxide emissions were estimated to be 41.6 billion tons in 2024, according to the Global Carbon Budget, implying nearly $2 trillion in ocean-related damages in one year that are currently missing from standard climate cost estimates.

The ocean has never been accounted into the economic harm caused by greenhouse gas emissions before, the researchers said. The ocean was largely overlooked in the standard accounting of the social cost of carbon, despite widespread degradation to coral reef ecosystems, losses from fisheries and damage to coastal infrastructure -- all of which are "well documented" and have impacted millions of people globally.

In addition, the distribution of impacts is "highly unequal" across the globe, according to the paper. Islands and small economies will be disproportionately affected, given the regions' dependence on seafood and nutrition, according to the study.

Scripps researchers felt the need to put a price tag on the harm that climate change causes to the ocean in order to properly inform key decision-makers with a cost-benefit analysis, said environmental economist and assistant professor at the National Autonomous University of Mexico Bernardo Bastien-Olvera, who led the study during a postdoctoral fellowship at Scripps Oceanography.

"The ocean was the big missing piece in these models that calculate the climate impacts on humans," Bastien-Olvera told ABC News.

Human-amplified climate change damages oceans by warming temperatures and altering its chemistry, according to the Scripps researchers. The changes then alter the distribution of species and damages ecosystems such as reefs, mangroves, seagrass beds and kelp forests.

Coastal infrastructure, such as shipping ports, can also be damaged by increased flooding and stronger storms.

The social cost of carbon is an economic metric used in climate policy to estimate the damages that a ton of carbon dioxide causes to humans today, Bastien-Olvera said.

The researchers estimated the social cost of carbon by using integrated assessment models to run different future scenarios of how people and the economy might behave during the next century, also incorporating the potential climate impacts on systems such as coral reefs, mangroves, fisheries and seaports, Bastien-Olvera said.

The accounting was further developed by looking at straightforward market-use values, such as decreased fisheries revenue or diminished trade, as well as non-market values such as health impacts of reduced nutrition availability from impacted fisheries and recreational opportunities at the ocean, according to Scripps.

The research accounted for reduced availability of key nutrients in seafood, including calcium, omega-3 fatty acids, protein and iron -- the loss of which can be linked to increases in disease risk and additional deaths.

The economic cost is caused by losses in the fishing industry, damage to coastal communities and impacts to systems that help fortify those communities, like mangroves and reefs.

The social cost of carbon is considered a more accurate accounting of harm from climate change than other calculations used as the basis of carbon credits or carbon offsets to travelers, according to Scripps.

MANILA BULLETIN

Building a cleaner, more resilient energy future through GEOP

The Climate Reality Project Philippines, in partnership with the Department of Energy (DOE) and the Philippine Economic Zone Authority (PEZA), recently held the second leg of Choosing REnewables, in Tagbilaran City, Bohol. The campaign promotes the Green Energy Option Program (GEOP) and other voluntary renewable energy mechanisms.

Participants included representatives from local power distribution utilities, government agencies and the business sector, many of whom expressed strong interest in renewable energy (RE) during the series of discussions.

The campaign aimed to showcase the benefits of shifting to clean energy, particularly in the Visayas and Mindanao, regions that frequently experience electricity shortages due to recurring power plant outages and rising demand.

“What we want is to make sure that access to GEOP is available in all provinces and all regions connected to the grid,” said Pocholo Enriquez, energy program lead of Climate Reality Philippines. “There are still bureaucratic hurdles and limited RE supply accommodated under GEOP, but the work that we've done so far has been addressing these problems, and we are excited to see what the coming years will do to GEOP.”

Beyond energy security concerns, the Visayas and Mindanao also face high risks from climate change, including stronger storms and more intense heat waves. The most recent example was Typhoon Tino, which caused more than a hundred fatalities across the two regions during its onslaught.

Given the issues of energy instability and climate vulnerability, the Tagbilaran leg of Choosing REnewables emphasized the importance of investing in renewable energy to address both concerns. Through GEOP and other voluntary RE mechanisms, businesses, particularly those most affected by energy disruptions and climate risks, are provided with more accessible pathways to cleaner and more stable power sources.

“We are not only expanding customer choice, we are also creating a stronger market signal for investments in clean and indigenous energy resources,” said DOE Undersecretary Mylene Capongcol. “As you all know, having imported fuels has a lot of challenges both in price and supply. Shifting to renewables opens opportunities for innovation, greater competition and reduced dependence on imported energy.”

By nature, RE offers a more stable source of power. Unlike traditional energy sources like coal and oil, RE grounded in local resources, such as sunlight, water, and wind, is less vulnerable to global fuel price fluctuations. When integrated into the country’s existing energy sources, RE

helps diversify supply, allowing communities to tap alternative sources during power plant outages.

Investing in RE also contributes to reducing carbon emissions, which are largely produced by fossil fuel-based power generation. As the energy sector remains a major contributor to the country's greenhouse gas emissions, policymakers and civil society groups continue to stress the need for an accelerated transition to cleaner energy sources.

"Our goal is to promote how renewable energy can empower people with a more sustainable way of living on a habitable planet," said Aimee Oliveros, interim branch manager of Climate Reality Philippines.

In regions highly vulnerable to both climate impacts and power shortages, GEOP serves as a practical mechanism to address these twin challenges. By strengthening energy security at the community level, Visayas and Mindanao can also contribute to the global efforts to reduce emissions through increased RE adoption.

"The GEOP market is expanding rapidly, and overall, electricity demand is growing every year. There are more opportunities for substantial development, especially in Visayas and Mindanao, as we shift to cleaner energy," said Michael John Domingo, science research specialist at the DOE's Renewable Energy Management Bureau.

To further examine these developments, Climate Reality Philippines is set to release a study on GEOP's impact and benefits for current end-users. The report, scheduled for release on Jan. 21, 2026, will serve as a follow-up to the organization's earlier analysis on GEOP's role in enabling the RE renaissance in the Philippines.

Urgent call to protect biodiversity as illegal wildlife trade surges

By: Henrylito D. Tacio

When discussing biodiversity and conservation, most people immediately think of Eastern Africa, the Amazon rainforest, or the Galapagos Islands.

Yet, “on a per unit area basis, the Philippines probably harbors more diversity of life than any other country on the planet,” according to the Biodiversity Management Bureau (BMB).

Unfortunately, the Philippines is also recognized as one of the world’s biodiversity hotspots—areas rich in species but under severe threat.

“This is because the Philippines continues to experience an alarming rate of destruction of these important resources brought about by overexploitation, deforestation, land degradation, climate change and pollution, among others,” the BMB said.

The Manila-based Asian Development Bank (ADB) has reported that the estimated value of illegal wildlife trade (IWT) in the Philippines ranges from $10 billion to $23 billion annually.

With such figures, IWT ranks as “the fourth most lucrative illegal business after narcotics, human trafficking and arms,” the BMB noted.

The ADB further reported that several areas in the country, particularly coastal zones, serve as transshipment points for wildlife species, both flora and fauna—raising serious enforcement challenges.

“There are many strategies to address illegal wildlife trade, but a strong legal framework is needed for enforcement,” said Dr. AA Yaptinchay, a marine conservation expert who has worked extensively with the Department of Environment and Natural Resources (DENR) and the World Wide Fund for Nature – Philippines.

“The Wildlife Act and the Fisheries Code already provide this framework, but it is in implementation that we need to immensely improve on,” he added.

The Wildlife Act, or Republic Act No. 9147, aims to conserve and protect wildlife species and their habitats, while regulating the collection and trade of these threatened and protected species.

Meanwhile, the Philippine Fisheries Code (Republic Act No. 8550 as amended by Republic Act No. 10654) governs the development, management and conservation of fisheries and aquatic resources and seeks to prevent illegal, unreported and unregulated fishing.

When asked why these laws are not properly implemented, Dr. Yaptinchay pointed to several challenges.

“There are many technical aspects to implementation, including familiarity with wildlife laws and penalties, expertise in species identification that sometimes require forensic technology and law enforcement skills such as surveillance, apprehension and prosecution,” he explained.

“Most of these can be addressed by capacitating law enforcers through training and providing them with the proper guidance, equipment and knowledge products to be able to effectively enforce the law,” he added.

Beyond enforcement, Dr. Yaptinchay stressed the importance of voluntary compliance.

“A necessity in implementation is to espouse voluntary compliance to wildlife protection and the regulation of their trade. In a perfect world, this is achievable if every citizen is aware of these laws, knowledgeable about the status of wildlife, and an understanding why these regulations are important.”

He emphasized the role of awareness campaigns and Information, Education and Communication (IEC) initiatives targeting stakeholders along the trade chain and communities involved in wildlife use.

At the national level, he said, the government must also uphold international commitments such as the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), to which the Philippines is a signatory. CITES aims to ensure that international trade in wild animals and plants does not threaten the survival of the species.

Species that are commonly traded across borders, including shark fins and marine turtle eggs, fall under the scope of this convention.

Many species, particularly those found in tropical rainforests, are now facing extinction. Among the country’s endangered species are the Philippine eagle, tamaraw and waling-waling.

Focusing on marine life, Dr. Yaptinchay noted that the list of protected marine wildlife has expanded over the years. Marine turtles, dugong, dolphins and whales have long been recognized as protected species, which has encouraged a degree of voluntary compliance.

However, he said the same progress has not been achieved for sharks and rays.

“About 66 species of sharks, rays and chimaeras are protected in the Philippines, particularly those listed in the CITES appendices. But since many are considered fishery resources and are difficult to identify, enforcement has been challenging,” he said.

He noted that dried shark fins, for example, are exported to China, and monitoring shipments becomes difficult when protected species are not easily identifiable.

Dr. Yaptinchay added that around 50 shark and ray species classified as threatened by the International Union for Conservation of Nature (IUCN) are not protected under Philippine law. “This will require revision of current policies and laws for their protection,” he said.

Illegal wildlife trade is often associated with large-scale smuggling, but Dr. Yaptinchay cautioned that small-scale and community-level trade can also fall under the definition.

He cited the traditional dish kinunot which uses stingray—a non-protected species—but may sometimes involve protected shark species, such as the thresher shark (protected) has proven difficult to control because of the traditional and cultural significance of the dish as well as the difficulty in identifying the species if only meat parts are encountered in the trade, he explained.
“Moreover, when wildlife is accidentally captured, there are no clear regulations on handling and disposal or release of dead or live animals,” he said. “As a result, they are just usually consumed and utilized instead of being discarded.”

Addressing illegal wildlife trade, he added, also requires tackling its root causes.

“Poverty and limited access to agricultural and aquaculture-based food sources need to be addressed,” he said. “Reliance on wildlife as a food source needs to be reduced.”

Ultimately, he stressed, protecting biodiversity is a shared responsibility.

“Participation from national government and local governments, the private sector, communities, conservation groups and private citizens is essential to ensure that our threatened biodiversity is protected from illegal wildlife trade,” he said.

Illegal wildlife trade is just one of the many causes of biodiversity loss in the country. Other major causes include habitat loss and fragmentation, invasive species, climate change and unsustainable extraction.

Dr. Yaptinchay founded the Marine Wildlife Watch of the Philippines (MWWP), a non-government conservation organization in 2009. His work has focused on large marine vertebrates, including marine turtles, dugong, cetaceans, and sharks and rays.

He laments that there is very little research being conducted on shark species in the country. “The fact that there are probably more than 200 chondrichthyan species in Philippine waters, and that they are mostly without protection, makes it imperative that a program for the conservation of this taxonomic group be developed,” he said.

When asked why biodiversity matters, Dr. Yaptinchay underscored its fundamental role in sustaining life.

“The planet functions through the delicate balance of ecosystems. These systems provide essential services such as air, food, water, raw materials and climate regulation. Without biodiversity, ecosystems will collapse, and these life-support systems will cease to function.”

PHILIPPINE DAILY INQUIRER

Mangroves matter

By: Ernesto M. Ordoñez

With the need for protection against climate change and more livelihoods to alleviate our poverty, mangroves significantly matter.

They should now get much more support from both the government and the private sector.

Last Jan. 15, a Department of Environment and Natural Resources (DENR) undersecretary told us that its budget for mangrove establishment had been reduced to zero.

Is this appropriate? Let us identify now the three main benefits of mangroves and then take the appropriate action.

The first main benefit is coastal protection and resilience. Mangroves absorb storm surges. They protect coastal communities by reducing damage from hurricanes, typhoons and tsunamis. They are also highly effective “blue carbon” sinks.

The second benefit is water quality and erosion health. They filter pollutants and excess nutrients from storm water runoffs, protecting seagrass beds and coral reefs. They provide breeding, feeding and nursery grounds for fish, shellfish and other marine life.

The third benefit is the economic and social dimension. Added livelihood and income is gained through fishing and tourism. Resources are provided like firewood, charcoal and medicinal plants.

An infographic showing the extent of mangove-covered areas in the Philippines
Infographic from the Philippine Statistics Authority. Data as of December 2025.
MANILA, Philippines — With the need for protection against climate change and more livelihoods to alleviate our poverty, mangroves significantly matter.

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“According to a study, the Philippines experienced the region’s second-worst mangrove decline. The country’s mangrove forests have drastically reduced from 500,000 hectares in 1918 to just 100,000 hectares in 1995.”

Worse, mangroves face threats, such as irresponsible coastal construction and reclamation, poor land-use planning and illegal logging.

Thankfully, our government has created programs for mangrove conservation and development.

The Mangrove and Beach Forest Development Project under DENR was allocated P1 billion during the administration of former President Benigno Aquino III.

It integrates the sustainable management of coastal resources, including mangroves.

The Integrated Coastal Management program was implemented by the DENR and the local government units. It unifies the sustainable management of coastal resources, including mangroves.

The National Mangrove Conservation and Rehabilitation Program focuses on the conservation and rehabilitation of mangrove areas.

This includes nursery establishment and mangrove forest planting and maintenance.

The Philippine Plan of Action for Sustainable Fisheries protects and rehabilitates mangrove systems. It aims to ensure the sustainability of coastal resources—vital for food, security and the economy.

Private sector
The private sector is to be commended for its contributions in this area.

Metro Pacific Investments Corp. has a Mangrove Propagation and Information Center. It supports education, community engagement, ecotourism and mangrove propagation efforts.

Globe Telecom partnered with the Zoological Society of London Philippines on a five-year initiative on sustainable management of mangrove areas. This includes abandoned fishpond reversion and community engagement.

Aboitiz Power Corp., together with DENR, local government units and fisherfolk associations, launched an island mangrove conservation project in Bataan. This five-year project will build on past mangrove restoration work totaling 30 hectares.

Manulife Philippines partnered with Haribon Foundation to support a ridge-to-reef restoration program. This will combine mangrove rehabilitation with terrestrial forest work to strengthen overall ecosystem health.

Then the Jollibee Group is running a mangrove reforestation program where employees plant propagules with the government and local partners. They emphasize community engagement and sustainable fisheries awareness.

Next steps

Given the momentum shown above by both the government and private sector, but with the zero DENR budget for mangrove plantation establishment this year, what steps should now be taken?

Since the identification of all mangroves was finally completed last year, there can now be a much-needed national mangrove roadmap formulated by a joint government-private sector team.

The currently involved private sector advocates can rally new partners to help fill the gap left by the government.

Why should we do all of this, given our difficult circumstances? Because mangroves matter.

PHILIPPINE INFORMATION AGENCY

Holistic climate action pushed to address climate change

By: Debbie E. Gasingan

Addressing climate change is not a one-size-fits-all approach. Dr. Romeo Gomez Jr., a biologist and a professor at the Benguet State University (BSU), said a variety of strategies must be combined to create a more holistic response.

“There is no one single solution. Let’s have an ecology of solutions. Let us also integrate our approach with the local government units. It’s important to harmonize our actions,” Gomez said during a forum at the BSU on Jan. 15, 2026.

He said that there is a need for mitigation, adaptation, and resilience.

“If we look at the root cause and put actions to address that, that is mitigation but when we now have adaptation, we now move forward and consider the consequence or the impact because of these changes in the ecological dynamics,” he said.

Gomez said that among the key strategies is the command and control which are basically the rules and regulatory systems that attempt to impose compliance on people like solid waste management.

“And we know, if we manage our solid waste properly, it will result to beneficial impacts and also strategies to address climate change,” he said.

He added that there is also the so-called market-based instrument(MBI). He cited the polluter-pay principle, an MBI that when operationalized, will disincentivize those who cause pollution.

“It means when you pollute, you have to pay for your pollution,” he said.

Gomez said that community-based advocacy can aid in the overall environmental management.

He said that one of the vital aspects of climate action is the active participation of all sectors of the society in planning and management efforts and in the decision-making process.

Gomez also emphasized the importance of socio-ecological production landscapes or going back to natural ecology where there is respect for biodiversity.

He mentioned the Satoyama-Satoumi which are Japanese concepts for sustainable, human-managed landscapes where communities live in harmony with nature.

“They put premium importance to biodiversity particularly in the management of highland areas and in coastal areas. The lesson, biodiversity is a very important component,” Gomez said.

He added the importance of sustainable agri-ecosystems and practicing biodiversity-friendly agriculture in ecologically sensitive areas.

The challenge is immense but so is the opportunity. He said that through innovative solutions, effective policies, and a shared commitment to sustainability, the people can still forge a path forward in the face of an uncertain future.

THE MANILA TIMES

Balancing the three pillars of sustainability

By: By J. Albert Gamboa

When Filipinos hear the word “sustainability,” the first thing that comes to mind is usually environmental protection. Images of tree planting, cleanup drives and renewable energy projects often dominate the conversation. While these are vital, sustainability as a principle must be understood in a much broader context. It is not limited to environmentalism; rather, it encompasses three inseparable pillars: economic, social and environmental.

The late 20th century introduced the concept of the “triple bottom line,” which evaluates performance not only in terms of profit but also of people and the planet. Many companies in the Philippines have adopted this framework in their annual reports, highlighting corporate social responsibility alongside financial results. Yet the practice often remains cosmetic unless applied with depth and sincerity.

Consider economic sustainability. Industries that rely solely on short-term gains tend to exploit natural and human resources at unsustainable levels. This results in boom-and-bust cycles that undermine national progress. On the other hand, businesses that practice long-term planning, efficient resource management and fair labor relations tend to create more resilient enterprises.

They also generate multiplier effects for their communities and the broader economy.

Social sustainability is equally crucial. The floods that recently paralyzed Metro Manila revealed how poor urban planning, inadequate housing and inequitable access to basic services exacerbate environmental risks. A sustainable approach would address not just drainage systems and flood control, but also the welfare of informal settlers, public health and disaster preparedness. Environmental solutions cannot stand alone if social issues remain neglected.

In today’s interconnected world, a purely environmental definition of sustainability is outdated. The pandemic illustrated how health systems, supply chains and financial markets are deeply intertwined with environmental shocks. Climate change, social inequality and economic instability cannot be addressed in isolation. They require systems thinking, cross-sector collaboration and visionary leadership.

Beyond being a buzzword

As the Philippines navigates its development challenges, sustainability must go beyond being a buzzword for environmental compliance. It should be a guiding principle for nation-building. This means balancing ecological preservation with inclusive growth and institutional resilience. Only by embracing all three dimensions can we hope to secure a future that is not just livable, but prosperous and just.

The ongoing flood control scandal is a stark reminder of how sustainability collapses when governance and accountability are absent. Over the years, trillions of pesos have been funneled into projects meant to shield communities from the destructive force of floods. Instead, corruption and negligence have rendered much of these investments ineffective. Substandard work, ghost projects and questionable procurements have turned what should have been a foundation for resilience into a monument of waste.

From the lens of sustainability, this debacle represents a systemic failure. Environmentally, flood mitigation projects are designed to protect ecosystems and urban areas from extreme weather events that are intensifying due to climate change. Their failure has only increased risks to lives and property. Socially, the scandal deepens inequities, since it is often the poorest Filipinos — those living in informal settlements near waterways — who suffer the most during calamities. Economically, the misuse of trillions in public funds diverts resources from essential infrastructure, education and health care, thereby weakening national development.

Sustainability cannot thrive in an environment where corruption prevails. What is needed is not just more spending but transparent processes, strong institutions and a culture of accountability. Without these, sustainability will remain an empty promise drowned by every habagat.

Going by the triple bottom line, sustainable development is not about slogans or survival. It should focus on building systems that prevent crises before they strike. Environmental stewardship, social equity and economic prudence must converge under accountable governance — otherwise, resilience alone becomes empty and nation-building remains forever unfinished.

CCC IN THE NEWS:

DAILY TRIBUNE

Classrooms as frontlines: Why climate education is now a test of national resilience
By: Secretary Robert E.A. Borje

We often speak of education as our first line of defense against climate change. But a nation cannot defend itself with a weapon that is being steadily dismantled.

In the Philippines, climate change is no longer only damaging coastlines and crops. It is disrupting classrooms, shortening school years, and quietly eroding the country's future capacity to adapt.School supplies

Class suspensions triggered by extreme heat, schools damaged by floods, and prolonged closures after typhoons are no longer rare interruptions. They are becoming structural features of our education system. But what is being lost is not only infrastructure, but learning time — and learning time is human capital in formation.

This is why climate change must now be understood not only as an ecological crisis, but as a human capital crisis. A country that repeatedly interrupts the education of its young is not merely absorbing disaster damage; it is weakening its future workforce, its future leadership, and its future capacity to govern.

Filipinos already sense this danger. A recent assessment by the Philippine Institute for Development Studies found that nine out of ten Filipinos consider climate change a serious problem. Few public issues command that national level of near consensus.

But near consensus is not the same as capability. Concern without comprehension does not produce resilience. Rather, it produces uncertainty. A nation that fears climate change but does not fully understand its mechanics, its risks, and its policy choices remains exposed to misinformation, short-term thinking, and reactive politics.

Many students already know what climate change feels like. They have lived through suffocating heatwaves, violent typhoons, and flooded streets. What too many still lack is a clear understanding of why these events are intensifying, how risks accumulate across systems, and how individual behavior, community planning, and government policy interact to either reduce or magnify harm.Pyromusical Competition tickets

This gap matters because climate change is not only a scientific problem — it is a governance problem. The quality of a country's decisions under risk depends on the quality of its public understanding. Climate literacy, therefore, is no longer a niche educational concern. It is a condition for effective democratic governance.

This is where education becomes strategic.

Climate education is not merely about adding content to a curriculum. It is about strengthening the transmission chain of resilience across society. What begins in the classroom should and must go beyond the classroom. A climate-literate student becomes part of a more prepared household. Prepared households form safer communities. Safer communities enable more capable local governments. And capable local governments are the foundation of a resilient nation.

The argument holds: This is how national resilience is built — not only from the top down through policies and budgets, but from the ground up through knowledge and judgment embedded in daily life.

In this sense, education is not only an object or instrument of climate policy. It is democratic infrastructure. It shapes whether citizens respond to risk with foresight or with improvisation, with cooperation or with blame. A climate-literate public is harder to mislead, harder to panic, and harder to govern poorly.

This is why climate change is not merely testing our weather systems — it is testing our governance systems. A society that understands risk can plan ahead. A society that does not understand risk remains trapped in cycles of reaction and regret.

This national logic is already reflected in the country's climate frameworks.

The Philippines' very first National Adaptation Plan, developed under the administration of President Ferdinand R. Marcos Jr., recognizes that resilience is built not only through physical infrastructure, but through people and institutions — through the capacity to understand risk, plan ahead, and reduce vulnerability before disasters strike. Similarly, the Nationally Determined Contribution Implementation Plan affirms that climate action depends on informed participation across sectors and levels of government, not merely on national targets or technical measures.

These frameworks treat climate action as a whole-of-society effort. That is precisely why education matters. Policies succeed only when communities can understand them, local governments can apply them, and citizens can sustain them.

Through the Climate Change Commission, the government has been working to translate these national strategies into action on the ground — by strengthening Local Climate Change Action Plans, localizing climate risk information, and supporting LGUs in integrating science into development planning and public investment. But even the strongest national frameworks depend on a population that can absorb and apply them.

Climate education is therefore not an accessory to adaptation policy. It is part of the operating system that allows adaptation policy to function.

When students understand how hazards evolve, how ecosystems protect communities, and how public choices shape risk, they become adults who can engage meaningfully with planning, budgeting, and accountability. They become citizens who can support long-term reforms rather than demand short-term fixes. In this way, education does more than prepare students for storms and heatwaves. It prepares society for better governance.

As climate impacts intensify, delay carries a cost. Every cohort that passes through our schools without climate literacy is a missed opportunity to strengthen households, communities, and institutions. Every year of inaction compounds future vulnerability.School supplies

As we observe International Education Day, we should move beyond ceremonial recognition. In a warming world, classrooms are no longer just places of instruction. They are frontlines of national resilience.

A country that climate-proofs its schools — physically and intellectually — is not only protecting education. It is protecting its future capacity to govern, to grow, and to endure.

PHILIPPINE DAILY INQUIRER

CCC highlights Vice Governors' role in risk governance

The Climate Change Commission (CCC) highlighted the critical role of Vice Governors in strengthening risk governance and building climate-resilient communities during the 103rd Year-End National Assembly of the League of Vice Governors of the Philippines (LVGP).

Vice Chairperson and Executive Director Robert E.A. Borje emphasized that Vice Governors occupy "the critical intersection where plans meet priorities, where evidence meets action, and where strategy becomes alignment across the entire province."

He said this strategic position enables Vice Governors to lead efforts that protect lives, sustain livelihoods, and secure the future of their provinces.

Borje linked this leadership role to national policy frameworks, particularly the National Adaptation Plan (NAP), which guides communities in identifying locally appropriate adaptation practices and projects based on specific vulnerabilities.

The NAP, developed under the leadership of President Ferdinand R. Marcos Jr., reflects the

administration's vision and plan of action for a climate-smart and climate-resilient Philippines.

"These insights allow Vice Governors to understand—not vaguely, but precisely—what hazards your provinces face and how those hazards intersect with population, livelihoods, and infrastructure," he said.

He stressed that Local Climate Change Action Plans (LCCAPs) must be anchored in the NAP to ensure provincial strategies are science-driven, evidence-based, and aligned with national priorities. Such alignment strengthens risk governance by making adaptation actions responsive, measurable, and sustainable.

Borje also highlighted the People's Survival Fund (PSF) as a key financing mechanism for local adaptation initiatives. From 2023 to 2025, the PSF Board significantly accelerated the approval of projects and Project Development Grants, resulting in a sharp increase in fund utilization from just over 30 percent to near full commitment.

By May 2024, the initial Php 1 billion allocation had been fully committed and exceeded by Php 321.6 million. To sustain this expanded pipeline, an additional Php 1 billion was appropriated under the 2025 GAA, bringing the portfolio to 15 projects and 9 PDGs with a total value of approximately Php 1.4 billion.

"These developments make the PSF a more accessible and reliable financing option, helping local governments secure funds to strengthen climate resilience in their communities," he said.

However, Borje acknowledged that there continues to be room for growth and development in the PSF application process. He underscored the CCC's commitment to sustain joint efforts with the PSF Board Chair and Secretariat Department of Finance and PSF Board members to explore ways of further improving and strengthening application and implementation support mechanisms for LGUs.

While urging Vice Governors to continue championing resilience and good governance, Borje also noted the importance of a whole of government and whole of society approaches to help ensure that government processes and systems remain responsive to the needs of local communities and lead to more robust sustainable development and climate resilience.

The LVGP, a national organization composed of Vice Governors from across the country, provides a platform for members to share experiences, discuss common challenges, coordinate policies, and exchange best practices to strengthen governance at the provincial level.

For more information on the CCC's climate mainstreaming activities, visit www.climate.gov.phand www.facebook.com/CCCPhl.

PHILIPPINE NEWS AGENCY

CCC urges water utilities to align ops with national climate goals

By: Marita Moaje

The Climate Change Commission (CCC) has urged water utilities and other essential service providers to align their operations and investments with the Philippines' national climate commitments to strengthen climate resilience.

In a news release Monday, CCC Vice Chairperson and Executive Director Robert E.A. Borje said climate risks in the Philippines are systemic and require coordinated action among the government, the private sector and the communities.

"Climate action does not succeed on policy alone. Nor does it succeed on infrastructure alone. It succeeds when institutions, communities, and individual Filipinos move together," he said during the 1st Manila Water Sustainability Leadership Talk held in Quezon City on Friday.

"The role of water utilities is fundamental. We must ensure water security despite a changing climate by climate-proofing infrastructure, diversifying water sources, and integrating nature-based solutions for watershed management," he added.

Borje highlighted the Nationally Determined Contributions (NDC) and the National Adaptation Plan (NAP) as the country's core key frameworks guiding climate action and advancing sustainable development.

He underscored that water companies can support mitigation through energy efficiency and low-carbon operations, improved wastewater treatment, and adaptation through resilient, risk-informed infrastructure.

Manila Water President and CEO Roberto Locsin affirmed this, saying that sustainability in water services extends beyond basic delivery, with daily operations serving as opportunities for direct climate action.

The Sustainability Leadership Talk serves as Manila Water's platform for engaging leaders from government, academe, and industry on climate action and resilience.

The CCC, meanwhile, reaffirmed its commitment, under the Paris Agreement, to actively engaging with the private sector to advance climate-resilient development and protect essential services amid climate change.

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