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BIOME 10

BIODIVERSITY AT THE CROSSROADS

SCIENCE,
STEWARDSHIP, AND
SUSTAINABILITY FOR
PHILIPPINE ISLAND
ECOSYSTEMS

10th Philippine
National
Biodiversity
Meeting

Manrico T. Masagca Memorial Lectures with Scientific Paper Presentations

SEPTEMBER 5, 2026
FAITH VILLAGE RESORT, BORACAY ISLAND
MALAY, AKLAN, PHILIPPINES



BIOME 10 MAGAZINE

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OUR HOST DESTINATION

“BORACAY BEYOND THE BEACH” AKLAN: A SETTING FOR SCIENCE, STEWARDSHIP, AND DISCOVERY

From the gateway of Kalibo to the shores of Boracay, Aklan provides a meaningful setting for BIOME 10’s conversation about Philippine island ecosystems.

A scientific meeting gains meaning from the place in which its questions are explored. For the 10th Philippine National Biodiversity Meeting, Aklan connects the programme’s themes with the landscapes, livelihoods, and communities at the heart of island sustainability.

The BIOME 10 programme identifies Faith Village Resort, Boracay Island, Malay, Aklan, as the venue for the Manrico T. Masagca Memorial Lectures with Scientific Paper Presentations on September 5, 2026. Its focus on biodiversity, stewardship, and sustainability invites readers to consider the host destination through an environmental lens.

Kalibo: A gateway to the province
Kalibo International Airport provides one of the air gateways serving Aklan and travellers bound for Boracay. For visitors arriving through Kalibo, the onward journey connects the provincial mainland with the island destination.

In this magazine, the airport image introduces that wider geographic story: the journey into a province whose environments and communities feature throughout the scientific programme.
Aklan within the research agenda

The meeting’s connection to Aklan extends beyond its venue. Programme contributions examine land-use dynamics in the Banga microcatchment, groundwater in the Bay-Ang, Batan basin, the thermal properties of Boracay’s beach sands, and beach forests along Long Beach. The consortium agenda also includes research on freshwater crabs from the Nabaoy River.

These subjects encourage a closer reading of the host province. Rivers, groundwater, coastal vegetation, and shorelines become places of inquiry, each raising questions about how environmental knowledge can support responsible decisions.

A place to connect knowledge and responsibility
Boracay gives the meeting a setting in which tourism, community interests, and environmental stewardship can be considered together. The programme invites researchers to connect their individual studies with the broader challenge of sustaining Philippine island ecosystems.

For BIOME 10, Aklan offers both a meeting place and a source of questions worth carrying forward.

Kalibo International Airport, Aklan—a gateway to the province and onward travel to Boracay, the location identified in the BIOME 10 programme.



CULTURE & COMMUNITY

BORACAY ATI: RECOGNIZING THE PEOPLE OF THE ISLAND

THE BORACAY ATI ARE FEATURED IN THE BIOME 10 OPENING PROGRAMME THROUGH “LUPANG HINIRANG” AND A SONG DEDICATED TO MANRICO T. MASAGCA.

The BIOME 10 opening programme places the Boracay Ati within a gathering devoted to science, stewardship, and the future of Philippine island ecosystems. Understanding Boracay means recognizing the people whose history is connected to the island. The Ati are an Indigenous people of the Visayas, with communities in Boracay, Panay, and Negros. Their place in Boracay’s story is an essential part of understanding the island beyond its identity as a tourism destination. [Source: Ati people](#)

The BIOME 10 programme recognizes the Boracay Ati through their scheduled rendition of the Philippine national anthem, “Lupang Hinirang,” during the opening ceremonies. It also lists a song dedicated to Manrico T. Masagca as part of the memorial tribute. These contributions connect the meeting’s scientific purpose with culture, community, and remembrance. Within a programme focused on biodiversity and sustainability, they create an opportunity to reflect on whose voices are heard when an island’s future is discussed.



A place for community voices
The theme of BIOME 10—“Biodiversity at the Crossroads: Science, Stewardship, and Sustainability for Philippine Island Ecosystems”—invites a conversation that includes the people who call these ecosystems home. Meaningful inclusion should continue beyond the opening ceremony. It means making space for community members to express their own priorities, describe their experiences, and participate in conversations that concern their surroundings and future.

For researchers, educators, and conservation advocates, this begins with listening. Respectful exchange allows scientific inquiry and community perspectives to inform one another without assuming that either speaks for everyone.

Culture within the conservation conversation

The Boracay Ati’s role in the programme offers a reminder that an island is also a place of identity, relationships, and belonging. As BIOME 10 explores rivers, mangroves, shorelines, and community livelihoods, its cultural dimension encourages a broader understanding of stewardship: caring for the environment while recognizing the dignity and voices of its people. Honouring that connection gives the meeting’s commitment to sustainability a more human meaning.



KNOWLEDGE THAT SERVES OUR ISLANDS

An island’s future depends on the relationships that sustain it: between land and water, people and livelihoods, scientific knowledge and everyday decisions.

The 10th Philippine National Biodiversity Meeting, or BIOME 10, places these relationships at the centre of its programme. Under the theme “Biodiversity at the Crossroads: Science, Stewardship, and Sustainability for Philippine Island Ecosystems,” it presents a shared challenge: how can research help people care more effectively for the places they call home?

The programme moves across disciplines and landscapes. It connects freshwater biodiversity with mangrove restoration, coastal studies with community livelihoods, and scientific communication with public policy. Its breadth invites researchers to consider how individual studies contribute to a larger understanding of island life.

BIOME 10 also carries a deeply personal purpose through the Manrico T. Masagca Memorial Lectures. Remembering PACIFICTECH’s founder and first chief executive gives the scientific programme a human foundation: learning, perseverance, institutional responsibility, and service. For students and emerging researchers, this meeting offers an invitation to participate. A meaningful contribution may begin with a question about a local river, a coastal plant, a familiar livelihood, or a change observed in the community. The responsibility that follows is to investigate carefully, communicate honestly, and make knowledge useful. That is the spirit this issue seeks to preserve.



PHOTOGRAPHY BY PACIFICTECH TEAM

SCIENCE AND STEWARDSHIP MEET IN BORACAY

BIOME 10 connects research on Philippine island ecosystems with the people and institutions working for their future.

The programme for BIOME 10 identifies September 5, 2026, at Faith Village Resort on Boracay Island as a day devoted to scientific exchange, remembrance, and collaboration.

Organized by PACIFICTECH RTIC CESSE, Inc., the meeting centres on the Manrico T. Masagca Memorial Lectures with Scientific Paper Presentations. Five lecture sessions bring together topics ranging from plant research and analytical science to mangrove conservation, coastal environments, and biodiversity advocacy.

This range reflects an important editorial thread running through the meeting: island conservation requires several kinds of knowledge.

A study of river organisms asks what lives in freshwater habitats and how those habitats differ.

Research on mangrove propagation examines questions that may inform nursery practice. Work on groundwater, beach sands, and coastal vegetation directs attention to features of island environments that deserve closer investigation.

Other contributions extend the conversation to cultural heritage, food innovation, and community livelihoods. These subjects place people within the conservation story and encourage discussion about how environmental responsibilities intersect with local development. The programme’s opening also recognizes culture and remembrance. It lists the Philippine national anthem by the Boracay Ati, an invocation, welcome messages, and a tribute to Manrico T. Masagca.

Alongside the formal sessions, the schedule provides time for collegial conversation and institutional collaboration. These spaces offer opportunities to explore questions that cross departmental and geographic boundaries. The resulting programme presents BIOME 10 as a meeting of connected concerns: how to understand island ecosystems, how to communicate that understanding, and how to carry it into service.



PHOTOGRAPHY BY PACIFICTECH-TEAM

IN MEMORIAM

MANRICO TEVAR MASAGCA: A LIFE BUILT THROUGH LEARNING AND SERVICE

05

August 14, 1954 – September 29, 2024

The biography prepared for this issue traces Manrico Tevar Masagca’s journey from Virac, Catanduanes, through education, banking, cooperative leadership, teaching, and the establishment of PACIFICTECH.

Its central story is one of perseverance.

According to the family account included in the reference material, Manrico experienced the loss of his parents at an early age. Growing up with six siblings, he learned responsibility and self-reliance while confronting the practical difficulties of continuing his education.

He graduated as valedictorian from Virac Pilot Elementary School and later as salutatorian from Catanduanes Colleges. His college years required him to combine study with work, strengthening a respect for education grounded in personal sacrifice.



PHOTOGRAPHY BY PACIFICTECH TEAM

In 1975, he earned a Bachelor of Science in Commerce, major in Accounting, from the University of Santo Tomas through the State Scholarship Program. He later completed a Master in Management at the Technological University of the Philippines and pursued further studies in cooperative management at the Polytechnic University of the Philippines.

His professional career developed through banking, accounting, administration, and organizational leadership. The biography records responsibilities within the Philippine National Bank and several employee, savings, loan, and cooperative organizations.

These roles required attention to systems and records, but their purpose reached beyond administration. Cooperatives and community organizations depend on trust, participation, and people willing to accept responsibility for shared resources.

Manrico also served in teaching and administrative positions, connecting professional experience with the development of students and other learners.

As PACIFICTECH’s founder and first chief executive, he helped build an institution intended to connect research, education, innovation, and community engagement. His story demonstrates how experience gained in one field can support service in another.

The Memorial Lectures place that legacy within a continuing programme of inquiry. They offer a way to remember him through the work of researchers, educators, and young people who carry learning into their communities. His life invites a lasting question: what can we build with the knowledge and opportunities entrusted to us?

OUR ROOTS

FROM A BAHAY KUBO TO A SHARED MISSION

The organizational history supplied for this issue traces PACIFICTECH's beginnings to a modest site in Constantino, Virac.

A small bahay kubo can hold the beginnings of a much larger undertaking.

The history included in the magazine reference identifies a property belonging to Manrico T. Masagca in Constantino, Virac, Catanduanes, as an early working site in 2009.

It provided a place to discuss ideas, identify community needs, and consider how education and organized action could respond.

The setting gives PACIFICTECH's institutional story a clear sense of place. Its beginnings were connected to a provincial community and to the conviction that local people could contribute to research, learning, and public service.

That conviction continues through the organization's emphasis on research, training, innovation, collaboration, and community engagement.

BIOME 10 belongs within this broader story. Its programme links work from Catanduanes and Aklan with researchers and institutions from other locations, creating opportunities for local questions to enter wider scientific conversations.

The bahay kubo remains a useful image of these beginnings: a modest space where people could gather, think, and start work together.

The task for an institution is to preserve that openness as its responsibilities grow.

PHOTOGRAPHY BY
PACIFICTECH TEAM



RESEARCH FEATURE

MANGROVES, RIVERS, AND THE QUESTIONS THAT GUIDE CONSERVATION

07



PHOTOGRAPHY BY
PACIFICTECH TEAM

Several BIOME 10 papers direct attention to the practical work of understanding island habitats.

Research often begins with a question that sounds simple.

Can mangrove propagules germinate in freshwater?

The BIOME 10 programme includes a study examining the germination performance of *Rhizophora apiculata* and *Bruguiera gymnorrhiza* under zero-salinity conditions, with attention to possible implications for nursery propagation.

The title identifies a specific research question. Its practical value will depend on the study’s methods, results, and the conditions under which those results apply.

A separate presentation addresses science-based mangrove conservation and restoration in Catanduanes. Listed contributors include Jimmy T. Masagca, Sonia R. Sapico, Estrella T. Tribiana, and Jhomann U. Socito.

Together, these programme entries invite discussion about how research can inform restoration decisions.

Freshwater ecosystems receive attention through a paper on gastropod assemblages in three major river systems in Catanduanes. The contribution by Dave T. Secorata and Jimmy T. Masagca focuses on species inventories, habitat associations, and conservation significance.

The consortium agenda extends these interests through proposed discussion of freshwater crab diets in the Nabaoy River and comparative work on Jagora snails from Catanduanes and Aklan.

These topics share an approach: look closely at organisms, examine their environments, and document what can be supported by evidence.

For a general audience, their significance lies partly in making overlooked habitats visible. A river becomes more than a line on a map when its organisms, conditions, and ecological relationships are investigated.

PLACE AND PERSPECTIVE

BORACAY BEYOND THE BEACH

08

The host island also appears as a subject of scientific inquiry.

Boracay is both the setting of BIOME 10 and a focus of its programme.

A lecture by Dr. Resurreccion B. Sadaba, “Boracay’s Green Shore: Assessing Beach Forests along Long Beach,” directs attention to coastal vegetation.

Another paper examines the “Cool Sand Phenomenon of Boracay Island” through a comparative study of the thermal properties of Philippine beach sands.

These subjects encourage readers to look beyond a familiar destination image and consider the island as an environment that can be observed, measured, and studied.

The programme also includes groundwater studies in the Bay-Ang, Batan, Aklan basin and Raymond J. Sugang’s lecture, “From Water to Coastlines: Integrating Environmental Science and Innovation for Our Common Home.”

Together, these contributions connect different parts of the landscape through research questions about water, shorelines, and environmental conditions.

The source magazine’s discussion of sustainable Boracay emphasizes biodiversity, waste management, water quality, coastal protection, and responsible resource use. It also identifies the importance of cooperation among communities, tourism stakeholders, educational institutions, environmental organizations, and government.

For a biodiversity meeting, Boracay offers a setting in which scientific questions and development concerns can be considered together.

The invitation is to look carefully at the island and ask what its future requires.

PHOTOGRAPHY BY
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SCIENCE ACROSS DISCIPLINES

MANY METHODS, SHARED QUESTIONS

PHOTOGRAPHY BY
PACIFICTECH TEAM

The BIOME 10 programme makes room for scientific approaches that may not immediately appear connected.

Ronald Jefferson A. Narceda’s listed lecture addresses studies related to plant-based new psychoactive substances in the Philippines. Dr. Carmencita M. Tumaca’s contribution examines physical and chemical properties and land-use dynamics in the Banga microcatchment, with a focus on GIS-based assessment of erosion hotspots.

Dr. Americus Perez is listed for a lecture on dating methods and potential biogeography applications, while Dr. Ryan P. Morco’s topic connects nuclear chemistry with carbon dioxide mitigation.

The blue economy session features Mary Mar N. Payne and Rhessa Grace G. Ortizo, placing biodiversity



SCIENCE ACROSS DISCIPLINES

MANY METHODS, SHARED QUESTIONS

PHOTOGRAPHY BY
PACIFICTECH TEAM



alongside innovation, responsible production and consumption, and conservation.

Other papers investigate biological activity in plant extracts. Their subjects include putat, *Acanthus mangroves*, and makahiya.

These entries describe areas of investigation. The programme alone does not establish their findings or demonstrate suitability for medical, veterinary, or commercial use. The inclusion of Pastor B. Mendez I's work on medieval logic and value pluralism in nature conservation adds a humanities perspective. It opens space to examine how people understand and assign value to the natural world.

Across these subjects, the meeting encourages a broad view of inquiry while preserving the need to assess each contribution on its own evidence.

PEOPLE AND LIVELIHOODS

CONSERVATION IN EVERYDAY LIFE

PHOTOGRAPHY BY
PACIFICTECH TEAM

Food, heritage, and community participation connect environmental questions with daily experience.

Jennifer A. Berces’s programme contribution, “Sweet Heritage, Sustainable Futures,” considers the muscovado or “bukayo” agro-industry in Alinawan, Panganiban, Catanduanes.

The topic places local production and cultural identity within the meeting’s sustainability conversation.

Another paper, “ECO S,” presents a biodegradable spoon concept using *Oryza sativa* and *Zea mays*. Listed contributors Kent Jude F. Quimpo and Jeron V. Zonio bring a product-development question into the scientific programme.

The consortium agenda also describes an ongoing study connecting seafood, regenerative tourism, coastal resilience, and community livelihoods. Breadfruit, oysters, and mangrove crabs feature in its proposed work across the Goni and Haiyan corridors.

These topics create opportunities to ask practical questions. How should a new material be evaluated? What evidence is needed before a livelihood intervention is expanded? How can community members help shape a research project from its beginning?

Jose Marie Eslopör’s presentation on community-based conservation strategies complements these concerns by placing participation directly within the agenda.

For magazine readers, the shared message is that sustainability becomes concrete when it reaches the activities through which people work, produce food, maintain traditions, and support their families.



COMMUNICATION

HELPING RESEARCH ENTER PUBLIC CONVERSATION

12

PHOTOGRAPHY BY
PACIFICTECH TEAM

A scheduled lecture examines the relationship between biodiversity knowledge and policy.

A research paper can document an important problem. Reaching the people who can act on it requires further work.

“Science Communication and Biodiversity Advocacy: Giving the Natural World a Voice in Policy,” listed under Lucio M. Flores III and Dr. Jimmy T. Masagca, addresses this challenge.

The supplied abstract describes a gap between scientific knowledge about biodiversity loss and its translation into policy action. It proposes discussion of practical approaches to communication between science and governance.

For a publication such as this magazine, that theme has immediate relevance.

Responsible reporting should help readers understand the question a study asks, the evidence it presents, and the limits of its conclusions. It should also explain why the subject matters to a community without turning an interesting possibility into an established result.

Clear language can bring research into classrooms, local discussions, institutional planning, and public debate.

The aim is to help people examine evidence and make informed decisions.



PARTNERSHIPS

CONNECTING CATANDUANES AND AKLAN

13

The programme's BU–CatSU–ASU consortium session provides a space for collaboration in instruction, research, extension, and production.

Its listed agenda includes a proposal submitted to CHED concerning the BEACON Goni and Haiyan corridors for coastal resilience. It also identifies work on freshwater crab diets, food innovation and livelihoods, *Lingula unguis* populations, and freshwater Jagora snails.

The submitted proposal should be distinguished from an approved or funded project. Similarly, ongoing studies represent work in progress rather than completed outcomes.

Together, the entries show the range of questions around which institutions may collaborate.

Comparative studies can help researchers examine similarities and differences between locations. Community-oriented work can bring local priorities into project design. Shared teaching and extension activities can help knowledge reach people beyond the original research team.

The opportunity is to build relationships that remain useful after the meeting: relationships supported by clear responsibilities, careful documentation, and continued communication.

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THE NEXT GENERATION

MAKING ROOM FOR YOUNG SCIENTISTS

PHOTOGRAPHY BY
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The recognition segment lists the establishment, beginning in 2026, of the Manrico T. Masagca Young Scientist Paper Award.

The programme describes it as recognition for the best paper presented by a student or researcher aged 30 and below. It does not identify a recipient.

The proposed award connects remembrance with opportunity.



Young researchers need occasions to present their work, respond to questions, and improve their methods. They also benefit from mentors who take their ideas seriously while expecting accuracy and thoughtful interpretation.

The opening message included in the source encourages students to remain curious, learn from communities, and recognize that their questions matter.

An award can acknowledge achievement. A supportive scientific community can help make that achievement possible.

BIOME 10

ISSUE SUMMARY

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BIOME 10 presents a programme connecting biodiversity research, climate-related concerns, environmental stewardship, and community service.

Its five memorial lecture sessions cover subjects across freshwater and coastal ecosystems, analytical science, plant research, restoration, livelihoods, and communication. The consortium session extends the discussion toward shared research and institutional cooperation.

At its centre is the memory of Manrico T. Masagca, whose biography connects perseverance in education with professional responsibility and community institution-building.

The programme invites participants and readers to consider how these values can guide scientific work: ask useful questions, investigate carefully, share knowledge clearly, and remain attentive to the people and places that research is intended to serve.

This is the continuing challenge expressed by the meeting's theme—bringing science, stewardship, and sustainability into a closer working relationship.



ACKNOWLEDGMENTS | THE PEOPLE BEHIND THE PROGRAMME

This issue recognizes the convenors listed in the

BIOME 10 reference:

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The programme recognizes Kenneth Tuplano and Mark Lorenz S. Trinidad for photography, with Krizza Nica B. Parum and Johndale I. Reloj listed for technical support.

Their roles form part of the practical work required to organize, document, and communicate a scientific meeting.



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CARRYING THE WORK FORWARD

Remembering a founder can become a continuing act of service.

Through research, teaching, community engagement, and responsible communication, the values associated with Manrico T. Masagca can find expression in new work.

May this issue encourage readers to remain curious about their surroundings, generous with their knowledge, and willing to participate in caring for Philippine island ecosystems.

For our islands. For our communities. For the generations to come.

PACIFICTECH RTIC CESSE, Inc.

Research • Training • Innovation • Collaboration • Community Engagement



KALIBO INTERNATIONAL AIRPORT



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