ISPRS Annals of the Photogrammetry, Remote Sensing and Spatial Information Sciences, Volume X-M-2-2025
30th CIPA Symposium “Heritage Conservation from Bits:
From Digital Documentation to Data-driven Heritage Conservation”, 25–29 August 2025, Seoul, Republic of Korea

Cultural Mapping of Natural Heritages in the First and Second Congressional Districts in Iloilo Province West Central Philippines

Joselito Trandio P. Mendoza[1], Anna Razel L. Ramirez[2]

[1] Iloilo Science and Technology University, La Paz, Iloilo City, 5000, Philippines - joselitotrandio.mendoza@isatu.edu.ph
[2]University of the Philippines in the Visayas, Molo, Iloilo City, 5000, Philippines - alramirez@up.edu.ph

Keywords: Cultural Mapping, Natural Heritage, Flora and Fauna, Land Formation, Water Bodies, Philippines.

Abstract

Heritage inventory has been an essential tool in gathering, analyzing, and generalizing information on the cultural properties of a place. The Cultural Mapping of Panay and Guimaras (CMPG) in the Philippines aims to inventory, map, document, validate, and store the information in digital forms on the natural heritage, tangible and intangible cultural assets of the region. This paper focuses on the natural heritage domain of the project that covers only the first and second congressional districts in the province of Iloilo.The methods used in gathering information are the participatory research design with the use of standard mapping form, interview, focus group discussion, and archival search.The results of the study covered 216 natural heritage maps which were categorized under the flora and fauna, land formation, and water bodies. The maps highlight the iconic flora associated with the town’s names, significance of the plants in agriculture, ecology, and societal needs. Some iconic faunas are embedded in the town’s place names, livelihood contribution, festivals, fish and avian diversity, and animal’s role in maintaining ecological balance. Land formation highlights the hills and mountains of the districts that reflect its rugged mountainous terrains and slopes. Water bodies include marine sanctuaries, rivers, creeks, and tributaries, waterfalls, lakes and ponds, with associated springs and wells. Cultural mapping is a tool to gather information, conserve and protect existing natural or environmental assets, and promote its significance in various facets of human endeavors. However, there are significant challenges and opportunities in the conduct of cultural mapping in the region. Challenges include lack of Memorandum of Agreements (MOAs) on the participation of the Local Government Units (LGUs), and difficulty in obtaining permits to conduct research from the office that oversees the Indigenous Peoples (IPs). Opportunities on the other hand, include the presence of cultural experts and researchers in the region, the vast arrays of cultural and natural assets that need to be inventoried and the proliferation of cultural mapping project to other regions of the country. The adoption and implementation of the Cultural Mapping Law can truly be achieved when the culture maps of the different regions will be considered as shared heritage, draws out our identity as a people, and becomes the source of our national pride as Filipinos.

1. Introduction

The enactment of Cultural Mapping Law (RA 11963) on August 2023 in the Philippines gave impetus to LGUs to comply with the act’s provisions and to draw out the richness of the country’s cultural heritages. The Cultural Mapping of Panay and Guimaras (CMPG) then ensued in the Western Visayas region with funding from Senator Loren B. Legarda as the major proponent of the law. This cultural mapping is envisioned to ensure the compliance and documentation of the various domains of our natural and cultural assets. Cultural assets are heritages that are unique to the community which have been part of the past and significant to the existence of the local people. The cultural mapping aimed to inventory, map, document, store, and disseminate heritage properties to various stakeholders that could be an engine for growth to culture appreciation, cultural education, heritage preservation and conservation, tourism development, livelihood opportunities, and other various applications.The cultural mapping project was delegated to various State Universities and Colleges (SUCs) in the region to divide the scope of work.The University of the Philippines in the Visayas (UPV) is the lead agency that served as the major proponent of the project. The coverage areas of the project included the four provinces of Panay, namely Aklan, Antique, Capiz, and Iloilo, and Guimaras as an island province. The Iloilo province is composed of five congressional districts. The Iloilo Science and Technology University (ISATU) was assigned to map the natural and cultural assets of the First and Second Congressional Districts of the province. There are five domains mapped, namely the tangible movable, the tangible immovable, intangibles, institutions and personalities, and the natural heritage. This paper focuses mainly on the mapping of the natural heritage domain.

1.1. Objectives of the Study

This study aimed to conduct cultural mapping of natural heritages in the First and Second Congressional Districts in Iloilo Province, West Central Philippines. Specifically, this heritage inventory covered the iconic flora and fauna, significant land formations and water bodies in the various municipalities under the two congressional districts of the province. It also aimed to document challenges and opportunities in the conduct of the cultural mapping project.

1.2. Locale of the Study

The First and Second Congressional Districts in the province of Iloilo cover fifteen municipalities. The first congressional district has seven municipalities; Guimbal, Igbaras, Miagao, Oton, San Joaquin, Tigbauan, and Tubungan. The second congressional district has eight municipalities, Alimodian, Leganes, Leon, New Lucena, Pavia, San Miguel, Santa Barbara, and Zarraga.

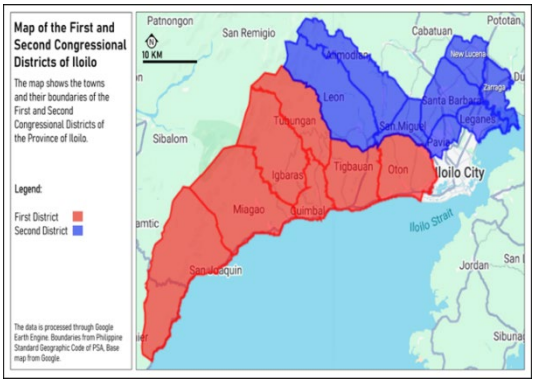

Figure 1. shows the map of the First and Second Congressional Districts of the province of Iloilo with their boundaries.

This contribution has been peer-reviewed. The double-blind peer-review was conducted on the basis of the full paper.
https://doi.org/10.5194/isprs-annals-X-M-2-2025-261-2025 | © Author(s) 2025. CC BY 4.0 License.

2. Materials and Method

2.1. Training of Cultural Mappers

The project duration was from January to December 2024. The mapping of the natural heritage along with other domains was conducted primarily by the Research Assistants (RAs) recruited from various SUCs with their respective study leaders, consultants, and the university coordinator. A week-long training of the mappers was conducted on March 2024 to prepare the participants in filling up the forms based on the guide book on cultural mapping toolkit by the National Commission for Culture and the Arts (NCAA, 2019).

2.2. Use of the Cultural Mapping Toolkit by the Research Assistants through Participatory Research

The mapping form in the natural heritage domain includes the background information of the natural asset, its description, associated stories, its significance, the key informants and the mapper’s data. The project for the Cultural Mapping of the entire Region VI, initiated by the Office of Senator Loren B. Legarda and implemented by the University of the Philippines Visayas, employed a participatory research design to ensure comprehensive and community-driven results. This approach involving academicians from SUCs such as West Visayas State University, Iloilo State University of Fisheries, Science and Technology, and Iloilo Science and Technology University ensure active community participation through personal engagement and conversations.

A key component of this methodology was the deployment of RAs recruited from the SUCs. These RAs are familiar and often related to the local communities, facilitated efficient navigation of the terrains and bypassed potential barriers rooted in community norms. Their local ties, being residents and having prior engagements can speak local dialect, that enabled them to gain easier access to community members, fostering trust and openness. The RAs were hired as full-time cultural mappers, leveraging their intimate knowledge of the local environment. Meanwhile, the SUCs contributed academically through faculty members and researchers skilled in documentation, archival work, and content editing. Their expertise ensured that the natural heritage data collected were accurately documented and elevated to scholarly standards. Community informants were identified with the assistance of village officials and community elders, ensuring that the information gathered was both credible and representative of the local landscape. This collaborative, participatory approach aimed to produce detailed, authentic, and scholarly documentation of the region’s natural heritages. The participatory research design also ensures data are correct from the sources and researchers are part of the community and have been there to witness, experience the significance of these natural heritages. These are aside from the collected data taken from archives and secondary sources.

2.3. Accomplishing Mapping Forms by Interviews of Key Informants, Focus Group Discussion, and Triangulation.

The mappers did the intensive fieldwork from April to October 2024. Key Informants Interviews (KII) include the tourism officer, local historians, municipal and village officials, local folks, and community elders in the respective municipalities. For more than two participants, Focus Group Discussion (FGDs) was employed to collate the answers, transcribe, and translate it to the actual form. Triangulation was conducted by cross validating the responses of key informants, feedbacking and critiquing by the experts and substantiated by published literature.

2.4.Obtaining Information from Secondary Sources such as Books, Archival Holdings, Government Records, and Online Sources such as Google Scholar, and Stuart Exchange.

The books as secondary sources primarily were accessed from the regional museum archives located at the school campus of the University of the Philippines in the Visayas under the auspices of the Center for West Visayan Studies. Online resources such as the Stuart Exchange and Google Scholar were readily accessible platforms to obtain related information to enrich natural heritage maps especially on the botanical description of plants and animal taxonomy.

2.5. Community and Expert Validation

From November to December of 2024, community validations were conducted for each respective municipality. Various stakeholders from the different sectors of the municipality including the local historians, municipal officials, academe, school representatives, and respected elders of the community were invited to critique and validate each natural and cultural assets mapped in their localities. They readily gave their feedback and comments. The highlight of the validation was mainly to ascertain the integrity of the mapped form content and authenticity of the substance contained therein, highlighting those natural and cultural assets with contentious status.

2.6. Creation of Websites for the Heritage Inventory

The website for the Cultural Mapping of Panay and Guimaras project was launched on August 2024. The website can be accessed through the https://cmpg.upv.edu.ph/ link.

3. Results and Discussion

The cultural mapping on the natural heritages of the First and Second Congressional Districts in the province of Iloilo which constitutes 15 municipalities yield a total of 216 natural heritage maps which broken as follows; 100 maps for the iconic flora, 39 for the iconic fauna, 30 on land formation and 47 water bodies.

The mapped flora and fauna in the various towns of the two districts are closely intertwined with the history of the named places of the municipalities (Table 1). In the first district of Iloilo the towns of Miagao, where the UNESCO World Heritage church was located derived its name from Miagos plant (*Osmoxylon lineare*), Tigbauan from a grass called Tigbaw (*Saccharum spontaneum*), and Oton from Kogtong (*Epinephelus lanceolatus*) or grouper fish.

Municipality	Flora	Fauna
Alimodian	*Alimodias* (*Coix lacryma- jobi*), Bagiw bagiw (*Tabernaemontana divaricata*), Balayong (*Cassia fistula*), Bamboo (*Bambusa blumeana),* Banana (*Musa balbisiana x acuminata)*, Coconut (*Cocos nucifera*), Coffee (*Coffea robusta*), Dahlia (*Dahlia pinnata),* Pitcher plant (*Nepenthes sp.*), Rafflesia (*Rafflesia speciosa),* Strawberry (*Fragaria sp.),* Wild Raspberry (*Rubus rosifolius)*	Halo (*Varanus nuchalis*), Iro (*Paradoxurus hermaphroditus),* Kalaw (*Buceros hydrocorax*), Limokon (*Phapitreron leucotis*), Tigwati (*Orthotomus castaneiceps*), Visayan Warty Pig (*Sus cebifrons*), Visayan Spotted Deer (*Rusa alfredi*)
Guimbal	Acacia (*Samanea saman*), Badiang (*Alocasia macrorrhizos*), Banana (*Musa balbisiana x acuminata*), Buri (*Corypha utan*), Cacao (*Theobroma cacao*), Langka (*Artocarpus heterophyllus*), Lunok (*Ficus elastica*), Nito (*Lygodium circinnatum*), Peanut (*Arachis hypogaea*), Sibukao (*Caesalpinia sappan*), Sagunyati (*Tectona grandi)*	
Igbaras	Mango (*Mangifera indica*)	Singarong (*Prionailurus bengalensis*), Urang (*Macrobrachium rosenbergii)*
Leganes	Bakhaw Laki (*Rhizophora apiculata),* Nipa (*Nypa fruticans*), Pagatpat (*Sonneratia alba*)	Malaysian Plover (*Charadrios peronii*), Mudcrab (*Scylla serrata*)
Leon	Agboy (*Mussaenda philippica*), Anonang (*Cordia dichotoma),* Bamboo (*Bambusa blumeana*), Banana (*Musa balbisiana x acuminata*), Benguet Pine (*Pinus kesiya*), Bunga (*Areca catechu*),Buyo (*Piper betle*), Coconut (*Cocos nucifera*), Daginot(*Robus rosifolius*), Lauan (*Shorea negrosensis*), Mango (*Mangifera indica*), Mirasol (*Tithonia diversifolia*), Palawan (*Cyrtosperma sp.*), Pandan (*Pandanus amaryllifolius*), Pipino (*Cucumis sativus*), Chayote (Sechium edule),Strawberry (*Fragaria sp*), Talisay (*Terminalia catappa*)	Carabao (*Bubalus bubalis carabanesis*), Halo (*Varanus nuchalis*)
Miagao	Alimodias (*Coix lacryma-jobi*), Arumpidan (*Tetrastigma harmandii*), Avocado (*Persea americana*), Bombay (*Allium cepa*), Burubitoon (*Barringtonia asiatica*), Coconut (*Cocos nucifera*), Coffee (*Coffea robusta*), Lunok (*Ficus elástica*), Mango (*Mangifera indica*), Miagos (*Osmoxylon lineare),* Sibucao (*Caesalpinia sappan*)	Aloy (*Euthynnus affinis),* Kabayo (*Equus caballus*)
New Lucena	Acacia (*Samanea saman*), Lunok (*Ficus elástica*), Mambog (*Mitragyna speciosa)*	
Oton	Bamban (*Donax cannaeformis*), Bamboo (*Bambusa blumeana),* Banana (*Musa balbisiana x acuminata*), Cacao (*Theobroma cacao),* Coconut (*Cocos nucifera*), Corn (*Zea mays*), Rice (*Oryza sativa*), Roma (*Prosopis juliflora*), Salo Tree (*Canarium asperum*), Watermelon (*Citrullus lanatus*)	Halo (*Varanus nuchalis*), Kogtong (*Epinephelus lanceolatus*), Lampirong (*Placuna placenta*), Miro (*Paradoxurus hermaphroditus)*
Pavia	Salay Tree (*Boswellia serrata*), Lunok (*Ficus elastica*), Rice (*Oryza sativa)*	Carabao (*Bubalus bubalis carabanesis)*
San Joaquin	Fire Tree (*Delonix regia*)	Taglang Carabao (*Bubalus bubalis carabanesis)*
San Miguel	Bamboo (*Bambusa blumeana*)	Carabao (*Bubalus bubalis carabanesis),* Kanding (*Capra aegagrus hircus)*
Santa Barbara	Bayoko Tree (*Artocarpus ovatus*), Catmon (*Dillenia philippinensis*), Coffee (*Coffea robusta*), Palochina (*Cassia alata),* Mango (*Mangifera indica)*	
Tigbauan	Acacia (*Samanea saman*), Burubitoon (*Barringtonia asiatica*), Rubber Tree (*Ficus elástica*), *Mango (Mangifera indica), Tigbaw (Saccharum spontaneum)*	Bolinao (*Stolephorus waitei),* Hipon (*Acetes spp*), Liwit (*Trichiurus lepturus*)
Tubungan	Abaca (*Musa textilis*), Banana (Musa balbisiana x acuminata), Buenavista (*Codiaeum variegatus),* Bunga (*Areca catechu),* Buyo (*Piper betle*), Coconut (*Cocos nucifera*), Kalachuchi (*Plumeria rubra*), Kamote (*Ipomoea batatas*), Mango (*Mangifera indica*), Rafflesia (*Rafflesia speciosa*), Tawa Tawa (*Euphorbia hirta*)	Amo (*Macaca fascicularis philippenensis),* Banatad *(Chalcophaps indica*), *Bukaw (Bubo philippensis*), Carabao (*Bubalus bubalis carabanesis*), Halo (*Varanus nuchalis*), Kulaknit (*Haplonycteris fischeri*), Saguksok (*Centropus viridis*), Umbok (*Turnix suscitator*),Visayan Warty Pig (*Sus c ebifrons*), Wild Chicken (*Gallus gallus*)
Zarraga	Acacia (*Samanea saman*), Bamboo (*Bambusa blumeana*), Mangrove (*Avicennia marina*), Tabun-ak (*Phragmites vulgaris*), Tamarind (*Tamarindus indica)*	Maya Pula (*Lonchura atricapilla*), Pantat (*Clarias gariepinus*), Tulabong (*Egretta garzetta*)

Table 1. The Iconic Flora and Fauna of the First and Second Congressional Districts of Iloilo Province

In the second district, the town of Alimodian's name is derived from Alimodias (*Coix lacryma-jobi*) plant, the old name of the town of Santa Barbara was Catmon (*Dillenia philippinensis*), a critically endangered plant (DENR, 2017). New Lucena's old name was Jimanban (*Donax cannaeformis*), Leganes, the first settlement was Guihaman, meaning wild boar or the Visayan warty pig (*Sus cebifrons*) that roamed the grassland of the town since ancient times.

The first district is located at the southern portion of the province of Iloilo where some municipalities are along the coasts with mountainous terrains. The coastal towns mapped various species of fish and crustaceans. In Tigbauan, for example, species of Liwit (*Trichiurus lepturus*) fish, Hipon (*Acetes* spp) shrimps, and Bolinao (*Stolephorus waitei*) fish were mapped. The dried acetes are a special delicacy of the town. The kinilaw or deboned bolinao soaked in grated green mango with coconut milk is the famous fish cuisine of the village. Lampirong (*Placuna*

placenta), a shellfish in Oton, is renowned for the shells made into windowpanes. Aloy fish (*Euthynnus affinis)* in Miagao when in abundance gave substantial income for the fisherfolks that would help them send their children to schools. Freshwater fishes such as Pantat (*Clarias gariepinus*) in Zarraga, became an inspiration of their yearly town celebration of the Pantat Festival. Urang (*Macrobrachium rosenbergii*), a freshwater shrimp in Igbaras became popular in the Tangyan River, where the people catch them especially women, in groups making the harvesting season a culturally significant tradition of the town. In the municipalities of Alimodian and Tubungan, there are animals mapped like the Visayan Warty Pig (*Sus cebifrons*), the Visayas spotted deer (*Rusa alfredi*), Kalaw (*Bruceros hydrocorax*), and Monitor Lizard (*Varanus mabitang*) are considered as critically endangered (DENR, 2019). The mountainous terrains of the towns are connected to the Panay Mountain Ranges providing a conducive environment for these animals to thrive and reproduce. The Visayan spotted deer is one of the flagship Philippine endemics. This is now reduced to only a few hundred individuals in the islands of Masbate, Negros and Panay, which are thought to be extinct in Cebu and Guimaras (Mittermeier, et al.,2004).

Cattle raising is a common livelihood in the different towns of the first and second districts of Iloilo. An significant event is the Pasungay or bull, carabao (*Bubalus bubalis carabanesis*), and horse (*Equus caballus*) fighting in the town of San Joaquin. Every January, during the town’s fiesta, the Pasungay is being held that converges people from different places to witness the cattle fights. Birds were also mapped in the two districts, that indicate the health of the ecosystem. Birds mapped are Limokon (*Phapitreron leucotis*), Tigwati (*Orthotomus castaneiceps*) in Alimodian, Malaysian Plover (*Charadrios peronii*) in Leganes, Banatad (*Chalcophaps indica*), Bukaw (*Bubo philippensis*) , Saguksok (*Centropus viridis*), Umbok (*Turnix suscitator*) in Tubungan and Maya Pula (*Lonchura atricapilla*) and Tulabong (*Egretta garzetta*) in Zarraga.

The iconic flora on the other hand, like peanut (*Arachis hypogea*) is the raw material to make “bandi”, a caramelized-peanut seeds with muscovado sugar that made the town of San Joaquin famous for tourists’ pasalubong or gifts. The major agricultural products of the first district are rice (*Oryza sativa*), banana (*Musa* spp), bamboo (*Bambusa* spp), corn (*Zea mays*) and mango (*Mangifera indica*). Miagao, the town famous for its Hablon weaving industry, sourced their natural fibers in the nearby municipalities where abundant abaca (*Musa textilis*) are found. The mapped plants include critically endangered plants such as *Rafflesia* and *Nepenthes*. The flora of the Philippines boost for around 66% endemism which the Conservation International considered the “hottest of the hotspots” (Mittermeier, et al.,2004).

The municipality of Leon which is considered as the “Summer Capital of Iloilo” capitalizes for the presence of pine forests in the village of Bucari. Benguet pines (*Pinus kesiya*) were planted during the American period and developed into the summer destinations in the province. Due to the cooler climates in the Bucari Pine Forests, the thriving plants such as strawberries, chayote, carrots and cabbages served as the main ingredients in making fresh vegetable salads. Leon serves as the major vegetable producer of the province.

In coastal districts, unique flora adapted to saline environment were also mapped. Bakhaw Laki (*Rhizophora apiculata*), Nipa (*Nypa fruticans*), Pagatpat (*Sonneratia alba*) in Leganes, and Mangrove (*Avicennia marina*) in Zarraga are very important plants in protecting the coastal communities from storm surges during typhoons.

The coastal zones and mountainous terrain characteristics of some of the towns of the first and second districts of Iloilo Province are blest with abundant unique land formations and water bodies (Table 2). The First Districts towns traversing Oton-Tigbauan-Guimbal- Miagao are bordered by the coastlines of the Iloilo Straight and the most southern town of San Joaquin faces the Sulu Sea. Here abundance of mapped marine sanctuaries were documented highlighting the influence of the sea to the people’s culture and tradition. The Pac-an and Bukay Bato Marine Protected Areas (MPAs) in Guimbal, Damilisan Marine Sanctuary in Miagao, and a dozen marine sanctuaries in San Joaquin demonstrated the environmental protection and conservation of the local government units to their marine resources. The beaches along these areas also contributed significantly to the tourism industry of each village. The Parara Beach in Tigbauan, and Trapiche Beach in Oton are concrete examples of how these beaches contributed to the development and progress of the villages in the first district. Connecting the coasts are the river basins that drain to these towns. The Aganan River that traverses Alimodian, San Miguel, and Pavia contributed mainly to the water supply for domestic, industrial, and irrigation needs. The Tigum River which intersects with the Aganan River in Pavia, provide abundant water supply in most residents and business establishments in Iloilo City. The Sibalom River in Leon drains to the Tigbauan estuary which provide fertile habitat for brackishwater fish species. The famous Tangyan River in Igbaras inspired the annual celebration of the village dubbed as the Tangyan Festival that gave importance to the role of the river in the history and lives of the Igbarasnon. Water bodies such as falls are found in the mountainous areas like the Buslugan Falls in Miagao, Guiritsan Falls, Nasadjan Falls, and Tarugan Falls in Igbaras, Imoy Falls and Combong Falls in Leon. These falls attract thousands of tourists every year to trek, bathe, swim and explore the areas for leisure and recreation. Lakes and ponds such as Danaw (Miagao), Sitio Danao (Tubungan), Linaw Kataw (Leon), Tinagong Danao (Alimodian) and Golf Course Pond (Santa Barbara) are famous tourist destination sites. Lakes and ponds have significant biological and ecological significance since they harbor diverse aquatic life and maintain the balance of nature. Significant springs and wells abound in the different municipalities that sustain the water supply of the homes. Bubon Birid (Igbaras), Tugup Spring (Miagao), Bubon Bartolome (New Lucena), Ilaud Spring (Oton), Awang sa Conaynay, Awang sa Pungsod, Tuburan Del Cielo and Talanghauan (Santa Barbara) are the constant source of water for families and communities. Brick-red colored water in some springs in Santa Barbara is unique to the place that the locals drink it with pride for they believed it has medicinal properties.

On the other hand, various land formations existed in the two districts that are worthy of mentioning. Caves for spelunking exploration are found in Gui-ob ni Tidoy (Miagao), Labay Cave (Tubungan), Mansiga Cave (Leon), Igcabugao Cave (Igbaras), and Binan Cave (Alimodian).

Mountain trekking and hiking can be experienced in Mount Colomo, Mount Eagle Cross, and Mount Agua Colonia (Alimodian) which offer mossy or montane forests with biodiverse area of flora and fauna. In Mount Napulak (Igbaras), a thriving and developing tourism site attracts hundreds of cyclists every year that offers panoramic view of the province. Mount Linguob, Mount Tambara and Pinihakang Dalaga (Tubungan) offer invigorating treks coupled with an appreciation of the surrounding natural environments. Famous Hills used for religious purposes and pilgrim sites especially during Holy Week are the Agony Hills in Alimodian and Tubungan. Hundreds of pilgrims flock to these areas to commemorate the Passion and Death of Jesus Christ. Historical hills recognized for their significance in the past events of the place are found in Tomas Confesor Hill, Mansiga Hill and Pyramid Hill in Leon. The hills witnessed the struggles of the Filipino soldiers led by Senator Tomas Confesor during the World War II.

Municipality (Town)	Land Formation	Water Bodies
Alimodian	Agony Hill, Bato Dungok, Binan Cave, Mount Agua Colonia, Mount Eagle Cross, Mount Colomo	Aganan River, Lico Falls, Tinagong Danao
Guimbal		Bukay Bato Marine Protected Area, Pac-an Marine Protected Area
Igbaras	Igcabugao Cave, Mount Napulak	Bubon Birid, Guiritsan Falls, Nasadjan Falls Tangyan River, Tarugan Falls
Leganes	Leganes Integrated Katunggan Ecopark	
Leon	Banang Rice Terraces, Bato Puti, Bucari Pine Forest, Buklod Bugtong, Mansiga Cave, Mansiga Hill, Pyramid Hill, Tomas Confesor Hill	Combong Falls, Imoy Falls, Linaw Kataw Sibalom River
Miagao	Bato Sampaw, Gui-ob ni Tidoy, Rice Terraces	Buslugan Falls, Danaw, Damilisan Marine Sanctuary, Tugup Spring
New Lucena		Bubon Bartolome, Danao
Oton		Ilaud Spring, Trapiche Beach
Pavia		Aganan River, Mali-ao Creek, Tigum River
San Joaquin	Imbidayan Rock	Basang Basa Marine Sanctuary, Baybay Marine Sanctuary, Barangay Cataan Marine Sanctuary, Barangay Lawigan-Igcadlum Marine Sanctuary, Crossing Dapuyan Turtles Marine Sanctuary, Igbangal Marine Sanctuary, Igcondao Marine Sanctuary, Kuliatan Marine Sanctuary, Masagud Marine Sanctuary, Pagang Marine Sanctuary, Puntod Marine Sanctuary, Tiolas Marine Sanctuary
Santa Barbara		Awang sa Conaynay, Awang sa Pungsod, Golf Course Pond, Pula nga Tubig, Tuburan Del Cielo, Tuburan sa Talanghauan
Tigbauan		Parara Beach
Tubungan	Agony Hill, Bato Dungok, Bato Simbahan, Bato Sumpit, Bato Tariwis, Labay Cave, Mount Linguob, Mount Tambara, Pinihakang Daraga	Baldan Creek, Jar-ao River, Sitio Danao

Table 2. The Culturally Significant Land Formation and Water Bodies in the First and Second Congressional Districts in Iloilo Province

Unique and peculiar rock formations abound in the various municipalities that enhance the beauty of the place. Striking examples are Bato Dungok (Alimodian), Bato Puti and Buklod Bugtong (Leon), Bato Sampaw (Miagao), Bato Simbahan, Bato Sumpit, and Bato Tariwis (Tubungan) which become the selfie sites of the tourists and local folks alike. The Imbidayan rock in San Joaquin had great historical significance that was claimed to be the site of the barter of Panay between the native chieftain, Marikudo and the 10 Bornean Datus.

These cultural maps on the natural heritage domain were inventoried, documented, validated, and stored in printed and digital forms. There are significant challenges and opportunities encountered during the mapping that could be of great help for future endeavors. Challenges include the lack of MOAs between the respective LGUs and the

CMPG team that would maximize their full participation on the project. Another challenge is the difficulty in obtaining permit to include in the mapping the indigenous peoples and their natural assets due to bureaucratic procedures. Opportunities, on the other hand, consist of the presence of cultural researchers and experts in the region, the richness and diversity of natural and cultural assets to be mapped, and the adoption of cultural mapping projects by the other regions in the country, which open broad avenues for collaboration and participation of cultural experts, researchers, academes, national agencies, local government units, and the public.

4. Conclusion

The First and Second Congressional districts in the province of Iloilo have a vibrant natural heritage. The natural heritages of iconic flora and fauna, land formation and water bodies are intertwined in the history, socio-economics, socio-political, aesthetic and scientific significance to the communities. The learnings afforded in the conduct of the study direct to have formal agreements and collaboration with the LGUs as the primary custodian and bearers of the natural and cultural properties. Furthermore, proper permits from the commission on indigenous peoples must be secured for future cultural mapping work so that natural and cultural assets possessed by them can be mainstreamed for the holistic heritage inventory. The presence of cultural experts, academicians, and researchers is the strength of the project, which could propel continuous cultural mapping in the municipalities and other regions of the country.

Acknowledgements

The authors would like to acknowledge the Government of the Philippines (GOP) for the funding on the Cultural Mapping of Panay and Guimaras (CMPG), Senator Loren B. Legarda for her initiative and full support of the project, the University of the Philippines in the Visayas (UPV) for allowing us to work with this endeavor and Iloilo Science and Technology University (ISATU) for the approval on the participation on this collaborative cultural mapping of Panay and Guimaras islands.

References

DENR (2017). Department Administrative Order No. 2017-11. Updated List of Threatened Philippine Plants and Their Categories. Quezon City

DENR (2019). Department Administrative Order 2019-09. Updated List of Threatened Philippine Fauna and Their Categories. Quezon City

Mittermeier, R., Gil, P., Hoffman, M., Pilgrim J., Brooks, T., Mittermeier C., Lamoreux, J., Ponseca, G., (2004). Hotspots Revisited; Earth’s Biologically Richest and Most Endangered Terrestrial Ecoregions. Conservation International

NCAA (2019). Cultural Mapping Toolkit: A guide for participatory cultural mapping in local communities.

RA 11963 (2023). An Act Strengthening the Conservation and Protection of Philippine Cultural Heritage through Cultural Mapping and an Enhanced Cultural Heritage Education Program.