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Insights from Environment, Economy, Policy, and Health

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Penerbit Widina

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FOREWORD

Welcome to Asian Cultural Landscape Association (ACLA). This book is a comprehensive exploration of the interconnectedness of culture, environment, economy, policy, and health. It delves into the complex relationships between these elements and how they shape our world.

In this era of rapid global change, understanding these connections is more important than ever. As we navigate the challenges of climate change, economic inequality, and public health crises, it is crucial that we approach these issues with a holistic perspective. This book offers a unique perspective, drawing from various disciplines and perspectives.

The authors of this book are experts in their fields, with a wealth of knowledge and experience to share. They bring together insights from various disciplines to provide a comprehensive understanding of the cultural landscape.

This book is not just for academics and researchers but for anyone who wants to gain a deeper understanding of the world around them. It is for those who want to make a difference in their communities and contribute to a more sustainable, equitable, and healthy world.

We hope that this book will inspire you to think critically about the world, to question the status quo, and to work towards a better future. We invite you to join us on this journey of discovery and learning.

Thank you for choosing "Cultural Landscape: Insights from Environment, Economy, Policy, and Health" as your book. We hope you enjoy reading it as much as we enjoyed writing it.

Sincerely,

Editors
ASIAN CULTURAL LANDSCAPE ASSOCIATION

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ANALYSIS OF THE CULTURAL LANDSCAPE OF KOREAN TRADITIONAL GARDEN

INTRODUCTION

Korean traditional garden has a special cultural landscape. And Korean traditional garden is influenced by China and has many similarities with Chinese garden. Korean traditional garden is characterized by utilizing the natural landscape without transforming the topography. These representative cultural landscapes are characterized by poetry and naming. The main activity in the Korean traditional garden was writing poetry. Writing poetry was an important hobby for scholars in general. These gardens are used not only in Korea but also in Chinese and Japanese gardens. These characteristics not only reveal cultural differences between the West and the East but also examine the similarities between Eastern cultures. A typical feature of Korean traditional gardens is to name objects in the garden space. After constructing a garden, Joseon scholars give meaning by naming not only the building but also the surrounding environment. Scholars of the Joseon Dynasty thought that it was completed by naming the space and facilities of the garden. In addition, Joseon scholars recognize various spaces and facilities in the garden as their property by giving names. Therefore, Joseon scholars consider not only the interior space of the garden of the traditional Korean garden, but also the fences, surrounding mountains, fields, and the sky as garden space.

KOREAN TRADITIONAL LANDSCAPE

Before analyzing Korean traditional gardens, the traditional landscape of Korea was first analyzed. Korean landscaping is historically very old, but not much is known compared to Japanese and Chinese landscaping. Korea's landscaping is a part of nature and has nature-friendly features. So, Korean landscaping tries to minimize its artificiality. The characteristic of traditional landscaping is that it uses the natural scenery as the interior space for landscaping. In this characteristic, the Korean traditional landscape tried to maximize the natural beauty. Korean traditional landscape did not prefer a completely symmetrical structure because it preferred the natural one.

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THE IMPORTANCE OF VISUAL PROTECTION FOR CULTURAL LANDSCAPE

INTRODUCTION

A cultural landscape is a type of landform that reflects the influence of human activity on the natural environment. It is a combination of physical elements, such as buildings, roads, and other structures, and natural elements, such as plants, animals, and weather patterns. The concept of a cultural landscape is important in preserving history and culture because it provides a tangible connection to the past, allowing people to understand and appreciate the history and traditions of their ancestors. Cultural landscapes can also serve as a source of inspiration for artists, writers, and other creative professionals, and they can contribute to the economic development of a region through tourism and other forms of cultural exchange.

Cultural landscapes reflect the values and beliefs of a society through the physical elements and structures that are created and maintained by the people who live there. The design and use of these spaces can reflect the values and beliefs of the society, such as the importance of community, the role of religion, or the relationship between people and the natural environment. For example, a society that values community might build public spaces that encourage social interaction, while a society that values nature might create parks and gardens that protect and preserve natural habitats. Cultural landscapes can also reflect the beliefs and values of a society through the use of symbols, such as monuments, statues, and other public art that represent important historical or cultural figures or events. Overall, cultural landscapes provide a tangible expression of the values and beliefs of a society and can help preserve and transmit these values to future generations (Nowicka, 2022; Pritsolas & Acheson, 2017).

Visual protection refers to the measures taken to preserve and protect visual elements, such as art, architecture, and other cultural heritage. In today's world, visual protection is relevant for several reasons. First, visual elements are an important part of our cultural heritage, and preserving them helps to maintain a connection to our past and the traditions and values of

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TRACKING THE HISTORY OF LUZON'S NORTH MAIN LINE

INTRODUCTION

One of the main factors that shaped cities and towns is the mode of transportation. Connecting different spaces separated by distance and functions, the past and the future of these different towns and cities are permanently linked as people, goods, and services move from one place to another. The shared history of these various places transcend the often limited perspective on the history of the place, since history is often defined by the people telling the story within their sphere of influence and experience. The mobile nature of transportation is left to the residual memory of the people who have experienced transience and not on the vessel or mode of getting to a certain place. History is often told as the beginning of permanence.

Unlike in other countries, particularly in Asia where greater efficiency in public transportation has been achieved due to the introduction of rail system in their own countries, the Philippines has not developed a system of chronicling and documenting the history of this system that has shaped and influenced a great part in the formation of our cities and towns that has created a common link to the consciousness of the people connected by rail, train stations, and experience in the train. The Philippine National Railway (PNR), a government agency tasked to operate the largest railway in Luzon (PNR, n.d.).

According to its corporate profile (PNR, n.d.), the Luzon North Main Line was created by virtue of the Royal Decree by King Alfonso XII of Spain to submit a general plan for a railroad in Luzon on 25 June 1875. The decree directed the then colonial Office of the Inspector of Public Works to carry out the planning of the rail system. On 31 July 1887, the construction of the line started. The first section of the Manila-Dagupan line was completed and commercially operational with its initial run from Manila to Bagbag on 24 March 1891. The entire line of 195.5 kilometers was completed and fully operational on 24 November 1892. The operation of the train was interrupted due to the Philippine revolution against Spain in November 1896.

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ANALYZING THE DEVELOPMENT OF JINAN TOURISM INDUSTRY BASED ON DATA VISUALIZATION TECHNOLOGY

INTRODUCTION

With the steady development of the economy and the continuous improvement of people's living standards, tourism has become one of the important driving forces for economic growth in China. In recent years, an increasing number of people have chosen China as their desired travel destination to enjoy the pleasure of travelling. The prosperity of the Chinese tourism market is not only reflected in the continuous growth of tourist numbers but also in the ongoing pursuit and upgrading of tourist experiences by travellers. From traditional sightseeing tours to today's deep travel and customized tours, the demand for tourism from the public is becoming increasingly diverse and personalized. As the capital city of Shandong Province, China, Jinan is endowed with a unique spring water culture, rich historical relics, and magnificent natural scenery, making it charming and attractive. Against the backdrop of growing market demand, Jinan's tourism industry has tremendous development potential and advantages. To deeply understand the data characteristics of popular tourist attractions in Jinan and reveal the current situation of the tourism market in Jinan is of great significance for promoting the healthy development of Jinan's tourism industry.

In this context, information visualization technology, with its unique data processing capabilities and intuitive presentation of data, provides a fresh perspective for the analysis of the tourism industry. Through information visualization tools, large amounts of tourism data can be transformed into easily understandable and analyzable graphics and images. This technology not only makes the data clearer and more comprehensible but also helps analysts quickly discover trends, patterns, and issues within the data, uncovering potential market insights. The results of data analysis based on visualization tools can assist industry professionals and tourists in making tourism policies, planning travel routes, and adjusting tourism resource allocation more scientifically and rationally.

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BIOPHILIC DESIGN IMPLEMENTATION IN TAMBAK MULYO, INDONESIA: HARMONIZING COASTAL LANDSCAPE WITH LOCAL HISTORY AND CULTURE

INTRODUCTION

Throughout history, the most livable regions for many civilizations have been along the coast (Asur, 2019). Most civilizations rose and developed nearby water, as there were plenty of resources. (Chellaney, 2011). One of these cities that developed from water points is Semarang City in Indonesia. Originally, this city shoreline was a lot different than it is now. As time passes, river sedimentation causes the shoreline to move forward and turn what used to be water into land (Andreas et al., 2019). Tambak Mulyo is one area that experienced this change and became a part of the Semarang land mass in 1947 (Firmandhani, 2020). Being a coastal area means Tambak Mulyo is subjected to various sea elements. The most common problem with shores is tidal flooding.

Tambak Mulyo does not only face water on one side, all three sides of Tambak Mulyo are exposed to water, either sea or river. This means Tambak Mulyo is exposed to tidal and river floods occasionally. Tidal flood in this neighborhood occurs twice daily, while river floods occur in the rainy season (Fajrin et al., 2021). A large chunk of this neighborhood is adjacent to the sea, creating more vulnerability for the people living there. Creating settlements directly adjacent to the sea reduces local biodiversity in areas such as Mangroves and birds (Oktiana & Antonio, 2015). The lack of biodiversity, in turn, creates more vulnerability as settlements become directly exposed to coastal elements (Sutton et al., 2019).

The biophilic idea has yet to stand up as the more significant to support resilient and sustainable neighborhoods (Zhao et al., 2022). The biophilic concept can be defined by the two words composing it: bio, which means nature, and philia, which means attraction. Biophilic design, by definition, is a design that would cause its user to be attracted to nature. Through this natural attraction, resilience and sustainability will spring out automatically (Gür et al., 2022). Biophilic design has three main attributes: direct experience, indirect experience, and experience of space and place (Kellert,

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ADAPTIVE MANAGEMENT ON CULTURAL LANDSCAPE: LEARNING FROM KABUYUTAN A SACRED NATURAL SITE IN INDONESIA

INTRODUCTION

Sacred natural sites are special locations that are acknowledged to be essential to preserving both culture and environment (Khan *et al*., 2008; Verschuuren *et al*., 2010). Global recognition of their significance can be found in the International Union for Conservation of Nature's Sacred Natural Site management recommendations (Wild & McLeod, 2008). According to these standards, locals have a thorough grasp of a site, making them important stakeholders in a management system. According to recent research on sacred natural sites, locals are playing a bigger part in administration (Allendorf *et al*., 2014; Dudley *et al*., 2010; Vodouhê *et al*., 2010). However, few case studies have been done in Indonesia.

This study focused on *kabuyutan* sacred natural sites in Indonesia in order to broaden the geographical scope of studies (Dudley *et al*., 2010) and enhance the body of knowledge in the field of sacred natural sites. The Sundanese people who inhabit the western portion of Java Island revere *kabuyutan* as the sacred sites. *Kabuyutan* have physical and cultural characteristics with other sacred natural sites (Dudley *et al*., 2010; Khan *et al*., 2008; Verschuuren *et al*., 2010) that are connected to indigenous knowledge. They might be singular objects like a tree, small spring, distinctive rock formation, or ancestral grave, or they can be part of a larger landscape that stands out from the surrounding area (Kartakusuma, 2006; Wessing, 1999, 2006). They can also be of different sizes and shapes. They are primarily found in valleys, above hills or mountains, upstream (near springs), downstream, or in regions that are susceptible to dangers, like those with river tributaries. They are also primarily covered in tall, dense trees. Spring water, natural vegetation, and animals are typically maintained in *kabuyutan* settings.

Although not well known, academics who specialize in studying the Sundanese language, such as philologists and archaeologists, use the term *kabuyutan*. The phrase appears in inscriptions such as the *Sanghyang Tapak*,

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UMMAH: THE SPATIAL CHARACTERIZATION OF THE CULTURAL DISTRICT "MUSLIM TOWN" IN THE CITY OF MANILA, PHILIPPINES

INTRODUCTION

From the personal, community, and environmental standpoint, Islam promotes a system guided by Allah through the Quran and conveyed by the Prophet Muhammad S.A.W, which is implemented, practiced, and focused towards submission to Allah in the development of humankind (Nurul, S.A.L.,Nor, Z.H.,et.al., 2020). Such particular focus on religion and history permeating all aspects of civic life intertwined Islamic communities with concepts of urbanity and civilization, as exemplified by the emerging study of the Islamic city. "That initial model was supplanted by a series of models that were either adopted from the various cultures which Muslims came in contact with or developed in response to the ever-changing cultural, environmental, and social conditions." (Rabbat, 2010).

The pre-Spanish Philippines was once considered a philosophical and cultural mixing pot through economic interactions with various Asian civilizations. However, the cultural hegemony during Western colonization has monopolized the cultural, economic, and political influence under the guise of religion and democracy. These various experiences with different kinds of cultures and power dynamics of different powers have altered the production of the country's historical narratives which shaped Filipino ideas and concepts of nation-state, religious and cultural orientations, and domestic relationships of the Filipino people. (Absari, D.J., & Morados, M.A., 2020)

Origin Of Islam In The Philippines: The history of Islam in the Philippines can be attributed to the historical development of the whole country. It is often noted that Islam was already present in the Philippines before the coming of the Spanish and American colonizers. Sulu was the first Muslim community in the south to establish a centralized government, the Sultanate of Sulu in 1450, preceding the arrival of the Magellan by almost a century. The Sulu Sultanate was already 71 years old when Magellan came to Mactan in 1521, when Legazpi arrived in 1565. The introduction of this Sultanate

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CONCEPT OF VEGETATION ARRANGEMENT IN THE LANDSCAPE BETAWI CULTURAL VILLAGE SETU BABAKAN ZONE-C, SOUTH JAKARTA

INTRODUCTION

The Setu Babakan area, located in Jagakarsa District, South Jakarta, has become an attractive cultural and recreational tourist destination as well as a centre for preserving Betawi culture. This is stipulated in the Decree of the Governor of DKI Jakarta No. 92 of 2000 concerning the Environmental Arrangement of Betawi Cultural Villages in Srengseng Sawah Village, Jagakarsa District, South Jakarta Municipality. This decree was issued by the DKI Jakarta Provincial government due to the increasingly rapid and developing development in the capital which is rapidly threatening the preservation of arts and culture, local wisdom and the environmental system of the Betawi community. In line with this decree, an area of ± 165 Ha consisting of a land area (terrestrial) of ± 130 Ha and a water area (aquatic) of ± 35 Ha will be developed so that it has a function as a means of information, research and development, arts and culture, education and recreation, as well as tourism. The direction of its use and development is cultural tourism, agro tourism and water tourism. In 2005, the Setu Babakan area was further strengthened by Regional Regulation No. 3 of 2005 which designated this area as a Betawi Cultural Village with an area of ± 289 Ha consisting of 30% ownership rights by the DKI Jakarta Provincial government and 70% by local ownership. The follow-up to the plan for utilization and development of this area is the carrying out of planning activities and preparation of the PBB area Master Plan for 2005-2020. The results of this Masterplan planning produce an area spatial plan which is divided into 4 (four) development zones, namely Zones A, B, C, and the Embryo Zone (Figure 1). The Embryo Zone is an area that has been developed and is currently the centre of tourist visits with an area of 4,091 m2. Meanwhile, Zones A, B and C have not been fully developed because they are constrained by land ownership issues and problems in the field (Samsirina et al., 2018).

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A PATCHWORK OF AGRICULTURAL, COASTAL, AND CULTURAL LANDSCAPES: STITCHING LANDSCAPE CHARACTER AREAS AND TYPES FOR LANDSCAPE CHARACTERIZATION OF GUMACA, QUEZON

INTRODUCTION

Landscape is not only the physical characteristics of the land but also the relationship between people and place (Swanwick, 2002). It is an area perceived by people whose character is the result of action and interaction of natural and/or human factors (Council of Europe, 2000). The landscape also plays an important role in the economy, attracting tourists, residents, and investments to an area, as well as supporting a range of primary production like farming, forestry, and horticulture. Furthermore, the landscape becomes an integral part of the identity of local communities, providing a sense of belonging for residents and visitors alike (Environment Guide, 2018).

To be able to assess a particular landscape, there is a need to explore its landscape character, which refers to the distinct and recognizable pattern of elements that occur consistently in a particular landscape. It is the combination of biophysical layers such as geology, landform, soils, vegetation, land use, field patterns, and human settlements, which makes each part of the landscape distinct and provides each its particular sense of place. Landscape character is composed of type and area. For clarity, landscape character types refer to distinct types of landscape that are homogenous in character. It can be generic, but they share broadly similar combinations of geology, topography, drainage patterns, vegetation, and historical land use and settlement patterns. Meanwhile, landscape character areas are unique and discrete areas of a particular landscape type (Swanwick, 2002). To fully comprehend landscape character, reference to its type and area is necessary. Thus, it bears repeating, that it is crucial to take into consideration all features of the landscape, to apply them to land use policies (Will, 2005).

From the determination of landscape character, an assessment may be had. This further step refers to landscape character assessment (LCA), which is the process of identifying and describing variations in the character of the landscape by mapping the Landscape Character Types and Areas (Scotland's

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TENGGER TRIBE YARD MODEL BASED ON INDIGENOUS PLANTS BROMO TENGER SEMERU NATIONAL PARK (CASE STUDY: NGADAS VILLAGE, PONCOKUSUMO, MALANG DISTRICT)

INTRODUCTION

Indonesia is a country where natural diversity in each region influences the lives of its people in changing space. This country, Indonesia, has very diverse animals and fauna. The diversity of natural wealth in each region influences the way people live in each region. In terms of natural diversity, each region has the potential for natural wealth found in the marine and land riches contained in Indonesia's land. Natural riches are different, of course, and the landscape conditions in each region in Indonesia are different. These conditions affect the vegetation that grows in each region. Not all vegetation can grow in all places. Sometimes vegetation requires adaptation to adjust the character of the vegetation itself. Natural resources, including rural and agricultural landscapes, have high diversity in various traditional forms and accompanying local culture (Kuswendi, 2011). In Indonesia, some of them can be used for various needs, but some still cannot be used due to limited technological and economic capabilities.

The characteristics of plants are very different, each individual has characteristics and a way of life to reproduce and grow, one of the characteristics of a plant is that it becomes a parasite for other plants. If other plants are invasive, it will disrupt the continued growth of native or indigenous plants. These plants gain a competitive advantage after the removal of natural constraints on their reproduction which allows the species to spread rapidly to dominate new areas in the ecosystem where the species is dominant (Vale'ry, Herve, Jean-Claude and Daniel, 2008).

One area in Indonesia that has very unique and interesting landscape conditions is Bromo Tengger Semeru National Park, especially Ngadas Village, which has topography, temperature, soil, and climate with its characteristics so that only certain plants can grow there. Bromo Tenger Semeru National Park has potential natural resources such as flora/plants, unique ecosystems, active volcanoes, habitats for migrant animals, and unique phenomena such

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ETHNOBOTANY AS CULTURAL HERITAGE IN INDONESIA

INTRODUCTION

Indonesia has one of the highest biodiversity in the world. Tropical rainforests, savannas, and other ecosystems create conditions that strongly favour the growth of various types of plants. This diversity became the basis for the development of ethnobotanical knowledge because local people coexisted with diverse flora. Humans have always been very dependent on the environment to meet their needs. For example, food, shelter, clothing, medicine, fertilizer, perfume, and even beauty can be obtained from the environment. The natural wealth that exists around humans is actually very useful, but it has not been fully studied, utilized, and even exploited. Indonesia has a wealth of knowledge about traditional medicine. Almost every ethnic group in Indonesia has a wealth of knowledge and methods related to traditional medicine. Indonesia's natural potential is huge because of the diversity of medicinal plants (Parwata, 2016).

Plants have been an important source of medicine for thousands of years. The use of plants for healing is perhaps the oldest form of medicine in the world. Every culture in the world has its traditional medicine system, and each region has different types of plants that can be used as medicine. Currently, treatment with natural ingredients is still one of the complementary therapies and treatment options to cure diseases and maintain health. In Indonesia, the use of medicinal plants to improve health has been done by our ancestors since ancient times. This knowledge was then passed down from generation to generation and is still used and developed in traditional medicine to this day, one of which is in the form of herbal medicine. Traditional medicine tends to be safer to use because the side effects are minimal compared to modern medicine (Muflisah, 2014).

The development of traditional medicine and traditional medicine is currently growing rapidly, especially traditional medicine derived from growing plants. We can see the increasing number of dosage forms of traditional medicine in the form of packaging that is very attractive to consumers. This development makes the Government or related agencies

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GUMACA, THE PEOPLE, AND THE LANDSCAPE: A LANDSCAPE CHARACTER MANAGEMENT PLAN FOR THE HISTORICAL, AGRICULTURAL, AND COASTAL ASSETS OF GUMACA, QUEZON PROVINCE

INTRODUCTION

The Municipality of Gumaca is one of the coastal towns of Quezon Province, traversing along its provincial corridor through the Pan-Philippine Highway, connecting the Calabarzon Region from Metro Manila and the Bicol Region. The first-class municipality and heritage town has a total land area of 189.95 sq. km. and a population of 71,942 based on the 2020 Census. Apart from its rich historical significance and developing financial and government center, Gumaca's land use is primarily agricultural, with farming and fishing as the main source of livelihood for its residents.

One major infrastructure development set to impact Gumaca is the ongoing SLEx TR5 Project, the 417-km Quezon-Bicol Expressway (QuBEx) from Lucena to Matnog, Sorsogon, whose Segment 1 covers the 59.60-km stretch from Lucena to Gumaca. This infrastructure practically cuts through the production areas at the southern hills of Gumaca all the way north, connecting to the existing Pan-Philippine Highway.

As identified in the Calabarzon Regional Development Plan (RDP) for 2023 to 2028, another possible impact in the pipeline is Gumaca's potential as a port. A 300-hectare reclamation activity was embarked on for an international seaport project, aligned with its Comprehensive Land Use Plan in 2017. Gumaca's urbanization, albeit showing a decrease in population growth from the latest national statistics, can be monitored by the town's burgeoning services as a financial, business, and government center among its neighboring municipalities.

LANDSCAPE CHARACTER MANAGEMENT PLAN

A Landscape Character Management Plan (LCMP) involves identifying and understanding the unique characteristics of a landscape, including its natural, cultural, and perceptual attributes. This approach integrates these attributes to portray the landscape effectively. It is a widely used tool for landscape

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POTENTIAL OF SETUPATOK AS A HYBRID LANDSCAPE IN CIREBON

INTRODUCTION

Cirebon is an area on the north coast of Java where most of the area is lowland in the north, and the southwest part is a mountainous area under the foot of Mount Ciremai and the land lies extending from the northwest to the southeast. In the past, Cirebon was an area that was once used as a silk route for trade from various nations, including Persia and the Middle East, China, India and Turkey, which transited the main port of Cirebon, so gradually cultural acculturation began to occur (Hariyanto, 2016).

Cirebon community culture is the descendants of Cirebon Javanese who acculturated with the Sundanese tribe and generally use the Cirebon Javanese language (*bebasan*). Cirebon's famous arts such as Tarling, Topeng Kelana Dance, and Sintren are very thick with a magical aura of local culture that aims to be a medium of Islamic preaching (Irmawati, 2020; Lasmiyati, 2011). Commonly known cuisines are Nasi Jamblang (rice wrapped in teak leaves), empal gentong, and docang. There are well-known historical tourist spots such as Sunyaragi Cave, Kasepuhan Palace, Kanoman Palace, Kacirebonan Palace, BAT Building (British American Tobacco), Sunan Gunung Jati Tomb, Chinatown Village, and natural tourism, one of which is Lake of Setupatok which is located in Mundu District, east of Cirebon City. Located ± 10 km from Cirebon city centre, making Setupatok an alternative tourist destination that is cheap and accessible to many people.

The word Situpatok comes from two words in Sundanese, namely the word '*Setu/Situ*' which means a lake, and the word '*Patok*' is a sign that is placed either on a stone, wood or something else. In the past, people believed why it was called Situpatok, because it was said that there were many stakes stuck into the ground which were used to strengthen the lake embankment so that when the rainy season arrived, undesirable things such as flooding in the area around the lake and downstream areas did not happen. Setupatok Lake was built because there was an initiative from the Dutch East Indies Government. After all, Cirebon City often experienced floods, and also Cirebon City was a strategic city for the Dutch East Indies Government

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GEOSPATIAL DIMENSIONS IN STRATEGIC PLANNING: AN INDICATOR-BASED SWOT-PEST ANALYSIS OF GUMACA, QUEZON PROVINCE

INTRODUCTION

Strategic planning, as a cornerstone of effective governance and sustainable development, demands a multifaceted approach that transcends conventional methodologies. In landscape management, understanding the intricate dynamics is essential for shaping a resilient and thriving future. This research endeavors to bridge the gap between strategic planning frameworks and contemporary geospatial technologies, offering a comprehensive solution that not only captures the nuances of specific landscapes but also integrates these insights into informed decision-making.

The study focuses on the Municipality of Gumaca in Quezon Province, Philippines, a place endowed with diverse landscapes and rich history that contribute to its unique identity and potential for development (Fig. 1). As a first-class municipality, it boasts a moderate competitive score of 35.51, securing the 65th position in the latest ranking of the Cities and Municipalities Competitive Index (CMCI). This index was developed by the National Competitiveness Council (NCC) through the Regional Competitiveness Committees (RCCs), with the assistance of the United States Agency for International Development. The index evaluates the economic dynamism, government efficiency, infrastructure, resiliency, and innovation to establish the rankings. In the case of Gumaca, the performance was notably strong in government efficiency, whereas infrastructure emerged as the sector requiring the most improvement.

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ASSESSMENT OF SOIL EROSION SUSCEPTIBILITY WITHIN THE BESSANG PASS NATURAL MONUMENT/LANDMARK (BPNML) USING THE REVISED UNIVERSAL SOIL LOSS EQUATION (RUSLE)

INTRODUCTION

Background of the study

The Bessang Pass Natural Monument/Landmark (BPNML) is known as one of the protected areas (PA) with historical landmarks within the Philippines. Within the site lies the Bessang Pass Marker which celebrates the valor and victory of the 1,395 Filipino guerilla soldiers hailing from the 11th, 14th, 15th, 66th and 121st infantry regiments of the 3rd battalion of the United States Army Forces in the Philippines – Northern Luzon (USAFIP-NL) who participated in the Battle of Bessang Pass in June 1945 — leading to the liberation of the whole Luzon Island after the defeat of Japanese forces led by Gen. Tomoyuki Yamashita (BPNML PAMP, 2021).

This PA is one of the few tropical pine reserves within the Philippines characterized with unique geological, biological, and ecological features (BPNML PAMP, 2021). Further. it is also dubbed as the summer capital of Ilocos Sur, with climates similar to that of Baguio City, and because of its steep, rolling terrains. It was declared as a natural monument in August 1954 due to its rich history and ecological resources, which includes three major forest ecosystems such as Pine Savanna, Sub Summit Mossy Forest, and Mix Montane Rain Forest. Likewise. it is home to a variety of fauna and flora such as the rare Benguet Bush Warbler (BPNML PAMP, 2021).

The municipality of Cervantes, where the BPNML is situated, is recognized as the “vegetable bowl of Ilocos Sur”; where the main source of livelihood within the PA is upland farming of highland vegetable and crops such as carrots, cabbage, broccoli, cauliflower, potatoes, and bell pepper. Other produce being cultivated within the agricultural lands of the area include sweet potatoes, ginger, pear squash, pigeon pea, yakon, banana, coffee, and tiger grass (BPNML PAMP, 2021). Because of its steep topography and elevation, one of the common farming practices being done within the region of interest are crop terracing. This farming practice is appropriate for

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THE EFFECT OF Euphorbia hirta L.. AS TRADITIONAL MEDICINE PLANT FOR HYPERURICEMIA

INTRODUCTION

Hyperuricemia is a medical condition characterised by elevated uric acid levels in the blood. It is typically defined as a serum uric acid level greater than 6 mg/dL in women and 7 mg/dL in men. The cause of hyperuricemia is that foods containing high purines cause uric acid to accumulate in the tissues around the joints, resulting in causes pain (Pribadi and Ernawati, 2010).

The Indonesian community for many centuries used herbal medicine to maintain good health and treat diseases. It is considered an important part of Indonesian culture and has gained recognition as an official part of Indonesia's cultural heritage. In ancient times, humans used their environment to fulfil their daily needs (Sari, 2006). The environmental components used are herbal plants in the form of herbal medicine or traditional medicine (Katno, 2008). The patikan kebo (Euphorbia hirta L.) plant is a herbal plant that is used by the community for the herbal treatment of diseases including lung abscess, chronic bronchitis, asthma, dysentery, inflammation of the breast glands, typhus abdominalis and urine laxative (diuretic) (Hariana, 2006).

According to Harris. (2010) the patikan kebo plant contains alkaloids, saponins, tannins and flavonoids. In the research of Jiang et al. (2020) flavonoid, alkaloid and saponin compounds have the potential to reduce uric acid levels. According to Ling and Bochu. (2014) tannin compounds have the potential to reduce uric acid levels. Based on research on flavonoid, alkaloid, saponin and tannin compounds that have the potential to reduce uric acid levels, research needs to be carried out to determine the effect of giving ethanol extract of patikan kebo leaves on reducing uric acid levels in male white rats. Wistar strain potassium oxonate-induced hyperuricemia.

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Cultural Landscape:

Insights from Environment, Economy, Policy, and Health

The theme "Cultural Landscape: Insights from Environment, Economy, Policy, and Health" encompasses the intricate relationship between human societies and their natural surroundings, exploring the interplay of environmental, economic, policy, and health factors within diverse cultural landscapes. This theme seeks to delve into how cultural heritage, environmental conditions, economic activities, policy frameworks, and public health intersect and influence one another within various landscapes around the world, especially in Asia. By examining the unique interconnections between these elements, this symposium aims to shed light on the multifaceted nature of cultural landscapes and their significance in shaping societies and human well-being.

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