

Ex-Situ Conservation on Nusantara Architecture: Implementation and Challenges (An Overview towards TMII and Stübing Freilichtmuseum)

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Abstract—Many traditional houses that are still persist in some area of Indonesia is in the verge of extinction. Salvation effort was aroused in order to save civilization heritage, national identity, and local wisdom for future generations. One way is reviving efforts about conserving a la ex-situ in the form of open-air museum. This paper aims to describe critically the implementation of ex-situ conservation towards endangered traditional houses in the form of museum. Critical frameworks that have been built in this research should be as a muse in evolving sustainable open-air museum particularly in Indonesia. By taking case in Stübing freilichtmuseum in Austria and Taman Mini Indonesia Indah (TMII) Jakarta, Indonesia, identified some common thread by juxtaposing each cases in order to produce a guideline (practical framework) that can be used as the blue book for the preservation of traditional houses of Indonesia. From the results it was indicated that the problem of mentality and behavior is the main factor why many traditional houses better abandoned and left extinct. Technically, the management is also a challenge that needs improvement in order to increase the quality of Indonesian museum, especially open-air museum. Therefore, the presence of this research is expected to push up the creation of policies that support the preservation of traditional houses to be more planned, integrated and organized

Index Terms—ex-situ conservation, open-air museum, traditional house

I. INTRODUCTION

Handling the traditional architecture now has a big hand as the basis for the development of modern architecture in next future. Various efforts were done to maintain the traditional architecture, for example by conservation. During this time, the conservation of traditional houses is often done and still holds on conservation in the site itself. However, we are not aware that this type of conservation itself has drawbacks the terms of maintaining condition of object per object. Moreover, if the house was secluded, surrounded by modern lifestyle pressures, and distantly of transportation access. Here, questions about the re-evaluation of vernacularism particularly conservation are insisting.

In facts, traditional houses in every parts of the world deal with the brink of extinction. The number of

traditional wooden houses has dropped sharply due to many aspects such as the rapid spread of new building materials, declining of agriculture, and urban migration. People are preferred let the historical value of all forms of their traditional houses and relics abandoned in their village. Whereas, throughout its modesty, many features can be traced from it for future such as wind catchers, element of shading and natural lighting, thermal insulation, methods in using local building materials and natural techniques that were used for air cooling. Not surprisingly because there is a gap between technological problem and cultural issues where modern people prefer living without dust and smoke [1].

Likewise occurred with traditional houses in Indonesia. The need for conservation of traditional houses began to burst in the last decade. One of the biggest achievements of the traditional houses reconstruction projects was initiated by *Yayasan Rumah Asuh* Program. However, due to constrained funding and support, this project only focused on several customhouses that still occupied by its community. But, how about the abandoned house? Kemper [2] was suggested open-air museum. When the traditional building cannot be kept by the people surround, rather than leave decay, it should consider that open-air museum perhaps the only way to make it sustain.

Conserve the building in the term of open-air museum itself is not much different from conserving the plants a la ex-situ. Endangered plants in its habitat conserved ex situ to the same new condition with the original place. But, conserving the plant to a new site usually only consider the climatic aspect and soil conditions. Architecturally, according to ICOMOS (New Zealand charter 2010), the purpose in conserving heritage building is to care for places of cultural heritage value. So that, people and its culture should also have to be considered. Exhaustive conservation of traditional architecture carried out intensively since China Charter in 2000 to clarify earlier charters and put traditional architecture as a reserve to be considered in the field of conservation [3].

II. LITERATURE REVIEWS

In many developed countries, no doubt, the museum becomes an instrument that has a strategic role to strengthening community identity. Concern of nation identity to culture growth has reflected in the awareness

and public interest to visit museum in developed countries. Of course, these conditions cannot be separated from the role of culture experts who put the museum as part of a social institution, as well as a vehicle to provide an overview and education of development of nature and human culture to the public [4].

Unfortunately, museum always predicated as a place to lay down the past and tends to be artifact based which has tasks collecting, preserving and presenting. While, during the improvement, open-air museum exists and have offer more roles based on combination of indoors and outdoor activity [5].

In his essay, Kemper [6] defined open-air museum as a safe place to put ancient monuments from extinction. This kind of ancient monuments further detailed as pre-industrial architecture where wooden traditional building became dominantly at the age and conditioned realistically either the form or the contain to make visitors realize that the building might have existed.

Commonly, open-air museum are consists of wooden building so that located where wood abundantly existed due to minimizes damage caused by the relocation. The constraints of authenticity in the relocation become a major issue in settling open-air museum. On the other hand, Kemper [7] stated that folk-culture plays an important roles as well as coloring the atmosphere of open-air museum. Therefore, in the reconstruction process which is started from dismantled, transported, reconstructed and maintained, the whole process should have to be reflected with how the ancient keep it maintained in order to keep the essence of the culture. The traditional building reserve many valuable information of how the culture developed and maintained due to as Rapoport said that 'folk-culture is the direct and unself-conscious translation' which transformed into the form of value of the house [8].

The Association of European Open Air Museums (AEOM), an organization of important open air museums in Europe defines Open-air Museums as "scientific collections in the open air of various types of structures, which, as constructional and functional entities, illustrate settlement patterns, dwellings, economy and technology" [9]. Even in the small scales, a group of building completely or partially, also can be considered as open-air museum since copies or true to scale reconstructions are rebuilt after original patterns, are properly furnished and opened to the public. These concessions can be made only under the condition that: "the original buildings of the type portrayed are no longer available (and) the copies or reconstructions are made according to the strictest scientific methods" [10].

III. METHOD

This paper proposes an overview about condition of the most comprehensive open-air museum in Austria, Stübing freilichtmuseum and compared with Taman Mini Indonesia Indah (TMII) in Jakarta. The purpose of this overview is to gain an image about method that can be made and implemented in order to underlining the importance of ex-situ conservation.

The main reason both objects chosen is the biggest one and comprehensively considered as showing numerous collections of the traditional houses than any open-air museum of each country. Also, it is nevertheless advantageous to restrict the scope in general to Stübing freilichtmuseum among 58 open-air museum [11] which had been classified all over Austria because it could be regarded as the best place to put conservation issues and its solving toward traditional building in Indonesia. On the other hand, many architectural features discussed here regarding conservation issues may seems can be compared and scientifically sound to draw conclusions from the comparisons.

In Indonesia, example naturally will raise from phenomenon of current condition of open-air museum at there. As we all know, there are many examples of Indonesia open-air museum but mostly as in-situ museum that the collection only consists traditional features of the area. One of the biggest ex-situ open-air museums in Indonesia is Taman Mini Indonesia Indah (TMII). Despite of some phenomena in its establishment, it will be the main consideration in this research in order to gain information critically regarding the opportunities and the challenges.

IV. RESULTS AND DISCUSSION

Local wisdom is a manifestation of humanity value, implemented in life, symbolized as identity and characterizes a nation. Therefore, local wisdom should strengthen continuously in order to maintain the identity of a nation.

Currently, the movement to revive local wisdom began erupted. Identity that manifested as a house consciously is a form of self-actualization. Not surprisingly, the houses that commonly encountered in the residential complex which was originally built in same shape, but once inhabited could be different, not merely the physical term (shape, colors, ornaments, etc.), but also the behavior which is formed at there. Dominantly, the occupants reflected this identity as a result of the childhood life that dissolved in the domain of cultural system that experienced. Mostly, this is the aspect that characterizes our traditional houses.

Over the ages, these identities getting dimmer annihilated by sparkling globalization. Traditional/custom houses as a reflection of culture seems allowed to 'live reticent, eke died reluctant'. While so many lessons could be learned from traditional house. The principle of life, mutual cooperation, modesty, culture, respect for nature, and sustainable technology were stored to be learned from traditional houses. At least the spirit to appreciate the heritage of the ancestors reflected in the way we appreciate the history of our nation. Rather than romantic depictions of old buildings with invented histories in spurious and contrived settings, vernacular architecture in the developing world needs respect and support, with encouragement for its continued use of renewable resources, passive climatic modifications, spatial organization based on social structures and scale according to the need [12]. Therefore, need a fervent

effort to save these 'remaining and scattered' traditional houses from extinction and situated more secure and well maintained, such as through the open-air museum.

Yet, as in a museum management particularly at open-air museum that requires more space and costs, internal and external challenges often become a bottleneck in the improvement. Issues around technical problem in moving the collection must be followed by the readiness in maintenance afterwards. Oliver stated '*conservation is frequently seen as a technological problem and it is true that the preservation of old materials, the keeping of venerable buildings in good repair is a technical matter*'. But fundamentally, conservation is a cultural problem [13].

In this case, the mentality of a society in appreciating culture can be seen from how they cherish their local wisdom. Most cultures overcast because no longer used as a patron in life. The original identity often left biased, mixed with modernism of capitalization. Also, political situation that creates practical policies with imaging intention. Not surprisingly, the conservation itself is now seen merely as maintaining job solely for the purpose of commercialism, especially in Europe [14].

In Indonesia itself, there are several factors that hinder conservation issue, that is:

1. Overly attention from government and related organizations (professional or NGO) for the 'traditional' building in urban area, which in fact it is a relic of colonialism. This attention is a result that embodiment general definition of preservation and also the form of the ambiguity of identity experienced by Indonesian people toward what the traditional building is, the effect of hundreds years of colonization.
2. Funding constraints and lack of effort in managing cultures. The government is less prioritizing in supporting preservation of the traditional house. While, in addition rich in historical values and meaning of life, traditional houses has abounded vocabularies of sustainable way of life.
3. The existence of TMII not adequately represent the shape of the building due to using new material and just prioritize the form, which is actually the authenticity of shape also questionable because as we know all of the houses in the archipelago itself has a wide range of transformations.
4. Mental map majority of Indonesian people are paying less attention to localism and more liberate outside view modernizing their thinking. This is an example where the concept of conservation not only encounters with values, in fact, the way of life become the main factor of culture degradation [15].

To be closer with the phenomenon, below described the comparison between TMII and Stübing freilichtmuseum.

A. Taman Mini Indonesia Indah (TMII)

Symbolizing culture authorization by the government at that time, many people said that Taman Mini Indonesia

Indah (TMII) was the symbol of power of New Order (*Orde Baru*). As a prestige symbol, lot of effort sought in developing TMII as a miniature of Indonesia. TMII became one of the most famous icon and makes Jakarta as a business center, government and entertainment. It was not complete visit Jakarta without visit TMII.

According to Barliana [16], in the reign of President Suharto, hubbub of revolution was replaced with the pace of development. Orderly development was raised to create the dignity of the nation. Unfortunately, this spirit built by creating "mass fear". Anyone who refused development for and in the name of "public interest" would be guilty and was considered as enemy of the nation. However, the development that occurred during Soeharto's era was supposed not describes the diversity of archipelago in general. The spirit of nationalism that marked by the pentagon-roofed mosques construction throughout Indonesia which is adopted from *joglo*, describes the hegemony of *javanisation* distributed to the entire nation. Denotes uniformity of vernacular architecture and termed as modernizing architecture in orthodox way of view. And thus, Taman Mini Indonesia Indah (TMII) was conceived as unifying concept and be expected, reflects the *Bhinneka Tunggal Ika*¹, but woefully, traditional architecture features at there were shown 'artificial', and then positioned in Jakarta as a form of administrative entity [17].

As a prestigious project which initiated on 1972 by Mrs. Tien Soeharto (President Soeharto's wife), TMII really became the main attention because the peaks of culture of each province being there. By visiting TMII, it was represented completely visited throughout Indonesia. Even vast budget was disbursed to make any representations traditional houses at there to be the best. Not surprisingly if the expression feels 'excessive' than the original.

Overall, all of the traditional houses (pavilions)² at TMII have a same shape. As seen on Fig. 1, all building shaped as replica of traditional house. Larger sized in order to load typical exhibition objects such as dioramas, assortment of bridal wear, woven, crafts, traditional musical instruments, and information about tourism.



¹ *Bhinneka Tunggal Ika* is the official national motto of Indonesia. The phrase is Old Javanese translated as "Unity in Diversity".

² Called as pavilion because in addition to the traditional house pavilion of each province, in TMII also there are some thematic museums such as, Museum of Indonesia, Museum Pusaka, Museum of Transportation etc. (More information at <http://www.tamanmini.com/tmii.php>)



Figure 1. Artificial traditional house of Lampung (above: TMII's archive) and Sulawesi Tenggara (below)

One example, East Nusa Tenggara (NTT) province built pavilion where there visitors could feel the atmosphere being in NTT which exhibiting some of traditional house and cultural objects. The largest building is a modified replica of royal palace in Kupang³, called the *Temukung* house. Originally, the house was stilt-shaped, thatched roof and palm-leaf midrib walled. In the west part of pavilion, placed a replica of the traditional house of Rote (*umatua*), therein exhibited traditional costumes and modern *sasando* (a famous traditional instrument of NTT); while building on the east is Alor traditional houses, which is exhibit a tribal king's ceremonial dress and a wide range of scarves. On the front, there is a replica of Sumba traditional house, called *uma mbatangu* or *uma kalada*. This two-story building divided the ground for offices, and the second floor as an exhibition space with modern construction (Fig. 2).

In the courtyard of the pavilion placed a replica of barns (*lopo*), and surrounded by palm trees, typical plants in NTT in order to portray the real condition of its flora. While to describe the peculiarities of fauna, Sumba horse and Komodo statue were made and matched as the entrance to the pavilion.

Those figures show that the pavilion in TMII undeniably mostly exhibited as replicas. The historical value becomes the umpteenth, which is only achieved by notching practically. Not surprisingly because the main purpose of TMII is to show the unity of Indonesia in the form as miniature.



Figure 2. Artificial *uma mbatangu* of Nusa Tenggara Timur and its courtyard ornaments

It is clearly seen that the architecture has been used as a political infrastructure to legitimize power. Instead as the conservation and revitalization effort, but then in the reality was realized that the identity of the physical form of the traditional architecture only a symbol to show the power of hegemony and control of the oligarchy [18]. So that, seemingly represents national diversity, but on a local scale essentially occurs uniformity.

Coupled, over time, Indonesian spirit, which kept in this monument, has dimmed. Peoples and communities were not paying attention to this national monument anymore. Described as a lack of *museumness*⁴ and ability in build without awareness of keeping. While behind the polemics, TMII still become a masterpiece which reflecting Indonesian cultural treasures.

The dilemma of whether TMII will serve as cultural or economic asset, especially when associated with past political issue, often becomes a bottleneck in developing TMII. Therefore, required an independent managerial system that innovatively could minimize the negative effects as well as raise cultural assets to become one of the driving economic and tourism in Indonesia.

TMII still expected become a library to study the Nusantara culture as well as recreation for young generation in gaining and searching their identity. With this lofty purpose that contains the wealth and diversity of Indonesian culture, will emerge a sense of love for the country and the nation itself.

B. Freilichtmuseum (Open-Air Museum) Stübing

Located 15 km north of Graz-Austria, Stübing open-air museum is one of the 10 largest and most impressive open-air museums in Europe, and also have gained reputation as a national treasure of Austria. Established in 1970, on a small hill southwest of Vienna, the museum covers 150 acres of land, all for displaying 97 historical buildings such as wooden homesteads, granaries and kilns, showing different styles of construction in various parts of the country over the last six centuries.

In Stübing, conservation done by moving uninhabited traditional houses from several areas in Austria to be

³ Capital city of East Nusa Tenggara

⁴ The term *museumness* here is described as visitor's perceptions on a certain physical of a museum [19].

rebuilt in this place, underlying the purpose of Stübing and 58 other open-air museums built in Austria. These buildings mostly relocated due to inability to maintain of the previous owner's. Some buildings in Stübing moved completely (Fig. 3) while the other was built with a few adjustments, as adjusted to the contours of the new place and replacing rotten material that has been weathered. There are also some new buildings constructed based on historical documents with using indigenous material that similar to the original as seen on Fig. 4.



Figure 3. A belfry built on 1776 moved from Burgenland and reconstructed on 1970 in Stübing

Stübing own uniqueness as the most complete museum in Austria because in addition to storing the collection of history and civilization of Austria, also become a research center of wood science, such as the age, durability, tectonics and structure. In its maintenance, management oftentimes held workshop and invite visitors joins in repairing damaged parts of the building, such as making wooden shingles for roofs as well to educate people about the importance of choosing and harvesting timber for buildings construction [20].



Figure 4. A stilt-barn of south tyrol built on 1529 and reconstructed on 1972 in Stübing

Stübing also faces dynamics problems related with conservation efforts that should be continued and sustained and thus requires more costs. Therefore, the management assisted by the local government keep pushing in promoting this potential continuously. For example, the management has tried to kindle the atmosphere by held annual season events. Various celebrations were presented at this museum so that visitors on their vacation may also educate and at the same time feels the atmosphere of the rural culture of Austria. Thus, Stübing as a medium of education and research as well as entertainment spots are able to provide a stimulus for improving similar museum in the future.

C. Comparison

As described above comparison between TMII and Stübing Freilichtmuseum, could be assumed that TMII featuring replicas of traditional house whereas in Stübing most of the original building was relocated to this new place. Of course, this affects the perception of visitors in enjoying the objects presented for its historical value.

TMII conserves the building pragmatically. Replication at there indicates another purpose than conservation. Indicated from certain buildings were modernized constructed with full new festive modern materials. Kerlogue [21] defines this festivity as a form of local pride as well as efforts to attract tourism by exhibiting all local property of entire area in one building. But unfortunately, less represents the cultural diversity that exists in the province and tends to generalize them all together.

While in Stübing, building preserved according to the original condition. Moreover, Stübing offer a more dynamic concept which conservation targets not only about physical appearance, but also the environment and aspects of society directly as a tangible medium of learning and research.

If compared between TMII and Stübing map (see Fig. 5) was also clear that the setting in TMII was conditioned more formally than Stübing. Indeed, linear configurations which applied to the site makes easier for visitors to visit each collection one by one, but not enough making them feel the atmosphere of the houses. Visitors only adores the facade, moreover TMII also facilitated with sky lift. By riding the vehicle, would be enough for the visitors to see everything below.

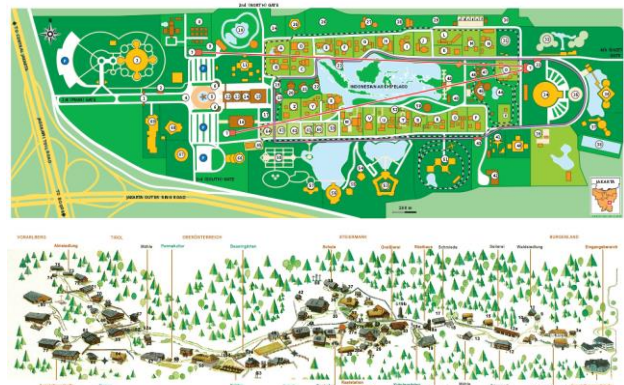


Figure 5. Map of TMII (above) and Stübing freilichtmuseum (below)

In Stübing, the traditional houses were arranged according to the regions of the house, and due to it was made in accordance with the original conditions consequently all were positioned as in the nature of its origin that also supported by the contours. In addition, there are lot of possibility and flexibility in adding new collection at Stübing because surrounded by forest. Unlike in TMII, which is surrounded by urban settlement, makes a challenge for additions or adjustments of collection.

Formerly, there are 27 traditional houses pavilion in TMII since constructed as representation of 27 provinces in Indonesia at that time. But this time, as a result of the reformation and regional autonomy, provinces in Indonesia had increased to 34 provinces. Consequently, all of new pavilion from the new province were 'tucked' behind the pavilion of North Sulawesi, such as the pavilion of West Sulawesi, Riau Islands, Gorontalo, North Maluku, Banten and Bangka Belitung. Of course, it has implications. The scale of these new building which being built there impressed force-inserted so it was made contemporary-looking, seemingly in order to simply accommodate custom collection from the province. One example can be seen from the pavilion of Kepulauan Riau province (Fig. 6).

This case is an example of a lacking-planned of open-air museum. The biggest implication of inappropriate placement is the lack of visitor's interest to visit the pavilion. This is not a problem if only erroneous in placing collection, but becomes a big problem in the terms of placing the house.



Figure 6. One of the newest collection of TMII: Kepulauan Riau's pavilion

Another consequence that arises in the future is these new buildings are not enough to represent a growing culture in their respective regions. Due to the limited space, the pavilion can be described just as a 'warehouse' to storage archaeological objects. Of course, very unfortunate since the exhibition is not only related to ancient objects, but should also be shown lively and can be regularly shared with the visitors.

V. CONCLUSIONS

Undeniable, the geographical condition of Indonesia, which consists tens of thousand islands, is a challenge to

unify traditional houses from various provinces. Not surprisingly TMII was still the one and only alternative to see Indonesia as a whole, as TMII's motto, 'roving Indonesia in a day'. Although archipelagic, need to realize that the sea among was not a barrier, but a unifier. This is the essence of the meaning of the Nusantara.

Learning from Stübing, mated with the Nusantara's spirit, open air museum should be located at each large island of Indonesia at least one as an epicenter of collecting nearby traditional houses. Technically, this museum could be either prepared from a bare place or could also equip an existed ancient site or a complex of traditional house. Indeed, the problems of infrastructure and livelihood still clung most areas in Indonesia and therefore, also, conservation issues still mistreated. However, if not treated swiftly, it is not possible national identity will lost alongside the extinction of traditional houses.

As also seen in Stübing, the museum should have to work closely with the surrounding community and eventually be able to strengthen cultural identity. Creation of identity also will have relevance to the meaning of today's society. In any case the meaning is needed by the society to formulate and rediscover their history by searching the relevance of the past with the present. These concepts should be absorbed as a formulation in realizing the open-air museum by ex-situ, particularly in Indonesia. Thus, conservation is a process to maintain the place in such a way so that the cultural meaning such as the attractiveness, history, science, or social value for generations in past, present and future will be maintained continuously.

On the other hand, management should be more independent in managing open-air museum. This independency will become a basis in boosting creativity in the management of the museum. In addition, in terms of figure, open-air museum should offer many outdoor appearances so that required more infrastructure that support outside activities. Thus, in addition focused on knowledge rides, playground and socializing at outdoors, improvement also can be directed towards more flexible to support creative functions at museum flexibly.

Therefore, the role of government and museum management also should be coherent with the spirit of conservation itself. Sustainability of conservation in a well-managed open-air museum automatically certainly gives historical impact and value of the region where it resides. Indeed, the mentality is also a restraining factor in changing people's mindset of museumness, especially in Indonesia. However, it could be eliminated by adapting indigenous values so that museumness could be adapted properly and at the same time makes the authenticity of the culture as the main parameter that must be prioritized in conservation issues.

This paper extends a wider scope to be improved and developed as a theoretical foundation in perusing the phenomenon of open-air museum in all over Austria, even in Europe. Ahead, this study will be enriched by encapsulate the phenomenon of another open-air museum in Austria so that later could be formulated as a blue book

on how developing open-air museum comprehensively in developing country. However, at least, the results of this comparison might become a stimulus in the birth of many new open-air museums that expresses traditional houses as a national treasure, especially in Indonesia, which emphasizes the value of cultural authenticity.

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