# Micro, Small, and Medium Enterprises (MSMEs) Center in East Kolaka with Emphasis on Neo-Vernacular Architecture

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#### **ABSTRACT**

Micro, Small, and Medium Enterprises (MSMEs) play a crucial role in enhancing community resources and advancing the economy in Indonesia. The purpose of this research is to analyze and describe the Micro, Small, and Medium Enterprises Development Center (MSMEC) in East Kolaka using a Neo-Vernacular emphasis. A qualitative descriptive method is applied in this study, with data obtained through observation, interviews, and documentation review related to the development and characteristics of the MSMEC in the area. The results of the study show that the MSMEC in East Kolaka not only functions as a place for economic activities but also as a center of social interaction that strengthens local identity. The application of Neo-Vernacular architecture in the design of the MSMEC building demonstrates a combination of tradition and modernity, creating a space that supports the sustainability of MSMEs and enhances the attraction for tourists. This research offers new perspectives in the development of policies and strategies to strengthen MSMEs in East Kolaka.

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## 1. INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) are the result of the productive efforts of the community, contributing significantly to the assets and economic circulation in Indonesia. The economic growth rate in developing SMEs can be observed from the available facilities and services, as well as from the enhancement of business skills and interests. The current economic conditions in Indonesia demonstrate resilience in the face of the monetary crises that have affected the country's capital [1].

Article 1, paragraph 7 of Law No. 25 of 2009 of the Republic of Indonesia states that service standards are the benchmarks used as guidelines for service delivery and as references to assess service quality, which are the obligations and commitments of service providers to deliver quality, fast, easy, affordable, and measurable services to the community [2]

Southeast Sulawesi Province, which encompasses 14 regencies/cities, has a land area of approximately 38,140 km², while its marine area covers about 140,000 km². The development of SMEs in Southeast Sulawesi, particularly in East Kolaka Regency, plays a significant role in boosting the economy, especially through the industrial sector. As a result of the splitting from Kolaka Regency, East Kolaka was officially established in the plenary session of the Regional Representative Council (DPD RI) on December 14, 2012, regarding the draft law for new autonomous regions [3].

Geographically, East Kolaka has the potential for agricultural and plantation commodities, with the majority of the population working as farmers and traders. In East Kolaka, industries based on agricultural and plantation products, such as cocoa and rice, have become essential suppliers for both the region and its surrounding areas. East Kolaka is the largest cocoa producer in Indonesia and is also known as a major rice producer in Southeast Sulawesi. In addition to being a producer of cocoa and rice, East Kolaka is also one of the centers for the development of sorghum in Indonesia. This region also has mineral resources, though they are relatively limited, including marble, quartz sand, black granite, asbestos, magnesite, and onyx [4].

Lalingato Village in Tirawuta Subdistrict, East Kolaka Regency, is one of the areas with an industrial development strategy playing a vital role in economic development because it is located in an office, tourism, and community activity center area. The area of Lalingato Village is 21.02 km².

One key role in strengthening the economy in Indonesia is to provide facilities for SMEs, such as training areas, to improve the knowledge and skills of SME actors, allowing them to produce productive businesses. By providing a platform for SME actors, they can capitalize on local potential by showcasing and marketing products created by the community [5].

In the context of this research, which focuses on Neo-Vernacular architecture for the design of the Micro, Small, and Medium Enterprises (MSMEs) Center in East Kolaka, the term "Neo-Vernacular" refers to an architectural approach that combines traditional local elements with modern innovations. The definition of vernacular architecture itself is rooted in the concept of architecture that evolves naturally within a specific region or culture, utilizing local materials and construction techniques passed down through generations. Vernacular architecture is not merely a style; it encompasses the relationship between the community and its environment, including social, cultural, and economic aspects. Vernacular architecture tends to be highly responsive to the local environment, such as weather, the availability of natural resources, and local traditions [6]. Therefore, the definition of vernacular is broader than just physical design; it is a representation of the way of life and the needs of the community within a specific context.

When discussing Neo-Vernacular, we refer to the effort of updating or adapting traditional elements to meet the needs and developments of modern times, without compromising the existing local values. Neo-Vernacular architecture does not merely add local elements to the building design; it creates harmony between tradition and innovation. This approach acknowledges the importance of preserving local cultural heritage while also demanding adaptation to contemporary technology and aesthetics, which can enhance the quality of the building and the comfort of its occupants [7]. Thus, the choice of Neo-Vernacular architecture in this study is highly relevant because it provides a design solution that considers the functional needs of MSMEs while still respecting the local wisdom possessed by the community of East Kolaka.

In this case, Neo-Vernacular is not just about applying local forms or materials; it is more about integrating the existing philosophy, spatial planning, and architectural concepts with modern design principles. This approach can be seen as an effort to maintain local cultural identity while promoting progress in the economic and development sectors. For example, the application of natural building materials such as bamboo or locally sourced wood, which have been traditionally used in East Kolaka, can be adapted in modern building designs for MSMEs. On the other hand, the use of modern construction technologies and more efficient, environmentally friendly spatial designs can be innovations that enhance the appeal of the design.

The need to design SME facilities that not only meet functional standards but also reflect local identity makes Neo-Vernacular architecture an excellent choice. This approach allows for the creation of spaces that not only support the local economic productivity but also foster a sense of ownership and pride in their cultural heritage. Therefore, by combining existing local elements and making modern updates, Neo-Vernacular offers a holistic architectural solution that respects tradition while encouraging sustainability and future development [8] [9].

#### 2. METHODOLOGY

The approach used to collect and analyze data focuses on a deep understanding of the social phenomena or human behaviors being studied. Qualitative research aims to explore the perspectives of individuals or groups within a broader and deeper context. One of the key characteristics of this method is its descriptive and exploratory nature, where the researcher collects data in the form of narratives or descriptions rather than numbers or statistics [10], [11]. In the context of research focused on Neo-Vernacular architecture in East Kolaka, data was obtained through surveys and direct observations of the conditions of MSMEs in the area. Qualitative survey methods, such as open interviews, enable researchers to explore the opinions, expectations, and experiences of respondents more comprehensively. Meanwhile, observations allow researchers to directly examine the physical conditions and social interactions at the relevant locations.

This research method allows the researcher to analyze data in depth and develop richer descriptions of the phenomena under study. Additionally, qualitative research is often flexible, enabling researchers to adjust data collection instruments and techniques according to field developments [12]. In this case, descriptive analysis is used to identify patterns and themes emerging from the data, which are then used to build theories or concepts relevant to the design of the MSMEs center in East Kolaka. The literature used in this study also strengthens the theoretical foundation and relevance to local policies and the socioeconomic conditions of the local community [13].

#### 3. RESULTS AND DISCUSSION

#### 3.1 Research Location

The Micro, Small, and Medium Enterprises (MSMEs) Center is planned to be developed in East Kolaka Regency, specifically in Tirawuta Subdistrict, Southeast Sulawesi Province. The site spans an area of 30,000 m², strategically located with the following subdistrict boundaries: Tinondo Subdistrict to the north, Loea Subdistrict to the south, Konawe Regency to the east, and Lalolae Subdistrict to the west.

The specific site boundaries for the MSMEs Center are as follows: the East Kolaka Administrative Offices lie to the north, the Lalingato Tribune to the west, the Official Residence of the Regional Secretariat to the south, and Ostar Peak to the east. This strategic location positions the MSMEs Center within a significant administrative and community hub, ensuring accessibility and relevance to the region's economic development.

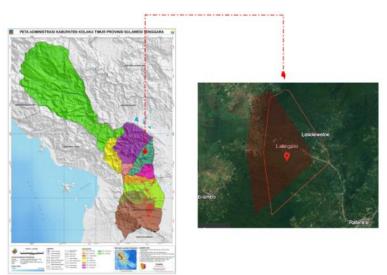


Figure 1. General overview of the location (source: Petatematikindo & Google Earth, 2024)



Figure 2. Existing Site (source: Google Earth, 2024)

The site area for this design project is currently an empty plot with dense vegetation, which helps reduce noise from the main road. Additionally, the site offers an attractive view as it is surrounded by several tourist destinations, including Sorombipi Peak and Ostar Peak.

## 3.2 Sun Orientation



Figure 3. Sun orientation (Source: Author)

Sun orientation will influence the shape and position of the building in order to optimize the use of natural lighting, with the possibility of the building facing east.

Response to the sun orientation on the site:



Figure 4. Response to Sun Orientation (Source: Author)

## 3.3 Wind Direction

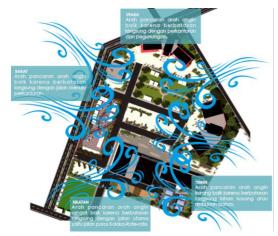


Figure 5. Wind Direction (Source: Author)

The wind flow originates from the mountain areas, specifically from the east and north. The site is located between office buildings, surrounded by pristine natural scenery, with dense trees and mountains that provide a cool atmosphere to the area. The utilization of wind flow as a source of natural ventilation for the building involves controlling the wind to ensure a steady supply of fresh air without compromising comfort.



Figure 6. Response to Wind Direction (Source: Author)

## 3.4 Rainfall



Figure 7. Rainfall (Source: Author's Analysis, 2024)

The northern region of East Kolaka, which includes Mowewe, Uluiwoi, Ueesi, and Tinondo, receives more than 2,000 mm of rainfall annually. Meanwhile, the southern and eastern regions, including Ladongi, Dangia, Lambandia, Poli-polia, Aere, Loea, and Tirawuta, receive less than 2,000 mm of rainfall annually.

Response to rainfall on the site:



Figure 8. Response to Rainfall (Source: Author)

## **3.5 View**

View refers to the perspective from both inside and outside the site, which is crucial in planning the MSMEs Center in East Kolaka to attract visitors.

## 3.5.1 View from the Site

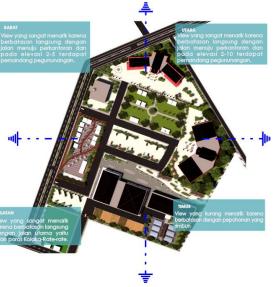


Figure 9. View from the site (Source: Author)

The view from the site is directed from the north and east towards the mountains, tropical forests, and office buildings, while the view from the south and west faces the main road and residential areas.



Memaksimalkan bukaan pada sisi selatan agar mendapatkan view mengarah pada jalan utama

Figure 10. Site Area Orientation (Source: Author)

## 3.5.2 View into the Site

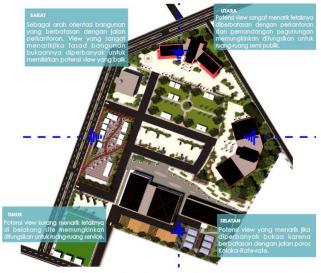


Figure 11. View into the site (Source: Author)

The view into the site comes from the direction of the main road and office roads leading to the site. Determining the direction of view from outside the site is essential to attract visitors to the planning location by designing focal points in the building.

## 3.6 Noise

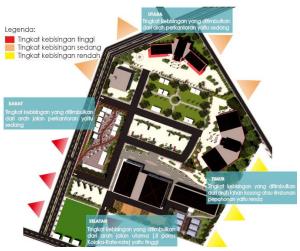


Figure 12. Noise (Source: Author)

Noise, resulting from sound vibrations originating in busy areas such as traffic and other activities, is a key consideration in site planning. At this location, noise primarily emanates from the main road to the south and the residential area to the west.

To address this, semi-public zones will be strategically placed in areas most affected by noise, effectively buffering quieter zones from these disturbances. Additionally, sound-absorbing materials will be incorporated into the design to serve as noise dampers, reducing the impact of external noise on the site. These measures aim to create a more comfortable and functional environment for all users.

## 3.7 Zoning



Figure 13. Zoning (Source: Author)

Zoning is the process of organizing the site to create public, semi-public, service, and private areas while considering the existing conditions of the site. In planning the zoning on the site, several considerations are required, including access to the site, noise levels on the site, and the views from inside and outside the site.

Response to zoning on the site:

- a) *Public Zone:* Based on the analysis of sun orientation, wind direction, views, and noise, the public zones are oriented towards the east and south, as well as along the connecting road that is also located in these directions. This makes it feasible to place public zoning in these areas.
- b) Semi-Public Zone: This zone is influenced by all results of site analysis from all directions but has certain boundaries.
- c) Service Zone: The analysis of sun orientation, wind direction, and noise shows that this zone is not directly exposed to any of these factors.
- d) *Private Zone:* Based on the analysis, this zone is placed behind the site and is not directly affected by sun orientation, wind direction, or noise.

#### 3.8 Circulation and Parking

During planning circulation within the Micro, Small, and Medium Enterprises (MSMEs) Center in East Kolaka, it is essential to analyze the circulation as follows:

## 3.8.1 Circulation to the Site

To reach the MSMEs Center in East Kolaka, private vehicles or public transportation, such as motorcycles, cars, or similar vehicles, can be used.



Figure 14. Circulation to the site (Source: Author's)

The pedestrian circulation system is planned with several key considerations to ensure functionality, comfort, and accessibility within the site. Firstly, the circulation system is designed to define and connect various areas within the site, creating a cohesive layout that enhances user comfort. Additionally, pathways are planned to allow pedestrians to fully enjoy the surrounding views, integrating natural and architectural elements into their experience. Sufficient space will be allocated for pedestrian movement, ensuring that the circulation is evenly distributed to prevent overcrowding and facilitate smooth flow. Lastly, the design prioritizes avoiding conflicts with other types of circulation, such as vehicular or bicycle traffic, to maintain safety and convenience for all users.

#### 3.8.2 **Vehicle Circulation**





**Entrance Site** 

Exit Site



Entrance-Exit Service Site

Figure 15. Entrance-exit site (Source: Author)

The vehicle circulation system is planned with careful considerations to prioritize safety, efficiency, and harmony with pedestrian pathways. Direct access to the parking area is avoided to streamline traffic flow and reduce congestion at entry points. Additionally, vehicle routes are designed to prevent crossings with pedestrian circulation, minimizing the risk of accidents and ensuring a clear separation of movement. The circulation area is designed to meet established vehicle circulation standards, providing adequate space for smooth and efficient vehicle movement. Furthermore, measures are taken to avoid disruptions to pedestrian pathways, ensuring that both circulation systems operate independently and without conflict.

#### 3.8.3 **Parking**

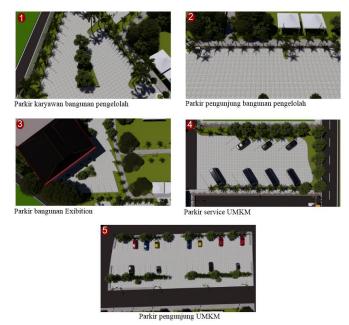


Figure 16. Parking Response (Source: Author)

Parking design considerations are carefully planned to ensure functionality, convenience, and integration with the surrounding environment. Materials used for the parking area will be selected to effectively support the weight and movement of vehicles, ensuring durability and safety. The layout will be adjusted to align seamlessly with both vehicle and pedestrian circulation, promoting ease of access and reducing potential conflicts. To enhance comfort and environmental aesthetics, vegetation will be planted around the parking area, providing shade to protect vehicles from prolonged sun exposure. Additionally, the parking arrangement will include a combination of straight and angled configurations, tailored to suit the existing circulation patterns and optimize space utilization.

## 3.9 Accessibility



Figure 17. Accessibility (Source: Author)

Accessibility to the planning site is defined by its ease of connection to the main road and connecting roads, ensuring smooth access for visitors and management. In response to this, the site design incorporates an entrance route that aligns seamlessly with the existing road flow, promoting intuitive and efficient entry to the area. Additionally, the exit route is carefully planned to facilitate vehicle circulation, preventing congestion and ensuring smooth transitions for both visitors and management. This design prioritizes free movement within and around the site, enhancing overall accessibility and user experience.

# 3.10 Building Form and Appearance

## 3.10.1 Basic Building Form

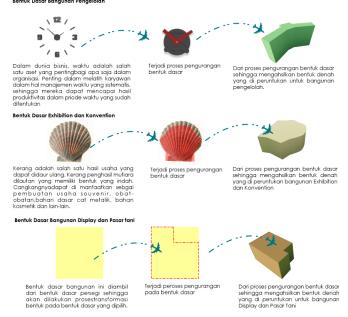


Figure 18. Basic Building Form (Source: Author)

The concept of the basic building form aims to create functional, efficient, and rational spaces, following the analogical architecture style for the MSMEs Center in East Kolaka. The basic form of management building is derived from the concept of time in the business world as a crucial asset for various organizational activities. This idea is represented by the shape of a clock, featuring long and short hands. The form then undergoes a process of simplification and reduction, ultimately inspiring the design of the management building. The basic form of the exhibition and convention area is inspired by a shell, a natural material that is recyclable and possesses high aesthetic value. Meanwhile, the basic form of the display and farmers' market buildings is derived from a square shape that has undergone a process of reduction.

## 3.10.2 Building Appearance

The appearance of the building will feature a modern façade combined with traditional architecture from East Kolaka Regency (*Bumi Sorume*) as a historical value, based on the design emphasis on Neo-Vernacular Architecture. The roof design from traditional Tolaki architecture will be applied to the building's roof.

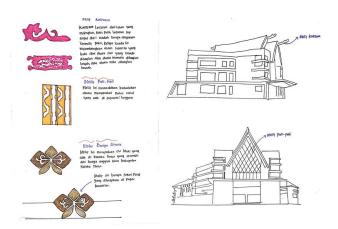


Figure 19. Building Appearance (Source: Author)

The meaning of the image above is the *Kalosara* symbol, which represents the customary law and culture of the Tolaki people in Southeast Sulawesi. *Kalosara* is made from rattan, forming a circle, with a square piece of white cloth and a woven container with fern motifs. These three elements symbolize the universe, consisting of the sacred world at the top, the human world in the middle, and the earthly world at the bottom.

## 3.10.3 Application of Neo-Vernacular Architecture on the Building

a. Application on the Building Facade

The *pati-pati* motif will be applied to the exterior of the building. The purpose of this motif is to signify the social status within the community in Southeast Sulawesi.



Figure 20. Application of *pati-pati* motif on the building (Source: Author)

## b. Application on the Roof

The *Kalosara* motif will be applied to the roof of the building. This motif serves as a symbol of local customs in Southeast Sulawesi, particularly in East Kolaka.

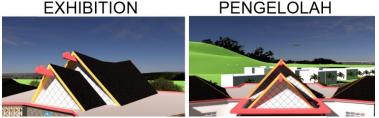


Figure 21. Application of *Kalosara* shape on the building (exhibition building on the left, management building on the right) (Source: Author)

## c. Application on Hard Landscape Materials

The Sorume motif will be applied to the hard landscape materials, such as the amphitheater. This motif is a distinctive feature of East Kolaka, inspired by the orchid flower that is native to the region.



Figure 22. Focal point of the building design (Source: Author)

#### CONCLUSION

The conclusion can be drawn regarding the application of Neo-Vernacular architecture in the design of the Micro, Small, and Medium Enterprises (MSMEs) Center in East Kolaka. This study emphasizes the importance of integrating local elements into modern architectural design to create buildings that are not only functional but also reflect the cultural identity of the local community. The Neo-Vernacular approach used in this research combines traditional elements with modern innovations that enhance the comfort and efficiency of space, while supporting sustainability in the development of MSMEs in the region. The novelty of this research lies in the application of architecture that blends local materials and construction techniques with the latest design innovations to create adaptive, environmentally friendly spaces that are relevant to the local economic needs. This study also contributes to the architectural literature by offering an approach that respects cultural values while still considering the advancement of technology and contemporary aesthetics. With this approach, the MSMEs Center in East Kolaka serves not only as an economic hub but also as a symbol of local pride and cultural sustainability. The qualitative research method used allows the researcher to delve deeper into understanding the needs and expectations of the local community, as well as to gain richer insights into designing spaces that can foster economic growth. Overall, this research reaffirms that Neo-Vernacular architecture provides a relevant and sustainable solution to addressing the socio-economic and cultural challenges in East Kolaka.

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