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SEMINAR ON BUILT
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**SUSTAINABLE BUILT
ENVIRONMENT**

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AWARENESS OF MAINTENANCE NEEDS FOR CONSERVED HERITAGE BUILDING AMONG LOCAL AUTHORITIES IN PERAK

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ABSTRACT

Conserved heritage buildings play a vital role in preserving a region's cultural, historical, and architectural legacy. Their lifetime and continued significance depend on proper maintenance, which is crucial. The issues are the absence of comprehensive education and training programs focused on heritage building maintenance and Malaysia faces a shortage of skilled technical workers in the maintenance sector, contributing to subpar maintenance work. Thus, this study aims to determine how well local authorities in Perak are aware of the maintenance needs for historic buildings that have been conserved. In order to achieve the set objective of this study, quantitative data collection methods were adopted. The study conducted a survey questionnaire to local authorities in Perak to gather information about their awareness of maintenance needs, existing maintenance practice, challenges faced, and resources allocated for conserved heritage building. The results of this study can help the local authorities in Perak create more sensible strategies and regulations for the preservation and maintenance of conserved heritage buildings.

Keywords: *awareness, maintenance, heritage building, local authorities*

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INTRODUCTION

Heritage generally means inheritance of things in concrete terms from ancestors (Senthil, 2016). Heritage buildings need to be maintained, according to (Zolkafli et al., 2019), because of their distinctive historical, aesthetic, social, archaeological, cultural, architectural, documentary, and even symbolic qualities. Since laws relating to heritage buildings do not adequately address the issues related to their maintenance and management, many heritage buildings are still in poor condition. This results in poor maintenance and management practises, which eventually cause the deterioration of these buildings. Therefore, every heritage building requires maintenance management to maintain the quality of the building and to make it more interesting and conducive environments. Thus, studying awareness in the context of heritage building maintenance helps professionals preserve historical and cultural significance, ensure structural integrity, balance preservation and modernization, develop specialized techniques, and engage stakeholders effectively. This knowledge and awareness contribute to the long-term preservation and sustainable management of heritage buildings for future generations. Studying awareness can help maintenance professionals and conservationists develop a deeper understanding of the building's historical context and cultural significance. This awareness allows for informed decision-making during maintenance and restoration processes to ensure the preservation of the building's heritage value. Studying awareness helps maintenance professionals develop an understanding of the building's specific characteristics and the potential impact of maintenance activities on its structural integrity. This awareness allows for careful planning and execution of maintenance tasks to prevent damage to the building's heritage elements.

LITERATURE REVIEW

Definition of Maintenance

Maintenance is an ongoing process that keeps a structure in its safest and best condition for use daily. The entire building, from the top to the bottom of a certain building, is covered by maintenance activities. There are several ways to characterise maintenance work, according to British Standard BS3811, maintenance is defined as a special work carried out sequentially to maintain or restore each amenity. Building maintenance is defined by the Chartered Institute of Building as work done to maintain, restore, or spruce up every facility.

The Importance of Maintenance in Conservation Context

According to (Abdul Rashid & Ahmad, 2011), the standards for conservation do not just include records and documentation; they also include the planning process and maintenance tasks. The components and construction materials of older structures will typically deteriorate with time. The maintenance of historical structures is frequently ignored, which causes the buildings to deteriorate more quickly. This could, in a way, contribute to the buildings' unsafe and inadequate conditions for its users and residents. If a historical building is not adequately preserved and cared for, its significance and worth will be lost.

The Need of Maintenance in Conservation Context

Historical buildings can never be completely maintenance-free. The construction materials of historic structures are typically prone to deterioration and flaw, but they can be avoided if maintenance tasks are carried out. Due to their authenticity, originality of the fabric, and condition, historical structures, which are classified as artefacts, differ from modern buildings. Then, all repair works should be undertaken by a skilled worker who are knowledgeable in the aspect of conservation and maintenance.

Definition of Heritage Building

Kamal and Harun (2002) defining them as structures constructed in the past that have high historical and architectural values and need ongoing care and protection to maintain their cultural, spiritual, social, political, economic, and aesthetic values. Heritage structures should be kept for as long as possible because they are supposed to have an infinite lifespan.

Definition of Conservation

Historical building conservation is a technical activity. In order to conserve the heritage buildings' material and structure, physical effort was required. It is a process to prevent decay, and the goal is to make buildings last longer. The true concept of conservation is preserving the authenticity of the heritage base on the original or historical evident.

Roles and Responsibilities of Local Authorities in Heritage Conservation

Local authorities play a crucial role in heritage conservation efforts, as they are responsible for overseeing and managing heritage resources within their jurisdiction. Their roles and responsibilities are Regulation and Enforcement, Heritage Inventories and Designation, Planning and Development Control, Financial Incentives and Support and Public Awareness and Education.

Challenges Faced by Local Authorities in Maintaining Conserved Heritage Buildings

Local authorities face several challenges when it comes to maintaining conserved heritage buildings which are Limited Resources, Lack of Expertise and Capacity and Balancing Conservation with Development Pressures. These challenges can hinder the effective preservation and management of heritage assets.

METHODOLOGY

The data will be collected from target respondents by using the distribution of a questionnaire through Google Forms. The research will be focused to the local authorities in Perak, specifically the individual having knowledge of historic buildings. They will receive and answer the questionnaires about this research. 19 questions were contained in the questionnaire and were designed to gather data relevant to the objectives of the study. A fixed time frame of 3 to 5 minutes was given to the respondents to finish the survey. The researchers also conducted literature reviews in addition to the survey to strengthen and support the goals of the research. The total of respondents that have been involved in this study are 16 respondents. This research is limited to selective local authorities in Perak which are Majlis Bandaraya Ipoh (MBI), Majlis Perbandaran Taiping (MPT), and Majlis Perbandaran Kuala Kangsar (MPKK).

ANALYSIS FINDING

The quantitative data collection which is questionnaire survey was carried out to get a feedback and insights from the local authority in Perak. The survey has been distributed using a Google Forms to Majlis Bandaraya Ipoh (MBI), Majlis Perbandaran Taiping (MPT), and Majlis Perbandaran Kuala Kangsar (MPKK). The questionnaires were carefully designed to achieve the all the research objectives. There are 16 respondents from these three (3) local authorities that have been participated in this research. After all information and data have been collected from respondents, the data have been analysed using pie charts.

Table 4. 1: Demographic

Questions	Multiple Choice Answer	Percentage (%)	Number of Respondents
Job title	Building team	25%	4
	Maintenance team	18.8%	3
	Architecture team	6.3%	1

	Landscape team	6.3%	1
	Electrical and mechanical team	6.3%	1
	Administration team	6.3%	1
	Information technology team	6.3%	1
	Human resources team	6.3%	1
	Staff team	6.3%	1
	Valuation team	6.3%	1
	Management team	6.3%	1
Work experience	Less than 3 years	75%	12
	More than 3 years	18.8%	3
	3 years	66.2%	1
Organisation	Majlis Perbandaran Taiping (MPT)	37.5%	6
	Majlis Bandaraya Ipoh (MBI)	31.3%	5
	Majlis Perbandaran Kuala Kangsar (MPKK)	31.3%	5

Table 4.1 shows the demographic analysis that have been analysed from the data collection. This table include the data for job title, work experience and organisation.

Table 4. 2: Agree Level Question

No.	Questions	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1.	Building maintenance is very important to conserved heritage buildings?	93.8%	6.2%	0%	0%	0%
2.	Do you agree that some of the organizations of heritage buildings do not include a proper set-up maintenance department or unit to carry out the specific work?	68.8%	18.8%	12.5%	0%	0%
3.	Do you agree that Malaysia has lack of technical know-how	0%	31.3%	56.3%	0%	12.5%

	and expertise to perform the maintenance?					
4.	Do you agree that every heritage building should have their own maintenance schedule to ensure that the building will be in a good condition?	87.5%	12.5%	0%	0%	0%
5.	Do you agree that training is importance for maintenance team to take care of conserved heritage building?	81.3%	18.8%	0%	0%	0%
6.	Do you agree that conservation heritage buildings need an annual inspection to make sure the building in a good condition?	68.0%	18.8%	12.5%	0%	0%
7.	Conserved heritage buildings need more maintenance than new buildings?	62.5%	18.8%	18.8%	0%	0%
8.	Do you aware that many historic building owners did not know the important of maintenance to conserved heritage buildings?	6.3%	12.5%	75%	6.3%	0%

Table 4.2 shows the analysis for the agree level question that have been analysed from the data that have been collected using Google Form. For the first question, it shows that most of the respondents which is 15 respondents with 93.8% strongly agree that building maintenance is very important to conserved heritage buildings. For the second question, 11 respondents with 68.8% strongly agree that some of the organizations of heritage buildings did not include proper set-up of maintenance department to carry out specific work. Then, for the third question, majority of respondents with 9 respondents (56.3%) choose neutral for the statement that Malaysia has lack of technical know-how and expertise to perform maintenance work. For the fourth question, 14 respondents from 16 respondents (87.5%) choose

strongly to agree that every heritage building should have their own maintenance schedule to ensure the building is in a good condition. Next, for the fifth question, 13 respondents (81.3%) strongly agree that training is importance for maintenance team to take care pf conserved heritage building. For the sixth question, 11 respondents (68.8%) vote for strongly agree that conservation heritage buildings need an annual inspection to make sure it is in good condition. For the seventh question which is conserved heritage buildings need more maintenance than new buildings, 10 respondents (62.5%) have been strongly agree with that statement. For the last question, 12 respondents (75%) choose neutral for their answer regarding the question about the awareness of building owners about the importance of maintenance for conserved heritage buildings.

Table 4. 3: Yes or No Question

No.	Questions	Yes	No
1.	Is there any regulation on the maintenance of heritage buildings under this authority?	18.8%	81.3%
2.	Is there any special budget allocation for the maintenance of the historic in this organisation?	50%	50%

Table 4.3 shows the analysis for the yes or no question that have been analysed from the data that have been collected using Google Form. The first question shows that 13 respondents from 16 respondents (81.3%) choose no for the question regarding to the providing of any regulation on maintenance of heritage buildings under their authority. Then, for the second question, it shows that the percentage is in equal which is 18 respondents (50%) choose yes and no for their answer for the question if their organisation provides any special budget allocation for the maintenance of the historic.

Table 4. 4: Good Level Question

No.	Questions	Very Good	Good	Average	Poor	Very Poor
1.	Please state if the budget is fulfilled the maintenance need?	0%	88.9%	11.1%	0%	0%
2.	What do you think about the current status of maintenance of this heritage building?	12.5%	18.8%	68.8%	0%	0%
3.	Do you think maintenance policy for this conserved heritage building in a good condition?	12.5%	31.3%	56.3%	0%	0%

Table 4.4 shows the analysis for the good level question that have been analysed from the data that have been collected using Google Form. For this question, it relates

with the previous question which is “is there any special budget allocation for the maintenance of the historic in this organisation”. Then, 9 respondents have answered this question and majority respondents which is 8 respondents (88.9%) stated that the level of budget is fulfilled the maintenance need is in good level. For the second question, the respondents also needs to answered the pervious question regarding to the which heritage building they want to choose to answer the next question and after they have choose the building, they need to answer the question about the current status of the maintenance of the building and the majority of the respondents with 11 respondents (68.8%) vote that the building is in average condition. For the last question, 9 respondents (56.3%) choose in average level that the maintenance policy for their chosen conserved heritage building in a good condition.

What is the common types of defect that usually occurred in conserved heritage building?

16 responses

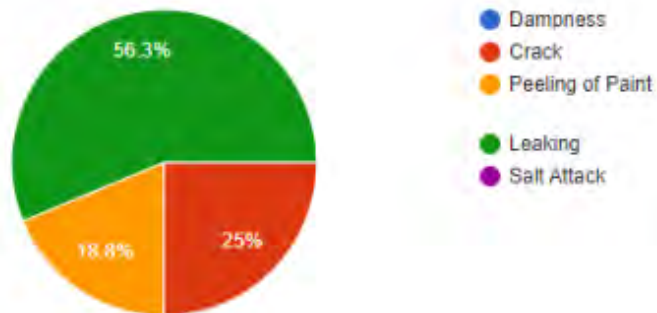


Figure 4. 1: Defects

Figure 4.1 shows the analysis for question regarding to the defects that have been analysed from the data that have been collected using Google Form. For this question, 9 respondents from 16 respondents (56.3%) choose leaking as common types of defects that usually occurred in conserved heritage building. Meanwhile, 4 respondents (25%) choose crack as common types of defects and following with peeling of paint with 3 respondents (18.8%) vote for it.

CONCLUSION

This research was carried out to know the level awareness of local authorities regarding the needs for conserved heritage buildings in Perak. Based on the data analysis, the findings demonstrated a generally positive level of awareness among local authorities regarding the importance of maintenance for heritage buildings. Many local authorities had established policies and guidelines to support maintenance efforts. Additionally, they demonstrated a willingness to collaborate with relevant stakeholders and allocate resources for maintenance activities. However, the findings identified several factors influencing local authorities' awareness of maintenance needs. These factors included limited financial resources, lack of technical expertise, inadequate public awareness, defects, and competing priorities. Overall, this research study provides important insights into the awareness of maintenance needs for conserved heritage buildings among local authorities in Perak. However, even though these findings get positive feedback from the respondents, the findings also suggest a positive trend in terms of awareness and commitment to maintenance. The study recommends targeted interventions such as resource allocation, and public awareness campaigns to further enhance local authorities' engagement in preserving and maintaining Perak's valuable heritage buildings. By addressing these recommendations, Perak can take significant strides towards ensuring the long-term sustainability and preservation of its conserved heritage buildings for future generations.

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