

# IRBM

## PROJECT NEWSLETTER

EDITION 4 | JUL-SEP 2024



GEF/UNDP/ASEAN Project on Reducing Pollution and Preserving Environmental Flows in the East Asian Seas through the Implementation of Integrated River Basin Management (IRBM) in ASEAN Countries

# Making Waves from Source-to-Sea







Within the Pasac-Guagua Watershed is the Sasmuan Bangkung Malapad Critical Habitat and Ecotourism Area that has become a haven for tourists and migratory birds and other marine animals.

## Pasac-Guagua Watershed: A Sanctuary for Wildlife and People

Located in the central region of northern Philippines, the Pasac-Guagua Watershed is a critical source of water and livelihood that supports, at least, 10 municipalities (Bacolor, Floridablanca, Guagua, Lubao, Macabebe, Masantol, Minalin, Porac, Santa Rita and Sasmuan) with approximately 888,560<sup>1</sup> population, over 566,576 live along 152 villages within the watershed. It is one of the major river systems that drain to Manila Bay, considered as the main harbor of the country that is connected to a larger marine ecosystem, that is the South China Sea.

The Pasac-Guagua Watershed stretches 80.61 kilometers down to its main basin outlet in Manila Bay. Aside from providing livelihood and water supply, the river is also a channel of transportation for the locals. In fact, in the municipality of Guagua, it is still considered as one of the faster and cheaper ways to reach isolated villages through wooden or motorized bancas. During the school year, students from far-flung communities who attend school in the town proper are paying only PhP 5-10<sup>3</sup> per trip.

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<sup>1</sup> Philippine Statistics Authority 2020 Census

<sup>2</sup> Estimated from the delineated boundaries of Pasac-Guagua Watershed for the preparation of State of River Basin report

<sup>3</sup> USD 1=PhP 56.36 using September 10, 2024 exchange rate





Waterbirds are residents in the vicinity of Pasac-Guagua Watershed, being part of an important wetland area recognized internationally. (Photos by Irene Marie Villar/Pampanga PGENRO)



The mangrove boardwalk leading to the outpost in Sasmuan Bangkung Malapad Critical Habitat and Ecotourism Area.

It has a total of 78.75 hectares of mangrove forest cover located in the municipalities of Lubao, Sasmuan and Macabebe. And nestled in the downstream of Pasac-Guagua Watershed is the Sasmuan Bangkung Malapad Critical Habitat and Ecotourism Area (SBMCHEA), part of the larger Sasmuan Pampanga Coastal Wetlands (SPCW), a recognized Ramsar Site or Wetland of International Importance. This wetland area, the 8th Ramsar Site in the country includes mudflats, mangroves and riverine habitats that serve as an important stopover points for migratory waterbirds on the East Asian Australasian Flyway.<sup>4</sup>



Aside from providing protection against soil erosion, the Lubao Bamboo Hub and Eco-Park also employs locals and contributes to local tourism in Pampanga Province.

Five coastal villages in the Municipality of Sasmuan rely on SBMCHEA for coastal protection against flood and storm surge. According to the locals, fish catch has increased since the mangroves have grown and protected the area.

located downstream and are thus affected by lahar sediments from the Pinatubo eruption.

Lahar is one of the identified threats in the SPCW, located downstream of Pasac-Guagua Watershed, according to its management plan. The municipalities of Lubao, Guagua, and Sasmuan are

Other identified issues in the watershed were conflicting and competing water uses for available freshwater and impairment of environment flows that can lead to biodiversity degradation and loss, as well as increased susceptibility to climate related impacts. To address these, the Province aims to advance sustainable forestry, fisheries, and aquaculture.

<sup>4</sup> <https://rsis Ramsar.org/ris/2445>

The pollutants and other issues affecting the water quality of the Pasac-Guagua Watershed have adverse impacts to Manila Bay, which connects to the South China Sea – an important marine ecoregion and a major fishing ground and global shipping route. This connectivity emphasizes the importance of addressing the management concerns of the watershed within the source-to-sea framework, as espoused by the IRBM Project.

Through the IRBM Project, the awareness and understanding of the land-to-sea ecosystem

linkages will be enhanced, putting emphasis on the impacts of watershed-based activities to the coastal waters of Manila Bay. The Project will also promote partnerships between government, businesses, and communities through a participatory process, and facilitate knowledge sharing to ensure the successful transfer of best practices, technologies, and skills among the ASEAN Member States.

Read the full story:

<https://bit.ly/pasacguaguastory>



In heavily populated areas, wastes from domestic and industrial sources contribute to the decreasing water quality of the river.





## A Fisherman’s Dream

The mid-day sun was shining over a small banca passing through the Pasac-Guagua Watershed. In the surroundings, one could hear the engine slowly fading as it stopped in the riverbanks. An old man secured his banca and his catch of the day in a small fishing box before disembarking at a station. The signage says “DELTAAnim.” His name is Edgardo Tungcab, 62, one of the local fishers who work at the DELTAAnim, a mangrove nursery along the Pasac-Guagua Watershed in the Municipality of Sasmuan in Pampanga Province, Philippines.

The Pasac-Guagua Watershed is a biodiversity haven for migratory birds and mangrove forest, and a critical source of water and livelihood that supports at least 10 municipalities in the Pampanga Province including Sasmuan. It is one of the major river systems that drain to Manila Bay, which is connected to a larger marine ecosystem, that is the South China Sea.

***“DELTAAnim is a mangrove nursery project that the Provincial Government Environment and Natural Resources Office (PGENRO) of Pampanga started during the pandemic. It intends to help local fishers who have been displaced from their livelihood during community lockdowns,”***

**Ms. Irene Marie Villar**

Assistant Department Head of PGENRO

Starting in 2021, the Provincial Government entered into an agreement with a local federation of fisherfolks to establish and maintain a mangrove nursery, and used its local development and the disaster risk reduction and management funds to jumpstart the initiative. Starting with 5,000 propagules, a total of 30,000 mangrove propagules of various species are now being raised in the nursery. This initiative has paved the way for regular mangrove planting efforts of the province along the riverbanks of Pasac-Guagua Watershed down to





the Manila Bay outlet. They engage other national government agencies, law enforcements, and even the private sector in their mangrove reforestation projects. While the mangrove nursery is housed in Sasmuan, they also distribute propagules to other local governments in Pampanga.

The cash for work program of the Department of Social Welfare and Development complements the existing agreement between the Provincial Government and the fisherfolks' association by allowing 70 fishers from from seven coastal villages to work on rotational basis so that they can earn an extra PhP 430 per day<sup>5</sup> when they perform duties at the nursery.

That day, it was Edgardo's duty along with three others. It is important for him to earn extra money to support his daughter's college education. On a normal day with a good harvest, he can earn 400 to 500 pesos. His wife will sell the fish to the market and the earnings will be divided to buy food, school expenses, and a half gallon of fuel to go fishing the following day. By nighttime, it will leave him and his wife with empty pockets again.

***“Kapag may bagyo, walang huli. Sa paglipas ng panahon, mas nababawasan na rin ang nahuhuli naming isda. Kapag walang huli, wala ring pambiling pagkain para sa pamilya. Walang pambili ng krudo kaya nangungutang na lang. (Whenever there is typhoon, we can't fish. As the years passed by, our harvest decreased. If we don't have any harvest, we can't buy food for our family. We can't buy fuel, and so, we just borrow money.)”***

**Mr. Edgardo Tungcab**

Fisherfolk, Sasmuan Municipality, Pampanga



According to Edgardo, the river was deeper and wider a few decades ago, before the Mt. Pinatubo eruption. Today, it is shallower and narrower, which potentially affects not only the volume of their harvest but also the kind of fish that they can catch from the river. He said that high commercial valued fish such as groupers, rabbitfish (*samaral*), and silver perch (*ayungin*) are abundant in the area, particularly in the downstream near Manila Bay. Today, the common harvests are only milkfish and *bidbid* (lady fish).

<sup>5</sup> USD 7.63 using September 10, 2024 exchange rate (USD 1=PhP 56.36)





There are days when Edgardo will catch not fish but trash floating on the watershed or trapped along the riverbanks and mangroves. He will recover the trash and carefully inspect if it is something he can sell to the junkshop. He will save what little amount of money he would earn from it, and by the month end, he will use it to pay for their utilities.

Asked about his dream as a local fisher who has been living with his boat and fishing nets for more than half of his life, Edgardo had only one answer: to see his daughter get a college diploma. And he will fish every day no matter the weather, and work at the nursery every call of duty, to fulfill his dream for his family.

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IRBM Regional Project Manager Ms. Nancy Bermas gave a brief introduction on the IRBM Project and State of the River Basin reporting system during the SORB Reporting Inception Workshop in General Trias, Cavite.



Participants of the SORB Reporting Inception Workshop in Lubao, Pampanga discussed the governance and management indicators during the breakout session.

## Development of the State of River Basin Reports kicked-off in the Philippines priority sites

Inception workshops on the development of the State of River Basin (SORB) reports were jointly organized by the Regional Project Management Unit (RPMU) of the IRBM Project and the Provincial Governments of Pampanga and Cavite in coordination with the University of the Philippines Los Banos Foundation Inc. last July to August in the two priority sites in the Philippines. On July 22-23, 2024, the IRBM Project convened provincial, municipal, private sector, academe and other local partners in the Province of Pampanga to discuss the SORB Reporting of Pasac-Guagua Watershed. Further, the workshop in the Province of Cavite for the Imus-Ylang Ylang-Rio Grande Rivers was organized on August 22.

Among the key items discussed included the delineation of the geographic boundaries of Pasac-Guagua Watershed and Imus Ylang Ylang Rio Grande Rivers, the governance and management indicators and accomplishing the data gathering templates for the SORB reports. Project partners also participated

in the stakeholder mapping and analysis and action planning for the completion of the SORB reports for launching at the IRBM Forum during the 2024 East Asian Seas Congress on 6-8 November 2024 in Xiamen, PR China.



Participants of SORB Reporting Inception Workshop for (Top) Pasac-Guagua Watershed and (Bottom) Imus-Ylang Ylang-Rio Grande Rivers.





RPMU staff together with MOEF's Director of Water Pollution Control Mr. Tulus Laksono and his staff during the courtesy meeting to discuss the project implementation in Ciliwung River Basin.

## Courtesy meeting organized with the Ministry of Environment and Forestry of Indonesia

Jakarta, Indonesia – On August 5, 2024, the RPMU staff had a courtesy meeting with the Directorate of Water Pollution Control, Directorate General of Environmental Pollution and Degradation Control, Ministry of Environment and Forestry (MOEF) of Indonesia led by Director Tulus Laksono, to discuss the ways forward on the project implementation in Ciliwung River Basin.

The team also visited MOEF's food waste biodigester and biocomposting set-up.

## Six Participating ASEAN Member States convened for GESI and Stakeholder Engagement Workshop

Bogor, Indonesia – The RPMU gathered key officials and project teams from the six ASEAN Member States for a Regional Gender Equality and Social Inclusion

and Stakeholder Engagement Workshop on August 6-7, 2024 in Bogor, Indonesia. Jointly organized with the Center for Coastal and Marine Resources Studies of IPB University and the Ministry of Environment and Forestry Indonesia, the workshop aimed at sharing and discussing relevant findings of the GESI analysis and ways to incorporate GESI into the action plans, and capacitate project partners to ensure a gender and socially inclusive project implementation. The regional partners also updated their stakeholder maps and plans for their respective priority river basins.



GESI specialist, Ms. Sef Carandang, during the open discussion on mainstreaming GESI into the project activities.



Participants of the GESI and Stakeholder Engagement Workshop in Bogor, Indonesia.





RPMU staff and representatives from MOEF, IPB university and Depok City during the site visit along the segment of Ciliwung River in Depok City, Indonesia.

## Site visit, meeting with stakeholders conducted in Ciliwung River

Bogor, Indonesia – From Bogor City and Bogor Regency to Depok City, the team comprising of RPMU staff and representatives from MOEF, IPB University and Depok City conducted a site visit in several areas of Ciliwung River on August 8-9, 2024.

During the visit, the team met with local officials, community-based organizations, and local establishments who benefited from, and are involved in the management of the river basin in their respective areas. Local waste management practices were also observed in Depok City's traditional market, local junk shop that collects recyclable wastes, and organic compost facilities in the City that process food wastes and biodegradables.

The RPMU staff also attempted to trace the headwater of Ciliwung River in the upland area of Bogor Regency. In the midstream, the Ciliwung Dam, which was built in 1911 supports 333 hectares of farm land.

The visit aimed at gathering first hand knowledge of the river, its resources and uses and the communities around it. The information will provide additional inputs in the preparation of the profile story for Ciliwung River.



The team visited the (1) local junkshop that collects recyclable wastes in Depok City and (2) the Ciliwung Dam in the upland area of Bogor Regency.





Participants of the Indigenous People's Consultation Meeting in Porac, Pampanga.

## Indigenous leaders in Pampanga Province consulted on the IRBM Project

Porac, Pampanga, Philippines – A dialogue with the leaders of indigenous communities from the Province of Pampanga was organized on September 17, 2024 to introduce the project, thus ensuring that they are informed and their perspectives on project implementation are heard.

The IRBM Project ensures that the importance of the indigenous people's traditional practices and their rights in managing their ancestral domain are taken into consideration in the course of project implementation. The consultation also aimed to convey the project's intention of engaging and supporting different communities in the province.

The meeting was participated by 29 IP leaders including women from the five communities in the Municipality of Porac as well as representatives from National Commission on Indigenous Peoples - Region 3, Municipal Environment and Natural Resources Office of Porac, and Provincial Government of Environment and Natural Resources Office of Pampanga.



RPMU staff and representatives from Pampanga PG-ENRO led the breakout session during the consultation meeting with the leaders of IP communities in Porac, Pampanga.





Participants of the 10<sup>th</sup> International Waters Conference in Punta del Este, Uruguay.

## IRBM Project participates in the 10th GEF Biennial International Waters Conference

Punta del Este, Uruguay – The IRBM Project participated in the recently concluded 10<sup>th</sup> Biennial International Waters Conference (IWC10) on 20-29 September 2024 in Punta del Este, Uruguay.

The IRBM Regional Project Manager Ms. Nancy Bermas joined a panel discussion under the session on Achieving Policy Coherence from Source to Sea, where she shared the Project’s experience in establishing the governance mechanisms at regional and river basin levels to improve the management of priority river basins in six ASEAN Member States. The pitch highlighted the utilization of the institutional framework of the ASEAN cooperation on environment through the ASEAN Working Group on Water Resources Management as the regional platform for consensus decision-making, risk management, cooperation and project execution oversight. Ms. Bermas also underscored that various models of inter-agency, multisectoral coordinating mechanisms were established based on the needs and opportunities at the basin level.

Under the theme “Transformative actions and impacts for the water and ocean SDGs: The GEF IW response to

the global challenge,” the conference brought together over 400 participants from different regions of the globe, celebrating 30 years of the Global Environment Facility International Waters programmes focal area. The multi-stakeholder participation witnessed exchange of learning and experiences from project managers, institutional stakeholders from beneficiary countries, non-governmental and civil society organizations, transboundary and regional management institutions, United Nations agencies, international funding institutions, intergovernmental organizations, and the private sector.



IRBM Regional Project Manager Ms. Nancy Bermas during the panel discussion on Achieving Policy Coherence from Source to Sea.



## 2024 KEY EVENTS



**EAS** XIAMEN, CHINA  
6-8 NOVEMBER  
**CONGRESS2024**



2024厦门国际海洋周  
World Ocean Week in Xiamen

### East Asian Seas Congress 2024

6-8 November 2024 | Xiamen, China

Connect with thought leaders and networks on sustainable marine and coastal management and learn about the latest on ocean science conservation, policy, practice, and financing.

View EASC2024 e-Program [here](#).

#### IRBM Forum - State of River Basin Reporting: Establishing the Baseline and Mechanism to Track Progress in the Source to Sea Continuum

6 November 2024 | 14:30 - 17:30 H

#### Engaging Stakeholders in River Basin Planning and Risk Management

East Asian Seas Congress 2024

7 November 2024 | 14:30 - 17:00 H



#### About the Integrated River Basin Management (IRBM) Project

Supported by the [Global Environment Facility](#), the IRBM Project aims to set-up a functional management mechanisms in priority riverbasins of six ASEAN countries to reduce pollution and sustain freshwater environmental flows as well as adapt to climate change vulnerabilities. The Project is being implemented by [UNDP](#) and executed by [PEMSEA](#) in collaboration with [ASEAN](#).

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