"Conservation of Cultural Heritage Buildings in Bagan Area"

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1. Abstract

This research paper would be conducted to integrate with cultural heritage buildings and new public buildings within the whole area of Bagan harmoniously. New public buildings such as hotels, motels, guest houses, inns, museum and viewing tower are constructed within old Bagan area, new Bagan area, area of inside city wall and Nyaung Oo area. The authority demarcated laws and regulations, and building control plans within archaeological zone, monumental zone and preservation zone for constructing of new public buildings and then new public buildings must not construct within their demarcated areas. In present, new public buildings are influencing within the area of Bagan according to their site and setting, form and height. Bagan archaeological museum is influencing not only the environment of Gawdawpalin temple but also the whole Bagan area according to its massive form. And, viewing tower is also influencing with the height of building. Construction of new public buildings such as Bagan archaeological museum and viewing tower which can be compared in relation to their height and massiveness such as the height and form of Bagan monuments can lose the essence of Bagan from visual aspects. While taking every respect of old cultural heritage buildings, it is very important to consider ( i ) not to lose the value of cultural heritage buildings ( ii ) not to influence with site and setting ( iii ) not to influence with the form of building and ( iv ) not to obstruct with the height of building. Therefore, in depth research work should be conducted for the emergence of new public buildings in Bagan environment.

2. Aims and Objectives

This research paper is aimed to contribute the following objectives:

To appreciate cultural heritage buildings and conserve the essence of architectural objects of these heritage buildings
To perceive the essence of the cultural heritage buildings in Bagan without losing their value

To reduce impact on the cultural heritage value of ancient Bagan monuments due to constructing of new public buildings within the whole area of Bagan

To suggest and recommend for construction of new public buildings at present and future to remain systematic historic city

3. Scope of the Research Paper

There are many new public buildings in the area of Bagan such as hotels, motels, guest houses, inns, museum and viewing tower etc. New public buildings were mostly built in Old Bagan area, inside city wall, new Bagan area and Nyaung Oo area.

Among these areas, new public buildings in old Bagan area, inside city wall and just outside of new Bagan area where need to pay particular attention the landscaping of ancient Bagan area according to their location are chosen. And, the environment of new public buildings such as the environment of archaeological museum, Nan Mying viewing tower and the whole area of Bagan will be analyzed from visual aspects.

4. Motivation

In present day, hotels, museum and viewing tower etc. have appeared within the historic area of Bagan. These new buildings are influencing on the heritage value of ancient Bagan monuments, especially, according to its locations, height and mass. If new public buildings appear or will appear or not, it should be look and respect the cultural heritage buildings according to their site and setting, height of buildings and visual aspects. All new public buildings should respect the environment of the cultural heritage buildings in Bagan.

5. Terms and Definitions

Cultural heritage in Myanmar

The term cultural heritage in Myanmar is defined as ancient monuments of ancient sites which are required to be protected and preserved by reasons of their historical, cultural, artistic or anthropological value. Most of such monuments, buildings and sites reflect and stand as the evidence of the history of Myanmar.

Heritage building

It means a building possessing architectural, aesthetic, historic or cultural values and it is declared as heritage building by the planning Authority/Heritage conservation committee or any other Competent Authority.

6. Method of Approach

The following methods are attempted to conserve the cultural heritage buildings in the area of Bagan.
• Literature review for assessment of cultural heritage buildings and cultural heritage zones
  Grading Lists of the cultural heritage buildings, demarcation as cultural heritage zone, laws and regulations, and building control plans for cultural heritage zone would be approached.

• Case studies of selected new public buildings in old Bagan areas, inside city wall
  Visual aspects from case studies of selected Bagan sites such as the environment of Bagan archaeological museum, Nan Mying viewing tower and the whole area of Bagan would be analyzed.

• Conservation of old cultural heritage buildings
  Recommendations and conclusions for new public buildings are approached to conserve the cultural heritage buildings in the whole area of Bagan setting from the above studies.

7. Introduction

The area of Bagan is one of the most important region in our country. The region of Bagan is very interesting ancient site not only in Myanmar but also in the world because it flourished as a Buddhist site and was rich in many valuable ancient monuments such as different varieties of temples, stupas and monasteries etc. Bagan is, therefore, the most significant stage along the history of Myanmar.

Cultural heritage site in Bagan reveals one of the most important origins of traditional culture of Myanmar. Bagan monuments are not only national symbols but also precious cultural heritage buildings.

These monuments have their unique reflection of architectural, archaeological and artistic achievements in the past. These cultural heritage buildings have their valuable essence according to their spatial organization, form composition, decorative elements and structural system.

Looking at these cultural heritage buildings in Bagan from various approaches, the essence of the cultural heritage buildings can be perceived.

The landscape of Bagan represents one of the most significant aspects as harmonious whole in Bagan environment. The essence of Bagan can be perceived not only the whole area but also each monument. (Plate 1.2.)

At present, new public buildings such as hotels, museum and viewing tower which is high and massive buildings appear within the historic area in Bagan. According to this research work, these new public buildings are obstructing the essence of Bagan which is harmonious with the environment of Bagan.
In addition, new public buildings especially hotels are designed with the architectural elements of Bagan monuments such as flaming arch pediment, crenellations, figure of Nat, the base with Throne shape etc. to perceive the essence of these monuments in these public buildings for the guests and to harmonize with the environment of Bagan.

This in-depth research work is therefore intended not to lose the essence of cultural heritage buildings due to construction of new public buildings such as hotels, motels, inns, guest houses, museum and viewing tower etc. to value the environment of whole area in Bagan and to appreciate the essence of cultural heritage buildings not only regional people but also the whole people in our country.

7. Literature Reviews

Grading of the Cultural Heritage Buildings

There are 2826 cultural heritage buildings in the area of Bagan according to the survey conducted by P. Pichard. [5]

Among these cultural heritage buildings, about hundred monuments are located within the area of old Bagan area surrounded by the ancient city wall. The other monuments are located outside of the ancient city wall.

The area in which most other monuments are concentrated is the northern area of the main road connecting to Nyaung Oo airport, Minnanthu village and new Bagan, and the southern area of Thiripyitsaya village along the Ayeyarwaddy River. Some of the monuments are located within the area of human settlements.

Among 2826 cultural heritage buildings, 422 cultural heritage buildings were selected to grade based on their archaeological value. [6]
These cultural heritage buildings were precisely identified and classified into three categories. A grading list of the ancient Bagan monuments can be seen in the following respectively groups.

Grade I: It consists of outstanding monuments which need to be systematically inspected and preserved. The number of monuments in this group is thirty four cultural heritage buildings. Some examples of the Grade I outstanding monuments are as follows.

GRADE ONE MONUMENTS
1. Abeyadana Temple, 1202
2. Ananda Temple, 2171
3. Bodihpaya(Mahabodhi) Temple, 670
4. Dhammayangyi Temple, 771
5. Dhammayazika Stupa, 947
6. Gawdawpalin Temple, 1622
7. Hpayathonzu Stupa, 477-478-479
8. Hpetleik (east), 1030
9. Hpetleik (west), 1031
10. Htilominlo Temple, 1812

Grade II: It consists of exceptional monuments which need to be regularly inspected, maintained and repaired. The number of monuments in this group is hundred cultural heritage buildings. Some examples of the Grade II exceptional monuments are as follows. (Map 2.1.)

GRADE TWO MONUMENTS
1. Alopigu Temple, 374
2. Anandaokkyaung Monasteruy, 2162
3. Bellpillars 1598
4. Buhpaya Stupa, 1657
5. Bulethihpayagyi, 394
6. Chaukhpayahlange Temple, 141
7. Einyakyaungngamyethna Temple, 1831
8. Gubisagyi Temple, 1662
9. Gu(north) Temple, 766
10. Gu(north) Temple, 765

Grade III: It consists of important monuments which need to be periodically inspected, maintained and repaired. The number of monuments in this group is 288 cultural heritage buildings. Some examples of the Grade III important monuments are as follow.

GRADE THREE MONUMENTS
1. Adeikhtanhpaya, 896
2. Agate Temple, 1340
3. Asawkwywan, 491
4. Ajagona Temple, 588
5. Bodipon, 143
7. Gubisange Temple, 1664
8. Guni Temple, 882
9. Gunihpaya, 135
10. Gutawthithpaya, 1486

Although these cultural heritage buildings in the above categories give the priority for protection and conservation, all of the cultural heritage buildings which are ungraded in the whole area of Bagan must be protected.

Map 2.1. Distributions of Grade I and Grade II Cultural Heritage Buildings in Bagan Area

Source: Archaeological Department in Bagan
Conducted By: Ma San Nan Shwe, Department of Architecture

**Cultural Heritage Zone**

Bagan is the historical site of the first Myanmar empire, the glories of power and achievement. None is as significant as the monumental buildings in Bagan. They were built in different periods, each with its architectural characteristic of its own time.
Therefore, Bagan is the most remarkable religious city comparable to no other city in the world. And, Bagan is a very important archaeological site to show national identity of Myanmar architecture. Not only regional people but also national people need to conserve and protect these valuable heritage buildings.

In addition, the authority demarcated the zones need to conserve the value of cultural heritage buildings. The demarcations of zones are as follows.

The authority demarcated cultural heritage zone in combination with archaeological zone, monumental zone, and preservation zone. In heritage zone, the height of new public buildings is no more than thirty feet.

**Definition of the Archaeological Zone**

The following wards of Nyaung-Oo, New Pagan and villages are demarcated as part of the Archaeological Zone with a total area of 14,102 acres.

Although there are not many monuments in some locations, they are demarcated for future excavation.

1. Kyauk Gu-umin and its environs East of Nyaung Oo
2. No.1 ward of Nyaung Oo
3. No.2 ward of Nyaung Oo
4. No.3 ward of Nyaung Oo
5. No.4 ward of Nyaung Oo
6. No.5 ward of Nyaung Oo
7. Part of Wetkyiin Village tract
8. The whole area of Taung-bi-kyar Village tract
9. Old Kyansitthar ward in Old Pagan
10. Old Anawratha ward in Old Pagan
11. The whole area of Myinkaba Village tract
12. The whole area of Thiripyitsaya Village tract
13. Kyansitthar ward in New Pagan
14. Anawratha ward in New Pagan
15. The whole area between Thiripyitsaya village and Twinywa Village
16. The area to the south and east of Twin-ywa
17. The area around Thuhtaykan Village
18. The area around West Pwasaw Village
19. The area on the west side of Kondangyi Village tract
20. The area around Minnanthu Village
21. The area from the north side of Minnanthu Village to the south-west side of ward No.5 Nyaung Oo

Archaeological zone consists of many heritage buildings that combine as a whole group. This area consists of less brick mounds; however, it needs to excavate in future. Depending on these factors, this area is demarcated as archaeological zone. (Map 2.2)
Map 2.2. Demarcation of the Archaeological Zone
Source: Township Law and Order Restoration Council

Definition of the Monument Zone

Monumental zone consists of the groups of ancient monuments within the archaeological zone. There can be seen in Map 2.3.

The following ward of Nyaung Oo, New Bagan, Old Bagan and village with a total area of 7,685 acres is demarcated as the Monument Zone for the groups of ancient monuments within the Archaeological Zone.

1. The area east of No.1 ward of Naung Oo, and Kyaukgy Umin and its environs
2. Some parts of Wetkyiin Village
3. The whole area of Taungbi Village tract
4. Kyansitthar ward in Old Bagan
5. Anawrahta ward in Old Bagan
6. The whole area of Myinkaga Village tract
7. The whole area of Thiripyitsayar Village and Twinywa Village
8. The whole area between Thiripyitsayar Village and Twinywa Village
9. The area from the north side of Myinnanthu Village up to the west side of ward No.3, Nyaung Oo
Map 2.3. Demarcation of the Monumental Zone
Source: Township Law and Order Restoration Council

Definition of the Protection Zone

Preservation zone is demarcated within the area which is defined by a line from Tuyintaung Stupa to Kyauk-gu Umin, the south end of the monument area and back from Tantkyitaung Stupa to Kyauk-gu Umin, the end of the north-east side and towards Tuyintaung Stupa and the south end of the monument area. (Map2.4.).

The following boundary lines are demarcated as the Protection Zone with a total area of 19,868 acres.

The Protection Zone is demarcated within the area defined by a line from Tuyintaung Stupa toward Kyaukgu Umin and the south end of the Monument area and back from Tantkyitaung Stupa towards Kyaukgu Umin, the end of the north-east side and towards Tuyintaung Stupa and the south end of the Monument area.

1. The south boundary of the Protection Zone runs along the Naletaw Chaung (dry creek) to meet the Nyaung Oo Kyaukpadueng tarred road
2. The eastern boundary of the Protection Zone runs along the Nuaung Oo to Kyaukpadueng tarred road from the above-mentioned road to the north-east end of the boundary post situated on the river ban, east of Kyaukgu Umin
3. The west and east boundary of the Protection Zone runs along the river bank between Twinywa Village and Kyaukgu Umin.
Map 2.4. Demarcation of the Preservation Zone
Source: Township Law and Order Restoration Council

Rules and Regulations for Cultural Heritage Zone

**Rules and regulations for the archaeological zone are as follows:**

(1) Not allowing to destroy and excavate earth surface
(2) Not allowing to make plastering and white washing to heritage buildings.
(3) Not allowing to cut down trees within heritage zone
(4) In archaeological zone, the distance between new public buildings and heritage buildings must have 90 feet.

**Rules and regulations for the monumental zone are as follows:**

(1) Not to extend quarters, villages within monumental zone
(2) Not allowing to build new buildings around the monumental zone except from villages and quarters
(3) Not allowing to cultivate 30 feet distance from heritage buildings
(4) New buildings are no more than 20 feet height within residential area

Rules and regulations for the preservation zone are as follows:
(1) Not allowing to build new buildings outside of villages and towns.

Building Control Plans for Cultural Heritage Zone
Building control plans for the archaeological zone are as follows:
(1) The height of buildings must be less than 30 feet.
(2) Construction of permanent buildings outside the settlement must have permission from the BCHPRC (Bagan Cultural Heritage Preservation and Restoration Council).
(3) Traditional styles and designs are desirable.
(4) The colour of the building should harmonize with the surrounding environment.

Building control plans for the monumental zone are as follows:
(1) Within the monument lot, construction of buildings is prohibited.
(2) The building height must be less than 30 feet.
(3) Construction of permanent buildings outside the settlements is prohibited except where they are essential in the public interest and for conservation activities.
(4) Traditional design is desirable.
(5) The colour of the buildings should harmonize with the surrounding environment, especially in the case of commercial/business premises, such as hotels, guest houses and souvenir shops.

Building control plans for the preservation zone are as follows:
(1) The height of the buildings must be less than 30 feet.
(2) Construction of permanent buildings outside the settlement must be authorized by the BHPRC (Bagan Cultural Heritage Preservation and Restoration Council).
(3) Traditional styles and designs are desirable.
(4) The colour of roof should harmonize with the surrounding environment.

8. Relationship Between Cultural Heritage Buildings And New Public Buildings From Visual Aspects
Environment of Bagan Archaeological Museum
The site and setting of Bagan archaeological museum is located within the monumental zone of old Bagan area and inside city wall. The height of the museum is about 135 feet and 360 feet in length. The height of the museum is more than the height demarcated by the authority. This museum lies on the east of Gawdawpalin temple and north of ancient Bagan monuments. Valuable cultural heritage buildings such as Gawdawpalin temple, Mimalaungkyaung temple, Pahtothamya temple, Ngakwyenadaung stupa, Thatbyinnyu temple, Minyeingon, Nwapyagu temple, Myinpyagu temple etc. are located near the environment of archaeological museum. Site and setting of this museum is influencing not only its surrounding but also the environment of Bagan area. The location of the museum can be seen in Map 4.1.
Before Bagan archaeological museum was built on the vicinity of Gawdawpalin temple, it can be appreciated the essence of Gawdawpalin temple without any visual obstruction and influencing on its vicinity. At that time, Gawdawpalin temple and other ancient monuments were perfect harmony with the environment of whole Bagan area. We could perceive the value of Gawdawpalin temple and its vicinity before the construction of new building, Bagan Archaeological museum. (Plate 4.1.)

Plate 4.1. The Vicinity of Gawdawpalin Temple in Past Time
After Bagan Archaeological museum has been built on the vicinity of Gawdawpalin temple, this museum is dominant on the environment of Bagan monuments due to its massive form and height. At present, looking at the vicinity of Gawdawpalin temple from any point of view, this museum is influencing and obstructing the environment of whole Bagan area. We can perceive the value of Gawdawpalin temple and its vicinity after the construction of new public building, archaeological museum. The vicinity of Gawdawpalin Temple can be seen in plate 4.2

Plate 4.2. The Vicinity of Gawdawpalin Temple in Present Time

The form composition of Gawdawpalin temple can’t be seen by looking from Lawkananda Stupa. We can only perceive the view of the uppermost part of the temple because the whole form of the museum which is located in front of the temple is blocking the view of the temple. The museum is, therefore, influencing on the Gawdawpalin temple and its vicinity according to its height, massive form and, site and setting. The view of the museum can be seen in Map 4.2. and Plate 4.3.

Map 4.2. The View of the Vicinity of Bagan Archaeological Museum from Lawkananda Stupa
The view of Gawdawpalin temple and its vicinity can be perceived by looking from Dhammayarzaka Stupa. The height and form of the museum is influencing on the environment of Gawdawpalin temple and Thatbyinnyu temple. The view of Bagan archaeological museum can be seen in Map 4.3. and Plate 4.4.
Plate 4.4. View from Dhammayarzaka Stupa

Looking at the view of Gawdawpalin temple and its vicinity from any point of view such as Dhammayangyi temple, Mingalarzedi Stupa and Shwegugyi temple, the museum is also influencing and obstruction due to its height, massive form and location. The views can be seen in Map 4.4. and Map 4.5., Plate 4.5., Plate 4.6. and Plate 4.7.

Map 4.4. The View of the Vicinity of Bagan Archaeological Museum from Dhammayangyi Temple
Plate 4.5. View from Dhammayangyi Temple

Map 4.5. The View of the Vicinity of Bagan Archaeological Museum from Shwegugyi Temple and Mingalarzedi Stupa
By analyzing Bagan Archaeological museum and its vicinity from visual aspects, the whole area of ancient Bagan setting can be mainly seen that the whole massive form and height of the museum is influencing not only general field of view but also detailed field of view. Looking from various points of views, it is influencing almost the whole area of Bagan which includes the valuable ancient heritage buildings. The influencing vicinity by archaeological museum can be seen in Map 4.6.

Arriving to the valuable ancient Bagan monuments, when looking at the environment of the whole Bagan area to feel the essence of Bagan monuments, the massive form and height of the museum appears in the views. The views of the ancient Bagan monuments can be astray due to the
influencing of the form and height of the museum on the landscape of whole Bagan area. The massive form and height of the museum is disturbing the view of onlookers.

![Map 4.6. The Influencing Vicinity by Bagan Archaeological Museum](image)

- The Influencing Vicinity to Mingalarzedi Stupa and Shwegugyi Temple
- The Influencing Vicinity to Dhammayangyi temple
- The Influencing Vicinity to Dhammayarzaka Stupa
- The Influencing Vicinity to Lawkananda Stupa

Map 4.6. The Influencing Vicinity by Bagan Archaeological Museum

**Environment of Nan Myint Viewing Tower**

The site and setting of Nan Myint viewing tower is located in the monumental zone of old Bagan area. This site is located near the groups of Azagawna temples and Winido Temple. The site and setting of the viewing tower is surrounded by ancient monuments. The height of the building is 198 feet. The height of the tower is more than the height demarcated by the authority. This viewing tower is as high as the highest and most famous temples such as Gawdawpalin temple, Thatbyinnyu temple, Sulamani temple etc. The height of the tower is influencing on not only its environment but also the whole area of Bagan. The main objective of this viewing tower is to look at the overall view of whole Bagan area from the open viewing level. The location of Nan Mying Viewing Tower can be seen in Map 4.7.
Before the construction of Nan Myint viewing tower on the environment of Bagan, visitors could worship and perceive the essence of Bagan monument’s upward direction. The environment of whole Bagan area can be appreciated without any visual obstruction and influencing on the cultural heritage buildings. At that time, the cultural heritage buildings in Bagan are in perfect harmony with each other on the environment of whole Bagan area.

We can perceive the value of Bagan monuments and its vicinity before the construction of new public building, Nan Myint viewing tower. (Plate 4.8.)

Plate 4.8. The Vicinity of Winido Groups and Azagawna Groups in Past Time
After Nan Myint viewing tower has been built on the vicinity of groups of Azagawna temple, this viewing tower is dominant on the environment of Bagan monuments due to its form and height.

At present, this viewing tower is influencing on the whole area of Bagan. Visitors can appreciate the essence of the overall view of whole Bagan area downward direction because of the construction of Nan Myint viewing tower within the area of Bagan.

We can perceive the value of Bagan monuments and its vicinity after the construction of new public building, Nan Myint viewing tower. (Plate 4.9.)

![Plate 4.9. The Vicinity of Winidow Groups and Azagawna Groups in Present Time](image)

The environment of Pyatthatgyi temple and its vicinity can be perceived by looking at the view from Dhammayarzaka Stupa. It can be seen in Map 4.8.

This viewing tower which can be compared in relation to their height and massiveness such as Gawdawpalin temple and Thatbyinnyu temple can be seen from visual aspect.

The height of this tower can be seen that it is influencing on the environment of Pyatthatgyi temple and its vicinity. It can be seen in Plate 4.10.

![Map 4.8. The View of the Vicinity of Viewing Tower from Dhammayarzika Stupa](image)
Looking at the view of Nan Myint viewing tower from Nyaung Oo - Ngathayauk main road, the height of the tower is also influencing on the environment of the whole area of Bagan. We can perceive the environment of this tower from visual aspects. The view of the tower can be seen in Map 4.9. and Plate 4.11.

Map 4.9. The View of the Vicinity of Viewing Tower from Nyaung Oo to Ngathayauk Main Road
Looking at the view of the tower from Shwesandaw Stupa, the height of the tower is also influencing on the environment of the whole area of Bagan. We can perceive the environment of this tower from visual aspects. (Map 4.10.)
Plate 4.12. View from Shwesandaw Stupa

Looking at the view of the environment of the whole Bagan area from any point of view such as Tayokepyae temple, Nyaung Oo to Kyaukpadaung main road, this tower is also influencing and obstructing due to its height and massive form. The influence of Nan Myint viewing tower on its vicinity can be perceived from visual aspects. The view of the tower can be seen in Map 4.11., Plate 4.13. and Plate 4.14.

Map 4.11. The View of the Vicinity of Viewing Tower from Nyaung Oo to Kyaukpadaung Main Road

Plate 4.13. View from Tayokepyae Temple
Plate 4.14. View from Nyaung Oo to Kyaukpadaung Main road

By analyzing Nan Myint viewing tower and its vicinity from visual aspects, the whole area of ancient Bagan setting can be mainly seen that the whole massive form and height of the tower is influencing not only general field of view but also detailed field of view. Looking from various points of views, the tower is influencing almost the whole area of Bagan which includes the valuable ancient cultural heritage buildings. The influencing vicinity by the viewing tower can be seen in Map 4.12.

Arriving to the valuable ancient Bagan monuments, when looking at the environment of the whole Bagan area to feel the essence of Bagan monuments, the massive form and height of the tower appears in the view. The views of the ancient Bagan monuments can be astray due to the influencing of the form and height of the tower on the landscape of whole Bagan area. The form and height of the tower is disturbing the view of onlookers.

The influencing vicinity to Tayokepyae Temple and
○ Nyaung Oo - Kyaukpadaung main road
○ The influencing vicinity to Nyaung Oo - Ngathayauk main road
Environment of the Whole Area of Bagan

When the environment of the whole area of Bagan is analysed, new public buildings are built within the demarcated areas in which the authority does not allow building new public buildings. Some of new public buildings are located within the environment of ancient Bagan monuments. The locations of these new public buildings can be seen in Map 4.13.

For example, new public buildings (hotels) are located in the south - east of old Bagan area and near the environment of Taungbi village. And, hotels are located in the west of the environment of Mingalarzedi Stupa and in the environment of the north and east of New Bagan. The site and setting of these new buildings is located near the environment of ancient cultural heritage buildings.

Although the landscape of Bagan is not influenced from these new public buildings due to the height and form of these new public buildings, it is influenced due to their location. (Plate 4.15., Plate 4.16., Plate 4.17., Plate 4.18., Plate 4.19. and Plate 4.20. If new public buildings are continuously built within these demarcated areas, most of these new public buildings will influence on the landscape of Bagan.
Plate 4.15. Group of Hotels in the West of the Environment of Mingalarzedi Stupa
Plate 4.16. Myanmar Treasure Hotel Near the Groups of Aleya Temple and Windo Temple

Plate 4.17. New Buildings near the Environment of Ancient Cultural Heritage Buildings
Plate 4.18. Site and Setting of Hotel among the Groups of Cultural Heritage Buildings in the North of New Bagan

Plate 4.19. New Buildings near the East of New Bagan
Plate 4.20. Site and Setting of Hotel near Environment of Tamani Stupa
9. Recommendations And Conclusions

Recommendations

By summarizing and analyzing from literature review, data analysis and questionnaire survey to appear new public buildings within the area of Bagan systematically and harmoniously, the followings aspects are suggested to integrate with cultural heritage buildings in the area of Bagan setting.

From visual aspects, new public buildings appear on the landscape of Bagan without any pay attention to the essence of cultural heritage buildings. Due to the construction of new public buildings within the area of Bagan monuments, the skyline of Bagan can be found by comparing with before and after. If the constructing of new public buildings is not strictly restricted, new public buildings will appear within the area of Bagan in future.

The monumental zone which includes the most significant monuments can attract tourists with their architectural and archaeological values. Therefore, this zone may be developed with tourist facilities such as new public buildings e.g. Hotels etc. without any attention not only on the value of cultural heritage buildings but also on the essence of the landscape of Bagan in future.

All developments within this zone should be strictly prohibited. The following areas should be restricted not to appear new public buildings within the monumental zone, especially,

- Restricted areas, the environment of Dhammayangyi temple,
- Restricted areas, the environment of Sulamani temple,
- Restricted areas, the environment of Dhammayarzika stupa and
- Restricted areas, the environment from Lawkananda stupa to Shwezigon stupa should be strictly restricted.

In the monumental zone, new public buildings which can influence and obstruct on the almost all of the area of Bagan like Bagan archaeological museum should not appear within these areas in future.

In the archaeological zone, new developments such as commercial facilities must be severely restricted. Developments that are harmful on the essence of Bagan are intended purely to bring public facilities must be severely restricted.

Nowadays, Nan Myint viewing tower has been built within the area of Bagan. In future, it is very important not to appear new public buildings which can influence and obstruct on the landscape of Bagan due to its height, form and location.

In the preservation zone, all developments should be strictly restricted because the local ambient of Bagan are needed to be controlled not to appear new public buildings which are influencing with their height, form and location. These new public buildings should be built within the settlements of towns and villages.

In addition, this zone is needed to be controlled the height of new public buildings even the construction of the new buildings within the settlement areas. Nowadays, new public buildings appear within the landscape of Bagan. Some of new public buildings are built among ancient Bagan monuments.

The following areas should be strictly and systematically restricted not to disturb and destroy the landscape of Bagan due to the construction of new public buildings. These areas are

- The vicinity of Old Bagan area which is located near Taungbi village
- The vicinity of the west of Mingalarzedi stupa
• The vicinity of the north and east of New Bagan and
• The vicinity of Windo and Azagawna temples.

Therefore, the development of new public buildings should be strictly restricted within the monumental zone, the archaeological zone and the preservation zone except within the settlements of towns and villages. In addition, the height and form of the new public buildings must not influence and obstruct on the environment of ancient Bagan setting.

Not only regional people but also national people need to conserve the essence of the landscape of ancient Bagan in order to protect the obstructing and influencing on the whole area of Bagan from visual aspects due to constructing of new public buildings.

Conclusions

Over viewing the architectural conservation of cultural heritage buildings in Bagan, systematic approaches in literature review for assessment of cultural heritage buildings and cultural heritage zones, visual aspects from case studies of selected new public buildings in Bagan, The main factor can be viewed as follows.

• How to integrate with cultural heritage buildings and new public buildings in Bagan from visual aspects in order not to lose the landscape of Bagan due to constructing of new public buildings which are influencing on the whole area of Bagan according to their massive form, height and location.

In considering how to integrate with cultural heritage buildings and new public buildings in Bagan from visual aspects in order not to lose the landscape of Bagan due to constructing of new public buildings which are influencing on the whole area of Bagan according to their massive form, height and location, the construction of new public buildings in the area of Bagan can be perceived that the cultural heritage buildings are integrated each other in the skyline of Bagan. After the construction of new public buildings in the area of Bagan, these buildings are influencing in the skyline of Bagan due to their height and form and location.

Therefore, the demarcation of zones such as the monumental zone, the archaeological zone and the preservation zone is considered carefully not to disturb the skyline of Bagan in future.

In addition, all developments such as the construction of new public buildings within these zones are strictly restricted. Especially, the areas of Dhammayangyi temple, Sulamani temple, Dhammayarzika stupa and the areas from Lawkananda stupa to Shwezigon stupa, the vicinity of Old Bagan area which is located near Taungbi village, the vicinity of the west of Mingalarzedi stupa, the vicinity of the north and east of New Bagan and the vicinity of Windo and Azagawna temples strictly prohibited the construction of new buildings.

From above consideration, the whole area of Bagan will harmoniously beautify by integrating with new public buildings systematically in future if new public buildings

• Respect to the cultural heritage buildings,
• Are designed not to impact the value of architectural objects of Bagan monuments,
• Are carefully attentive to the landscape of Bagan,
• Are not influencing on the cultural heritage buildings in Bagan according to their height, form and, location.
In addition, not only regional people but also national people need to conserve and protect the landscape of Bagan not to lose the essence of Bagan due to the construction of new public buildings.

Therefore, this thesis hopes to appear new public buildings which harmoniously and systematically merged with the whole Bagan setting from architectural aspects and visual aspects in future.

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