

Design of A Multipurpose Building in Tjoe Ann Kiong Temple of Lasem City, Rembang Regency, Central Java

M. Maria Sudarwani^{1*}, Sri Pare Eni², Ktut Silvanita Mangani³, Setiyadi⁴, Kefin Grardiyani S.D. Siga⁵, Friska Grezlie Kase⁶
Universitas Kristen Indonesia

Corresponding Author: M.Maria Sudarwani margareta.sudarwani@uki.ac.id

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ABSTRACT

Tjoe An Kiong Temple is a hundred-year-old cultural heritage building in Soditan Village, Lasem City, Rembang Regency, which still functions actively as a place of worship. Along with the times, there is a need for additional facilities in the form of multipurpose buildings to accommodate various social, cultural, and religious activities of the local community. This article describes the Community Service (PKM) activities of the Architecture Study Program of the Indonesian Christian University which aims to design a multipurpose building while maintaining the preservation of the cultural heritage area. The implementation method includes the preparation stage, field observation, and design implementation through coordination with community partners. The research resulted in a comprehensive architectural design that was flexible, functional, and harmonious with the context of the historic environment.

INTRODUCTION

Built with a touch of high art, Tjoe An Kiong Temple looks sturdy even though it is hundreds of years old. There is no exact record of when the oldest temple in Lasem, Rembang, Central Java was built. Looting by the Dutch army during the colonial period is believed to have contributed to the removal of this historical evidence. Nothing has changed from this old temple building. Only now there are additional buildings such as the front and other buildings on the left and right of the temple as a complement to the building. It is recorded that renovation was carried out once in 1838 to raise the temple floor because floods often hit at that time. This is understandable because this temple stands right in front of the Lasem river.

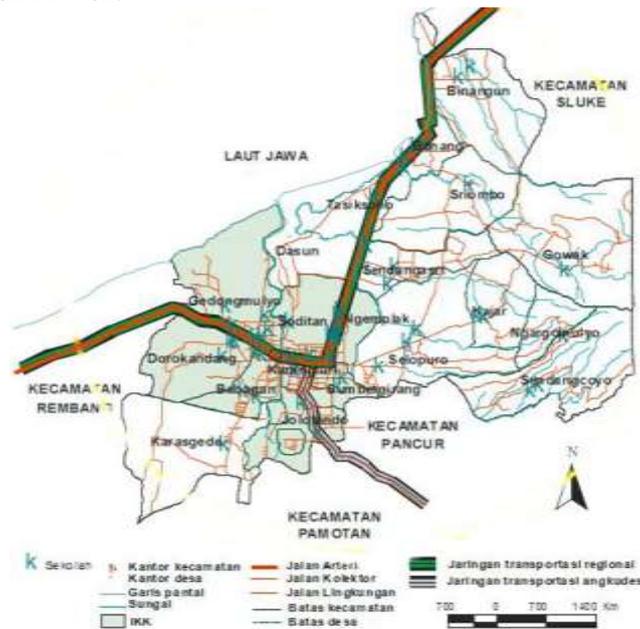


Figure 1. Map of Lasem City, Rembang Regency

The geographical location of Lasem District, Rembang Regency is in the Southern Province of Central Java and is an area bordering East Java Province. Lasem District is the second largest city in Rembang Regency after *the city of Rembang*. This sub-district is one of the sub-districts on the coast of *the Java sea* in Rembang regency, approximately 12 km to *the east* of *the capital* of Rembang regency, with the boundaries of the area including:

1. The *north* is bordered by *the Java Sea*.
2. To *the east* it is bordered by *the sub-district of Sluke*.
3. The *south* is bordered by *the sub-district of Pancur* to the *west* it is bordered by *the sub-district of Rembang*.

Lasem District has an area ranging from the coast of *Java* to the south. To the east is *Mount Lasem*.

The area is 4,504 ha. 505 ha is intended as settlements, 281 ha as pond land, 624 ha as state-owned forests. Its location, which is passed by the Pantura route, makes this city a strategic place in the field of trade and services.

Lasem District consists of 20 villages divided into 84 Community Units (RW) and 219 Neighborhood Units (RT), with the sub-district capital in Soditan Village. The villages are: Babagan, Binangun, Bonang, Dasun, Dorokandang, Gedongmulyo, Gowak, Jolotundo, Kajar, Karangturi, Karasgede, Ngargomulyo, Ngemplak, Selopuro, Sendangsari, Sendangcoyo, Soditan, Sriombo, Sumbergirang, and Tasiksono.

Four of the villages are located on Mount Lasem, namely Gowak, Kajar, Sangangcoyo, and Ngargomulyo, while five of the villages are coastal villages directly bordering the Java Sea. The five villages are: Bonang, Dasun, Binangun, Gedongmulyo, and Tasiksono. And 8 villages are included in the Lasem city area, namely: Dorokandang, Karangturi, Soditan, Godongmulyo, Ngemplak, Babagan, Jolotundo and Sumbergirang.

According to the administrator of the Tjoe An Kiong temple, Gandor Sugiharto Santoso, Lasem used to be a very dense teak forest. It was the Chinese who first opened the village where this temple was built. Then the population began to live there to trade until finally the Dutch came to colonize. As a sign of the mixing between the Chinese and indigenous communities. Every birthday of Thian Siang Seng, which also falls as the temple's birthday, which is on the 23rd of the 3rd month of the Chinese calendar, the temple will celebrate a number of puppet performances, cloning and gamelan. Currently, the Tjoe An Kiong temple remains independent in the midst of a heterogeneous society. To the west, not far from the temple, there was a loud sound of horns from tronton trucks passing through Pantura street. Tjoe An Kiong Temple is a historical proof that the Chinese community can blend and merge with Javanese culture and society.

In line with the time of the existence of the Tjoe An Kiong Temple, additional facilities and infrastructure are needed in the form of a meeting hall that can accommodate all community activities around the Lasem City area, Rembang regency. This is necessary because there is still a lack of meeting hall facilities that can accommodate all community activities, including weddings, meetings, exhibitions and so on. It is planned that the design of a building with the function of a multipurpose building can still maintain the preservation of the cultural heritage area, in this case the Tjoe An Kiong Temple which has been established for hundreds of years and can still be used. The multipurpose building will be placed on the south side of the Tjoe An Kiong Temple site, which is a site owned by one of the temple's administrators. And the plan is to be built with self-help owned by all administrators and worshippers of the Temple.

Because of this, the Institute for Research and Community Service of the Indonesian Christian University takes a role in the context of handling the necessary for the design of a building while still paying attention to the cultural heritage area. This activity was realized in the form of Community Service carried out by the Community Service Team of the Indonesian Christian University, Jakarta, through the Design of the Multipurpose Building of the Tjoe An Kiong Temple Through Community Service located in Soditan Village, Lasem District, Rembang Regency.

Community Service Activities of the Community Service Team of the Christian University of Indonesia, Jakarta in the context of the Community Service Activities of the Community Service Team of the Christian University of Indonesia in the context of the Design of the Multipurpose Building of the Tjoe An Kiong Temple in Soditan Village, Lasem City, in 2025 is expected to bring the following benefits:1) Adding additional facilities in the form of multipurpose buildings.2) Preserving the cultural heritage of Tjoe An Kiong Temple.

This Community Service Plan aligns with the roadmap of the 2025-2030 flagship community service themes of the Indonesian Christian University Community Service Roadmap, namely Cultural Conservation and Local Wisdom Scientification. See Figure 2. The 2025-2030 Community Service Roadmap of the Indonesian Christian University is based on the basic concept that community service must be unique and the result of superior research.



Figure 2. Roadmap of Indonesian Christian University

IMPLEMENTATION AND METHODS

The method of implementing the activity is carried out in the activity of Design of a Multipurpose Building in Tjoe Ann Kiong Temple of Lasem City, Rembang Regency, Central Java using several stages, namely: 1) First Stage: Preparation and Orientation Forming a service team consisting of lecturers and students, completing permits, and conducting initial coordination with partner communities. At this stage, an inventory of problems, an exploration of community aspirations, and a mapping of potential are carried out as the basis for planning. 2) Second Stage: Field Observation Conduct a direct survey at the Tjoe An Kiong Temple complex using primary data collection methods through location surveys, documentation, interviews with community leaders, and field reviews. This stage aims to identify the condition of existing infrastructure and facilities, as well as analyze potential and problems for design purposes. 3) Third Stage: Implementation of Activities Carry out two main processes, namely the design of the Multipurpose Building by a team of experts, then the presentation of the design to community leaders to obtain feedback and ensure that the design can be accepted and realized.

RESULTS AND DISCUSSION

The Community Service Activities of the Community Service Team of the Christian University of Indonesia in the context of the Design of the Multipurpose Building of the Tjoe An Kiong Temple, Soditan Village, Lasem City, in 2025 aims to produce the design of the Tjoe An Kiong Multipurpose Building in the cultural heritage area of the Joe An Kiong Temple, Soditan Village, Lasem District. Rembang Regency. The goals to be achieved from the Community Service Activities of the Community Service Team of the Christian University of Indonesia in the context of the Community Service Activities of the Community Service Team for the Design of the Multipurpose Building of the Tjoe An Kiong Temple, Soditan Village, Lasem City, in 2025 are: to provide additional buildings by providing the Design of the Tjoe An Kiong Multipurpose Building to support worship activities at the Tjoe An Kiong Temple Complex.

Solutions to the Problems of Community Service Activities of the Community Service Team of the Christian University of Indonesia in the context of the Design of the Multipurpose Building of the Tjoe An Kiong Temple, Soditan Village, Lasem City, in 2025, as follows: 1) Designing a Multipurpose Building to accommodate the functions of community activities and activities. 2) Preserving the cultural heritage building in the form of Tjoe An Kiong Temple, by providing additional buildings for additional functions in the area without damaging the cultural heritage building. The output of PKM is not only in the form of design drawings of the Multipurpose Building, but also in the form of 3D animations and cost budget plans needed for the realization of the building. The output of PkM will be published in international journals indexed by non-scopus. The design procedure for a multipurpose building basically follows the planning and architectural design stages of public buildings, but with a focus on functional flexibility, user comfort, and space efficiency. The following is a general procedure for its design, compiled systematically:

Design Procedure

The design procedure for multipurpose buildings begins with a preliminary study that aims to understand user needs, site context, regulations, and design best practices through identification of building functions, environmental analysis, spatial planning rule studies, and comparative reviews.



Figure 3. Discussion of Planning & Design

Furthermore, a space program is prepared to determine the type, function, capacity, and relationship between spaces along with the necessary technical requirements. The next stage is to formulate an architectural design concept that includes flexible building shapes and masses, structural systems with wide spans, efficient circulation concepts, aesthetic and durable material selection, and an environmentally friendly approach with air conditioning and natural lighting. The concept was then developed into schematic designs in the form of plans, cuts, appearances, simulations of user flows and utilities, and 3D models.

Furthermore, technical design and cross-disciplinary coordination were carried out by preparing complete working drawings for architecture, structures, MEPs, and landscapes, accompanied by structural calculations, acoustic systems, security, and evacuation. After that, complete documentation is prepared in the form of images of IMB/PBG, RAB, RKS, and tender documents for the licensing and tender process. The construction and supervision phase is carried out by the contractor under the supervision of an architect to maintain quality, followed by functional and operational tests to ensure all systems are functioning properly, and finally a post-occupancy evaluation is carried out to assess user satisfaction and operational efficiency of the building. In this process, the design of multipurpose buildings must prioritize space flexibility, optimal acoustics and air circulation, accessibility for users with special needs, and parking and access management for large vehicles.

In general, the site conditions in the Tjoe An Kiong Temple area are relatively flat, with the primary use being a place of worship, and another planned additional use is a multi-purpose building. This multi-purpose building is located south of the Tjoe An Kiong Temple, which is planned to be built on a plot of land owned by one of the temple's administrators.



Figure 4. Site of Multipurpose Building

Multipurpose Building Design

a. Floor Plan

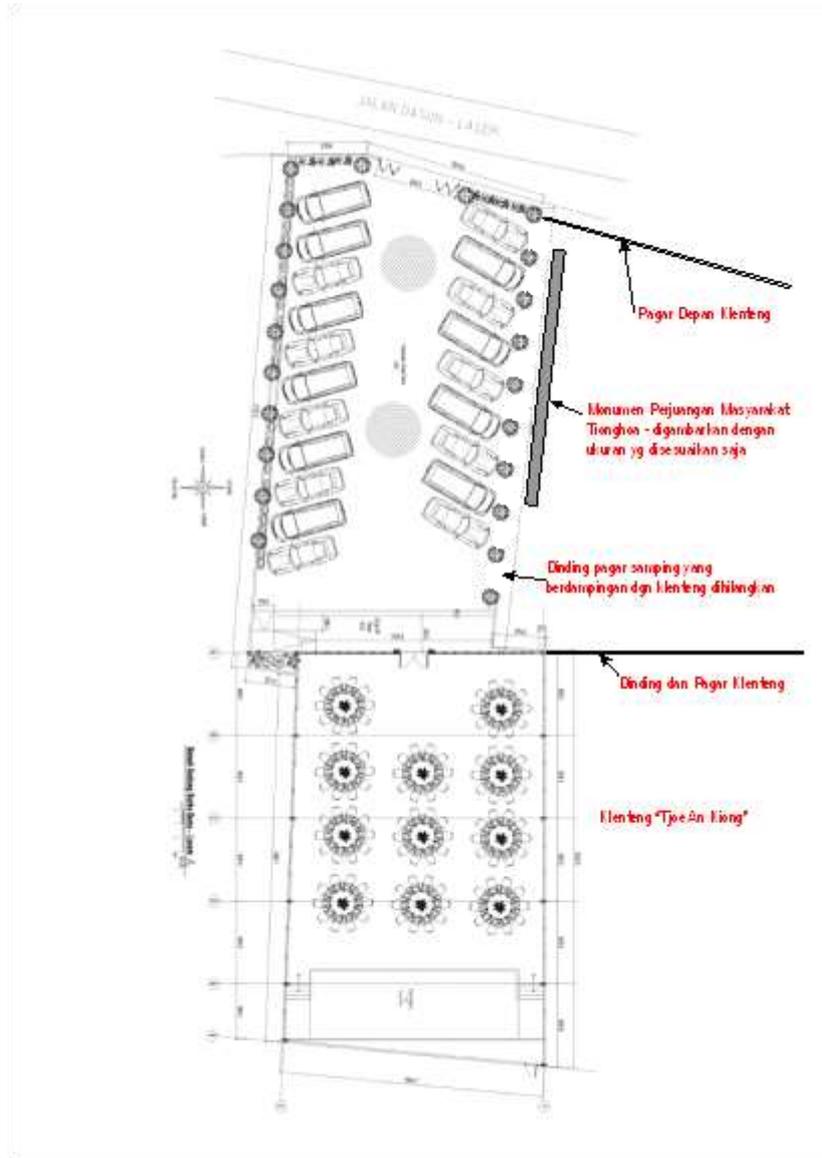


Figure 5. Floor Plan



Figure 6. Exterior of Multi Purpose Building



Figure 7. Exterior of The Gate



Figure 8. Interior



Figure 9. The Stage

CONCLUSIONS AND RECOMMENDATIONS

The Community Service activity carried out by the Architecture Study Program Team, Faculty of Engineering, Christian University of Indonesia with the title Design of the Multipurpose Building of Tjoe An Kiong Temple, Soditan Village, Lasem City , has been running well in accordance with the goals and plans that have been set. This activity was carried out as an effort to answer the needs of partner communities for multipurpose building facilities that can accommodate various social, cultural, and religious activities, while maintaining the preservation of the cultural heritage area of Tjoe An Kiong Temple.

The result of this activity is in the form of an architectural design of the Multipurpose Building which is designed taking into account the context of the area, historical value, and local cultural character. The design is carried out through the stages of field observation, needs analysis, concept formulation, and presentation of the design to community leaders and temple administrators. Input from the public is an important part of improving the design so that it can be accepted and has the potential to be realized.

Overall, this Community Service activity not only makes a real contribution to partner communities, but also becomes a means of applying architectural science in a contextual, sustainable manner, and supporting the preservation of cultural heritage. This activity is expected to be an example of collaboration between universities and the community in the development of a sustainable built environment.

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Finally, hopefully the results of this Community Service activity can provide benefits to partner communities and make a positive contribution to the development of architectural science and the preservation of cultural heritage in Indonesia.

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