

Cultural Heritage Monuments in Myanmar Hit by Cyclone Nargis

Cyclone Nargis was a powerful tropical cyclone that caused the most devastating natural disaster in the recorded history of Myanmar. The cyclone slammed the southern part of the country in May 2008, leaving massive destruction in its trail and an estimated 146,000 deaths, 2.4 million people destitute, with several thousands more missing. There are fears that about a million people might have perished or would die from the calamity, and damage was estimated at more than US\$10 billion. Nyunt Han, former Director-General of Myanmar Department of Archaeology, visited the areas affected by the cyclone a month after the tragic event, and reports on a preliminary and limited survey that he carried out on the damage caused to historic monuments as a result of the catastrophe.



Fig 1: Map showing the route of Nargis cyclone.

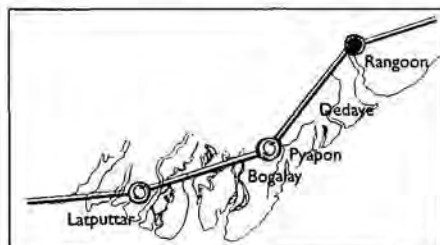


Fig 2: Map showing regions affected by the calamity.

A powerful cyclone, Nargis, moved from the Andaman Sea, gradually intensified and entered Myanmar's coastal regions on May 2, destroying many of the country's coastal villages and towns [Figure 1]. After sweeping through the Ayeyarwady area, where the most devastated parts include Latputtar, Bogalay, Pyapon and Dedaye, Cyclone Nargis passed the Yangon Division, and damaged many buildings and cultural heritage monuments [Figure 2].

According to Myanmar government sources, the cyclone killed about 22,460 people, with an estimated 40,000 missing, and destroyed a large number of houses in many villages as well as towns. In some villages of Latputtar, houses in the entire village were swept away; with only bamboo structures and thatches left behind.

Neither religious buildings nor cultural heritage monuments were spared in the destruction. A survey shows that most of



Figure 3: The umbrella of Maung-ti pagoda was broken, and ancient plasters on the bell-shaped dome were torn off. Maung-ti pagoda was built in lower Myanmar by King Anawrahtar of the Bagan kingdom in the 11th century AD. It was of a peculiar architecture featuring a Bagan-type pagoda built on five receding terraces made of laterite stone blocks. (photo by Nyunt Han).



Figure 4: The toppled umbrellas and top pinnacles of many "ayan-pagodas" (surrounding stupas). These pinnacles add to the magnificent view of the Shwe Dagon Pagoda in Bahan. (photo courtesy of the Shwe Dagon Pagoda Trustee Committee).

the cultural heritage monuments damaged are located in the various townships of the Yangon Division, such as the following: Kyauk-tan, Than-hlyin, Twantay, Bahan, North Okkalapa, Thin-gan-gyun, Pazundaung, Mayangon and Mingalardon. The damaged cultural heritage monuments include pagodas (a form of stupas known as Ceti in Myanmar), Buddha image shrine halls, pavilions, preaching halls, roof-covered stairways (saung-tan), entrance pavilions (moke-u saung), enclosure walls, and excavated structures at ancient sites.

Damage was also caused to the umbrellas or chattravali of many ancient pagodas, namely Maung-ti pagoda in Twantay [Figure 3]; Kyaik-khauk pagoda in Thanhlyin; Kyaik-kasan pagoda in Thingangyun; and many small stupas (ayan cetis) surrounding the Shwe Dagon pagoda in Bahan [Figure 4].

The pinnacles of stupas of the Kyaik-khauk pagoda [Figure 5]; Shwe Santaw pagoda in Twantay [Figure 6] and Shwe Dagon pagoda in Bahan were toppled as a consequence of the disaster. Many multiple roofs on top of pavilions such as those at Kyaik Hmaw Wun pagoda [Figure 7] and Shwe Dagon pagoda [Figure 8] collapsed. The multi-tier roofs and decorative wood carvings, which add to the grandeur of



Figure 5: Kyaik-khauk Pagoda, which was built on a hillock in Than-hlyin, provide visitors a view of the surrounding scenery. Many umbrellas and pinnacles of small stupas broke and fell (photo courtesy of the Kyaik-khauk Pagoda Trustee Committee).



Figure 6: The Shwe Santaw Pagoda in Twantay, within which the hair relic of Buddha was enshrined, was built in the 11th century AD. The umbrellas and pinnacles of small stupas crashed into pieces (photo courtesy of the Pagoda Trustee Committee).



Figure 7: Kyaik Hmaw Wun Pagoda built on a rocky island in Kyauk-tan, is accessible only by boat, and the pagoda was crowded with pilgrims and visitors every day. The "prasat" (pavilions) on the platform of Kyaik Hmaw Wun Pagoda were also damaged by the cyclone (photos courtesy of the Pagoda Trustee Committee).



Figure 8: The pinnacles of small surrounding stupas which add to the grandeur of the Shwe Dagon pagoda were in ruins (photo courtesy of the Shwe Dagon Pagoda Trustee Committee).



Figure 9(a): Damaged pavilion at Kyaik Hmaw Wun pagoda.

Decorative carvings on the pavilions of many pagodas, some depicting the "Jataka" (stories of Buddha's life), and others with carvings of traditional floral designs of 15th-18th centuries AD, fell and broke into pieces (photo courtesy of the Pagoda Trustee Committee).



Figure 9(b): The view of a damaged entrance pavilion at Kyaik-khauk pagoda (photo courtesy of the Pagoda Trustee Committee).

the shrine halls in Kyaik Hmaw Wun pagoda [Figure 9 (a)], Kyaik-khauk pagoda [Figure 9 (b)], and Shwe Dagon pagoda [Figure 10] were damaged and scattered on the platform.

The Kyaik Hmaw Wun pagoda is a very well known monument to pilgrims and foreign visitors. It was built on a rocky island, and the only accessible way to the pagoda is by crossing on a boat. Constructed in the 15th century AD, it is an attractive pilgrimage site which draws a large number of visitors from near or far, every day. There is a belief in Myanmar that if you offer worship at this pagoda once, you will have the fortune of living long enough to visit it a second time.

The complete collapse of the northern roof-covered stairway at the Kyaik-khauk pagoda in Than-hlyin [Figure 11] illustrates the extent of the destruction. The pagoda was built in the 15th century AD as evidenced by 15th-century AD bronze Buddha images found inside the relic chamber of the pagoda. At the site are Buddha image shrine halls decorated with wooden carvings on the platform of the pagoda. As the monument was built on a

hillock of about 150 metres high, pilgrims and visitors can enjoy views of the scenery of the other ancient monuments which are located around this pagoda.

Similarly, shrine halls such as the one in Maung-ti pagoda [Figure 12] and Aung Zay Yone pagoda in Kyauk-tan [Figure 13] were extensively damaged, and now stand as tragically sorrowful sights.



Figure 10: Beautiful wooden carvings which decorated the shrine halls lie broken on the platform of the Shwe Dagon Pagoda (photo courtesy of the Shwe Dagon Pagoda Trustee Committee).



Figure 11: The scene of a wooden shrine totally blown away from the brick platform near Maung-ti pagoda in Twantay (photo by Nyunt Han).



Figure 12: A large Buddha image shrine hall at Aung Zay Yone pagoda, in Kyauk-tan, which was severely damaged (photo by Nyunt Han).



Figure 13: At Kyaik-khauk pagoda in Than-hlyin, the roof-covered stairway on the northern side collapsed to the ground. Many roofs of corrugated sheets were ripped off (photo courtesy of the Pagoda Trustee Committee).



Figure 14(a): The roofs of Ngar-htat-gyi pagoda (photo courtesy of the Pagoda Trustee Committee).



Figure 14(b): The roofs of Chauk-htat-gyi pagoda (photo courtesy of the Pagoda Trustee Committee).

Figure 15(a): In some places, such as at the Kyaik-ka-san pagoda, the shrine hall buildings were damaged by large trees that had fallen (photo courtesy of Pagoda Trustee Committee).

The roofs of the main shrine hall of the following monuments were ripped off by the Nargis cyclone: the Ngar-htat-gyi pagoda [Figure 14 (a)], Chauk-htat-gyi pagoda [Figure 14 (b)] and Taing-tayar old monastery [Figure 14 (c)].

At the Kyaik-ka-san pagoda [Figure 15 (a)] in Thin gangyun as well as the Melamu pagoda in North Okkalapa [Figure 15 (b)], huge trees fell onto nearby shrine halls, causing grave damage.



Figure 14(c): The roofs of the old Taing tayar wooden monastery of about 150 years old were blown away by the cyclone (photo courtesy of the Pagoda Trustee Committee).



Figure 15(b): A ruined shrine hall at the Melamu pagoda in North Okkalapa (photo courtesy of the Pagoda Trustee Committee).



Apart from the pagodas and shrines, ancient kilns which were excavated in 1998 by the Department of Archaeology were also severely ruined [Figure 16].

Significant ancient monuments

Among the ancient pagodas hit by the cyclone, the Shwe Dagon pagoda is the oldest. It is believed to have been built during the lifetime of Gautama Buddha, and later reconstructed by a number of kings. The present Shwe Dagon pagoda was built during the time of Queen Shin Sawpu in the 15th century AD. On the platform of the pagoda, there are many ancient shrine halls which were beautifully decorated with wooden carvings that were destroyed, along with the multi-tier roofed pavilions.

Another historically significant pagoda damaged was Maung-ti pagoda in Twantay, lower Myanmar. It was a Bagan-type pagoda built by King Anawrahtar of the Bagan kingdom in the 11th century AD. Many large terracotta votive tablets (45 cm in height x 30 cm in breadth) [Figure 17], bearing Bagan-type Buddha images, were found near Maung-ti pagoda during excavation, and are now kept in a shed nearby. The force of the cyclone tore off ancient plasters covering the bell-shaped dome of the stupa (see Figure 3).

The Shwe San Taw pagoda, a significant pagoda in Twantay, was also built by King Anawrahtar in the 11th century AD. It is believed that the Buddha's hair relic was enshrined in this pagoda. Ancient kilns in Twantay were not spared from destruction. Those in Phayagyi village and near the Kangyigon village were glazed pottery kilns of the 15th century AD. The Department of Archaeology excavated the sites in 1998, and the exposed kilns were housed under wooden sheds. The cyclone fell all the wooden sheds along with the brick walls of the ancient kilns.

Post-cyclone restoration

According to the 'Ancient Monuments Preservation Act' of Myanmar, all religious or secular monuments which were built before 1885 are



Figure 16: The ancient kilns in Twantay which produced glazed ceramics are dated to the 15th century AD. After archaeological excavations, the Department of Archaeology built wooden sheds to house these ancient kilns. These wooden sheds, together with the brick walls of the ancient kilns, had collapsed (photo by Nyunt Han).

defined by law as “ancient monuments”. The ancient pagodas, which are places of worship, are allowed by the regional authority (township level) to form Pagoda Trustee Committees in ensuring the preservation and maintenance of each pagoda. The Committee, elected by the people who live in the locality, can raise funds and accept cash donations from the public. If there is no Pagoda Trustee Committee to maintain an ancient monument, the Department of Archaeology under the Ministry of Culture will use the government budget to undertake necessary conservation measures.

In reponse to the damage of many ancient monuments in Yangon, the Ministry of Culture instructed the Department of Archaeology, National Museum and Library, to assess and report on the damages. Accordingly, the Department sent teams of conservation engineers and archaeological officers to the damaged ancient sites and monuments to conduct surveys.



Figure 17: Large terracotta votive tablets (measuring 45cm in height by 30 cm in breadth), bearing Bagan-type Buddha images, were found during excavation. Since these votive tablets are important archaeological objects of the Bagan period, they are kept in a shed near Maung-ti pagoda (photo by Nyunt Han).

Currently, the Department of Archaeology is implementing urgent measures of conservation, with the assistance of a government budget, at some important ancient monuments, e.g. Maung-ti pagoda in Twantay. Donors are also offering cash donations to the department to carry out restoration work, and local inhabitants are participating voluntarily in clearing debris at the affected sites.

In the areas where a Pagoda Trustee Committee exists, restoration and preservation of damaged ancient pavilions and pagodas are undertaken with donation funds. However, while a few Pagoda Trustee Committees have sufficient funds, many other Committees encounter difficulties in carrying out restoration work due to a lack of funds. The Committees are thus seeking individual donors or organisations to support them.

Acknowledgement

I would like to thank Director General U San Win, Deputy Director Generals U Kyaw Oo Lwin and Daw Sanda Khin, Director U Aung Naing Myint, Deputy Director U Min Wai, Assistant Director Daw Ummar Aung, Research Officers U Myint Aung, Daw Thaung Thaung Nu, U Myo Oo of the Department of Archaeology, National Museum and Library under the Ministry of Culture, for their assistance during my trip to observe the damages of ancient monuments caused by cyclone Nargis in Yangon. Without their assistance my trip would not have been possible. I also want to thank the Pagoda Trustee Committees for providing me the photo images.

Nyunt Han is currently a Senior researcher at SEAMEO-SPAFA in Bangkok, Thailand. He received his Master's Degree in Archaeology from the University of Pennsylvania, Philadelphia, USA, and was the former Director-General of the Department of Archaeology in Myanmar. He can be contacted at uhan@seameo-spafa.org