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Historicizing Iloilo City's Sustainable Urban Transformation: A Qualitative Analysis of River Rehabilitation, Circular Economy, Cultural Branding, and Climate-Resilient Urban Governance

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Abstract

The Iloilo City local government has received accolades in both the international and domestic arenas for their accomplishments in revitalizing the rivers, promoting clean tourism, gastronomic tourism, public places, zero waste practices, housing projects, active transport, and private-public collaboration. But while success stories of these accomplishments are celebrated individually, there has been little effort on putting them together as parts of the bigger story of Iloilo's sustainable urban transformation. The research paper seeks to explore the history of sustainable urban development in Iloilo, considering it in relation to other environmental, cultural, socio-economic, and governance efforts that are interconnected in various ways. The analysis followed chronological mapping and thematic synthesis. Findings showed that Iloilo City's transformation began with flood-control and river-system foundations and later expanded into river rehabilitation, public-space and livability development, clean tourism recognition, cultural branding through gastronomy and festival identity, active mobility, socialized housing, public-private partnership for market modernization, and circular economy recognition. The sustainability strategy that is employed in Iloilo City cannot be considered the result of one single process. However, it is a series of strategies that are based on the specifics of the local environment. The present study adds value to the existing literature on sustainable city development. It examines the phenomenon from the perspective of a secondary city. Such issues as climate change, circular economy, culture, public space, and social inclusion are interconnected.

1. Introduction

Urbanization is extremely important from the perspective of sustainable development due to multiple reasons associated with environmental, social, economic, governance, and other relevant issues. Thus, sustainable land and water use in urbanized areas, infrastructure development challenges, public spaces, housing, waste management, and landscape protection are among key topics in sustainable urbanization. Contemporary times witness the close linkage of sustainable urban development with such aspects as climate adaptation, the circular economy, inclusivity, environmental restoration, and culture. Based on this, it is possible to say that the city of Iloilo in the Philippines represents sustainable urban development since the country has been consistently receiving recognition in urban development, environmental protection, the creation of public spaces, and local sustainable development projects during many years.

First, the city of Iloilo in the Philippines enjoys global recognition due to its competencies in urban development, culture, and sustainability. In 2023, the city was included in the UNESCO Creative Cities Network, with the organization awarding it the status of the Creative City of Gastronomy. This means that Iloilo City uses its creative and cultural resources in order to support sustainable development and transformation processes. In this respect, it is worth noting that the city's gastronomy may be considered as an element that includes culture, economics, events, small business, and urban branding.

Second, sustainable development projects have contributed much to the transformations in Iloilo. The Iloilo-Batiano River Development Project received the Galing Pook Award for its contribution to river rehabilitation, including improvements in terms of environmental sustainability, health, safety, and aesthetics of the river environment [5]. According to the description, the project was based on such stages as the relocation of informal settlers, demolition of fish pens, erosion control, and mangrove planting (Philippine News Agency, 2018). Consequently, the sustainable urban transformation in Iloilo involved not only aesthetic aspects but also governance dimensions related to the development of river environments.

Third, the issue of flood management in Iloilo was addressed in the area. The study has shown that the ex-post assessment of the Iloilo Flood Control Project by the Japan International Cooperation Agency found that the project aimed at improving the river system in Iloilo City and Pavia by making five rivers of the area—namely, Iloilo River, Jaro River, Aganan River, Tigum River, and Upper Ingore Creek—more capable of dealing with floods [8]. Although there are some previous sustainability projects, this project became a new stage of sustainable urban transformation in the area, including the creation of Iloilo River Esplanade transforming the riverbank into the space open to the public.

At the same time, sustainability initiatives started becoming more multidimensional with the emergence of zero-waste and circular economy governance approaches. For instance, UNEP reports that twenty mayors in the Philippines have been awarded for their initiatives in zero-waste management, circular economy, and sustainable urban ecosystems [23]. Thus, it is reasonable to consider sustainability initiatives in this regard for Iloilo.

However, the review of literature shows that there is one major methodological issue related to the analysis of initiatives. Namely, these initiatives often lack any historical context. Issues discussed in the literature are often associated with river rehabilitation, public-space creation, sustainable tourism, gastronomy, waste management, slum rehabilitation, affordable housing, public-private partnerships, and festivals for promoting culture. Thus, it becomes obvious that the analysis of sustainable urban transformation of Iloilo City should take into account its historical context.

Against this background, the present study will address the following research questions: (a) What milestones define river rehabilitation and public-space creation? (b) How has urban transformation occurred? (c) What sustainability initiatives relate to the circular economy and waste management? (d) How significant have culture branding and gastronomy been? (e) What kind of governance initiatives and public-private partnership projects have occurred? (f) What is the significance of sustainable urban transformation for Iloilo City?

Based on this, the objectives of this paper include: (1) identifying milestones of sustainable urban transformation of Iloilo City; (2) examining the roles of river rehabilitation and public spaces in urban transformation; (3) investigating initiatives related to the circular economy and waste management; (4) analyzing initiatives relating to culture branding and gastronomy; (5) assessing governance initiatives

and public-private partnerships; (6) emphasizing the significance of sustainable urban transformation in Iloilo City.

2. Literature Review

Sustainable urban transformation as a historical and systemic process

In this regard, urban transformation can be considered both the outcome and the process of development. This multi-faceted phenomenon involves various dimensions of urban change including but not limited to urban governance, urban planning, urban design, ecology, economy, infrastructure, and sociability. [6], there are three potential angles from which urban transformation can be viewed: transformation of the city, transformation by the city, and transformation in the city. The last perspective seems particularly relevant today when science views cities as transformative agents.

One of the exciting approaches to the topic in question might be urban transitions and transformations. In their works, Torrens et al. define urban transitions as the intersection of sustainability transition theory and urban scholarship and practice. As opposed to sustainability transitions research that tends to highlight top-down policies, cities become the arenas for innovative forms of governance in this approach. Thus, it is reasonable to say that the selected methodology fits the research goals: Iloilo City is regarded as the result of past actions rather than a reward for those.

Furthermore, it must be noted that historical analysis of a city has firm foundations in current scientific discourse. This methodology allows establishing links between various processes, contexts, and timespans. Using it, one will be able to explore how the city goes through a number of stages to achieve its transformation and sustainable development, including the following issues: floods, river rehabilitation, cultural heritage revitalization, urban markets, waste disposal, and housing.

Urban governance and institutional capacity for sustainability

Urban governance becomes a crucial factor in achieving sustainable urban transformation. As was mentioned above, sustainable urban areas need the combination of numerous actions. As suggested by [6], governing competence can be used for fostering sustainable urban transformation. In relation to the current case, the importance of the discussed concept can be highlighted in that Iloilo City succeeded in becoming sustainable due to the joint activities performed by local governments and other organizations.

Taking into account the recommendations provided by UN-Habitat (2022), the following qualities should characterize future cities: resilience, sustainability, inclusivity, and effective governance. According to the World Cities Report 2022, despite all the problems that will emerge in future cities (climate change, inequality, economic uncertainty, and others), sustainable and inclusive development will take place. Thus, it can be said that sustainable urban transformation does not necessarily come from metropolitan regions alone.

The examples that will be further analyzed show how the suggested research methodology could be applied when analyzing sustainable transformation. Governing practices may vary; therefore, such sources as policy documents, institutional reports, awards received, ongoing projects, official statements, media publications, and other materials might be analyzed. This means that documentary analysis becomes a reasonable choice for studying the selected issue.

Circular economy and zero-waste city development

Another key aspect of sustainable urban development is the circular economy. Following OECD (2020), the involvement of municipal and sub-national authorities is needed when developing and implementing circular economy policies. This policy covers several sectors, among others, waste management, urban planning, transportation, construction, and climate change mitigation. Moreover, local governments are mentioned as the major catalysts of such projects by OECD (2020). Concerning the research, in the case of Iloilo City, zero-waste could be viewed in terms of a governance problem.

Hence, there is a need to highlight the importance of cooperation between governmental agencies, private sector entities, communities, and NGOs in the creation of circular economies. The relevance of the matter is evident because, through this research, it is planned to investigate links between zero-waste implementation and the formation of the circular economy in Iloilo City with regard to the following aspects: waste management and recycling, upcycling, local markets, food systems, behavior, and education. Thus, the circular economy and zero-waste issues will be discussed in terms of their connection with the studied urban system.

Additionally, one more reason for focusing on the problem is Iloilo City's involvement in the UN zero-waste project. As is noted in the United Nations Environmental Programme report of 2026, twenty city leaders were chosen as circular economy frontrunners and will be recognized as such by the United Nations Secretary-General's Advisory Board on Zero Waste. Iloilo City belongs to those cities.

Overall, based on the discussion provided above, it could be stated that zero-waste is a challenge of both historical and governance nature in the context of the research.\

River rehabilitation, waterfront regeneration, and public-space development

The rehabilitation of rivers is significant in studies on sustainable cities because of the multiple functions of urban rivers with regard to ecology, flood control, public health, transportation, leisure activities, public open space, and urban identity. According to [9], in their systematic review of studies on urban rivers as corridors, the use of the corridors depends on various social and ecological characteristics like accessibility, safety, aesthetics, environmental quality, recreation, and public attitude towards them. Thus, their findings suggest the use of socio-ecological system approaches to urban rivers. Such an approach is relevant for Iloilo City because the Iloilo River and Iloilo River Esplanade serve not only as infrastructure but also ecological, recreational, social, and symbolic urban spaces.

Waterfront regeneration literature also emphasizes inclusion and access. [1] examined waterfront regeneration in informal areas and argued that public open spaces are important for equity and inclusion. Their study highlighted the role of waterfronts in the urban, social, and economic structure of cities, especially where access and informal settlement conditions create planning challenges. This is important for the present study because Iloilo City's river rehabilitation and esplanade development were connected with informal-settler relocation and housing. The Iloilo River Esplanade should therefore be examined not only as a public-space improvement but also through social inclusion, relocation, safety, environmental protection, and settlement governance.

These studies shape the analysis of the present research. Documentary evidence will be coded for references to ecological restoration, public access, safety, recreation, informal-settler relocation, open-space development, urban livability, and flood resilience. This is necessary because sustainable waterfront transformation often includes both achievements and tensions. In Iloilo City, the riverfront became a visible symbol of urban renewal. However, a rigorous historical analysis of transformation to examine the governance and social processes.

Climate resilience, green infrastructure, and urban livability

Urban development ought to include strategies for risk reduction, protection of ecosystems, and improvement of standards of living in terms of planning that takes both spatial and environmental aspects into account. According to UN-Habitat (2022), it is obvious that urban resilience, green recovery, sustainability, urbanization, and mitigation of climate change play key roles in modern cities. Therefore, such topics as flood prevention, river [7] claim, urban transformation comes about due to the interaction of forces influencing resilience and sustainability. Thus, river rejuvenation, flood prevention, mangrove restoration, public spaces, walkability, sanitation, and climate change mitigation can be considered integral elements of urban transformation in the case of Iloilo City.

Hence, as far as the findings of the literature review suggest, a historical research design will fit the study because climate resilience results from a combination of factors associated with environmental, infrastructural, and social processes. It is important to focus on the influence of river rehabilitation, flood prevention, public spaces, and environmental protection on sustainable urban development in Iloilo City.

Cultural branding, gastronomy, and sustainable urban identity

In the context of this research, sustainable urban development is considered from the viewpoint of current trends such as culture and creativity. As per UNESCO Creative Cities Network, UNESCO supports city-to-city collaboration by using creativity as a tool for achieving sustainable development. In particular, the organization promotes the utilization of culture and creative industries in order to create policies and international cooperation that foster urban development. Thus, the inclusion of Iloilo City into the UNESCO Creative Cities Network in the field of gastronomy represents the primary focus of this research.

First, UNESCO understands the importance of culture and festivals related to gastronomy in the city. Moreover, it can be observed that gastronomy serves as a means of urban development through events like "Timplada" event centered around food. Thus, the utilization of gastronomy as a catalyst for development can be assumed. Consequently, the present study considers gastronomy as an instrument for cultural sustainability, economy based on creativity, entrepreneurship, and place branding besides being a tourist brand.

The idea of analyzing urban development and place branding problems by means of gastronomy is validated by [4]. Their study shows that gastronomy can connect urban branding with local production, creativity, and place-based development. This supports the present study's decision to analyze Iloilo City's gastronomic identity together with public markets, festivals, local food systems, heritage, and urban recognition.

This literature requires the present study to connect culture with sustainability. Iloilo City's gastronomy recognition and festival identity should not be treated as isolated cultural achievements. They should be analyzed as historical elements that contributed to the city's sustainable urban identity and international visibility.

Public-private partnership, public markets, and urban modernization

Sustainable urban development often requires coordination between public agencies, private sectors, and local communities. According to OECD (2020), "cities can support a circular economy through stakeholder coordination, public sector leadership, private sector involvement, and experiments at the local level." In this regard, the importance of utilizing public-private partnerships for current research becomes evident since sustainable development in urban settings is often produced through governance mechanisms that involve other actors besides the local government.

Such an approach is relevant when examining the redevelopment of public markets in Iloilo City. Public markets should be seen as something more than commercial infrastructures since they operate as places within the food chain, employment hubs, cultural landmarks, tourist spots, and service centers. The redevelopment of such public markets has connections with the city's culinary culture, urban sanitation issues, small business growth, transport, and market development. For this reason, this research approaches public-private partnerships as governance tools that relate urban modernization to cultural branding and economic activities.

Figure 1. Collage of the modernized public markets of Iloilo City perspectives, namely Iloilo Central Market, Iloilo Terminal Market, La Paz Market, and Jaro Market, presented in the context of the Iloilo City Government–SM Prime public-private partnership for market modernization.

Methodological implications for the present study

The literature provides direct support for the study's qualitative historical analysis design. First, sustainable urban transformation is cumulative and systemic. It should therefore be studied through a

design that can trace sequence, context, and interconnection. Historical analysis is suitable because the study aims to reconstruct how Iloilo City's sustainability identity emerged from earlier interventions in flood control, river rehabilitation, public-space development, housing, cultural branding, market redevelopment, and waste governance.

Second, governance literature shows that urban sustainability is shaped by institutions, actors, partnerships, and policy capacities. Documentary analysis is appropriate because these processes are commonly recorded in official documents, institutional reports, policy records, development profiles, media reports, and public recognition materials. The present study will therefore use documentary sources to identify major events, actors, policy decisions, recognitions, and thematic patterns.

Third, previous studies stress the need for analyzing praise for urban development projects and their start-up using a critical perspective. The waterfront redevelopment project, squatter relocation program, private-public collaboration, market redevelopment, and zero-waste program must be assessed. They must be examined based on access, inclusiveness, equality, public goods, governance, and sustainability. This is the reason why the current study uses thematic analysis to analyze the strengths and weaknesses in the history of Iloilo City's development.

Synthesis and research gap

The literature shows that sustainable urban transformation is shaped by interrelated pathways. These include governance capacity, circular economy, river rehabilitation, flood resilience, and public-space development. Likewise, these come along with cultural identity, public-private partnership, and inclusive urban renewal. However, many city studies examine these pathways separately. Circular economy studies often focus on waste systems. Riverfront studies often focus on environmental or spatial renewal. Creative city studies often focus on branding and cultural industries. Public-private partnership studies often focus on infrastructure and financing. This separation limits understanding of how these dimensions interact within one city's historical development.

This gap is evident in the case of Iloilo City. Available accounts describe the city's UNESCO Creative City of Gastronomy recognition, Iloilo River rehabilitation, Iloilo River Esplanade, flood-control foundations, clean-tourism recognition, zero-waste recognition, public market redevelopment, and housing initiatives. However, these are often presented as separate achievements. Limited scholarly synthesis has explained how these developments formed a connected sustainable urban transformation pathway.

In order to fill the gap that has been noted, a qualitative historical analysis is carried out of Iloilo City's urbanization. There are six main paths along which the analysis will be conducted: (1) river rejuvenation and strengthening flood resilience, (2) creation of public spaces and liveable cities, (3) circular economy and zero waste systems, (4) cultural branding through food festival promotion, (5) public-private partnership within market revival, and (6) inclusive urban renewal through relocation and housing.

3. Methodology

Research Design

The approach used in this study involved a qualitative research method with historical and document analyses being the research design. The research design is based on the objective to analyze how the sustainable urban transformation of Iloilo City happened over time through interconnected actions such as river rehabilitation, flood control, improving public spaces, circular economy, cultural branding, public-private partnerships, housing, and climate-resilient governance. Historical analysis allows one to trace the sequence, context, and connections as opposed to treating the recognitions achieved by Iloilo City as standalone events. Documents were chosen as the primary data collection method because of the reliance on publicly available information, institutional reports, project descriptions, recognitions, policies, media reporting, and literature review. This method fits the use of documents as qualitative data to construct meanings and knowledge [2; 19]. It is also aligned with the conceptualizations of urban transformation as systems resulting from historical, institutional, environmental, and social processes [7; 20].

Study Context

The subject of this research is the city of Iloilo in the Philippines. Its selection was based on the remarkable progress it has made towards sustainability. This progress includes several developments such as the restoration of the Iloilo river, the Iloilo river esplanade, flood protection, and eco-tourism. These come along with circular economy, cuisine, public market reinvigoration, housing, and beautification.

The map in Fig. 2 shows Iloilo City in relation to Iloilo Province, Panay Island, Guimaras, and nearby regional landforms. Source: Created by the author in QGIS using [10]) public domain vector data.

Data Sources and Selection

The selected documentary sources included those that contained any reference to Iloilo City and provided information regarding at least one of the topics discussed in this research. Credible information ranging from documents provided by the government agencies and the city profile by the international organizations, institution publications, project documents, academic journals, reliable news portals, and the case studies of development initiatives comprised the key sources for this research. Unreliable sources including promotional material lacking verifiable facts, undated/anonymous websites, duplicated material, unreliable blogs, and unidentified sources were not included.

Analytical Procedure

The analytical framework used in this research is illustrated in Fig. 3. The first step involved chronological analysis. At this stage, sources were classified based on year, initiative, organization, and themes of sustainability. It helped determine sustainability events in Iloilo City in chronological order. The second step involved the use of thematic analysis. This involves the process of document coding, theme

identification, and reporting without employing any statistical analysis. The flowchart below shows how thematic analysis was undertaken, noting the five key steps involved in this process.

Table 1
Analytical Framework

Analytical Pathway	Focus of Analysis
River rehabilitation and flood resilience	Iloilo River, Iloilo-Batiano River Project, flood-control works, ecological recovery, riverfront improvement
Public space and livability	Iloilo River Esplanade, plazas, cleanliness, walkability, recreation, beautification
Circular economy and zero waste	Waste reduction, recycling, upcycling, resource recovery, zero-waste recognition
Cultural branding and identity	UNESCO gastronomy recognition, Dinagyang Festival, food heritage, city branding
Partnership and modernization	Public-private partnership, public market redevelopment, vendor spaces, food-system infrastructure
Inclusive urban renewal	Informal-settler relocation, socialized housing, public safety, access, settlement governance

The current research is an investigation of the evolution of the city of Iloilo from a historical perspective and its relationship to sustainable development through the conceptualization of the model given in Table 1. The research methodology follows six distinct approaches: River rehabilitation and flood prevention, public spaces and urban well-being, circular economy and zero waste, city branding and identity, partnership and modernity, and inclusive urban renewal.

Trustworthiness and Ethical Considerations

Rigor was strengthened through source triangulation, source criticism, and an audit trail. Evidence from official records, institutional reports, media sources, and scholarly literature was compared before claims were included. Official and institutional sources were prioritized for factual claims, while peer-reviewed sources were used for conceptual framing. A documentary evidence matrix was maintained to record source type, year, theme, extracted evidence, and credibility notes. This helped ensure transparency and traceability.

In this particular case, only public resources were used; there were no interviews, surveys, confidential sources, or any other type of personal data included in this paper. This means that consent for experiments with human participants was unnecessary in this instance, since there were no humans involved in this research. However, ethical norms were observed, including citation of the used sources, analysis of the issue of relocation and housing, and refraining from groundless assumptions.

Methodological Limitations

Limitations of the research include its reliance solely on documentary sources. There is no direct testimony from any individual or group, such as those involved in planning and implementation, those who have been affected by relocation, or those who used the space before the project was implemented. The research does not look at the impact on the environment in terms of flood prevention, cleaner air and water, reduced waste, or economic benefits.

4. Findings

Based on documentary research, sustainable development for Iloilo City was not the outcome of any single project or accomplishment. On the contrary, it was attained as part of an iterative process. This includes the revitalization of rivers, flood prevention techniques, and the creation of recreational areas. Also, a part it are the development of cultural identity, zero-waste management, private-public partnership, the building of houses, and the encouragement of clean tourism.

Figure 3 is the thematic timeline showing the historical development of Iloilo City's sustainable urban transformation. These come across environment and river systems, public space and livability, culture and identity, mobility, inclusion and housing, and partnership and modernization from 2013 to 2026.

River rehabilitation and flood-resilience foundations

The process towards sustainability in Iloilo City depends largely on the rehabilitation of the rivers in Iloilo and building flood resistance. It is through such interventions that the city of Iloilo was able to achieve sustainability as evidenced by the Iloilo Flood Control Project. According to the Japan International Cooperation Agency, improvements were done in the following rivers: Iloilo River, Jaro River, Aganan River, Tigum River, and Upper Ingore Creek [8].

Based on Fig. 5, the implementation of the river rehabilitation program in Iloilo is associated with an integrated approach that includes the rehabilitation of the river system, creation of floodways, improvement in the conditions of the flood plains, and relocation of people living in flood plains. In other words, the figure validates the previous hypothesis by demonstrating the learning process through the integration of insights derived from DRR programs in shaping the development of the city through its rivers.

Regarding the cooperation of government agencies, the Iloilo-Batiano River Development project may be viewed as an example of this practice since various stakeholders were involved in the river rehabilitation project. Such inter-agency cooperation can be explained by evidence suggesting that various benefits were observed in connection with the development of several dimensions of public welfare, namely health, sustainability, security, and livelihoods [5]. The Philippine News Agency reports that the activities included such aspects as settler relocation, removal of fish pens, prevention of soil erosion, and preservation of mangroves (Philippine News Agency, 2018).

Therefore, river rehabilitation projects in Iloilo are important for promoting development as well as for facilitating hydraulic modernization and governance.

Public space, livability, and environmental beautification

The third issue refers to the way Iloilo City has been beautified and improved by creating public spaces. One of the best examples of such an improvement process is represented by the Iloilo River Esplanade. According to the information provided on the website of the Urban SDG Knowledge Platform, the Esplanade is “a riverside development that integrates environmental rehabilitation, public space creation, informal settlers relocation, and improvement of urban quality of life.”

What is more important is that the Iloilo River Esplanade has won international acclaim. Thus, it can be viewed as a globally acclaimed public space, created on flood-protection infrastructure.

Figure 6 displays the spatial layout of selected areas within the Iloilo River Esplanade of the Iloilo River. The map shows the locations of Esplanades 1–5 to illustrate how the river rehabilitation process has been turned into integrated spaces to increase walking and recreational opportunities, enhance the environment, and support livelihoods.

This process can be reinforced with cleanliness and effective public space management. Indeed, Iloilo City has received the ASEAN Clean Tourist City Award from 2020 to 2022 due to the assessment of its public spaces, traffic control system, and environmental initiatives. After an inspection and validation process led by the Office of Tourism Standards and Regulations and DOT Western Visayas, the city was awarded again in 2026 [12]. Prior announcements regarding the 2020–2022 award explained that cities would be honored based on efforts to improve the aesthetics of public places, enhance sanitation and the environment, increase attractiveness of the whole city, and create attractions [13].

Consequently, the process of transforming the city into a liveable urban place is built on developing integrated systems of flood prevention, public space, sanitation, traffic management, and cleanliness/beautification. This means that public space development functions both as an environmental initiative and as a sign of good governance.

Circular economy and zero-waste governance

The third key finding entails that Iloilo City’s sustainable development has transformed into a governance model of circularity and zero waste alongside environmental rehabilitation efforts. For example, as stated by the United Nations Environment Programme, in 2026, the United Nations Secretary-General's Advisory Board on Zero Waste identified twenty city mayors who had achieved the goal of zero waste. The basic purpose of this initiative was to recognize municipal leadership in zero waste, share best practices, encourage cities to become zero-waste communities, and foster local circular economies (United Nations Environment Programme, 2026).

Such information serves as vital evidence of establishing links between the local projects focused on environment and global trends towards zero waste and circular economies. Moreover, any city striving for zero waste means that its sustainable development agenda is evolving from resource recovery to waste management, recycling, upcycling, and more active citizen participation. It is essential to mention, nonetheless, that further information is needed in order to confirm the efficiency of the city's environmental initiatives. While recognizing the accomplishments of its leaders within the realm of zero waste, it is also vital to have additional metrics that would show how much the city has been able to divert and recover waste materials. As a result, one can conclude that the city has gained its zero-waste status. In the context of this research, however, such recognition should be regarded as an indicator of sustainable development.

Cultural branding through gastronomy and festival identity

The fourth finding highlights another important aspect associated with the cultural aspects of Iloilo City, which can be viewed as another important element of its sustainable urban identity. In 2023, Iloilo City was named Creative City of Gastronomy by UNESCO. The profile on UNESCO's official website states that the city boasts its own unique culinary culture based on local, fiesta, and banquet culture. Also, gastronomy is associated with the employment of over 4,600 people and with over 300 restaurants in the city area, promoting the development of the city itself [22].

In this regard, food heritage acts as both a tourism attractor and an essential resource for local development. The gastronomy identity is associated with the local businesses, public markets, gastronomy events, festivals, and brand identity of the city. Thus, the food culture of the city is another component of its sustainable strategy, covering all aspects of sustainability, such as cultural sustainability, livelihoods, creativity, and tourism.

Additionally, the Dinagyang Festival is a pivotal factor for advancing cultural sustainability in the city. As stated by the [13], Iloilo's Dinagyang Festival managed to win two awards at the ATOP Pearl Awards ceremony, namely: (1) the award for the best tourism practice during the pandemic and (2) the award for the best results in regards to festivals' practices [17].

To conclude, one can state that the gastronomy culture of the city, as well as the Dinagyang Festival, are two factors proving that Iloilo City is culturally sustainable and has made its way towards achieving sustainable urban transformation through developing cultural resources.

Public-private partnership and market modernization

Observation number five reveals that PPPs form the primary tool behind attempts to modernize cities. For example, the creation of Iloilo City’s Central Market and Terminal Market was conducted with the participation of SM Prime Holdings. In doing so, there is also a trend towards increasing the scale of market modernizations. According to information from the Public-Private Partnership Center of the

Philippines, the cooperation between Iloilo City and SM Prime contributed to creating two city-operated markets after signing the lease in 2022 [18].

As per project-related reports, the construction of Iloilo Central Market and Terminal Market can be regarded as one of the most important tasks. As reported by [3] this PPP included the redeveloping of two city-operated markets with a floor area of 62,000 square meters. Earlier, the Philippine News Agency announced that there was an investment worth PHP 3 billion and would be beneficial for 2,800 vendors [16].

As seen from the above results, there is a close connection between the modernization of public markets and the wider processes of urban modernization. Markets perform a crucial role not only as business centers but also as elements of food system, living conditions for merchants, hygiene and sanitation, transportation, cuisine, public spaces, and culture. Thus, the implementation of PPPs in the development of public markets involves the relationship between the modernization of infrastructure and cultural branding, amongst other things. However, similar to other urbanization projects, future success depends on many factors.

Inclusive urban renewal through housing and relocation

Inclusive urban renewal is an immensely essential and intricate process in the context of Iloilo's urban transformation. Second, it is necessary to mention that the rehabilitation of the riverside, creation of public space, and relocation of informal settlers are inseparable parts of inclusive urban transformation. As data provided by the [24] show, the following aspects of urban development have been incorporated into the construction of the Iloilo River Esplanade: relocation of informal settlers, pollution reduction, increased environmental safety, and creation of public spaces.

Uban housing and other relevant components of urban development are also worth mentioning in the current study. In particular, as data presented by the [15] demonstrate, there will be constructed fourteen buildings in 2023 to accommodate the residents of informal settlements. In total, there will be built 1,260 housing units. Every building is expected to consist of 90 housing units and be connected to electricity and water networks [14].) In such a way, urban housing is also analyzed in the current paper.

Nonetheless, it is important to consider possible implications of the above findings. Housing and relocation might be considered instruments for promoting urban transformation through the improvement of environmental conditions, economic situation, safety, and access to housing. However, these processes might yield negative consequences, such as livelihood disruption, problems associated with affordability and lack of resources, and sustainability issues. Hence, it is necessary to point out that urban housing and relocation are not the end points of success but merely the starting points for sustainable development.

Integrated finding: Iloilo City’s transformation as a layered sustainability pathway

In terms of its recorded history, the progress made by Iloilo City can be described as an endeavor towards sustainable development as opposed to the list of accomplishments made. For instance, in level one, the primary concerns involve the establishment of infrastructure, including the management of rivers and floods. In level two, the city works towards creating clean, attractive, and enjoyable public spaces. Level three centers on the promotion of culture through the preparation of special dishes and festivals.

Table 2
Summary of key findings.

Analytical Pathway	Main Finding	Supporting Evidence
River rehabilitation and flood resilience	River improvement became a foundation for later sustainability and livability outcomes.	JICA flood-control project; Iloilo-Batiano River Development Project
Public space and livability	The Esplanade, cleanliness, sanitation, and public-space management made sustainability visible in everyday urban life.	Urban SDG case profile; ASEAN Clean Tourist City recognition
Circular economy and zero waste	Iloilo City's sustainability profile expanded into zero-waste and circular economy governance.	UNEP zero-waste city recognition
Cultural branding and identity	Gastronomy and Dinagyang strengthened Iloilo City's cultural sustainability and international visibility.	UNESCO Creative City of Gastronomy; ATOP Pearl Awards reporting
Partnership and modernization	Public-private partnership supported large-scale public market modernization.	PPP Center, BusinessWorld, and PNA reports on SM Prime market redevelopment
Inclusive urban renewal	Housing and relocation were linked with environmental rehabilitation and public-space development.	Urban SDG case profile; PNA housing report

From the results presented in Table 2, one would see that the accolades received by Iloilo City were not just ceremonial or superficial in nature. It was part of a much deeper historical process that involved environmental remediation, space restoration, identity formation, governance cooperation, transition towards a circular economy, and sustainable urban renewal. Overall, this serves as an historical example of how a secondary city in the Philippines could create its own identity for sustainability.

5. Discussion

The results suggest that Iloilo City follows an approach for its transformation into sustainability that involves a progression of developmental stages instead of achieving sustainability through individual projects or awards. In the case of interventions related to flood and river management, they stimulated further action towards river rehabilitation, development of public spaces, sustainable tourism, branding, active transport, urban housing, and better cooperation between the public and private sectors, which

resulted in reaching zero-waste certification. This is in accordance with theories about the emergence of sustainability in urban areas through the interlinked governance of ecology, society, culture, and infrastructure [7; 20].. In addition, the noted sustainability indicators could easily be connected to approaches to sustainable urban transformation that include elements like governance, ecology, public spaces, culture, inclusiveness, and circular economy as necessary parts of a sustainable city [11; 21].). Therefore, Iloilo City can be seen as an example of sustainable urban transformation in terms of place-based governance suitable for secondary cities.

6. Conclusion

This trend of moving towards sustainability in Iloilo is nothing but an example of gradual progress where different actions were taken to develop a sustainable city. This includes basic actions like flood prevention and river cleaning, followed by urbanization, pollution cleanup, reinforcing local culture, improved transport system, and sufficient housing. All these successes have been achieved due to effective collaboration between government and the private sector, based on circular economy. In other words, Iloilo shows how a secondary city can make itself visible on the map of sustainability.

7. Limitations and Future Research

In this case, the shift towards sustainability in Iloilo City is a definite example of a smooth transition aided by a series of actions that result in sustainable urban development. The transition begins with basic actions that include the reduction of the risks of flooding and cleaning up the rivers, and moves onto more ambitious goals such as urban, environmental, and cultural development. The transition will be additionally strengthened by the creation of a good transport system and housing. These results were made possible due to the close cooperation of governmental bodies and private sector companies following the concepts of the circular economy.

Declarations

Ethics Declaration

An ethics clearance was not required for the current research since it made use only of publicly available literature without any involvement of human subjects, interviews, survey questionnaires, and personal information. This study used various sources such as institutional reports, policy papers, official recognition papers, development case studies, and others that are accessible to the public. The ethical approach in this research included citing sources appropriately, avoiding unsupported claims, and presenting facts in an anonymized way. Care was taken when dealing with issues concerning informal settler eviction, relocation, and urban renewal.

Credit Authorship Contribution Statement

The author is responsible for everything that concerns this study, specifically: Conceptualization, Methodology, Investigation, Data curation, Formal analysis, Writing – original draft, Writing – review and editing, Project administration.

Declaration of Competing Interest

The author declares that there are no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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Data Availability

Data will be made available on request.

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Figures



Figure 1

Modernized Public Markets of Iloilo City under the Iloilo City Government–SM Prime Public-Private Partnership (Author's perspectives)

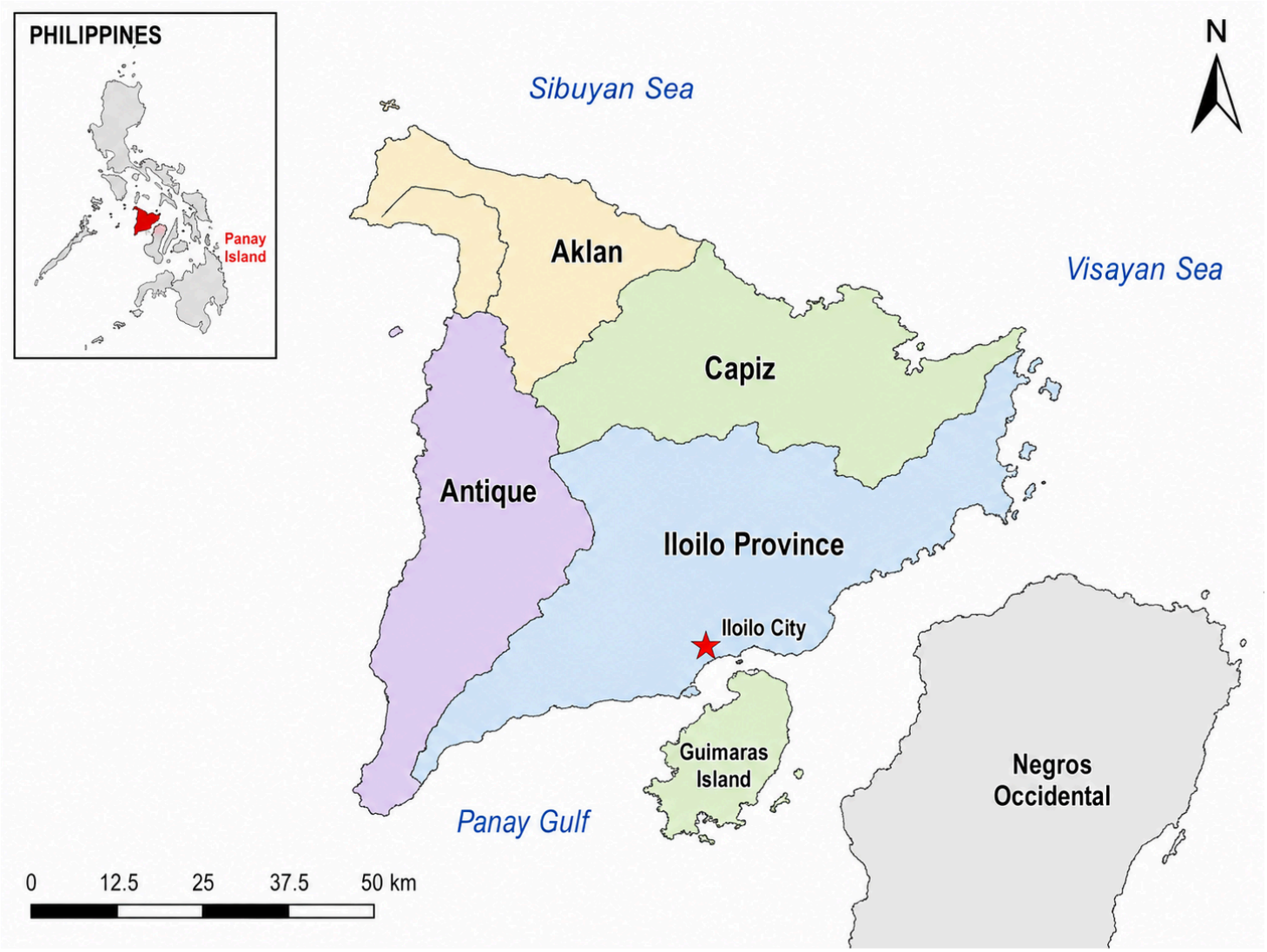


Figure 2

Location of Iloilo City within Panay Island, Western Visayas, Philippines.

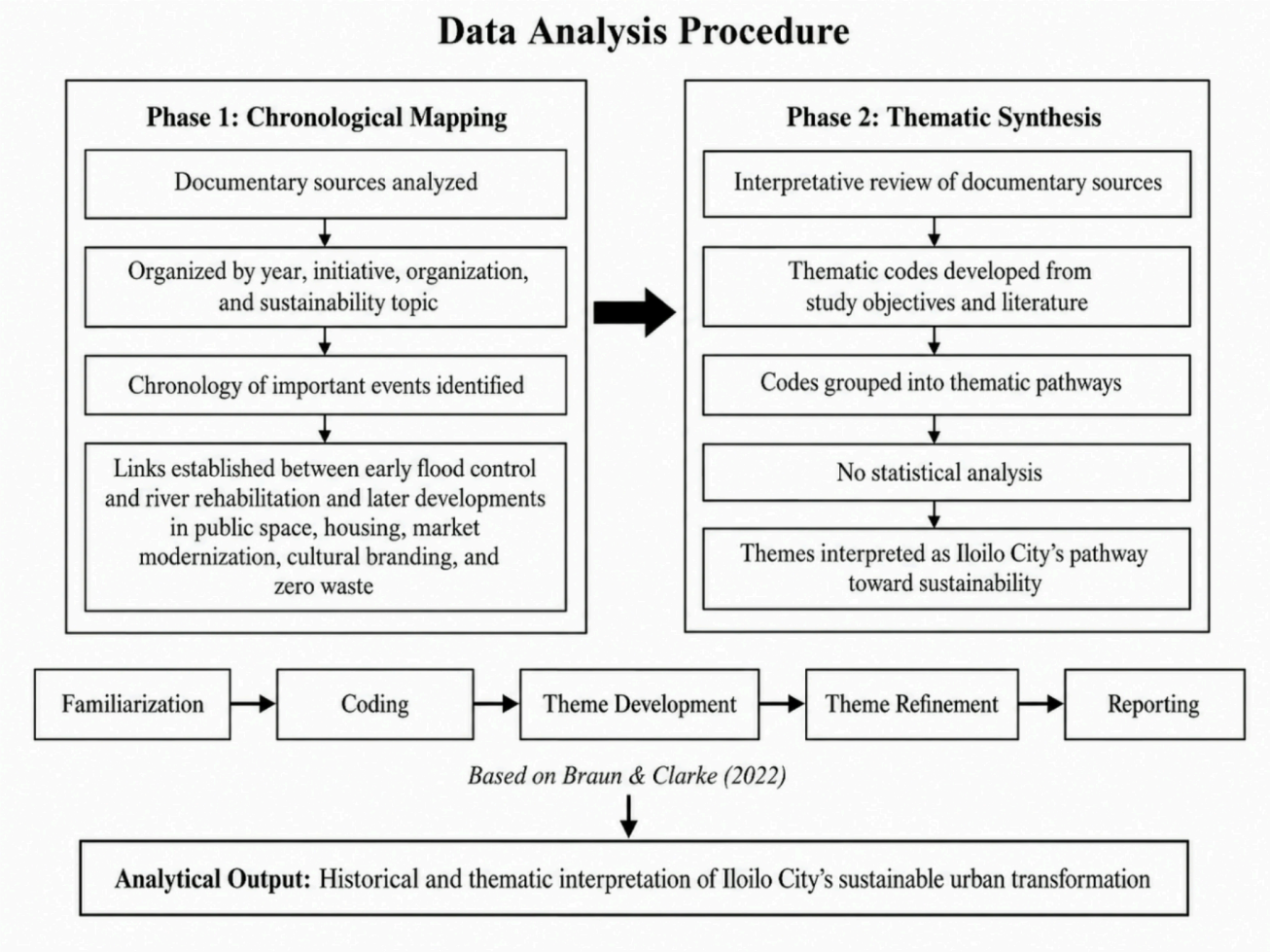


Figure 3

Data Analysis Procedure for Chronological Mapping and Thematic Synthesis

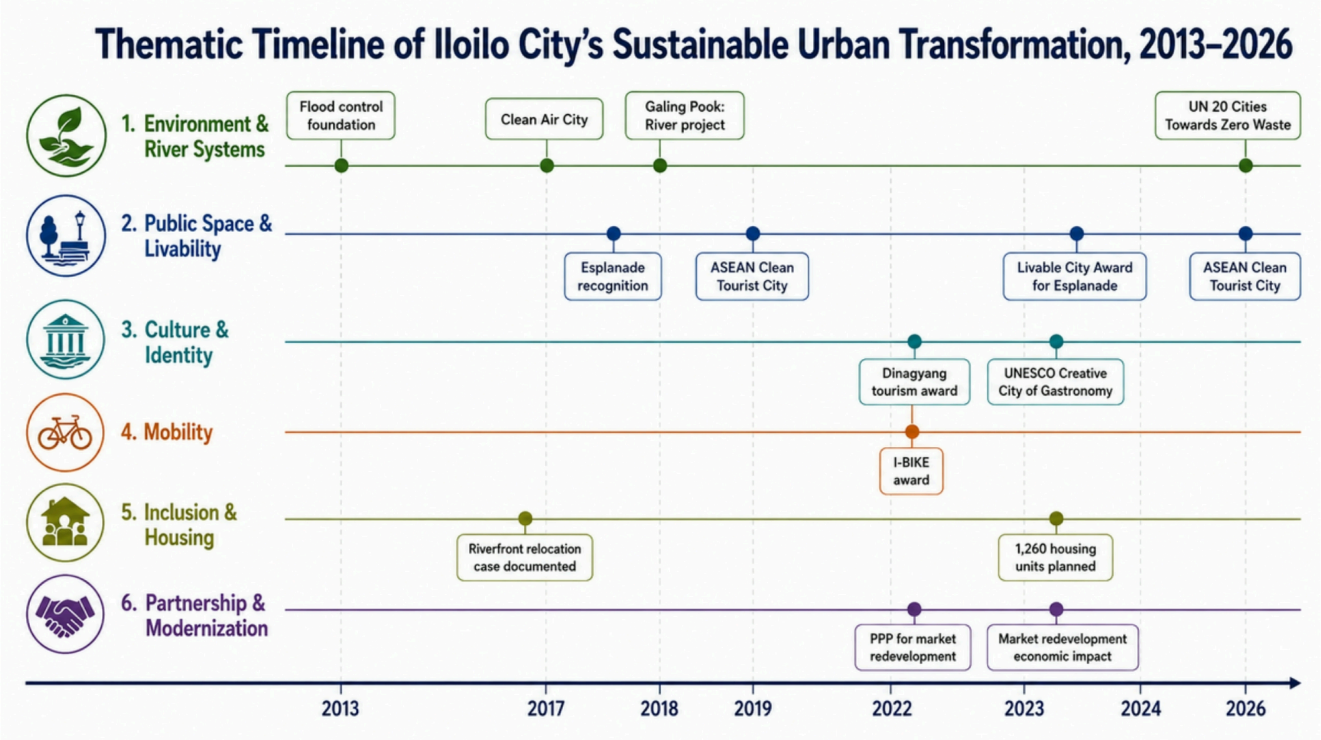


Figure 4

Thematic Timeline of Iloilo City's Sustainable Urban Transformation, 2013–2026 (Created by the author)

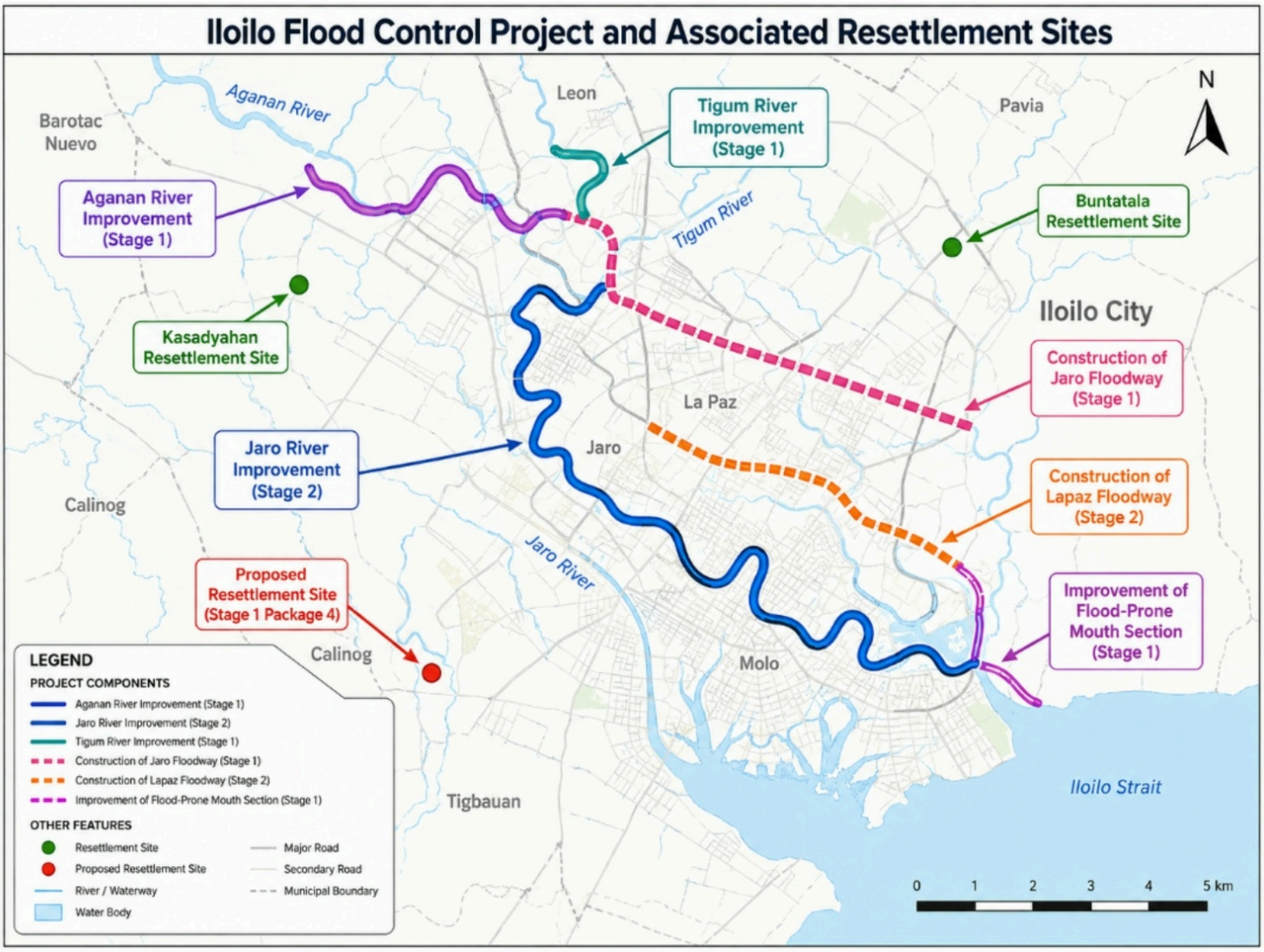


Figure 5

Diagram of the Iloilo Flood Control Project and Associated River Improvements (Adapted by the author from [25])



Figure 6

Spatial Distribution of the Iloilo River Esplanade Sections Along the Iloilo River Source: [24]