



## **A Survey of the Old Buildings Built before 1957 in the Area of Mee Chai Road, Mueang District, Nong Khai Province: Guidelines for Rehabilitation**

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### **Abstract**

This research aims to examine the old buildings located on the area of Mee Chai road, Mueang district, Nong Khai province. This study is based on fieldwork using survey and observation to collect data. Samples were 12 old buildings from a total of 30 buildings. Interviews with owners of the buildings and residents were conducted to understand the background of the old buildings built before 1957, which were influenced by colonial foreign countries. The old buildings deserve preservation since they show historical value. The buildings are also considered as tourist attractions in Nong Khai province where is one of the most attractive living places in the world as viewed in the environment and living in a community. The present study presents details of the buildings and assessment of potentiality to get the old buildings in the area of Mee Chai road into a process of buildings preservation. An analysis of data from the buildings undertook different steps for assessment of building preservation. The results from survey and assessment, which can classify the buildings in five groups based on levels of completion in its preservation, found that three buildings were in a perfect condition, two buildings were in good condition, four buildings were in a fairly good condition, one building was in an improvement-required condition, and two buildings were in an improvement-needed condition. An analysis from the interviews showed four different key perspectives. First, improvement and preservation of the buildings needed much budget so that the support of the budget was essential. Second, renovation of the area for usage in the buildings should change an interior area in corresponding with the current state of the buildings for residential and business purposes. Third, maintaining the buildings' original styles was needed, but there was a lack of materials and skillful works. Last, photos taken by tourists which created emotional value encouraged maintaining of the state of the buildings for the exhibition of local activities and presentation of background and history of the buildings.

**Keywords:** *Old buildings, Rehabilitation, Cultural value*

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### **1. Introduction**

Since 2018, the Thai government has produced a national strategic developmental plan for creating opportunities and social equality as guided by a notion of decentralisation of advancement in economics, society, and technology. With the supports of fundamental knowledge of information about areas, technology, and innovation as following strategic guideline, the aim is to highlight urban management which can facilitate living in society safely in an expansion of urbanisation. Due to this, the researcher is interested in having an understanding of the old buildings in the communities with an influence of architectural designs integrated with architecture in different areas of Thailand. This research is based on the guideline in developing some important cities where were affected by other areas such as preservation of Penang city, Malacca city, Luang Prabang city, and Hội An city. These cities have been preserved for benefits of cultural studies in communities with the original settlement, which contributes to value creation in the areas. In 2019, four acts of urban planning had been cancelled, and a new act has been used and introduced as "2019 new act of urban planning." The country's planning policy in section (13), subsection 2 (g) in promoting cultural arts and local history identifies six important topics including regulations of land usage, planning of open space, the project of transportation with a representation of networking connection, planning for a project of public utility, natural resources and environment, and water supplies. After the new act of urban planning has been declared for an official application, it becomes "Urban planning charter" that several departments must comply with a stipulation which in turn enables to bring changes in the environment for a better one.



Preservation of areas and communities occur because of the long history in specific localities where a few interesting stories and symbols have left behind. The issues on preservation have different dimensions that need to discuss. The old buildings with deterioration, for instance, need rehabilitation for re-usage. Also, the problems about acts and laws relating to the development of the land area for promoting preservation because the old law has had only the national acts of historical sites, antiquities, arts, and museum since 1961 and added version in 1992. Thus, management of urban planning and specific urban planning must identify the use of area clearly. Also, another problem is that surrounding area of communities where residents immigrated to new places because of career opportunities and development in economics. As a matter of this fact, owners closed down the buildings and residential areas.

Preservation of buildings with different steps should be corresponding with the country's planning policy as well as the development of urban and community. Specific urban planning and development comprise with three principles, namely, (i) conservation which focuses on maintaining of identity, values, and environment to be as original as possible regardless of improvement, movement, and adjustment, (ii) improvement which concerns an improvement, renovation of buildings for appropriate characteristics of usage, different systems in buildings as well as awareness in land use based on several laws and acts, and (iii) development which concentrates on creating of new patterns in the deteriorating area where cannot get an entry for a new operation because the areas and buildings are unsuitable for usage and not corresponding to the development of the area with the current state.

This research was conducted to determine the state of the current buildings whether they need an environmental adjustment in the community in order to create the local identity and to offer rehabilitation plan for the old buildings. The research site for the present study was in Mueang district, Nong Khai province. Mekong riverside of Mueang Nong Khai municipality was set up on 25<sup>th</sup> June 1935 in accordance with municipality establishment decree of Mueang Nong Khai. The municipality of Mueang Nong Khai has the area of 35.15 square meters, covering the areas of seven sub-districts of Mueang Nong Khai district such as all areas of Nai Mueang and Mee Chai sub-districts and partial areas of Pho Chai, Kuan Wan, Hat Kham, Nong Kom Ko and Mueang Mi sub-districts. Communities in the area of the municipality of Mueang Nong Khai consist of 42 communities, that is, the communities in all areas of Nai Mueang sub-district and the communities in the partial areas of Hat Kham sub-district. The researcher selected the area of Mee Chai road as a research site for the present study since this area has several buildings and show features of communities which deserve for preservation. The statement of the problem in this research is that the area of Mueang district, Nong Khai province where was considered as the significant bordering point had been influenced by architectural designs during the period that neighbouring countries were colonised. In the past, a long history of Mekong river basin happened in this particular area. The buildings with the influence of architectural designs were built on the Thai coast by a Vietnamese architect who immigrated to Thailand for settlement. Presently, those buildings were demolished and destroyed for building new ones. As the information given by a local officer, there are no actions taken by government departments for preservation. Only undergraduate students at the faculty of architecture the northeastern universities gathered data of the old buildings for a requirement of a local history course. The present study, therefore, intends to provide a guideline in preserving the old buildings which take feature of continuation of the buildings and community planning into consideration. Data collected from the buildings were used to assess the potentiality of rehabilitation for creating value and cost, and that may turn the old buildings to be new tourist attractions in the country.

## 2. Objectives

This study would like to indicate that the old buildings deserving of preservation exist in the community area. Presently, the values of the demolition of the old buildings and the construction of new buildings have been captured and seen in the community of the studied area. The two main reasons that the old buildings have been demolished are due to the expense of maintenance which is more expensive than a new building's construction and other difficulties. The questions raised by the owners' buildings include why the old buildings are preserved and what benefits of building preservation are. The present research attempts to provide answers for those questions by considering the factors of economics, society and community,



preservation of architecture, and environment which affect the building owners' decision whether to renovate their buildings or not.

As for the explanation above, the present study has three specific research objectives as follows:

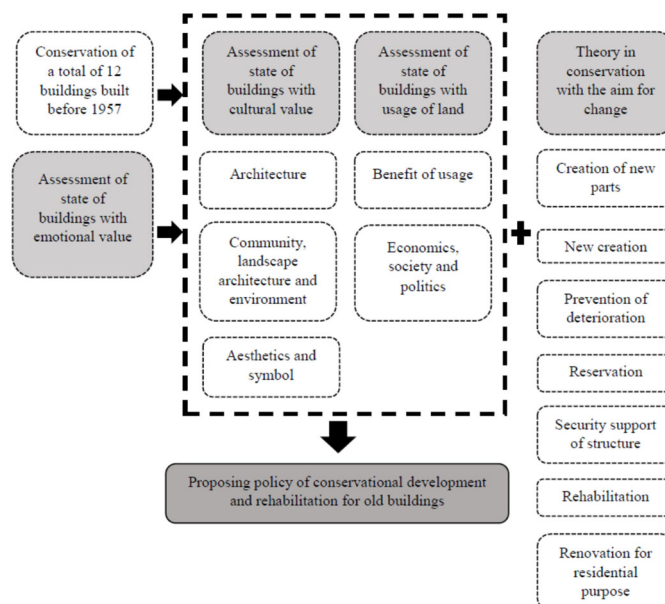
1. to explore the background of the community in which has architectural designs and buildings with the influence before 1957.
2. to evaluate the features of the buildings that should be preserved, rehabilitated, and improved.
3. to view the possibilities of the old buildings' preservation based on the factors of economics, society, and environment.

In order to show an understanding of how to preserve the old buildings, an assumption of this research is to study the preservation of the old buildings and use it as a fundamental guideline in making a classification of different conditions of the old buildings with colonial influence before 1957.

This study paves the way for a realisation of preserving the old buildings which help their owners to perceive the value of the buildings with the original-skill designs. Each old building has different historical story and background in showing its uniqueness that is important for considering them as one of the attractive cities and tourist attractions in the country. After the area is preserved and connected to the community of the old buildings with the same architectural patterns, the potential to be proposed and nominated as the world heritage like Penang and Malacca cities of Malaysia which are the famous tourist attractions and learning resources is relatively possible.

The benefit of this study is to understand the problems of the old buildings' rehabilitation and the needs of the building owners which are taken to make a foundational classification of different conditions of the buildings such as architectural features, age of buildings, improvement, adjustment, economics, and abilities for further improvements. These are essential components to decide to have an urgent improvement based on the building's current state or leaving the buildings with inabilities for improvements. Besides, this research has a contribution of gathering the information of the old buildings, which is useful to create a history of the community and to classify them into different groups. For improvement of the old buildings, the information of the old buildings in the present study is beneficial to making different policies, regulations, and measures that are in collaboration with government and private sectors. Also, this study offers a compilation of the old buildings in one specific community which is an interest of undergraduates in different fields such as tourism, history, architecture, and fine arts.

Also, the conceptual framework of assessment of architectural value using Tansukhanan's criterion (2016) can be separated into two groups such as assessment of architecture (i.e., architecture, history, and landscape of community) and assessment of appropriateness for improvement in architecture and appropriateness of budget. The assessment enables to show the value of architecture and landscape of preliminary work for operating urbanisation preservation. Also, Tansukhanan (2016) further elaborates that preservation planning and rehabilitation, as proposed by Cohen (2001), help decision-making on a suitable preservation planning and preservation policy. Tansukhanan (2016) postulates that determination of what should be preserved and what plans should be undertaken can only resolve the problem of preservation partially. Most successes in preservation are up to the expertise in selecting which buildings should have rehabilitation or improvement in particular for a variety of usages. An investigation of details is necessary especially for states of buildings and the need for rehabilitation. It is suggested based on the expertise in this discipline that a combination of small-size buildings can reduce the budget.



**Figure 1** Conceptual framework of preservation value and assessment of the old buildings

### 3. Methodology

The researcher chose the old buildings in the area of Mee Chai road, Mueang district, Nong Khai province which needs rehabilitation as a research site for the present study because this area is important for history and has been influenced by an expansion of the western countries' territories in the 18<sup>th</sup> century (i.e., 1683-1953) along Mekong river basin on the Indochinese Peninsula. The features of architectural works with influential impact can be viewed in religion, community, building, house, environment, and ways of living in Nong Khai, Nakhon Phanom, Yasothon, Sakon Nakhon provinces. Specifically, the areas of Nong Khai province show characteristics of a community and the western influence in many buildings. As such description, therefore, the old buildings in the area of Mee Chai road were chosen. By using purposive sampling, 12 buildings from a total of 30 buildings which were built before 1957 were selected as samples for the present study. Interview sessions were conducted with five interviewees, either owners or residents who have a role in play in the samples of old buildings.

Survey and observation were the two main research instruments used for data collection. Maps illustrating the areas of original and old buildings in the communities and number of the old buildings were collected from an officer of Mueang Nong Khai municipality. The given maps were used to separate information for assessing the states of the old buildings in the area of Mee Chai road. A protocol used for interviewing residents and renters of the buildings is presented in details as follows:

#### 1. Survey of buildings and places

Section One: General information about the location and surrounding environment.

Section Two: Information about components of different buildings with the influence of arts and architecture.

Section Three: Information about usages in an area of the building.

#### 2. Interviews with residents and renters of buildings

Section One: General information about interviewees.

Section Two: Information about opinions on components of buildings, arts and architectural designs and patterns.

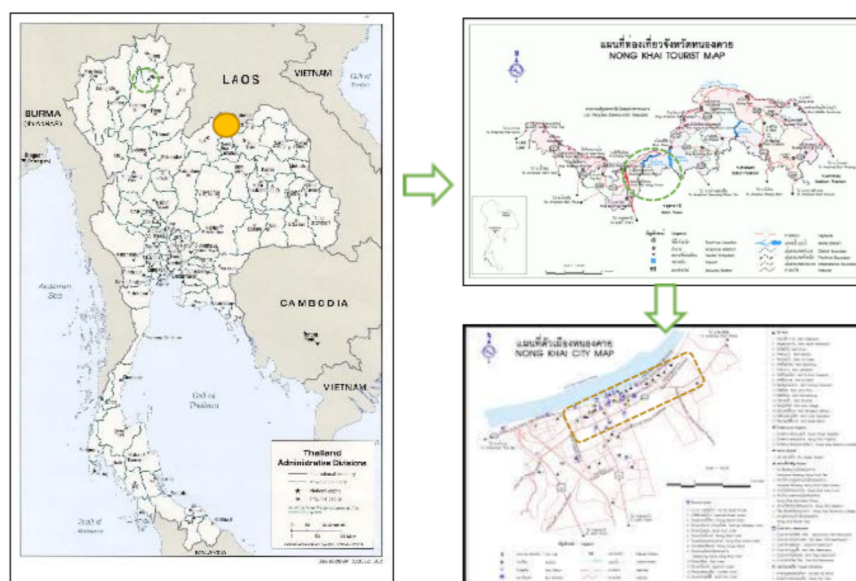
Section Three: Information about community and physical environment.

Section Four: Information about concepts and attitudes of residents and changes in patterns that affect buildings.





An empirical description was used to analyse data from the survey of buildings and places. Also, an assessment using observation and photos was used to analyse components of the arts and architecture with a deteriorating condition and require rehabilitation. Together with that, a descriptive analysis was used to analyse data obtained from interviews with residents and renters who were users of the old buildings. The description was explained based on the residents' information since they first lived in the buildings or did some activities in the communities, their negative and positive feedback, recommendations as well as information of conservation manual guideline and conservation of the environment and the arts in the old communities.



**Figure 2** Maps of information in the area of Mee Chai road, Mueang district, Nong Khai road



**Figure 3** Locations of the old buildings in the area of Mee Chai road, Mueang district, Nong Khai province

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#### 4. Findings

Results from the survey of 12 buildings, their places, and assessments of architectural patterns and features of the buildings which deserve preservation were described below.



##### **No. 261/1 where its side is close to Tha Sadet road**

- State of the building with colonial style has not been used for 4-5 years as reported by the renter of the area in front of the building.
- Overall, the building was usable but needed improvement on roof and wall, new painting, and change in an interior system.
- This building also needed maintenance, and 35% of the building was worthy for assessment.



##### **No. 001 Silsopa building**

- This building which is a hotel for tourists took approximately one year for improvement.
- Currently, the building has been extended its size to be a two-storey building.
- The area of the first floor was used for the reception as well as food and beverage, while the area of the second floor was for accommodation rooms.
- This building had applied features and patterns.
- Also, this building was designed by the owner of the building, who was an architect with expertise in selected good quality materials.
- Overall, 80% of the building was in good condition.



##### **No. 304 where is opposite to Si Khun Muang temple**

- This building was opened for rental.
- The lower storey was renovated while the upper storey was closed down.
- There were the needs of improvement on the roof and the main structure on the second storey as well as a new painting.
- Some areas of the floor which was made of wood deteriorated.
- This building also needed maintenance, and 50% of the building deserved for preservation.



**No. 126 Srimasingsh family**

- This building was reputable and built before the other old buildings in the same area.
- The whole building was improved two years ago and was proposed to be the building for preservation from the department of fine arts.
- The building with the local architectural feature was in perfect condition.
- Though 95% of the building was worthy for assessment, maintenance was still needed.



**Official building of the museum, Nong Khai province**

- This one-storey building was integrated with interior design with a cement structure.
- The wooden wall was used to show an exhibition of the historical background of Nong Khai people.
- This building has been taken care of the official department.
- Overall, 85% of the building has been received maintenance and was in perfect condition.



**No. 022 Bunrod house**

- The current state of this building was used for residential purpose.
- This building had a colonial pattern and was made of cement as the whole building.
- It had maintenance with a new painting.
- The back of the building was extended with a wood structure.
- Improvement should be done in some parts such as roof and repair of the broken structure of the building's wall.
- This building needed maintenance, and 60% of the building deserved for preservation.



**Official building of Sunkasatan**

- It was a historical building that was built in 1950.
- Presently, this building was closed down and has not been used for two years.
- Because of the transfer of the office, this two-storey building with concrete had had rehabilitation.
- It had maintenance to maintain good condition.
- This building was a popular place for tourists to take photos.
- This building has been improved and renovated with good care so that 90% of the building was worthy for preservation.





**No 423 Tah Sadet market**

- This building was first built in 1957 and finished in 1959.
- It was the cement building with the floor made of hardwood in a wooden structure, located inside the Tah Sadet market.
- The lower storey of the building was rent for souvenir shop while the upper storey was used for the building owner's residence.
- State of interior design in the shop was decorated with modern materials.
- Structure in front of the building was expanded its area.
- Maintenance was needed, and 55 % of the building deserved for assessment.



**No. 731 Seng Huat shop**

- This building sold stuff relating to showing respect to shrine.
- It was Chinese style with two rooms in the building made of a mix between cement and wood materials.
- The area on the first floor was deteriorating, and the building was packed with stuff with a heavyweight.
- The floor of the building was collapsed, so the level of the building's floor was lower than the road.
- This building extremely needed maintenance and 20% of the building deserved for assessment.



**No. 614 building of the department of rural development**

- This two-storey building which was made of wood had two rooms on the left-hand side.
- The previous owner of the building belonged to the department of rural development.
- Presently, this wooden building was in the sale.
- It was closed down in some areas.
- The lower storey was used for a shop, and the upper storey was a storage room.
- This building needed full maintenance due to deterioration.
- It should be improved for new usage, and only 20% of the building was usable.
- Further improvement on roof, door, and windows was needed.



**No. 615**

- This building was on the right-hand side and was opened for a long period of the rental.
- The feature of this building was the house with half cement and half wood structure.
- It was in good condition and extended in the area in front of the building for residential usage.
- This building used modern materials such as steel structure and steel roof.
- The remaining parts in this building included door, wooden windows, and painting.
- This building needed improvement and rehabilitation.
- Overall, 80% of the building was usable perfectly.



**No. 026 belonged to great-grandfather Boonlom**

- This building was built with cement with the colonial style.
- It was the original building built more than 70 years ago.
- This three-storey building was used for a food shop under renovation.
- The second storey was used for the gallery which was going to be closed for renovation.
- The third storey was closed down and used as a storage room.
- This building was improved three years ago.
- Maintenance was needed, and 50% of the building deserved for assessment.

**Figure 4** Old buildings No. 001 Silsopa, No. 304, No. 126 Srimasingh family, Official building of the museum, No. 022 Bunrod house, Official building of Sunkasatan, No 423 Tah Sadet market, No. 731 Seng Huat shop, No. 614 building of the department of rural development, No. 615, No. 026 belonged to great-grandfather Boonlom in the area of Mee Chai road, Mueang district, Nong Khai province

The results from the interviews with five interviewees who were the owners of the building and the residents in the buildings in the areas of Mee Chai road showed different perspectives on the residential buildings and the community as presented below.



- This building has been currently operating business of hotel which has started for two years. It was opened for rental and was improved in all parts of the building. The lower storey was used for the reception while the upper storey was used for accommodation and exhibition area. This building spent 1,500,000 Baht for rehabilitation and renovation. With an understanding in the feature of the building for working purpose, at present, this building has been extended and improved for commercial areas.



- Srimasingh house was the residential place built in the beginning period. This house with two storeys, made of cement had the age of 80 years old. This building has just been renovated and considered as an important building in this area. The areas in this building were separated for the food shop and living place. Previously, this building was the local health center for people in the communities. The official department requested this building for preservation. However, the owner rejected the request because of some conditions which contradicted with his/her demands. This building spent 500,000 -1,000,000 Baht for rehabilitation. The use of toilet area purposively moved to outside the building. Srimasingh house has been renovated not less than four times.



- This building was built in 1922 and has been in the process of new interior improvement for the business of food shop on the first storey. The area on the second storey intentionally used for exhibition show and presentation of the historical background of the building. All interior areas of the building were in renovating operation, and the area at the back of the building was extended. This building was preserved its original patterns regardless of changes in painting and interior design in the building.



- This building was opened for rental on the first storey which was operated for a food shop. The second storey was used for residential purpose. There was a designer employed to operate some improvement in the building for three months. The design aimed to improve and extend some parts of the building. The interior system in the building spent more than one million Baht for modern materials.



- This rental building on the lower storey was used to sell clothes and jewelry. The renter operated the whole interior design and decoration. This building was improved to be in good condition. Frequently, tourists took photos of all areas around this building so that the preservation of this building was supported as a tourist attraction.

**Figure 5** Old buildings No. 001 Silsopa, No. 126 Srimasingh family, No. 026 belonged to the great-grandfather Boonlom, No. 614 building of the department of rural development, No. 304 where is opposite to Si Khun Muang temple

## 5. Discussion and Conclusion

The results indicated that two official buildings had rehabilitated and that turned them to be in good condition. However, the building of Sunkasatan had been closed. Though a lot of budgets were spent on maintenance, it had not been used. For the three private buildings which received maintenance and rehabilitation were Srimasingh family, Silsopa building, and building no. 615. These three buildings spent budget more than one million to change them to commercial buildings. For the residential buildings, there were 12 buildings built before 1957 that should have maintenance and assessment for presentation and conservation of the original architectural features. The survey can group the buildings into five levels based on their completion in its preservation, as shown in Table 1.

**Table 1** A classification of buildings by their completion in its preservation (N=12)

Conditions	Number of buildings	Percentage
Perfect	2	16.66
Good	3	25.00
Fairly good	4	33.33
Improvement-required	1	8.33
Improvement-needed	2	16.66



As reported in Table 1 above, there were four and three buildings classified in fairly good and good conditions, respectively. Each of the two buildings was grouped in perfect and improvement-needed conditions. Also, there was only one building in an improvement-required condition.

The results from the interviews among the five interviewees were reported as follows: First, improvement and preservation of the buildings needed a lot of budgets so that the support of the budget was essential. Second, renovation of the area for usage in the buildings should change an interior area in corresponding with the current state of the buildings for residential and business purposes. Third, maintaining the buildings' original styles was needed, but there was a lack of materials and skillful works. Last, photos taken by tourists which created emotional value encouraged maintaining of the state of the buildings for the exhibition of local activities and presentation of background and history of the buildings.

**Table 2** A classification of values for preservation

Theory of values for preservation (Chungsiriarak, 2017)	Results from the interviews with the owners of the buildings and residents
Emotional value concludes astonishment, identity, continuation, mind, and symbol	- Taking photos of the buildings by tourists constituted of sentimental value which was beneficial for the community. Some buildings needed to organise the building's area for exhibition shows and presentations of their historical background.
The cultural value comprises with evidential documents, history, archeology, rareness, aesthetics and symbol, architecture as well as landscape architecture and environment	- The interviewees would like to maintain the states of the buildings as original as possible. However, materials and skillful works were currently unavailable.
Usage value encompasses with benefits of usage, economics, society, and politics,	- Rehabilitation of preservation of the buildings required to use a lot of budgets so that the financial support from government was necessary for maintenance. - Improvement of the interior areas in the buildings for usages must be corresponding with the current states of the buildings. That was not only for residential but also for business purposes for earning income.

The analysis with a practical guideline of the department of fine arts for the sake of preservation of historical sites in 1985 and Chungsiriarak's (2017) work classifies preservation into three forms, namely, (i) preservation which relates to maintaining of the original state, (ii) rehabilitation which concerns the process of returning to the original state, and (iii) improvement refers to changes for a better condition with almost the same state which shows a clear difference between the old and the new ones. The researcher found that improvement with the support of the current availability of materials and man's work in repairing the buildings for the preservation of its architectural patterns in the communities as possible and that can also control budget and correspond to criteria of government for having further supports.

## 6. Suggestions

(i) The old buildings located on Mee Chai road in the community area had potentiality for rehabilitation and development to turn the buildings to be used effectively. This area can become a new tourist destination that serves the country's development of economics, society, and the arts. One of the stories about the Mekong river basin had received considerable attention in the past. The rehabilitation and improvement of the buildings have to consider the financial status of the buildings' owners. That is to say; they may need to have a support of loan with low interest for their old buildings' rehabilitation and improvement. They suggested changing the areas in the buildings for the benefit of value as referring in the studies of Daengkul (2013) and Saki (2009) which posit that usages of areas both inside and outside buildings for preservation purpose should bring the most advantages and development.

(ii) Designs of policy should make plans with examples and have collaboration with people in the community in order to analyse the possibility for physical development. Imparting of knowledge should be



easily accessible and informing about the advantages and disadvantages of getting involved in operation should be done sincerely. Cooperation with the community should be initiated through the government's investment support for researchers and academicians in doing research studies. In doing so, planning and analysis in evaluating abilities for developing areas can be operated in the long run. To support such action, Tansukhanan (2016) also asserts that working with a community in different steps needs systematic planning.

**Remark:** A Survey of the Old Buildings Built before 1957 in the Area of Mee Chai Road, Mueang District, Nong Khai Province: Guidelines for Rehabilitation is a part of Ph.D. thesis entitled Planning for Foreign Influence in Building Conservation Policy: Case Study of 2430-2500.

## 7. References

- Chungsiriarak, S. (2017). *Background, concept, theory, and application in preservation of historical sites*. Bangkok: Silpakorn University.
- Cohen, N. (2001). *Urban planning, conservation, and preservation*. New York: McGraw-Hill.
- Daengkul, K. (2013). *The adaptive reuse and value creation of historic building for commercial development*. A thesis for the degree of Master of Architecture and Planning. Thammasat University.
- Saki, M. (2009). *Urban characteristics of high-density low-rise residential areas in Tokyo*. A thesis for the degree of Master of Science in Architecture Studies. Massachusetts Institute of Technology.
- Tansukhanan, P. (2016). *Urban conservation*. Bangkok: Chulalongkorn University Press.
- The Office of Natural Resources and Environmental Policy and Planning. (2012). *The project of benchmarking for standard of quality in cultural and environment for the old area community in the central and the eastern regions*. Bangkok: Property Print.