

# THE HERITAGE CULTURE RESTORATION TO ENGAGE IN BIO-CULTURAL DIVERSIFICATION

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## ABSTRACT

*The ecology and cultural legacy of a community define its potential for development. Combining philosophy and thinking fosters the preservation of historical sites, environmental protection, and the capacity to display the diversity of bio-cultures.. This case study is directed towards the issues of the state government, the fishermen's market organization, and fishing villages. It is also possible to identify this through reasonable issues that fall under the environmental, social, and physical challenges groups. This article discussed the economic circumstances in Kuala Kedah and offered cultural insights. The cultural heritage and ecology retreat, which fosters a feeling of place and promotes the sustainability of a heritage culture town, brought attention to the significance of this article. # The main goals of this study are to look into the uniqueness and distinctiveness of the relationship between local identity, legacy, and the economic revival of Seberang Kota through inventory and analysis. The findings and information from the inventory and analysis are combined to identify possible areas for environmental preservation and cultural enhancement. The final half of the article included some design guidance that is essential for anticipating the rules for organising and carrying out this research. To support sustainable living opportunities for the local population and the preservation of the surrounding environment for tourists, which will entice them to participate in environmental and cultural activities, this article offers a plan for preserving and enhancing Seberang Kota's distinctive character and identity as a*



*cultural heritage village.*

**Keywords:** *Cultural heritage, Bio-culture diversity, Environmental, preservation*

## INTRODUCTION

The concept of heritage and sustainability alludes to the relationship between a community's history, identity, and economic growth. Sustainable community development can result from sustainable development because of their interconnection (Rosetti, 2022). This article defines or categorizes traditional settlements as dynamic, historical landscapes with a diversity of tangible and intangible "values" that support a variety of social interactions and traditional ways of living. Even if some cities had to adapt to the contemporary world, they nevertheless retain some of their ancient characteristics. This article provided cultural insights and talked about Kuala Kedah's economic situation. The importance of this particular work was highlighted by the cultural heritage and ecological retreat, which creates a sense of place and supports a heritage culture town's sustainability. The main focus of this article is to examine the uniqueness and peculiarity of the relationship between local identity, legacy, and Seberang Kota's economic resurgence through inventory and analysis.

According to Maffi and Woodley (2012), the same mechanisms of change that are destroying ecosystems and changing ecosystems into unique configurations are also responsible for the worldwide trend toward a loss of biocultural diversity. It is essential to safeguard these culturally significant landscapes, including preserving and restoring their distinctive biocultural features, to produce future landscapes that are resilient and sustainable in the face of severe environmental change (Posey, 1999; UNESCO, 2010).

The article demonstrated an interest in biocultural diversity. According to Maffi and Woodley (2012), the same mechanisms of change that are destroying ecosystems and altering ecosystems into distinctive configurations are also generating a global trend toward a loss of biocultural diversity. It is essential to safeguard these culturally significant landscapes, maintaining and restoring their distinctive biocultural features

to produce future landscapes that are robust and durable in the face of harsh environmental change (Posey, 1999; UNESCO, 2010).

## **LITERATURE REVIEW**

### **Cultural Heritage Conservation**

As to UNESCO (unesco.org, 2007), heritage refers to "our legacy from the past, what we live with today, and what we pass on to future generations." Soini and Birkeland (2014) state that such a definition necessitates a conceptualization that is cumulative, temporal, and constant throughout all its manifestations. According to Cuthbert (1984); ICOMOS (1981), legacy conservation is the process of caring for a tangible and intangible legacy to maintain its cultural significance and keep it from being damaged or destroyed.

According to Mustafa, and Abdullah (2013), cultural heritage refers to tangible or intangible forms of cultural property, structure, or artifact and may include heritage matters, objects, items, artifacts, formation structures, performances, dances, songs, or music that are important to Malaysians' historical or modern way of life. Natural heritage is not considered cultural heritage.

Conservation is the term used to describe any actions taken to maintain a location's cultural relevance. Burra Charter (2013); Lesh (2020). The term "conservation" refers to practices aimed at preserving a cultural resource's historic value and increasing its physical lifespan.

The administration of locations with cultural significance must include conservation. Culturally significant locations must be safeguarded and should never be in danger or left in a precarious situation (Harun et. al., 2018). A place's history and past uses can help explain why it is significant, and traces of past renovations, extensions, and other treatments to the building's structure can be seen. Rather than obstructing understanding, conservation initiatives should encourage it. (From The Burra Charter, 2013).

The Burra Charter (2013) defines the cultural importance of heritage sites as the "aesthetic, historic, scientific, social, or spiritual value for past, present, or future generations" that is "embodied in the place itself, its setting, use, associations, meanings, records, related places, and related objects." The purpose of conservation is to ensure that all interventions and actions pass the authenticity test in every way.

According to Mohamed (1995), the strategy for resolving conflicts between conservation and tourism growth, especially in rural areas where agriculture or the idea of a "cultural landscape" predominates. The study highlights the necessity of forming fruitful alliances between the travel and tourism sector, the government, and the local populations. To meet this challenge, rural areas need management plans and policies that prioritize preserving the unique characteristics of the region while also taking into account the social, economic, and cultural needs of the local communities. This will guarantee that local customs and culture survive and are carried on.

## **Conserving Fisherman Cultural**

According to Hassan (2010), the traditional fishing villages as its case studies because of their similar geographic locations and the fact that the fishing villages that survive now most closely mirror ancient city layouts. These ancient cities, including Malacca and Kota Johore Lama, were Malay port cities in the Malay Kingdoms prior to European invasion. The literature evaluation includes an analysis of the fishing villages and a historical overview of the ancient cities. Further more, the study shows that inside traditional cities and fishing villages, low-rise, high-density housing units are grouped in a close settlement pattern. The existence of traditional fishing settlements refutes arguments that traditional planning patterns are only appropriate for rural areas.

Traditional fishing methods have tight contact with the natural world and are based on the sustainable utilisation of local ecosystems. However, hazards to the environment from both modern development and natural disasters have caused resource abundance to fluctuate, which poses a number of challenges for fishing communities (Ghazali, 2011). Ghazali (2011), examines the experiences that fishing communities in Teluk Bahang, Penang, Malaysia, have had in maintaining the natural and cultural history

of their community. Informal interviews were carried out with household members who engaged in activities related to their history. Even though they would prefer to continue living traditional lives, many are forced to adapt to changes in the natural environment.

## **SUSTAINABLE ENVIRONMENTAL OVERVIEW**

Natural resources are vital to billions of people's livelihoods. When appropriately managed, renewable natural resources, productive landscapes, seascapes, and watersheds provide the groundwork for long-term inclusive growth, food security, poverty reduction, and human well-being (Ostendorf, 2011). Additionally, a clean environment is necessary for people to lead healthy and fruitful lives and for public and private resources to be directed toward growth rather than the removal of pollutants.

The ecosystems of the planet act as a unique and efficient buffer against extreme weather events and climate change, regulating the air, water, and soil that we all depend on. Globally, more effective waste management programs, fiscal policies that are environmentally friendly, and fiscal markets are required to promote sustainable growth (World Bank, 2010; 2018).

## **RESEARCH METHODOLOGY**

Thus, research methodology is this study examining how scientific research is carried out (Harrison et.al., 2017). a strategy for approaching the study problem logically and gradually. Methodological tools facilitate comprehension of both the process and the outcomes of scientific research. The goal of research methodology is to establish assumptions and consequences, shine a light on resources and restrictions, analyse and explain procedures, and connect potential outcomes to the parallel universe at the "center of the learning process."

### **Primary Data**

The observation methods were utilized to acquire primary data for this investigation. This strategy examines the existing research site in terms of physical places, activities, and consumer categories involved in the study

region. The observation was conducted at a site study within a week in September 2022.

## **Secondary Data**

The secondary data was collected from government departments, previous studies, and other data collected for site inventory and analysis.

## **Government Departments**

The government department involved in this study is (Seberang Kota, Mukim Kuala Kedah.) The Local Government Act (RT) from the Majlis Bandaraya Alor Setar requires data since it contains the current study area plan, land use plan, existing development plan, and future development. The connected open space and river site planning criteria are also necessary.

## **Previous Study and Research**

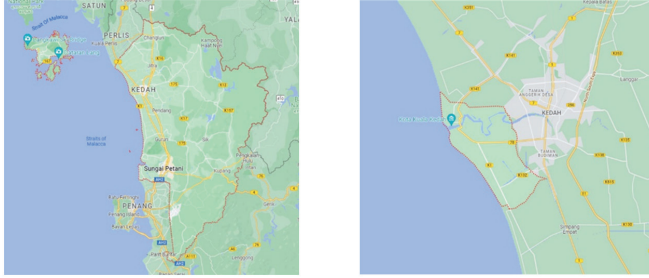
Statistical studies were acquired and used as a study by prior researchers who released their data on a recognized website. This data is also derived from reading materials such as books, journals, thesis, and certified internet databases on study topics.

## **Inventory And Analysis**

The whole data collection process for physical, environmental, and social assessments, including data collection for inventories and analyses, will be discussed. The circulation network, building profile, and site land usage of Kampung Seberang Kota in Kuala Kedah are the observed elements in the physical analysis. Waterbodies and the features of the plants in Seberang Kota are observed during environmental analysis. The socio-cultural analysis, meanwhile, keeps track of the users, activities, and historic and cultural values. As soon as all the site's obstacles and opportunities have been identified, the design creation phase will move on to the next procedure, which will essentially be based on the inventory and analysis stage.

## BACKGROUND OF STUDY AREA

### Location of Site



**Figure 1. Key plan of site study, Kedah (left). Location plan of site study, Kedah (right)**

Source: Google Maps (2022)

Kedah is a state in northwest Malaysia, bordering Thailand and encompassing the Langkawi archipelago. Kedah is considered the "rice bowl" (Jelapang Padi) of Malaysia, accounting for about half of Malaysia's total production of rice. In 2008, the state government banned the conversion of paddy fields to housing and industrial lots to protect the rice industry (Falarti, 2013). Kedah has a relatively heterogeneous populace constituted by three major ethnic groups which are the Malays, Chinese, and Indians as well as some Malaysian Siamese ethnic groups, like most of the other Malaysian states. (Musa, 2015). The selection of Kampung Seberang Kota in Kuala Kedah was based on its advantageous location next to a river and scenic natural surroundings. The location of the place was also close to the mangrove. The river must protect its biodiversity by forbidding construction inside designated buffer zones and preserving its natural view of riparian vegetation, mangroves, and wildlife.

The proposed site is in Seberang Kota which is strategically located in Mukim Kuala Kedah near Malacca Strait and acts as the main entrance to Northern Kedah. Seberang Kota is connected along Jalan Marina Harbour which is surrounded by paddy agriculture and located opposite to a Kuala Kedah Ferry Terminal. The potential development in Seberang Kota is supported by cultural heritage and environment. The focus of Seberang Kota is cultural heritage and economic and recreational activities.

# PHYSICAL INVENTORY AND ANALYSIS

## Land Use



Figure 2. Land use of Mukim Kuala Kedah

Source: RTD Majlis Bandaraya Alor Setar 2035 (2018)

The main current land use in Mukim Kuala Kedah is an open space and recreation area that is covered by 4207.47 hectares (49.26%) that consists of residential, commercial, and green areas. The government sector area is 19.08 hectares (44.86%) which consists of the historical area and maritime building and waterbodies area in Seberang Kota, which conducts one of the main activities in it is 2.79 hectares (6.56%), RTD Majlis Bandaraya Alor Setar 2035, (2018).

As for cultural heritage and environmental preservation, Kuala Kedah is to be developed as a Catalyst Hub that is supported by green, historical,



commercial, and recreational activities.

## **Green District**

The green area is one of the major sectors that are important for ecosystems, habitat, and natural resources at Kuala Kedah. As Kuala Kedah is famous for its strategic location at the end river mouth of Sungai Kedah and facing Malacca Strait, green areas act as a strong and sustainable value that is important for the community and environment. The unutilized area is the biggest space that projects by 11.4%, followed by riparian by 9.6% and mangroves by 4.6%. The unutilized area contributes to the local recreational attraction while mangroves tend to be preserved. The current scenario of recreational activities in Seberang Kota is seen along the coastal area rather than the settlement area, (J. P. B. Rancangan Struktur Negeri Kedah, 2011).

Seberang Kota Village is surrounded by mangrove species in the riverbank area. The mangrove acts as a barrier and protection to the village. The mangrove also becomes a habitat for aquatic life. Hence, a devastating typhoon can destroy a large part of the mangrove forest by uprooting the mangrove trees.

Since the mangrove area is experiencing degradation, Seberang Kota Village potentially has flood events during high tide. This factor subsequently increases uncomfortable and reduces safety in the settlement community nowadays. (<https://bernama.com/en/news.php?id=2020228>)

## **Historical District**

The historical district of Kota Kuala Kedah is under the Conservation Department of Museum Malaysia where the reconstruction began in 2000 with the guideline of the KL City Planning Act 1973. Kota Kuala Kedah consists of Museums, artifacts, and monuments. The site of Kota Kuala Kedah or Kota Kuala Bahang which is located on the north bank of the mouth of the Kedah River is strategic as a defense for the state of Kedah according to history, (Musa, 2015).

Museum Kota Kuala Kedah is located at the center of the fort where historical information is shown while the monuments and artifacts surround

it. The visitors are locals and tourists who came for a visit, research, and photographic purposes.

Archaeological site heritage authenticity should be emphasized in the educational function of local museums or cultural offices to increase the interest of the local community.

## **Building Profile**

The building profile in Seberang Kota has shown various types of building use. This building determines the daily activities of the town. The major use in the town is dwellings. Other types are shops or stores, religious, community service, museums, restaurants, and government buildings.

Seberang Kota has several significant buildings that have heritage and historical values that could be preserved for the remembrance of its past. From the above building use map, the dominant use is for residential and commercial activities.

As a fisherman village, traditional houses and also jetty are some of the important buildings to support the culture and economy of Seberang Kota. The building pattern is a mix of linear and cluster aligned with a linear network of roads. As seen in the map above, residential use is mostly developed and jetty along the riverbank, creating active human movement there. Other building uses support the commercial use thus giving a continuous functional space.

## **Significant Buildings**

### **a. Malay Traditional House**

Malay traditional houses existed in Seberang Kota Village since the village was developed. All 22 houses are from traditional house architecture which they are made up mostly of timber materials that indicate the traditional elements in architecture. The houses have compartments under the house that are used to store things or conduct activities that create cultural memories. The houses owned by Malay fisherman residents that are locally from the village create localization of conservation stewardship along with a sense of place.



**Figure 3. Malay Traditional House of Seberang Kota Village**

Source: Author (2023).

Malay traditional houses act as dwellings for the Seberang Kota villagers who then experience changes in material conditions that cause erosion and decomposition to the houses due to weathering and pollutants. The original Malay traditional houses decreased due to floods which forced the residents to move to new settlements thus giving a sense of place and sense of belonging (Harun & Jaffar, 2018) to previous users.

### **b. Jetty Boat House**

Fisherman boathouses or jetties are made up of timber and located at the water mouth. The structure faces the loss of historic degradation. Local fishermen with inherited occupations as the dominant users which brings the intangible cultural heritage of fisherman activities. In the boat house have a pile of fishing gear that gives tangible culture. Stilt pillars that stand in the water to withstand the high volume of water. The existing jetty route was arranged with timber built from the riverbank towards the boat house.



Figure 4. Jetty Boat House

Source: Author (2023)



Figure 5. Timber Jetty

Source: Author (2023)

Due to the onslaught of pollution, changes in water levels and moisture including damage from vibration and settlement, affect the structure which highly potential to be attraction of function and preservation of culture.

### c.Kuala Kedah Fort

Kuala Kedah Fort is one of the existing buildings during was built in 1771 during the reign of Sultan Muhammad Jiwa, its construction was completed in 1780. 13 cannonballs and six English-made cannons that are over 100 years old are being preserved to enhance the history to spread knowledge for the future generation. An archway known as Kacapuri" was designed with the influence of Islam seen in the dome. Lighthouse was then known as Rumah Pelita" made of concrete in 1891.



**Figure 6. Museum of Kota Kuala Kedah and Rumah Pelita**

Source: Author (2023)

Lack of exposure to the site due to the density of visitors is low on weekdays but increases during weekends and public holidays. ([https://museumvolunteersjmm.com/wp-content/uploads/2021/02/forts\\_grazia-v2-1.pdf](https://museumvolunteersjmm.com/wp-content/uploads/2021/02/forts_grazia-v2-1.pdf)), <https://www.kedah.gov.my/wp-content/uploads/2022/01/kualamuda.pdf>. Emphasizing the educational function of local museums is needed to increase the interest of the local community.

## **ENVIRONMENTAL INVENTORY AND ANALYSIS**

### **Green Space**

Seberang Kota is majorly covered with green spaces that benefit the environment surrounding. Green spaces in Seberang Kota are unutilized and used by fishermen to conduct activities. Other green spaces mentioned in the map below are the significant and potential sites that can be enhanced for more leisure and commercial activities.

Seberang Kota has few significant existing green spaces such as in Kota Kuala Kedah, unutilized green space in the museum area, and few open spaces along the riverbank area.

The green spaces can contribute to recreational activities for the community in Seberang Kota by putting a benefit to it. An ecological framework could be produced by conserving natural ecosystem values for environmental, social, and economic sustainability.

## **Waterbodies**

Seberang Kota is surrounded by coastal areas and rivers. Malacca Strait located at the west of the site the potential to be developed as a recreational area. Kedah River which flows towards Malacca Strait is the main route for water transportation. The river is a dominant hydrology that offers cultural activities and is used as a hydrology system for paddy agriculture and wildlife habitat.

Trading and tourism activities by local and outside communities create economic attraction in Seberang Kota. Fishermen depart and return from the sea result constant use of the water route daily. The habitat of riparian areas is not well preserved due to human activity that disturbs their ecology.

The river with its natural view of riparian vegetation, mangroves, and wildlife needs to preserve the river biodiversity by prohibiting construction within designated buffer zones.

## **Planting Characteristics**

The vegetation in Seberang Kota is various with different types of soil, landscape character, and function for spatial use. The existing plant species and their planting characteristics are identified according to two areas which are: the village area, green spaces, and river area.

The plant species in Seberang Kota village are usually surrounded by mangrove species which are significant to the coastal area and fisherman village. Mangroves act as a buffer between land and the sea and for coastal protection as well as water purification.

Mangrove species along the riverbank decreased by years and grew sparsely between trees which increased the risk of low protection to the settlement (Kamil. et.al., 2020). The root's structure helps diminish the energy of incoming waves and also lessens the risk of flooding to communities that live behind mangroves. (<https://www.malaysiakini.com/letters/360320>)

## **Green Spaces and River Area**

The plant species in and river area at Seberang Kota consist of wild and riparian species, flowery, bushy, and visually natural aesthetics to the surroundings. Riparian habitats showed a complex vegetation structure mainly related to the tree component, as wide, tall, and abundant trees of different species mostly covered these habitats (Ab Latif, 2023).

Riparian species are very crucial plantings that are needed in the riverbank to support the aquatic ecosystem of the river. The riparian plants and upland species near the wetlands could also be very beneficial to controlling floods by fluctuating water levels, slowing flood water velocity, and acting as natural water filtration. Furthermore, these riverbank plant species also act as erosion control where the root strengthens and stabilizes the soil structure. In short, wetland plant species must be conserved to maintain the river ecosystem.

## **SOCIO-CULTURAL INVENTORY AND ANALYSIS**

Seberang Kota consists of several activities that involve the local community and tourists such as cultural activities, recreational activities, and business activities. The users and activities are the main factors that enlighten the area in Seberang Kota.

Cultural activities by the fisherman need to be preserved from extinction and forgotten by future generations. A systematic strategy needs to be implemented to enhance the identity of fisherman culture along with a sense of place that emphasizes the function of the river.

Daily activities involved in Seberang Kota that are related to recreational areas are usually held near the coastal area. Existing activity which is sunset viewing enhances integration with commercial activities like food stalls that give economic benefit to the local business which become nodes to Kuala Kedah.

The density of humans increases during the evening due to fine weather that is sunny and windy beside sunset time which causes the site to be

passive for another hour. The active spaces with active human movement contribute to a vibrant activity in a space thus creating robustness of a space.

Business activity at Seberang Kota is actively conducted to serve local products that become profitable to the businessman. The community of Pasar Nelayan Seberang Kota is dominated by a local businessman. Visitors from the local area and outside of Kuala Kedah with a density of visitors are low on weekdays but increase during weekends and public holidays.

## **DESIGN IMPLEMENTATION AND RESULTS**

In this article, the design solution and study's outcome are explained, along with the goals of the investigation as they relate to the inventory, analysis, and synthesis carried out in the earlier chapters. As a result, the interpretation of the synthesis results into a design solution, set of principles, or plan is also decided in this chapter. Furthermore, as said in the synthesis, the conversation regarding advantages, disadvantages, opportunities, and threats will serve as a roadmap for the design phase of the synthesizing process. Finally, conceptual and programming diagrams as well as the suggested master plan will be created. This section will go into further detail on design solutions and broad concepts to address all the concerns raised and meet design goals.

## **DESIGN STATEMENT**

This plan will create a new public social space for the local population and tourists to experience a healthy blend of natural and commercial surroundings, while also reviving and revitalizing the existing cultural and heritage aspects. The concept behind improving the perception of the culture of fishing communities is that the ideas can be implemented in an open-space configuration that complements the local way of life. It is a procedure that requires the involvement of related parties and policy help to be used as a basis for effective planning to reduce the risk of environmental harm. Malay people make up most of the fishermen in Seberang Kota, and they have an excellent understanding of the ecosystem. Our capacity to improve living standards is based on the quality of our productive human resources. It takes



on a way of thinking and a mindset that is always looking to improve its abilities, know-how, and skills.

The design solutions are based on the social, physical, and environmental inventories that were made using information from the local community and Seberang Kota, which served as a case study. Essentially a solid understanding of every place inside the cultural heritage area constitutes the foundation of the whole design.

## **DESIGN CONCEPT**

Based on the analysis, and synthesis study, the design concept chosen for this site study reflects the Seberang Kota identity as a cultural heritage and ecological retreat town. The concept of the "Living Culture Network" is implemented to solve the major problem at Seberang Kota which is the degradation of cultural values and the environment (<https://bernama.com/en/news.php?id=2020228>).

The concept is derived from "Cultural Value" and was assessed by disaggregating it into five components which are aesthetic, social, symbolic, spiritual, and educational value. Thus, the author has chosen "Cultural transition" to redefine the five components of cultural value to indicate identity, productivity, accessibility, and sustainability to depict the experience and expectation of the sense of place that will be observed by the user involving social interaction, respect and values in cultural and heritage town.

- Aesthetic value is straightforward, being related to beauty, harmony, and visual appeal.
- Social value is linked to cultural identity and an understanding of the role of culture in society; one statement places this possible recognition in general terms.
- Symbolic value relates to the narrative or meaning of a work or to how the work is perceived to convey some wider and to be summed up in the phrase 'cultural significance'.
- Spiritual value is being related to transcendental or mystical/religious sentiments generated by exposure to an artwork.
- Educational value can be identified in terms of the heritage's role in

community education.

Living indicates the daily fisherman activities along the river and also the business activities conducted by the local community in the commercial area. Culture defines the fisherman's lifestyles, Malay villagers' activities, and heritage monuments of historical sites (Ghazali, 2011). Network systematic connectivity by wayfinding, navigating, orientating, and communicating within the town (Prandi, et.al., 2023). The "Living Culture Network" concept will take into account both present and potential users, enhance the culture and heritage, increase trail accessibility, enhance the path's long-term sustainability, address resilience and self-retention, adhere to best management practices, and guarantee the viability and robustness of an environment.

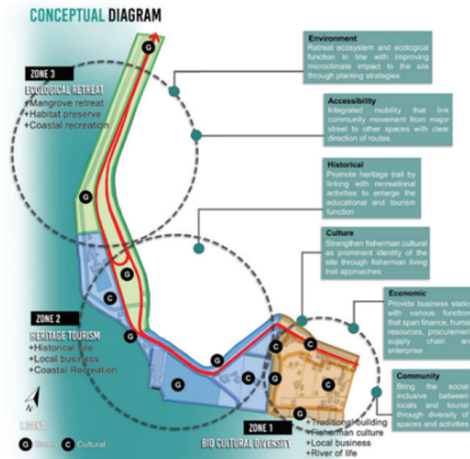


Figure 7. Conceptual Diagram of the Study Area

Source: Author (2023)





Figure 10. View towards Bazaar Nelayan

Source: Author (2023)



Figure 11. View towards Laman Tradisi

Source: Author (2023)



Figure 12. View towards Nelayan Bridge and Boat House

Source: Author (2023)

## **CONCLUSION**

In summary, this paper has concentrated on defining the design's aims and objectives. Also, the design offers a historical, ecological, and cultural learning space for the neighbourhood. This combination of landscape patterns and cultural and environmental design creates a contrast between Kuala Kedah's past and present. The design's definition of "Living Culture Network" has highlighted the focus area with essential and possible activities for each user. By enhancing Seberang Kota's feeling of place, the author hopes to raise the locals' awareness of historical values and promote a sense of community.

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## **AUTHOR CONTRIBUTIONS**

All authors contributed significantly to this study. They all approved the final version of the manuscript for submission and agreed to be responsible for all aspects of the work, guaranteeing the accuracy and integrity of every part of the study, ensuring thorough investigation and resolution of any discrepancies.

## **CONFLICT OF INTEREST**

The authors declare that there is no conflict of interest regarding the publication of this paper.

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