

THE BATANES ISLANDS OBSERVATORY

2025 ANNUAL REPORT

BATANES TOURISM AND HOSPITALITY MONITORING CENTER

A member of
UN Tourism International Network of Sustainable Tourism Observatories (UN Tourism - INSTO)

UN Tourism INSTO International Network of Sustainable Tourism Observatories

Breathtaking BATANES



MESSAGE FROM THE BATANES PROVINCIAL GOVERNMENT

Hon. Ronald "Jun" P. Aguto, Jr
Governor, Batanes Province

As we close another truly productive year, we stand at a defining moment in our collective journey toward sustainable and inclusive development. This Annual Report is more than a compilation of activities—it is our proof of progress, our testament to shared responsibility, and our promise to safeguard the future of our beloved province under the guiding framework of Mission HOPE.

The formal inclusion of Batanes as a designated observatory under the UNWTO International Network of Sustainable Tourism Observatories (INSTO) is a global affirmation of the Ivatan spirit of stewardship. It elevates Batanes to the world stage as a living laboratory where preservation and progress coexist, and where our commitment to Environment, Opportunities, and Education is recognized internationally.

The energy and momentum generated by the ongoing and upcoming research initiatives featured in this report reflect the BTMHC's unwavering dedication to data-driven governance, a core expression of E-Governance and Preparedness. Our focus on foundational systems—particularly water and waste management—demonstrates our resolve to secure the environmental lifelines that sustain our communities. These studies will guide long-term solutions for Potable Water, Health, and Environment, ensuring that our ecosystems remain pristine for generations.

Equally vital is our commitment to safeguarding cultural integrity. By monitoring and protecting our traditions, architectural heritage, and community practices, we reinforce the pillars of Education, Opportunities, and Peace and Order, ensuring that development never comes at the expense of identity.

This report also highlights initiatives that strengthen the connection between our cultural heritage and our local economy. I am especially proud of the growing Batanes Slow Food Movement, which champions our authentic gastronomy, honors traditional farming, and uplifts local producers. Through this effort, we advance Employment, Opportunities, Food Security, and Cultural Pride, building a more resilient and self-sustaining future for our communities. As we embrace slow food and sustainable tourism, we reaffirm our commitment to a development model that is people-centered, culturally grounded, and environmentally responsible—fully aligned with the aspirations of Mission HOPE. Let us view this Annual Report as our comprehensive baseline for hope: a strategic guide that secures a prosperous, authentic, and protected future for our Home of the Winds. Together, we continue to build a province where dignity, unity, and sustainability define every step forward.

MESSAGE FROM THE BATANES STATE COLLEGE



Djovi Regala Durante, DPA
President, Batanes State College

Throughout 2025, our partnership entered a sophisticated new phase of data-driven governance. This progression is evident in our transition from basic observation to the active monitoring of the 11 key issue areas mandated by UNWTO-INSTO, with a specialized focus on sustainability indicators. By anchoring our hospitality sector in these metrics, we ensure that the development of Batanes remains scientifically sound and deeply rooted in the preservation of the Ivatan way of life.

Moreover, the establishment of the Batanes Tourism Hospitality Monitoring Center (BTHMC) has proven to be a significant investment for future generations. Through diligent data collection and the rigorous evaluation of our strategies, we are now better positioned to cultivate a resilient destination that balances economic development with environmental conservation. Our findings this year provide the Provincial Government and local stakeholders with the evidence-based insights necessary to facilitate informed decision-making, benefiting both the local community and our global standing as a sustainable destination.

This year's annual report for the BTHMC is a direct result of the robust tripartite collaboration between Batanes State College (BSC), the Provincial Government of Batanes (PGB), and the University of the Philippines Diliman (UPD). It serves as a testament to what can be achieved through a shared vision and academic synergy.

In conclusion, we wish to express our profound gratitude to our partners at the University of the Philippines Diliman (UPD) and the Provincial Government of Batanes (PGB) for their unwavering dedication to this initiative.

As Batanes State College continues its partnership within this observatory, we remain steadfast in our commitment to upholding world-class sustainable tourism practices. Together, we are not merely monitoring the present; we are actively securing a vibrant, sustainable, and culturally rich future for the Home of the Winds.

MESSAGE FROM THE UNIVERSITY OF THE PHILIPPINES DILIMAN



Edgardo Carlo L. Vistan II, LLM
Chancellor, UP Diliman

The activities of the Batanes Tourism and Hospitality Monitoring Center (BTHMC) stand as exemplary illustrations of UPD's commitment to research and extension services. As a pioneering initiative situated in one of the country's most unique and fragile island provinces, the research group embodies the university's mission to generate knowledge that is both academically rigorous and socially relevant. By working hand in hand with local partners in Batanes—ranging from community organizations and industry stakeholders to government agencies—the BTHMC has been able to produce vital data that directly addresses pressing sustainability concerns. These outputs are not merely academic exercises; they are designed to inform policy, guide decision-making, and empower communities to take part in shaping a more sustainable future.

Over the past year, the group has undertaken a diverse set of projects that highlight the multidimensional nature of tourism and hospitality management. Particularly instructive are the results of initiatives focused on wastewater analysis, solid waste management, and the measurement of tourism's economic benefits. These studies provide concrete evidence of how tourism activities intersect with environmental health and local livelihoods. Equally important are the surveys on tourist satisfaction, which shed light on visitor experiences and expectations, offering valuable insights for both service providers and policymakers. Beyond the technical aspects, researchers behind BTHMC has also invested in projects that explore slow food practices and cultural heritage preservation, recognizing that sustainability is not only about ecological balance but also about safeguarding identity, tradition, and community well-being.

The accomplishments of 2025 deserve recognition. We extend our warmest congratulations to the dedicated team behind the BTHMC, whose tireless efforts have advanced both scholarship and practice in the field of sustainable tourism. Their work demonstrates how a university-based initiative can serve as a bridge between theory and practice, ensuring that research findings are translated into actionable strategies for local development. More importantly, the Center has shown that collaboration with island communities is essential in producing knowledge that is grounded, inclusive, and transformative.

Looking ahead, we are eager to witness the group's continuing engagement with industry partners, civil society organizations, and government agencies across the islands. The upcoming projects on energy use, accessibility, and water management promise to deepen our understanding of sustainability challenges in Batanes. These areas are critical not only for tourism but also for the broader resilience of the province, which faces unique vulnerabilities due to its geographic isolation and exposure to climate change. By continuously monitoring these issues, the BTHMC reinforces the importance of adaptive governance and evidence-based planning.

These activities also underscore our collective dedication to fulfilling commitments with UN Tourism's International Network of Sustainable Tourism Observatories (INSTO). Through this involvement, the country contributes to global conversations on sustainable tourism while ensuring that local realities are represented and valued. At the same time, the work of the BTHMC aligns with the broader development goals for Batanes, supporting the province's aspirations for balanced growth, cultural integrity, and environmental stewardship. Ultimately, these initiatives reflect the resolve of the University of the Philippines to advance its agenda for a more sustainable Philippine society—one where knowledge serves as a catalyst for meaningful change, and where communities are empowered to thrive in harmony with their environment. Mabuhay!

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EXECUTIVE SUMMARY

The Batanes Observatory, hosted by the University of the Philippines Diliman, functions as the institutional platform for sustainable and resilient tourism monitoring. Institutional support is provided through a multi-sectoral Technical Working Group, established under Executive Order and amended in January 2025, to ensure inter-agency coordination and responsiveness to local priorities. This report presents the monitoring outcomes of the Batanes Tourism and Hospitality Monitoring Center (BTHMC) for the 2025 monitoring cycle.

Priority key areas were identified through multi-sectoral consultations initiated in 2019 across the islands of Batan, Sabtang, and Itbayat. Operating under the INSTO framework, the BTHMC adopted a "phased approach" aligned with priorities identified by the stakeholders and institutional capacity. Initial monitoring in 2023 focused on solid waste management, employment, governance, and resident satisfaction, as well as physical carrying capacity, biodiversity, and cultural integrity, notwithstanding the unique features of Batanes.

This year, the scope expanded to include destination economic benefits, tourism seasonality, wastewater management, tourist satisfaction, and food security. These issues respond to emerging pressures associated with post-pandemic recovery, attitudinal and behavioral shifts, logistical and food supply constraints.

The monitoring approach by BTHMC is both intentional and deliberate. To illustrate this, an Applied Monitoring Framework for Sustainable Tourism was developed to document the observatory's journey—from needs assessment and sustained stakeholder engagement to the formulation of indicator sets informed by multiple methodological references. The framework recognizes the critical role of periodic monitoring, grounded in a participatory approach, incorporating diverse perspectives to identify patterns of change induced by tourism development over time, and in ensuring that the Center measures what truly matters to the Ivatans.

In addition, the report documents the application of the Tourism Opportunity Spectrum (TOS), developed by Butler and Waldbrook (1991), to assess ecological limits (and possibilities) in Batanes amid tourism development. For instance, food security is examined in various avenues.

Supported by funding from the National Research Council of the Philippines (NRCP), analyses of the impacts of typhoons and tourism seasonality on residents' food consumption are underway. Similarly, product innovation initiatives, such as the development of UVED (banana corm) as a disaster-resilient food and tourism product, demonstrate how monitoring outputs are translated into policy-relevant actions.

One of the key outcomes of this monitoring cycle is the generation of new data on tourist satisfaction and visitor experience—the first assessment of its kind in Batanes. Findings indicate that meaningful, experience-based engagement with the "place qua place", rather than visitor volume (and money spent alone), plays a central role in shaping tourist satisfaction and place attachment. These insights provide practical nuance for maintaining the quality of tourism and hospitality while safeguarding community values consistent with the landscape and seascape that have long sustained the Ivatans.

Field visits serve to evaluate indicators of solid waste management in terms of progress and concerns. Most municipalities have made commendable strides in solid waste management, including waste segregation, diversion targets, monitoring and reporting, financial support, and public education campaigns. Key gaps remain, notably the absence of MENRO plantilla positions and the need to establish partnerships with external recyclers and materials recovery facilities. Sustained, evidence-based monitoring of SWM plans and indicators, combined with periodic updates, is essential to strengthen institutional capacity and promote sustainable, community-centered waste management across the six municipalities.

The tourism and hospitality sector demonstrates strong awareness of wastewater management and implements water-conservation practices; however, these measures are largely operational rather than regulated. Well-managed wastewater policies, expanded infrastructure coverage, and technical support are critical to ensuring sustainable water and sanitation, protecting environmental quality, and fostering resilient Batanes tourism.

Overall, the BTHMC demonstrates how the INSTO framework can be applied in a phased, participatory manner in a small-island context. By generating data for impact use, the Monitoring Center supports regenerative tourism through evidence-based decision-making. Future monitoring (2026) will expand coverage to additional INSTO core issues, including climate action, accessibility, energy management, and water management. Pilot interventions are envisaged to eventuate through stronger and wider institutional partnerships, further strengthening the sustainability of monitoring efforts.

INTRODUCTION

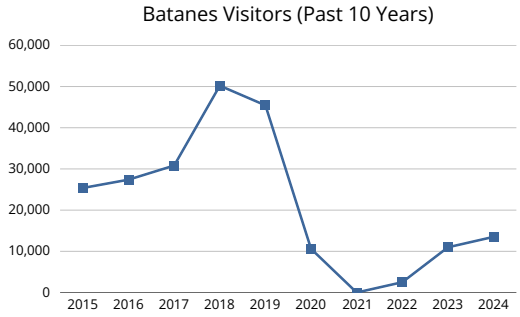
ABOUT BATANES

Batanes is the northernmost province of the Philippines, located about 162 km north of the Luzon mainland in the Luzon Strait and composed of six municipalities, with Itbayat, Batan and Sabtang as the only inhabited islands. It is home to the Ivatans and known for its traditional stone houses in response to the winds and monsoon weather. Conservationists note that Batanes is one of the last remaining areas in the Philippines retaining unique natural physiographic features, including wave-cut cliffs, cave-like outcrops, and secluded white sand beaches. This is attributed to its geographic location at the Pacific Ocean and West Philippine Sea meeting points. Consequently, strong winds and fast currents combine to create its morphology.











Source: Breathtaking Batanes 2025 Visitor Arrival Statistics from Batanes Provincial Heritage and Tourism Office

INTRODUCTION

ABOUT BATANES TOURISM AND HOSPITALITY MONITORING CENTER

On January 1, 2023, the Department of Economy, Planning, and Development of the Philippine (DEPDev), formerly National Economic and Development Authority (NEDA) released the Philippine Development Plan (PDP) 2023–2028. Chapter 16 of the plan highlights the importance of monitoring and evaluating indicators to assess progress toward national development goals. In April 2025, the National Ecotourism Strategy and Action Plan (NESAP) 2024–2028 was launched, jointly implemented by the Department of Tourism (DOT) and the Department of Environment and Natural Resources (DENR). Notably, Strategy 8—"Monitor outcomes and impacts"—reflects NESAP's commitment to evidence-based evaluation. The NESAP further integrates the INSTO framework, emphasizing the need for data-driven monitoring of tourism's economic, environmental, and social dimensions. This underscores the critical role of the Batanes Tourism and Hospitality Monitoring Center (BTHMC) in advancing the commitment of both NESAP and NEDA to evidence-based decision-making.

https://www.untourism.int/observatories/batanes

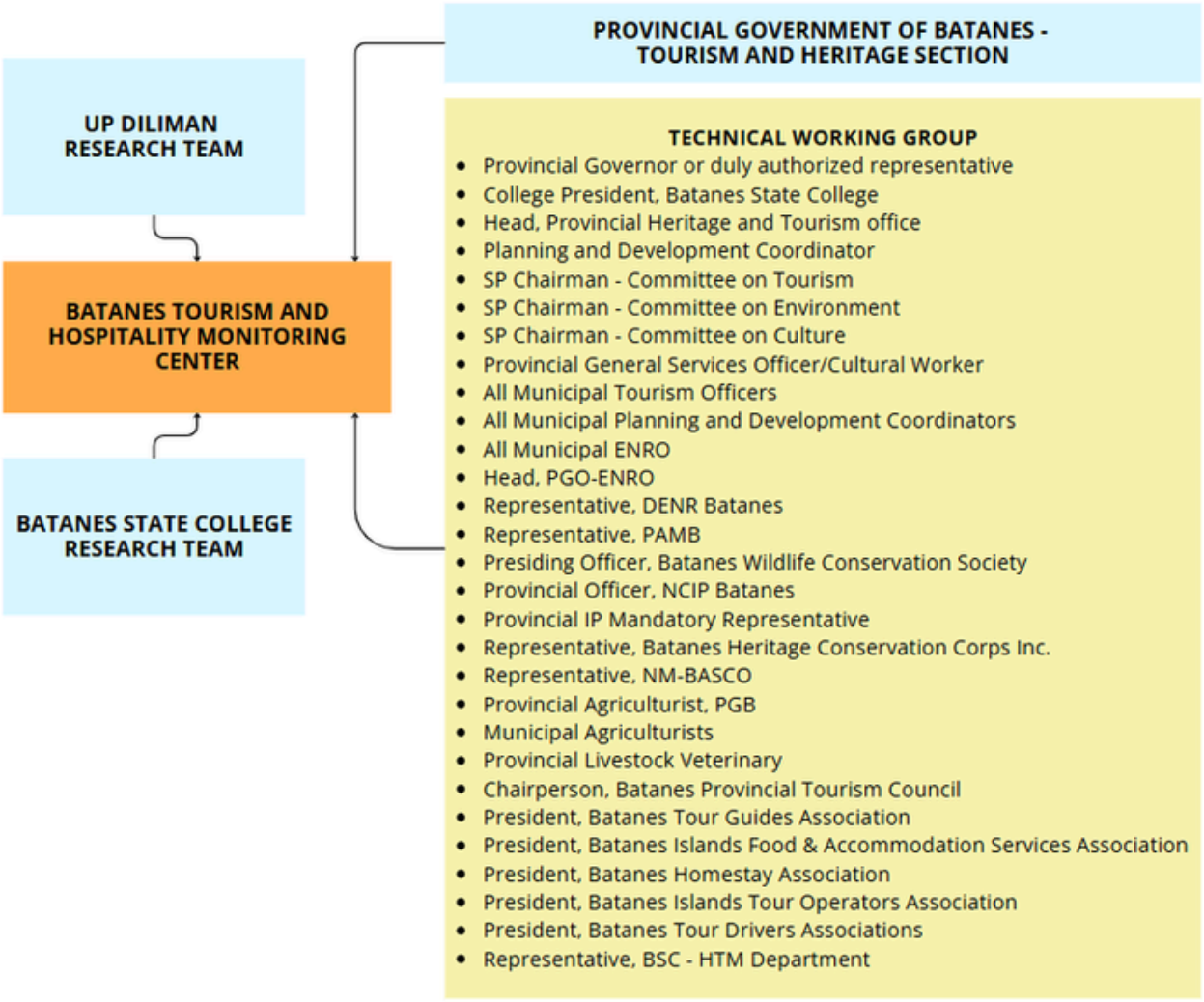




OUR VISION

A well-preserved natural and cultural environment that supports sustainable tourism, promotes heritage conservation and social equity through healthy collaboration and data from the Observatory.

ORGANIZATIONAL STRUCTURE



Pursuant to Executive Order Series 2024, amended in January 2025, a Technical Working Group (TWG) was established to assist the Batanes Tourism and Hospitality Monitoring Center (BTHMC) in monitoring indicators for the core issues identified, discussed, and finalized by the Ivatan community on 20 January 2020. The TWG meets annually at an appropriate time and is composed of multi-sectoral representatives, with the addition of the provincial agriculturist, municipal agriculturists, and the provincial veterinarian as stipulated in the amendments.

The meeting serves as a platform to discuss and clarify key findings arising from research conducted by the BTHMC. As a consultative body of experts, the TWG provides recommendations and acts as a policy enabler, guiding the BTHMC to ensure that its work remains consistent with the vision of the Batanes Observatory.

MONITORING KEY PRIORITY AREAS (2024 - 2025)

APPLIED MONITORING FRAMEWORK FOR SUSTAINABLE TOURISM: THE BATANES JOURNEY

The INSTO Framework mandates the monitoring of at least **eleven sustainability areas:** (1) resident and visitor satisfaction, (2) tourism seasonality, (3) economic benefits, (4) governance, (5) solid waste, (6) wastewater, (7) water management, (8) climate change, (9) accessibility, (10) employment, and (11) energy management. For Batanes, a list of impact indicators has already been established through sustained collaboration with stakeholders. This list was developed through a series of meetings beginning in 2019 and culminating in a multi-sectoral workshop in 2022, which involved representatives from the three islands: Batan, Sabtang, and Itbayat.

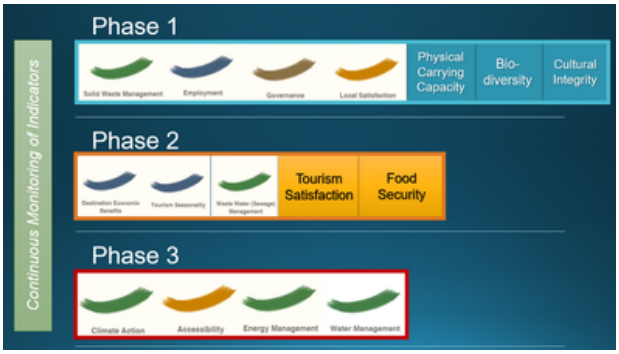
Given Batanes' unique status as a protected area and the ancestral domain of the Indigenous Ivatan People, not all eleven INSTO areas were monitored simultaneously. Instead, workshops with stakeholders across the three islands were conducted to identify priority issues for periodic assessment.

Between 2022 and 2023, the core issues selected for monitoring included solid waste management, employment, governance, and resident satisfaction. In addition, three priority areas were identified as crucial for safeguarding Batanes' distinct heritage and environment: physical carrying capacity, biodiversity, and cultural integrity.

Details of these workshops are discussed in the Preliminary Study, which can be accessed here:
https://bit.ly/BTHMCPreliminaryStudy

For 2024–2025, five additional indicators were monitored: destination economic benefits, tourism seasonality, wastewater management, tourism satisfaction, and food security. It should be noted that core issues often cut across multiple areas. For example, indicators of economic benefits can be assessed in the context of tourism expenditure, while solid waste issues may be evaluated based on tourist perceptions. This underscores the need for periodic monitoring, which offsets the limitations of "one-shot" cross-sectional studies and allows for a more comprehensive understanding of patterns of change over time.

Looking ahead, the upcoming monitoring cycle will include four additional issues: climate action, accessibility, energy management, and water management.



BTHMC Indicators for monitoring sustainability in line with the UN Tourism INSTO Framework

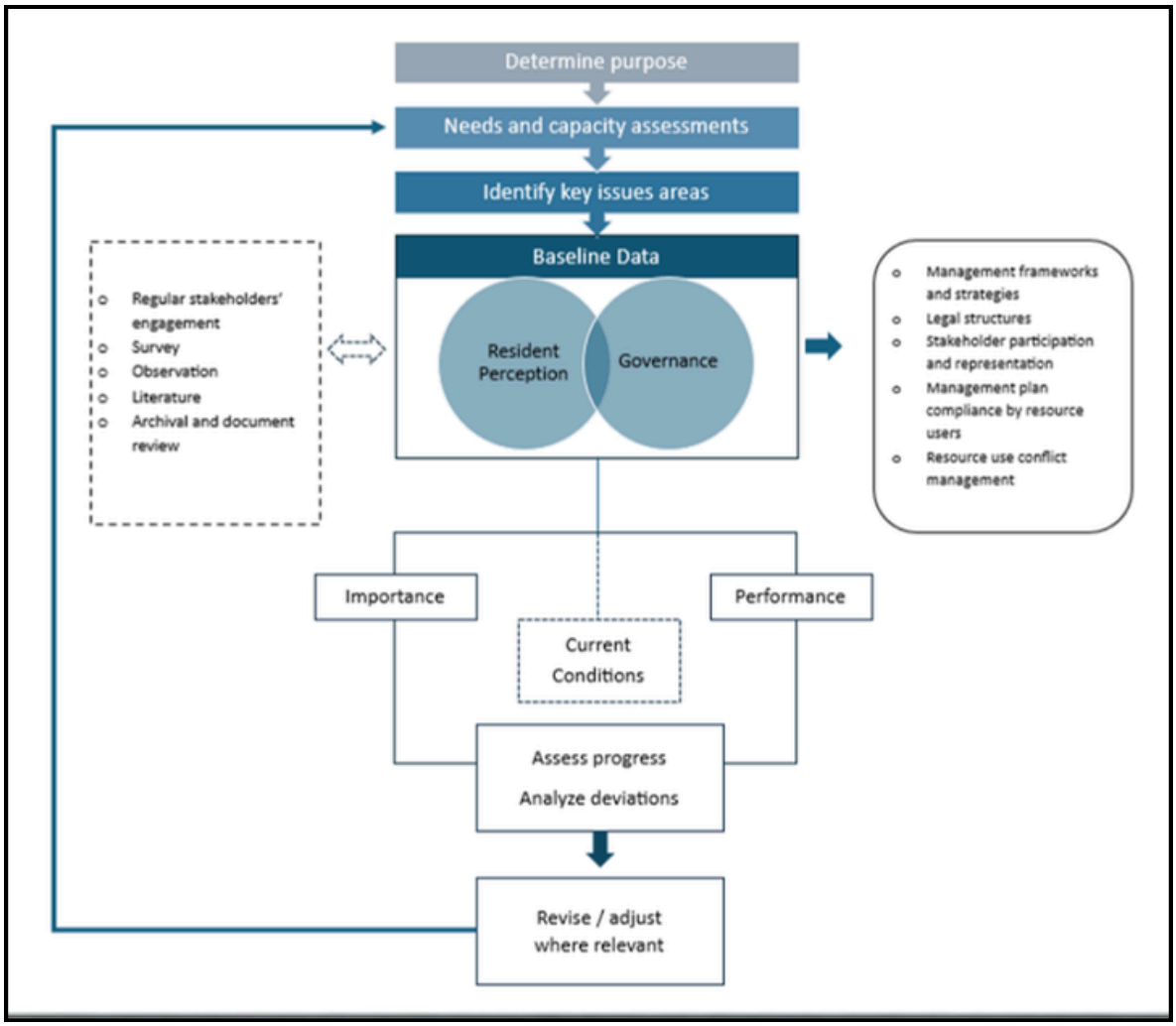


Figure 1. Applied Monitoring Framework for Sustainable Tourism: The Batanes Journey

Dela Santa and Ramos-Tumanan (2026) proposed a monitoring framework to assess the effectiveness of protected area management (see Figure 1). This framework illustrates the BTHMC's journey—undertaken in strong partnership with stakeholders—toward identifying indicators of long-term sustainability. Although approached within the broader context of governance, it underscores the central role of a participatory process, in which stakeholder engagement is a critical input to evidence-based planning and decision-making.

2025 HIGHLIGHTS

1.1 TOURIST SATISFACTION

The purpose of the study was threefold: (a) to examine visitors' motives for traveling to Batanes; (b) to assess their evaluations of the overall visit experience; and (c) to describe patterns of their expenditures while staying on the islands. The questionnaire was divided into several sections, each designed to capture specific dimensions of the visitor experience. The survey was conducted in April–May 2025 and collected data from 202 tourists visiting the Batanes Islands. The final report is appended.



PILOT TESTING
February to March 2025

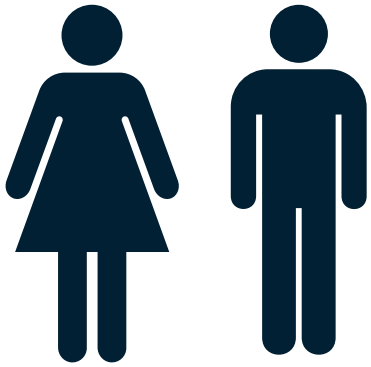
ACTUAL SURVEY
April and May 2025

202 TOURISTS

The Questionnaire				
1 Reasons for Visiting Batanes	2 Experiences in Batanes	3 Patterns of Expenditure	4 Solid Waste Management	5 Socio-demographic

1	2	3	4	5	6	7	0
Strongly disagree	Disagree	Tend to mildly disagree	Neither agree nor disagree	Tend to mildly agree	Agree	Strongly Agree	No opinion/ view to express or have not experienced this item

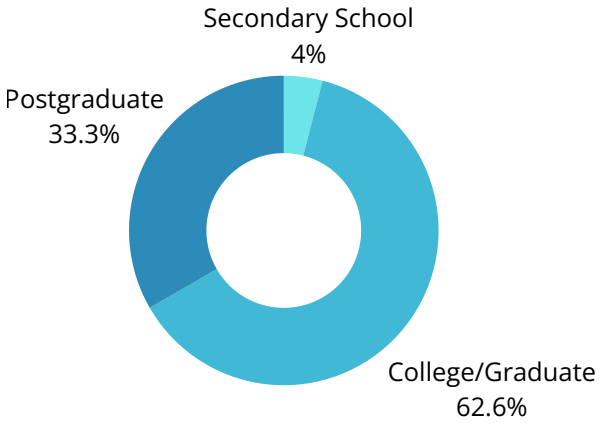
Nature of the sample - who were the tourists?



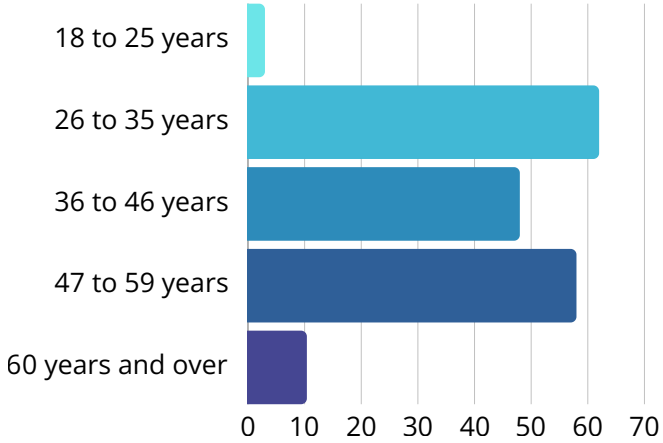
62%

34.6%

Education

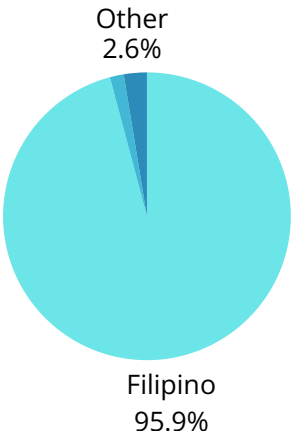


Age





Nationality



Survey results indicate that tourists visiting Batanes were primarily young Filipino adults, with the 26–35 age group most strongly represented, closely followed by the 47–59 age group. Most respondents reported high levels of educational attainment and above-average income.

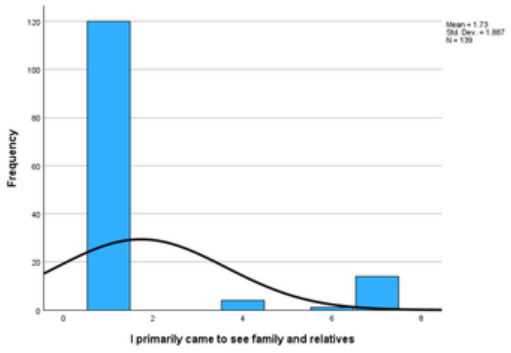
Motives for visitation

The results show that the following factors are the major reasons for tourist visits:

- See the landscape including traditional stone houses
- To mentally and physically relax
- Ivatan culture

These "core" attractions of Batanes — the landscape, quiet lifestyle, Ivatan culture — strongly resonate with visitors and are consistent with an environmental awareness, with self-reflective and escape motivations, a search for cultural experiences.

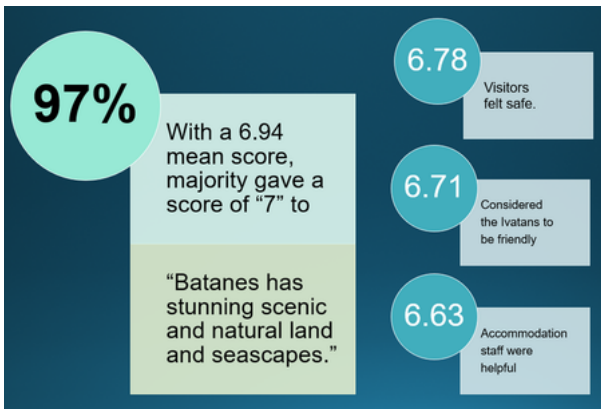
Batanes tourism does not appear to be dominated by the visiting friends and relatives (VFR) segment. However, while the primary purpose was not to visit family or friends, one can note in graph below that the item "I came to bond with family/friends" achieved a mean score of 5.93 (see Appendix A) with kurtosis indicating a a skew to the higher scores. In short, about 65% (n=132) of the participants scored "7" on this item.



The distribution of score regarding visiting family in Batanes

Determinants of tourist satisfaction

The data show that the landscape of the Batanes did not fail to please the visitors, with a mean score of 6.94 and a skew score that showed the majority (97%) gave a score of "7" to the item "Batanes has stunning scenic and natural land and seascapes".



Four themes account for the levels of satisfaction. Three are positive: (a) landscape, culture, and safety, (b) food quality and service, and (c) a desire to stay longer representing an identification with place. The one negative theme was high prices and early boat/ferry schedules, but respondents were clear that they had good value for money.



Evaluations of the Visit

Satisfaction levels were high and consistent across all three items.

Recommend to Friends:
★★★★★★★ **6.87**

Overall Satisfaction:
★★★★★★★ **6.79**

Intention to Return:
★★★★★★☆ **6.37**





Local livelihoods and culture in action: Ivatan woven crafts and warm welcomes at Basco Airport.

Place Attachment in Batanes

Given that Batanes follows a low-volume, high-quality tourism framework, the survey provides deeper insight into what "quality" truly means. Quality is not necessarily defined by the visitor who spends the most, but by the most meaningful expectations tourists hold of the destination. These expectations are inextricably linked to their motivations and overall satisfaction, with the experience at the core, forming the foundation for the development of place attachment. "Place Attachment is the emotional bond to place. It is a feeling rooted in experience, in which place meaning is developed." (Ramos-Tumanan, 2018).

"I would much like to stay longer here if I could."
Mean Score: 6.01

"Batanes makes me feel different about myself in a way that no other place does."
Mean Score: 5.59

"I identify strongly with this place."
Mean Score: 5.52

"Batanes is part of me"
Mean Score: 5.24

1.2. ECONOMIC BENEFITS

The same survey mentioned above also provided insights regarding the economic benefits of tourism, based on the reported expenditures of tourists. But first, it is worth noting that tourism demand continues to recover for Batanes, as shown by the following statistics:

Visitor arrivals
2023: 12,659
2024: 13,511
2025 (until September): 12,522

For 2025, domestic tourists dominated with 97% of arrivals, slightly higher than the 94% recorded in 2024. Foreign tourists came mostly from USA. Females travelled in greater proportion than males (59% v 41% respectively) to Batanes. Based on survey data, most travel on tour packages with a party of six comprising 50% of groups. Average length of stay was for 3 nights.

As tourism continues to recover, the capacity of the industry to support operations has also improved, as seen in the higher number of accommodation, transportation and food establishments:

Capacity of tourism establishments (2024)
Total accommodation establishments: 62
Total number of rooms: 388
Number of restaurants, canteens, catering services, cafes: 105
Number of tour operators: 50
Land transport composed of vans, sedan
cogon trike, trike, single motorcycle: 104 (figure is for Ivana, Sabtang and Itbayat only)
Number of motorboats (75-200 capacity): 8
Number of event management businesses: 2
Number of souvenir producers/manufacturers: 16

Consequently, the number of directly employed individuals is as follows:

Number of employees across the sector (2024):
Accommodation: 164
Tour operator: 75
Food: 284
Events management: 6
Transport: 101
Souvenirs: 32

The ownership structure of tourism establishments is now much clearer, with data revealing single proprietorship as the main mode across establishments.

The demand for tourism services has resulted in revenues for the island of Batanes. The table below shows a summary based on the declared gross income of tourism establishments during the renewal of their business permits as well as user fees collected by the provincial government (and shared with municipal governments). The municipal governments of Mahatao, Sabtang and Itbayat also collect their own individual ecotourism fees.

Table 1. Summary of income and Fees from Tourism

	BASCO	MAHATAO	IVANA	UYUGAN	SABTANG	ITBAYAT
Mun. Ecotourism Fees	-	1,454,063.00	-	-	2,768,260.00	42,877.90
Share from Prov Govt.	255,388.00	255,388.00	255,388.00	255,388.00	255,388.00	255,388.00
Accommodation Gross Income	78,809,116.75	50,000.00	300,052.00	-	14,915.19	545,319.00
Tour Operator Gross Income	9,315,512.00	781,591.20	179,300.00	-	-	-
Food Establishment Gross Income	23,751,801.01	3,457,662.24	300,052.00	16,911.24	14,967.78	1,561,753.29
Events Management Gross Income	202,000.00	-	-	-	-	-
Transportation Gross Income	9,205,358.04	-	1,360,902.34	-	-	3,776,595.00
Souvenir Gross Income	3,692,722.06	-	-	-	-	-
TOTAL	125,231,897.86	5,998,704.44	2,395,694.34	272,299.24	3,053,530.97	6,181,933.19
GRAND TOTAL	Php 143,134,060.04					

The distribution of revenue reflect survey findings regarding the geographic spread of tourist expenditure. Respondents stated that, on average, money was spent in Basco (51%), Sabtang (37%), Ivana (35%), Mahatao (25%), Uyugan (15%) and Itbayat (2%), reflecting the comparative development of tourism-related activities and services across the province.

Spending was for a range of products and amenities including transportation, food and drinks, souvenirs and gifts, tour guides as well as ecotourism fees. For a group, the median expenditure was 80,000 pesos, resulting in a median daily expenditure of 4,444.00 pesos.

Outside of the tour package, visitors in Batanes spent on souvenirs and gifts, meals and drinks, spa and massage, additional accommodation and other services including renting motorcycles and drones. For these extra services, the median expenditure was 1,600.00 pesos.

Taken together, a typical tourist in Batanes staying for 3 nights was found to spend approximately 14,932.00 pesos.

2. SOLID WASTE MANAGEMENT

A comprehensive study was conducted in 2025 to monitor and evauate the solid waste management (SWM) indicators of the Batanes Observatory. The research focused on evaluating compliance with the Ecological Solid Waste Management Act of 2000 (RA 9003), characterizing tourism-driven waste, and assessing the capacity of local waste facilities to support sustainable tourism.





Key Activities:

- **Waste Analysis and Characterization Study (WACS):** Following the WACS during the low tourist season in July 2024, the team conducted another seasonal snapshot in Basco in April 2025 for high season focusing on tourism establishments (24 accommodations and 6 food and beverage services).
- **Infrastructure Assessment:** Field surveys were conducted to Materials Recovery Facilities (MRFs) and Sanitary Landfills (SLFs) across all municipalities to evaluate storage and disposal capacities.
- **Stakeholder Engagement:** Held meetings with the Provincial Government, Municipal LGUs, and tourism stakeholders for data sharing and indicator monitoring.
- **Tourist Surveys:** A satisfaction survey was administered to 202 visitors between April and May 2025 to gauge perceptions of tourists on Batanes' on cleanliness and SWM policies.
- **Capacity Building:** Conducted WACS webinars and distributed portable weighing scales to barangays, and Provincial and Municipal Environment and Natural Resources Offices (MENROs) to improve local data collection.

2.1 Compliance with RA 9003

Each municipality was evaluated using a set of criteria covering governance, infrastructure, and program implementation dimensions of SWM. The results were color-coded to assess the level of alignment of each municipality: dark green (Fully Aligned), light green (Mostly Aligned), yellow (Moderately Aligned), orange (Minimally Aligned), and red (Not Aligned).

- All six municipalities comply with the basics of waste segregation and storage.
- When it comes to collection and transport, Ivana stands out for sticking to regular schedules and having the right equipment. Basco and Mahatao are not far behind, but the remaining towns still experience difficulties, especially in remote areas, making them partly aligned.
- Infrastructure for material recovery is lacking.
- Disposal remains a major weak spot. Basco and Sabtang still use residual containment areas (RCAs), while Uyugan has made some progress in sanitary landfilling.
- Most municipalities exert commendable efforts in setting clear waste diversion targets, monitoring and reporting, and allocating financial resources to support SWM programs. Every municipality has made a push for waste diversion, mostly through composting and recycling.

2.2 Recommendations for Sustainable SWM

- **Infrastructure Investment:** Improve the efficiency of MRFs and accelerate the completion of sanitary landfills with proper leachate treatment.
- **Institutional Strengthening:** Establish permanent MENRO plantilla positions to ensure consistent SWM operations.
- **Market Partnerships:** Formalize agreements with junk shops and recycling partners outside the province to manage the outflow of recyclable materials.
- **Tourism Focus:** Continue prioritizing plastic reduction within the tourism sector and engage tour guides as key ambassadors for environmental policies

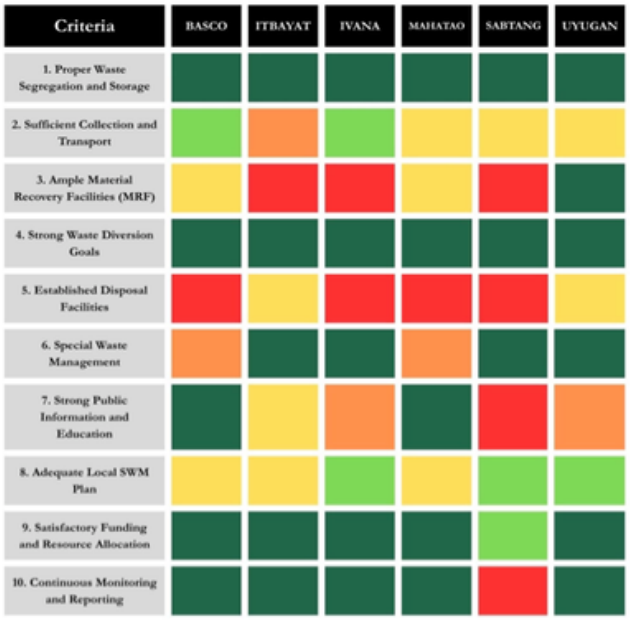


Figure 2. Compliance of the Municipalities in Batanes with RA 9003

2.3 Waste Infrastructure

While multiple MRFs are **concentrated in Basco, not all barangays across Batanes are served,** indicating uneven distribution and potential service gaps in waste management infrastructure**.**

During visits conducted in April 2025, it was found that **four out of six barangay MRFs in Basco are overflowing with recyclables, leaking outside of the intended storage area.** Based on our calculations, existing MRF structures in Basco are significantly undersized and capable of holding only around **five (5) days' worth of recyclables**. The potential MRF based on available lot area is sufficient for over **two (2) months** of recyclables waste. However, many of these lots are located adjacent to public roads, which may pose safety and health risks to the surrounding community due to exposure to unprocessed waste. Recyclables are stored in MRFs for up to **six months** before they are shipped to Manila for recycling.



Basco MRFs (from left to right): (a) Chanarian, (b) Kaychanarian, (c) Kayhuvokan, (d) Kayvaluganan, (e) San Antonio, and (f) San Joaquin



Ivana (a-c) Central MRFs located in Radiwan, and (d-f) extra MRF space



Mahatao Barangay MRFs located in (a) Hanib, and (b) waste management facility in Uvoy



Sabtang Barangay MRFs located in (a) Chavayan, and (b) RCA and MRF in Sinakan. Photos taken in January 2024



Uyugan (a-b) Central MRF in Chanalan and barangay MRFs in (c) Imnajbu, (d) Itbud, (e) Kayuganan, and (f) Kayvaluganan



Basco RCA and SLF under construction (April 2025)

2.4 Tourism-driven waste generation

Table 2 presents the waste composition and waste projection of accommodation and food and beverage establishments during the high season. **The accommodation sector plays a major role in the solid waste generation in Basco due to longer length of tourist stay and broader range of services provided.** The combined tourism-driven waste from these establishments was predominantly biodegradable, accounting for 65.17% of the total. While plastics were not observed to be most of the total waste, they represented a significant share within the recyclable and residual categories which drew attention to both their prevalence and the challenges they pose in solid waste management.

Table 2. Tourism-driven waste composition during high season (%)

Establishments	Kitchen Waste	Other Biodegradables	Recyclables	Residuals	Special Wastes	Waste Projection (kg/day)
F&B	33.72	30.9	5.65	12.02	17.71	55.09
Accommodation	52.97	12.27	18.19	13.54	3.03	255.48
Over-all	50.85	14.32	10.37	13.37	4.65	310.571

2.5 Perception of tourists on SWM in Batanes



- Tourists are satisfied with the SWM and general cleanliness of Batanes; presence of segregation bins in accommodations
- On segregation practice during their Batanes trip – tourists answered "Often/always segregating"
- Rated 4.37 out of 5 for sufficiency of implementation of policies to reduce plastic pollution in Batanes
- The words "tour" and "guides" had the highest frequency of usage in the survey comments.
- The tour guides were an important source of information on SWM policies and their implementation.

3. WASTEWATER MANAGEMENT

3.1 Tourism and Water Consumption

Tourist arrivals in Batanes show strong seasonal fluctuations that is affected by flight accesability and weather conditions. *Figure 3* shows the monthly tourist arrivals for Batanes from January 2018 until April 2024. The peak in monthly tourism volume occur during March to May and decline between August and September. The absence of tourism activity from April 2020 to April 2022 corresponds to the pandemic-induced travel restrictions. Although tourist arrivals began recovering slowly in 2022, volumes remain significantly lower than pre-pandemic levels.

Water consumption trends are similar to the fluctuations in tourism activity. In *Figure 4*, the water consumption and tourist arrivals in Sabtang show clear seasonal peaks and a sharp decline during the COVID-19 lockdown and tourism recovering only partially after 2022. Despite some post-pandemic increase, both metrics remain below pre-COVID levels, due to the decrease in accredited tourism establishments from 17 in 2019 to six in 2024. Continued water consumption during low tourism periods suggests shared meters between establishments and residences, complicating accurate demand estimation.

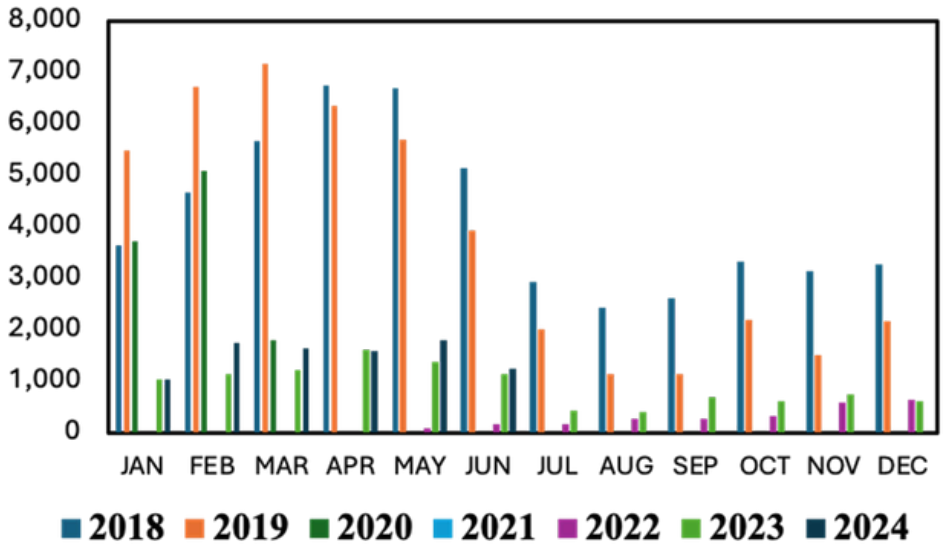


Figure 3. Monthly tourist arrivals in Batanes from January 2018 to April 2024.

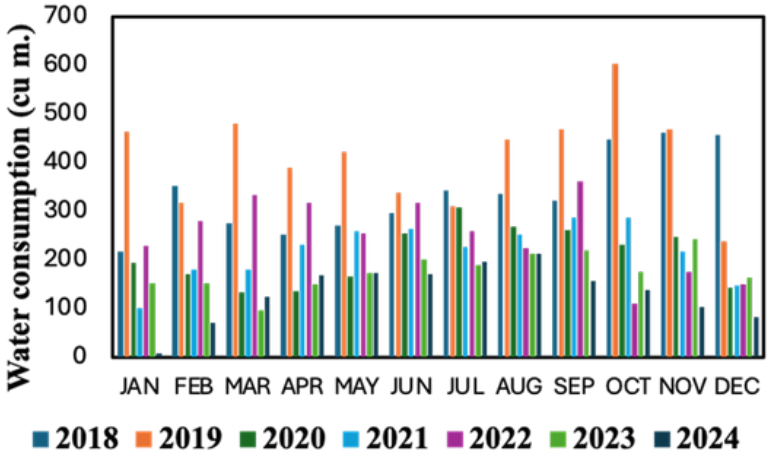


Figure 4. Total monthly water consumption of tourism establishments in Sabtang from 2018 - 2024.

3.2 Wastewater infrastructure

3.2.1 Septage Management

The province operates a central septage treatment facility in Basco, which serves residents and commercial establishments on Batan Island. Fig. 5 shows the treatment process that includes gravity flow, coarse and fine screening, lime stabilization, and reed bed filtration prior to final storage. Because the system achieves zero liquid effluent discharge, no water quality analyses are conducted. The service offered includes desludging, transportation, and treatment at PHP 3,600 per cubic meter. However, only a handful has availed of the services offfered uptake remains low where most establishments cited concern for the high cost. Some were unaware of provincial desludging services offered.

3.2.2 Sewage Management

There is no central sewage treatment facility in Batanes that treats grey water generated by residents and commercial establishments. The greywater from establishments are discharged into shallow open canals that empty into coastal waters. Currently, septic tanks remain the primary method of wastewater treatment in the province for both grey water and black water produced. The provincial government has plans to establish a sewage treatment facility near the existing septage treatment plant.

3.2.3 Wastewater Management in Tourism Establishments

The wastewater infrastructure among tourism establishments varies widely in technological maturity. Based on the list from the provincial government,



Figure 5. Provincial Septage Treatment Facility of Batanes showing (from left to right): (a) filter bed, (b) manual coarse screens and fine screens, and (c) lime stabilization tank.

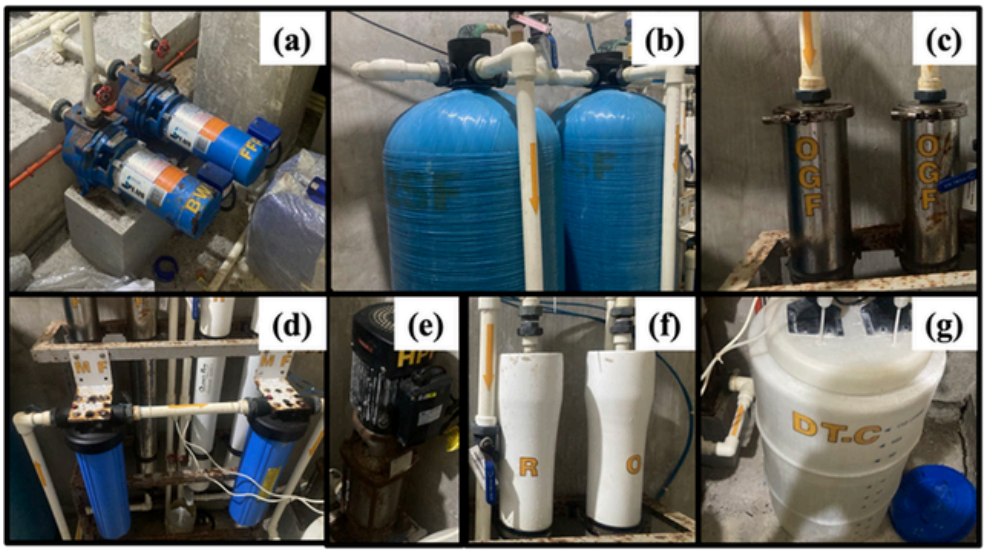


Figure 6. Septage treatment of grey water of a tourism establishment composed of: (a) pump, (b) filter tanks, (c) oil and grease filter, (d) microfiltration modules, (e,f) high pressure pump and reverse osmosis modules, and (g) chlorine dosing tank.

there are 12 tourism establishments having wastewater treatment facilities. Site visits confirmed that only 4 establishments possess functional treatment facilities (*Fig. 6*). No tourism establishment has provided water quality testing results - some citing confidentiality as constraints.

The absence of the treated water quality raises questions regarding the actual performance of on-site systems and whether discharge meets the quality thresholds of the Philippine government prior to release into drainage canals or soil infiltration areas.

3.3 Awareness, Practices, and Compliance of Tourism Establishments

A total of 37 tourism establishments participated in the survey, which is comprised of 29 accommodations and 8 food and beverage establishments. Survey results are as follow:

- 83.8% of establishments considered proper wastewater management to be “very important.” This implies strong awareness of potential environmental and public health impacts. Respondents has associated wastewater management with preventing foul odors and avoiding customer complaints rather than complying with regulatory standards of the national government.
- Water conservation and informal wastewater management practices include reducing water usage by installing water-saving fixtures, installation of filters in grease traps or use of packed beds, and recycling greywater for landscape maintenance and cleaning.
- An average of two septic tanks per tourism establishment, but some facilities reported single-chamber septic systems, which do not meet the Philippine Department of Health prescribed minimum requirements
- Septic tanks remain as the primary form of wastewater management in tourism establishments coupled with irregular desludging practices and untreated greywater discharge
- Regulatory compliance is weak. Only three establishments possessed valid environmental discharge permits and only half reported having an accredited Pollution Control Officer
- No exisiting local ordinances and information, education and communication (IEC) campaign on water and wastewater management in all municipalities
- Local government has expressed the need for external technical training and capacity building, particularly on design of wastewater treatment facility, IEC development, and monitoring of desludging compliance

4. BIODIVERSITY

One of the means by which the health of the environment is determined is through the Biodiversity Monitoring System (BMS). Undertaken by the Department of Environment and Natural Resources (DENR), the focus is on identifying changes in natural biological resources and their use. Methods used include field diary, photos, transect walk and swim, and focus group discussions. For 2025, resources such as quarry materials, grasses, seagrasses, fauna and landscapes were observed. Presented below through pictures, tables and texts are some notable observations by the DENR-Batanes team.





Year	Count
2021	2
2022	14
2023	34
2024	14
2025	66

The increasing population of Indian Myna, an invasive alien species within the BPLS, has triggered calls for their execution in a humane way





Multiple landslides were observed. The forest cover decreased due to the effect of three (3) super typhoons that affected the province in Brgy. Imnajbu, Uyugan (Vanawang)

BMS Indicator Species



Whistling Green Pigeon
Treron formosae





Metallic Pigeon
Columba vitiensis





Common Emerald Dove



Philippine Cuckoo Dove

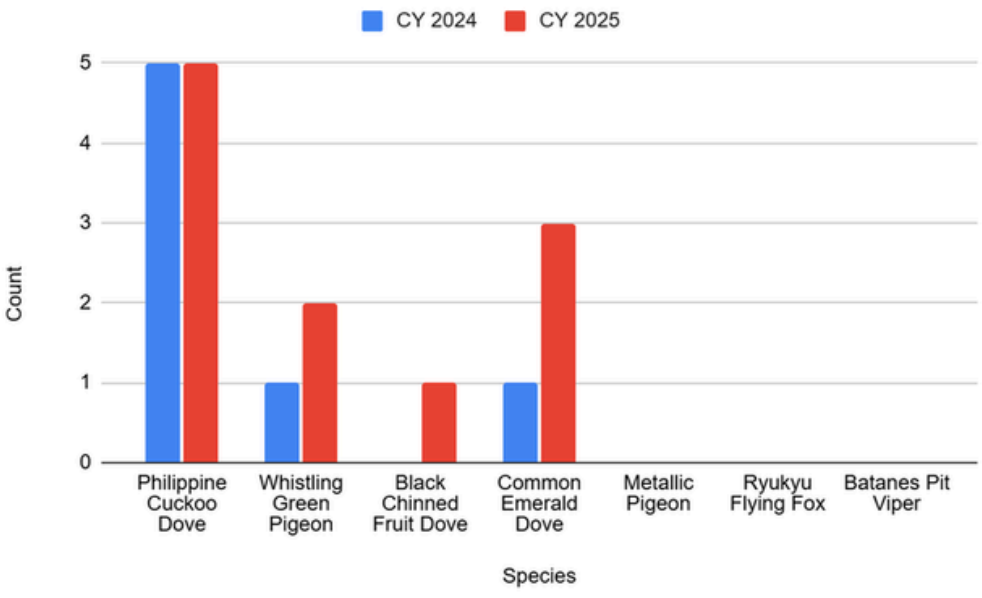
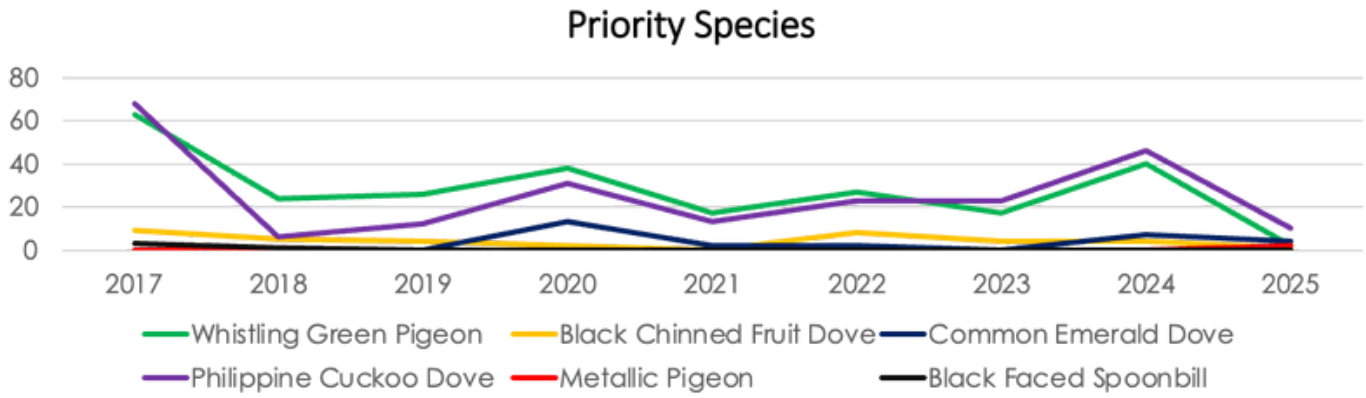


Figure 7. Indicator Species Observed at Mt. Giraya, Barangay Sinakan, Sabtang, Batanes (1st Semester)

Summary of result of transect walk



From the above-mentioned data, the DENR concluded that, for the year, species richness increased while species abundance decreased. That is, there was increased faunal diversity through new arrivals or changes in species composition despite overall population size decline. The increase in the number of species in small population sizes may imply initial ecological recovery despite habitat disturbances/pressures. Indicator/priority species with declining populations (e.g. whistling green pigeon) show susceptibility to random events (e.g. extreme weather), requiring heightened priority for conservation to reduce risk of local extinction.

Other observations from the BMS include:

- Cogon grass, a valuable grass species in Ivatan culture, is abundant.
- Seagrass beds increased in percentage cover across all sites
- Average percentage cover of hard corals decreased
- Average percentage cover of soft corals increased
- Number of fishes and other marine fauna generally increased from 2024 to 2025. The warmer waters may have expanded habitable zones that became more suitable for more species to thrive

5. GOVERNANCE

On the tourism governance system

An important event in the local governance system was the holding of national and local elections in May 2025. After the ballots were counted, the results revealed a line-up of new officials for the province. These include the following:

Jun Aguto – new governor of Batanes
Joseph Cultural – new mayor of the municipality of Itbayat
Jerry Agana – new mayor of the municipality of Ivana
Geronimo Carba – new mayor of the municipality of Mahatao
Tita Neyala - new mayor of the municipality of Sabtang
Richard Cabugao - new mayor of the municipality of Uyagan
Milo Caccam – re-elected mayor of the municipality of Basco
Ciriaco Gato – re-elected congressman of Batanes

The results show that six major decision-makers in the province are fresh on the job. Their entry, along with the election of councillors and board members, means that institutional structures will be re-organized in order to reflect the new situation. This implies that such bodies as the Solid Waste Management Boards at the provincial and municipal levels will be reconstituted. The same will be done for local tourism councils and the Protected Area Management Board.

On the effective management of conflict over resource use

As stated in the 2024 Annual Report, there was a congressional effort (through House Bill 4419 under the 19th Congress) to convert a barangay in Uyugan from a national park to an alienable and disposable residential site. The intention, according to the bill, was to "provide long-time residents opportunities and entitlements", which have been constrained and been a source of conflict since Batanes became part of the national integrated protected system.

Unfortunately, nothing happened, and like previous filings of the same bill in the 17th and 18th Congress, the bill did not become a law. Nonetheless, it has been refiled in the 20th Congress under HB 1955, with further explanation that the Dept of Environment and Natural Resources has already approved the survey plan for the barangay including the technical description of the parcel of land for declaration as agricultural land open for disposition for agricultural, commercial and residential purposes.

Regardless of the result in Congress, and getting ready to do the technical work, stakeholders in Batanes have started identifying areas for proposed delisting from the BPLS. Land-use maps featuring protected areas, and sites reserved for tourism and agriculture have been prepared and shared by some local government units during working group meetings. This is a big step towards resolving resource use conflicts in the islands and a concrete sign of changing mindsets about protected areas in Batanes.

MEASURING OTHER INDICATORS:
THE TOURISM OPPORTUNITIES SPECTRUM MODEL

Sustainable and resilient tourism in Batanes is about creating and co-creating conditions and identifying opportunities that sustain the daily needs of users - tourists and the local community. Analyzing these conditions requires a thorough understanding the impact of tourism-induced change on residents and tourists in the context of ecological resource allocation and management. The Tourism Opportunities Spectrum (TOS) provides a crucial backdrop against which the evidence-based data collected by BTHMC becomes the input to examining social carrying capacity in Batanes.

The inputs interconnect to social process and involvement of stakeholders. The dynamics of social process and perspectives of various stakeholders clarify how the tourism opportunity conditions will implicate the Batanes as a protected area and as the home of the Indigenous Peoples amidst unpredictability and continuous change (internal and external stimuli). If viewed systematically against the requisites of ecological resource allocation and management, how are ecological resources allocated and managed against Ivatans' and tourists' satisfaction measures?

The social process requires an understanding of the Ivatans' context and their ability to accept tourism development, as they face many constraints related to vital resources, such as land, food, and water, that support their lives.



Prof. Chris Ryan sharing his expertise during a TOS knowledge-sharing session attended by the Batanes Observatory Core Team, Municipal Tourism Officers, and representatives from the Provincial Government. (31 January 2025)

Concurrent with this work, data on tourist satisfaction, for instance, which were previously not available to policymakers, complement other data generated by the Monitoring Center so far – solid waste, residents' perceptions of tourism development, and management effectiveness of protected area governance, to name a few.

The outputs are Data for Impact Use that will enable local government units to craft evidence-based policies and tourism projects based on the range of opportunity settings available to both Ivatans and tourists. Outcomes are crucial indicators for assessing whether conditions and tourism sites across three islands are threatened by additional tourism development. Impact underscores indicators of improved capacity among Ivatans in resource allocation and management that takes into account the experiences of all stakeholders, a critical component of sustainable and resilient Batanes tourism. Figure 8 illustrates the proposed TOS model, while two indicators are presented to demonstrate its application.

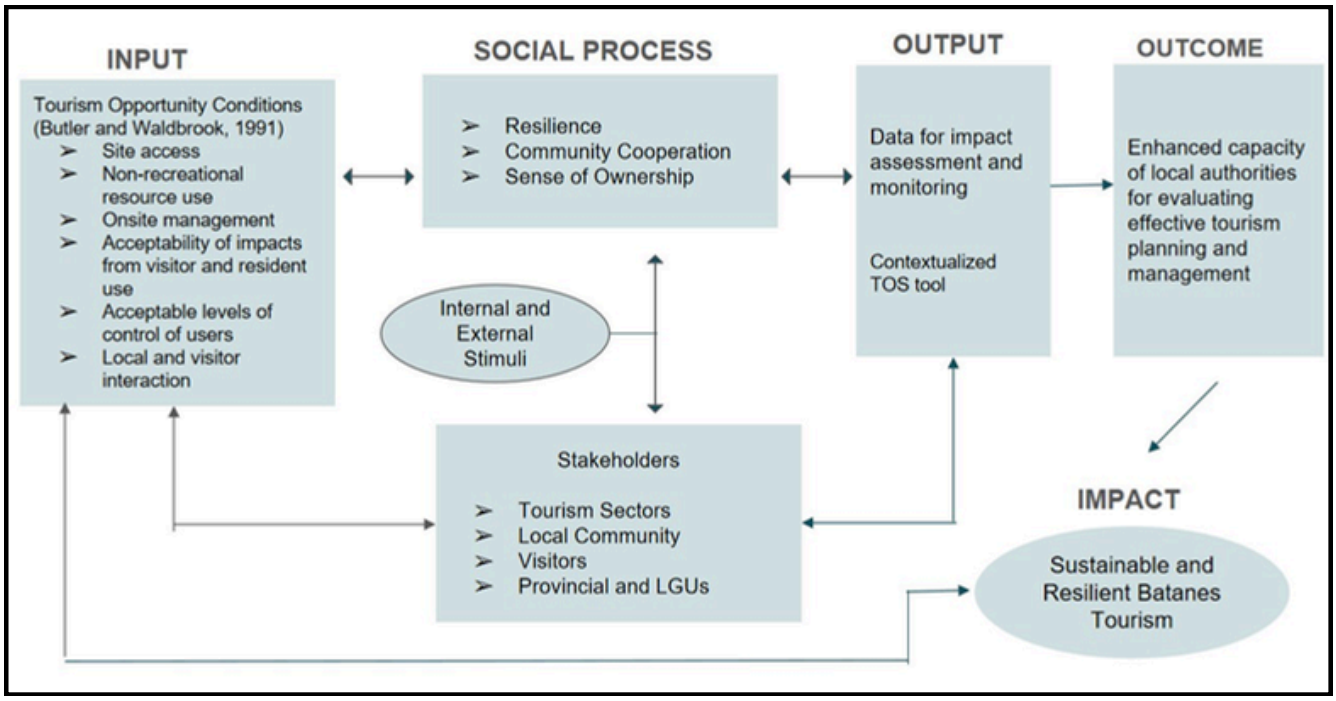


Figure 8. A Proposed Tourism Opportunity Spectrum Framework (Ramos-Tumanan, 2025)

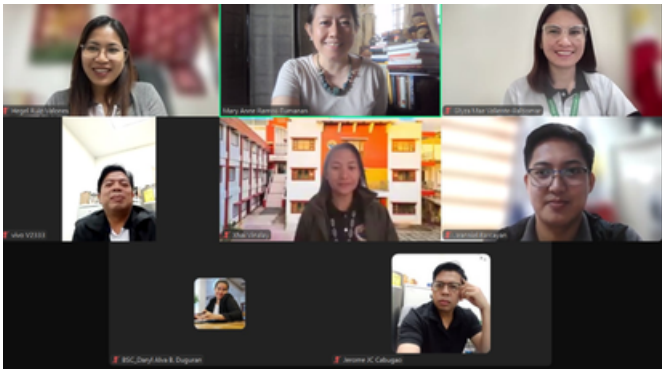
CASE IN POINT: FOOD SECURITY

From a systematic perspective, the TOS framework raises critical questions about the allocation and management of ecological resources: How are these resources distributed and managed to meet the needs of both Ivatans and tourists? To address this, a survey examining the impact of typhoons on residents' food consumption patterns, based on local food supply, is currently being conducted (as of December 2025) under the National Research Council of the Philippines (NRCP) grant. A follow-up survey is scheduled for March 2026 to assess the impacts of tourism on residents' food consumption during peak season.

The data collected will not only highlight food security issues in Batanes but also provide insights into supply chain management and logistical challenges within the province.



Moreover, the survey will assess the effectiveness of the questionnaire itself, as Ivatans actively identify the commodities to be included, incorporating indigenous foods that are readily available and significant to their daily lives.





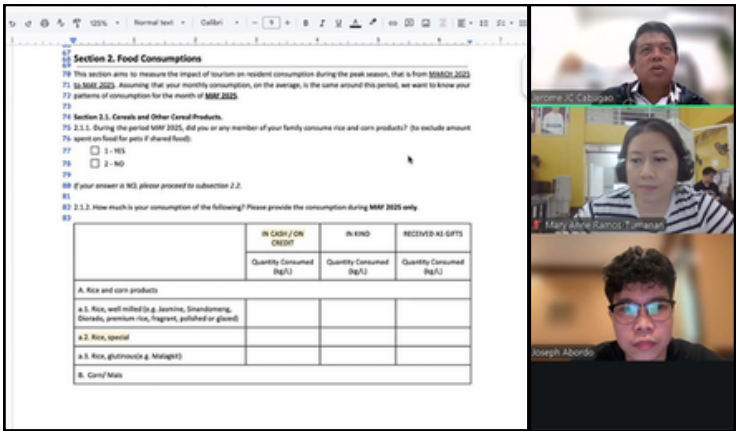


Photo 1. With the Undersecretary of the Philippine Statistics Authority, Claire Dennis Mapa and team.

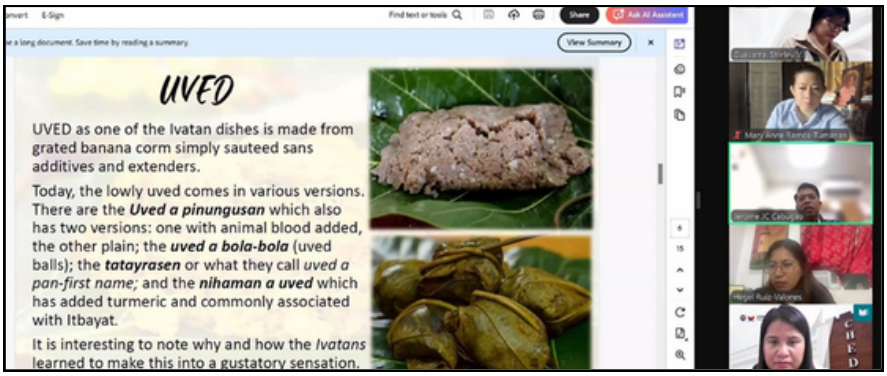
Photos 2-4. Consultative meetings with the Food Security Core Group, represented by Department of Trade and Industry Batanes, Department of Agriculture - Batanes, Batanes State College, Provincial Tourism Office, Philippine Statistics Authority -Batanes and the statistician from UP Cebu.

DEVELOPMENT OF DISASTER-RESILIENT AND TOURISM-READY PRODUCT-**UVED(**BANANA ROOT CORM)

As an output of product innovation under NRCP funding, the Ivatans, led by the food security core group, explored the potential of *uved* (banana root corm) as a viable tourism product, linking cultural heritage with practical and economic benefits. Dean Professor Shirley V. Guevarra, PFT, PhD, was engaged as the expert to examine the feasibility, quality, and food safety of uved at a household scale. Based on these findings, actionable recommendations have been provided to key agencies—including the Department of Agriculture, the Department of Trade and Industry, and the Provincial Government—to scale up initiatives that support economic growth, local entrepreneurship, and enhanced food security in the province. In addition, an investigation of the local banana leaf, *kab'baya*, was conducted to ensure food safety, as these leaves, native to Batanes, are readily available.

What emerged as a notable insight is that *uved* has proven to be a viable product for disaster relief or 'ayuda', particularly for tourists stranded on the islands due to adverse weather, as it is readily available across all three islands and has a confirmed shelf-life, as verified by the expert.







Clockwise from middle right: Raw and bottled UVED, Sensory Evaluation of bottled UVED, and collaborative meeting with the Food Security Core Group.

CASE IN POINT: CULTURAL INTEGRITY

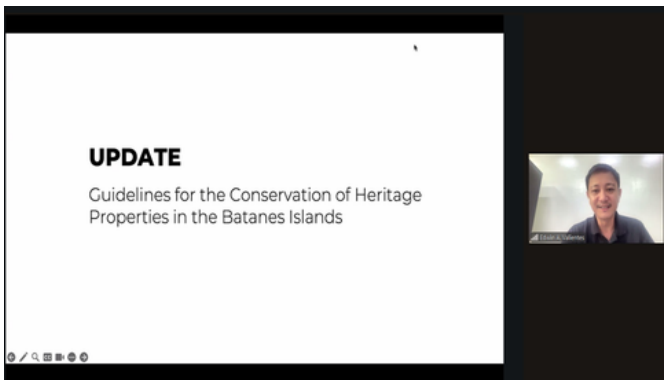
structured around Policy Guidelines on Built Heritage and Archaeological Sites

Cultural Integrity

As a critical TOS component for managing the supply and demand sides of resources, it is essential to ask: What guidelines can be established to preserve tourism sites while balancing economic needs, ecological and cultural preservation, and enhancing visitor experiences?

Guidelines for the conservation and preservation of built heritage and archaeological sites are structured around local and Indigenous notions of authenticity and integrity, as encouraged by the Nara Document on Authenticity (1994). These guidelines also align with national policies, such as the Implementing Rules and Regulations of RA No. 10066 (the National Heritage Act of 2009), and international standards, including the Venice Charter for the Conservation and Restoration of Monuments and Sites (1964) and the Burra Charter (amended 2013).

The emphasis on local heritage values and conservation practices reflects the goal of the observatory to foster a sustainable and resilient approach to heritage management. This is particularly significant given that results from the 2022 survey indicate that, while Ivatans are supportive of tourism development, it must be consistent with the protection of their cultural heritage and natural environment. Furthermore, this framework seeks to identify crucial indicators by which the varying conditions of tourism sites across the three islands can be assessed for potential threats arising from additional tourism development.





With Assistant Professor Edwin Valientes of the UP Department of Anthropology and Arch Jun Velez, it is noteworthy that both are Mangpus awardees—the highest honor conferred to Ivatans in recognition of their outstanding accomplishments and contributions across various fields, celebrating their significant impact on Batanes society.

KEY PROJECTS AND INITIATIVES

ESTABLISHMENT OF BATANES SLOW FOOD COMMUNITY

This initiative aims to advance the sustainable preservation of Ivatan food heritage and promote responsible consumption and production practices within the province. The program adopts the local name "***Inapu ñi Biyang***", which literally translates to "Grandchildren of *Biyang*." The chosen name holds deep cultural and symbolic significance. In Ivatan culture, *Biyang* is a common name for a grandmother—a figure who embodies warmth, care, and tradition. The name evokes a sense of home, family, and continuity, resonating deeply within Ivatan households. Historically, mothers and grandmothers prepared meals not only to feed their families but also to preserve culinary traditions and transmit indigenous knowledge.

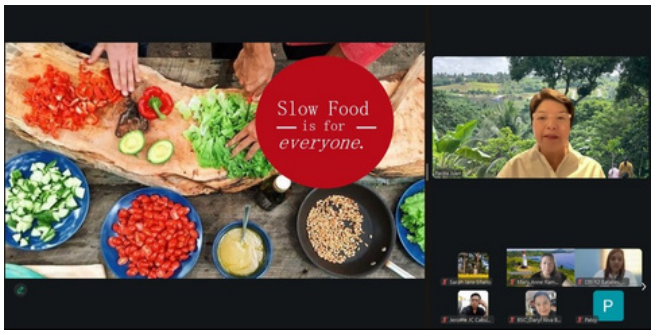
The program includes the following components:

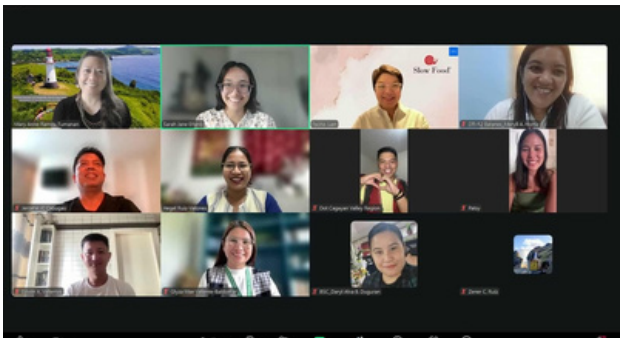
General Objective:

To safeguard and promote Ivatan survival foods by reintroducing them into daily consumption, fostering local business opportunities, and encouraging partnerships. The initiative seeks to preserve Ivatan food heritage while supporting ecological balance and livelihood resilience.

Commitment:

The team is committed to documenting and reviving traditional Ivatan survival foods through workshops with elders, ensuring knowledge transfer to younger generations. The program will encourage households, schools, and tourism establishments to integrate these foods into their menus, supports farmers and micro-entrepreneurs in processing and marketing survival food products, and promotes biodiversity through regenerative cultivation and responsible harvesting. Awareness campaigns, food tastings, and partnerships will strengthen community pride, cultural identity, and ecological sustainability.





Ms. Chit Juan introduces the Slow Food movement to the Food Security Core Group.

Inapu ñi Biyang captures the essence of what the Slow Food movement in Batanes represents: honoring the past by preserving ancestral foodways and ensuring their transmission to future generations. It symbolizes the community's collective identity as heirs to their foremothers' wisdom and as guardians of food that nourishes both body and soul.

The Slow Food Program—***Inapu ñi Biyang***—stands as a living testament to Batanes' commitment to sustainable heritage preservation, food sovereignty, and cultural continuity. *Source: Ms Daryl Batin-Duguran*



Photos were taken during the launch of Terra Madre Asia and the Pacific, held from November 19–23 in Bacolod City, Negros, Philippines. Michelin Star Chef Chele González was captivated by the uniqueness of "vunung", composed of uved, lunis (pork fat or small pieces of pork), and turmeric rice, all wrapped in kabbaya leaves. This dish reflects the Ivatan people's culinary heritage, highlighting the use of locally available ingredients and traditional preparation methods.







FIELD SCHOOL

To connect the monitoring activities with higher education, the UP Asian Institute of Tourism organized a field school in Batanes on July 14-18, 2025. Officially called the Midyear Educational Program in Tourism Development and Management, the field school brought together graduate students and tourism deans from various state colleges and universities for a collaborative, immersive, hands-on learning focused on solid waste management and biodiversity monitoring. The organization of the event was helped by partners from the islands specifically the Batanes State College, the Provincial Government of Batanes and the Department of Environment and Natural Resources - Batanes.







Participants with Gov Aguto of Batanes



Inspecting MRFs and conducting WACS were key activities during the program



A transect walk of Mt Iraya was one of the highlights

SUSTAINABILITY MEASURABLE INITIATIVES BY THE PROVINCIAL HERITAGE AND TOURISM OFFICE

The Provincial Heritage and Tourism Office (PHTO) delivered a productive year, with key accomplishments directly contributing to the sustainable monitoring areas of the Batanes Tourism and Hospitality Management Center (BTHMC).

In advancing Resident Satisfaction and Cultural Integrity, the PHTO undertook substantial work in the Preservation of Ivatan Built Structures, successfully completing the reroofing of four significant vernacular houses—one in Uyugan, two in Ivana, and one in Sabtang's Savidug Payvahayan. Complementary efforts included lime painting, repointing, and cleaning of seven Ivatan houses and two ruins in Ivana, as well as the twin house and fence walls in Uyugan, ensuring the aesthetic and structural integrity of these cultural landmarks for both residents and visitors.





Furthermore, the Preservation and Strengthening of Intangible Heritage was prioritized through initiatives such as the Laji Workshop/Summit, which celebrated and documented Ivatan oral history, alongside the Ivatan Kanta Contest and the Awarding of Culture Bearers (Maniped nu Ivatan awards). These activities reinforce local identity and pride.







In addressing Food Sufficiency and local economic connection, the Promotion of Indigenous Food Plants through Cookfest and Pie Baking Contests encouraged the use and celebration of local produce.

Meanwhile, the Preservation and Promotion of Ivatan Attire—through exhibits, fashion shows, and the hiring of artisans to train younger generations—created employment and human resource opportunities, engaging community members as trainers and craftspeople. These initiatives directly strengthen Destination Economic Benefits.





Crucial improvements in Accessibility and service quality were achieved through extensive training programs, including 5-Day Basic Life Support and Standard First Aid Training for 77 tourism stakeholders and frontliners, ensuring visitors receive professional, safe service.





Finally, the office actively promoted Batanes by participating in five national and regional trade fairs and leveraging social media, posting 98 reels, videos, and updates, thereby expanding the province's reach and attractiveness to a broader market and further contributing to sustained Destination Economic Benefits.



CHALLENGES FACED

Election and Transition Period: The May elections led to a 'changing of the guards' across various local government offices, including the governor's post, resulting in a temporary slowdown in coordination and decision-making during the transition period.

Severe weather-related disruptions: A series of typhoons struck both Batanes and the National Capital Region, affecting logistics, travel, and the conduct of face-to-face activities.

KNOWLEDGE DISSEMINATION ACTIVITIES

THE TWG MEETING

7TH TWG Meeting

The 7th Technical Working Group workshop was held on 12 February 2025 in Basco, Batan with participants from Itbayat, and on 13 February 2025 in Sabtang, serving as a platform for knowledge sharing, stakeholder validation, and identification of strategic priorities for 2025–2026, advancing evidence-based, inclusive, and sustainable Batanes tourism. Research findings were presented by the project leaders across key INSTO core areas, including resident satisfaction, tourism seasonality, governance, and solid waste management. During the workshop, multi-sectoral representatives presented the status of research data utilization to inform planning and decision-making, identifying challenges and corrective actions. It served as a participatory forum for soliciting local perspectives and identifying additional or emerging sustainability concerns, ensuring that observatory work remains responsive to their priority needs.

The 2025 research agenda was presented by project leaders, emphasizing the Tourist Satisfaction Survey, the inclusion of wastewater indicators, and continued monitoring of Phase One core issues. In addition, the Batanes Slow Food initiative and a field school for Asian Institute of Tourism students in the Tourism Impacts course were introduced as key components to strengthen experiential learning and community engagement. In addition, the stakeholders agreed that Phase Three of the INSTO programme should include these core issues: water management, climate change, energy management, and accessibility and inclusivity.



Discussions on climate change highlighted increasing variability in weather patterns, particularly in Sabtang Island, and its impacts on agricultural cycles, food security, and livelihoods. Participants emphasized the need to strengthen locally relevant climate indicators, integrate biodiversity considerations, and embed community-based adaptation measures within the Local Climate Change Action Plan (LCCAP).



On accessibility and inclusivity, stakeholders identified persistent barriers related to transportation reliability, infrastructure adequacy, economic participation, and inclusion of persons with disabilities.

High transport costs, weather-related disruptions to maritime travel, and limitations in forecasting accuracy were noted as factors constraining mobility, livelihoods, and tourism operations. Addressing these challenges was recognized as essential to ensuring equitable access to the benefits of tourism.



Discussions on energy management underscored the unique vulnerabilities of an off-grid context, compounded by outdated data and limited implementation of renewable energy initiatives.

While potential sites for solar and wind energy development have been identified on government-owned land, improved coordination, demand assessment, and stakeholder engagement are required to advance energy resilience.

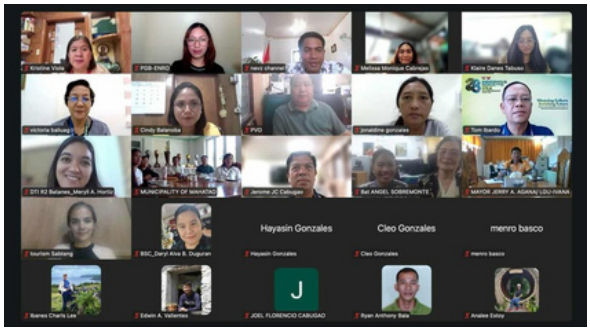
The 7th TWG Meeting reaffirmed the value of INSTO in collaborative and participative governance, evidence-based planning, and capacity-building, with full TWG attendance, it signals the Ivatans' commitment to advancing the observatory's objectives.



8TH TWG Meeting

The BTHMC organised a dedicated virtual presentation of key findings from studies on tourist satisfaction and expenditure, solid waste management and waste water. The event was attended the members of the TWG, including mayors, BSC president, and representatives from the governors office. The 9th TWG Meeting is envisaged to eventuate in the first quarter of 2026.





THE 2025 MANAGEMENT ACROSS TOURISM CONTINENTS (MTCON)





Held in the iconic city of Istanbul, Türkiye, from April 30 to May 3, 2025, the conference —organized by the Association of Turkish Tourism Academics with the support of leading Turkish universities and in collaboration with internationally respected scholars—served as a vital platform for examining contemporary issues and innovations in tourism and hospitality management.

During the event, Professor Ramos-Tumanan highlighted the application of the Tourism Opportunity Spectrum (TOS), emphasizing its methodological value in providing a structured basis for future research on ecological resource management. By classifying tourism sites according to their biophysical, social, and managerial attributes, TOS offers an analytical lens that supports proactive and effective tourism planning, promotes product diversification, and points to necessary adjustments in existing site conditions.

In another paper, Professor Dela Santa talked about Protected Area Management Board (PAMB) resolutions issued from 2014 to 2023 in the course of investigating the extent to which greater democratization in decision-making impacts the quality of governance in protected area tourism.

INTERNATIONAL CONFERENCE ON PLANETARY ACTIONS FOR SUSTAINABILITY (IPAS 2025)

The conference was successfully held on October 30 to November 4, 2025, at the Hongo Campus, University of Tokyo, Japan. The conference, with the theme "Inclusive Sustainability", provided a platform to explore inclusive policies and innovative strategies that address these inequalities and drive sustainable development. Discussions focused on social, economic, and environmental solutions that empower all populations, especially the most vulnerable.

Asst. Prof. Ma. Brida Lea Diola of the UP Institute of Civil Engineering and member of BTHMC delivered an oral presentation for their paper “Towards Sustainable Tourism and Solid Waste Management in Remote Islands: Policies and Practices in the Province of Batanes, Philippines”. She highlighted the strong awareness and participation of the residents of Batanes in solid waste management (SWM), particularly in waste segregation. However, infrastructure gaps exist and there’s a need for improved SWM systems to preserve the fragile ecosystem of Batanes. The findings support evidence-based policymaking aimed at advancing sustainable tourism, enhancing regulatory compliance, and strengthening waste reduction strategies in small island contexts.





UP COLLEGE OF ENGINEERING PROFESSORIAL CHAIR COLLOQUIUM 2025-2026

The UP Diliman College of Engineering, together with UP Engineering Research and Development Foundation, Inc. (UP ERDFI) and the UP National Engineering Center, held its 2025–2026 Professorial Chair Colloquium on December 10, 2025 at the UP ICE Main Building. With the theme “Engineering for Trust: Research, Governance, and Professional Excellence in Service of the Public Good”, 149 Professorial Chair Awardees showcased their research and extension work across 12 simultaneous sessions, covering all engineering disciplines, from infrastructure, manufacturing, and energy to digital systems, AI, environment, and sustainability.

Dr. Augustus Resurreccion presented their study “Evaluation of Wastewater Management Practices, Infrastructure, and Policies in the Batanes Tourism Sector” while Asst. Prof. Ma. Brida Lea Diola delivered her presentation “Towards Sustainable Tourism and Solid Waste Management in Remote Islands: Policies and Practices in the Province of Batanes, Philippines”. By sharing evidence-based insights through forums such as the Professorial Chair Colloquium, the BTHMC contributes to raising awareness, encouraging dialogue, and promoting informed decision-making on sustainable tourism, and solid waste and wastewater management challenges faced by remote island communities.



SALIKSIKHAY - UNIVERSITY OF THE PHILIPPINES RESEARCH COLLOQUIUM

Framed by the metaphor “Taming the Waves, Sustaining the Islands,” Professor Tumanan talked about how the resiliency of the Ivatans fosters a form of tourism where local pride and visitor satisfaction can co-exist, mutually reinforcing each other. Taming the waves of change means weaving together progress, heritage, and harmony with the land and sea that have long sustained the Ivatans.

The term "Saliksikhay" is a portmanteau of "saliksik," meaning research, and "hay," which denotes “zeal”. Mary Anne’s participation stands as a reminder of how scholarship can inspire more inclusive, grounded, and sustainable pathways for communities in protected areas.



Watch Here:
https://www.facebook.com/Saliksikhay/videos/1120671166547225
(Presentation starts at 4:13 mark; Q&A at 5:48:09)

KAKPEHAN- BATANES STATE COLLEGE

Student-led activities such as “Kakpehan” (an Ivatan term for “getting together”) designed to foster a deeper appreciation of research as a tool for building meaningful futures.





In Progress

Book chapter: Tourism Indicator Development and Sustainability	Dela Santa, E. and Ramos-Tumanan, M.A (2026)	The Routledge Handbook of Interdisciplinary Tourism Research: An Intellectual Feast

PLANNED ACTIVITIES FOR 2026

ADDITIONAL CORE ISSUES

- Climate Action
- Accessibility
- Energy Management
- Water Management
- Assessing Residents' Perceptions of Tourism Impact Informed by Disaster Vulnerability and Smart Technology Adoption

PILOT INTERVENTIONS FOR 2026

- Project Alignment Matrix

Structured around the Tourism Opportunity Spectrum (TOS) requisites and the UN Tourism Best Tourism Villages (BTV) indicators, this matrix will serve as an analytical tool to map existing initiatives, identify gaps, and align monitoring outputs. The resulting interim report will guide Batanes in preparing evidence-based documentation for the UN Tourism BTV application.

- Batanes Slow Food Learning Lab

Envisaged in partnership with Batanes State College, the Provincial and Municipal Government Units, and the Batanes Youth Council, this long-term initiative seeks to strengthen student learning outcomes through experiential, place-based learning opportunities for students enrolled in Gastronomy, Food and Culture, and allied hospitality courses offered by State Universities and Colleges (SUCs) from other regions of the country. By engaging directly with local farmers, fisherfolk, and Ivatan gastronome-advocates, students gain hands-on experience in farm-to-table practices and in Indigenous sustainable food production. This immersive approach not only strengthens their culinary and cultural knowledge about Batanes but also fosters an appreciation for local food heritage, ecological sustainability, and community-led food systems in protected areas.

- BTHMC Logo Design Competition

INSTITUTIONAL PARTNERSHIP

- A Memorandum of Agreement between the Sun Yat-sen University (Guangzhou) and the University of the Philippines Diliman supporting joint research, capacity-building, and knowledge exchange initiatives.
- A planned strategic partnership among State Universities and Colleges (SUCs), the Tourism Infrastructure and Enterprise Zone Authority (TIEZA), and the Department of Tourism (DOT) to support the expansion of observatories nationwide.

BTHMC RESEARCH TEAM

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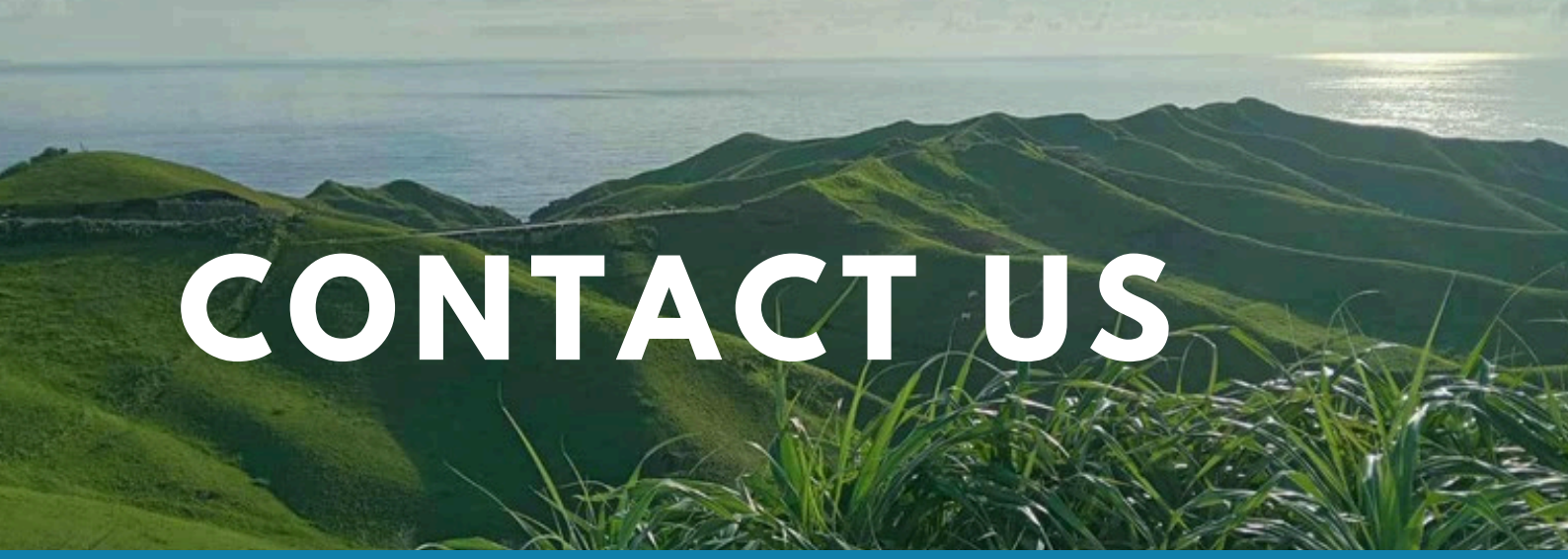
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- University of the Philippines Diliman Office of the Chancellor thru the Office of the Vice Chancellor for Research and Development
- National Research Council of the Philippines - Department of Science and Technology (NRCP-DOST)



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ANNEXES

A. Final Report - Tourist Satisfaction

B. Survey Instruments - Patterns of Residents' Food Consumption