

BUILDING WOODBLOCKS PRESERVATION SYSTEM BASED ON THE COMMUNITY

(Studying the case of the Woodblocks of Vinh Nghiem pagoda and Bo Da pagoda, Bac Giang province, Vietnam)

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1. Overview of the woodblocks of Vinh Nghiem pagoda and Bo Da pagoda

1.1. Vinh Nghiem Pagoda, Bac Giang province, is now located in Tri Yen Commune, Yen Dung District, built in the 13th century, the largest Buddhist center in the Tran Dynasty, where Three ancestors of Truc Lam Tam, Tran Nhan Tong, Phap Loa, Huyen Quang used to be head-monks and open a sermon school. Vinh Nghiem Pagoda is considered as a museum of Mahayana Buddhist culture that is quite typical in northern Vietnam.

The woodblock storage is now a documentary heritage carved at different times with a total of 3,050 separate blocks with nine books carved on Diospyros decandra such as: Monk nun sutras (Tu Duc 34th – 1881): 1883), Sutras Rules (Tu Duc 34th – 1881), Dai Phuong quang Phat Hoa Nghiem Kinh (Tu Duc 37th – 1884), Kinh tin luc (Tu Duc 39th – 1886), Yen Tu nhat trinh (Bao Dai 7th – 1932), Mahapanya (Bao Dai 10th - 1935), Sa Di Ni Sutras(Tu Duc 34th - 1881), Amitabha Sutras, Namo Avalokiteshvara Sutras, West Beauty story (of which there are several royal ordinance woodblocks, textiles and lunar calendar for reading good and bad times in the year), which were made in many different periods between the 17th century and the beginning of the 20th century, but most of them were copied and carved in the late 19th century and the early 20th century. In terms of form, of 3,050 separate blocks, there is a few of inscribed wooden boards with the same sizes of boards carving royal ordinances, textiles served for funeral rites of the Buddhist followers, and almost are woodblocks of 9 books.

1.2. Bo Da Pagoda belongs to Tien Son commune, Viet Yen district, Bac Giang province. The pagoda name is Quan Am Pagoda, also known as Tu An Pagoda. The current population of Bo Da Pagoda is as follows: The ancient pagoda named Bo Da Son (abbreviated as Bo Da Pagoda, Bo Pagoda, also named Quan Am pagoda), the main pagodas, Tu An Pagoda, Am Tam Duc Pagoda. In addition, there is also a shrine of General King Thach Tuong, who helped the 16th Hung King oppose invaders.

Bo Da Pagoda is the largest Buddhist center of Vietnam under the Lam Te meditation faction, created by the famous Chinese Zen master named Lam Te in the eighth century. The Lam Te meditation faction was propagated to Vietnam divided into two stages, the first stage is in the early Tran dynasty, but at this stage, no influence was visible, until the 17th century when Chinese Zen masters arrived at Vietnam, this faction was widely spread both in Cochinchina and Tonkin.

2. Woodblocks preservation stat

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The article inherits the research results of the above topic.

The woodblocks are made of wooden materials, put under the weather, and the climate that is hot, humid and dry in Vietnam, leading to the possibility of regular swelling. It can be cracked, warped, got termites or wood eaters, or decayed over time. Therefore, the protection and preservation of wood products is not simple works. We shall evaluate the preservation of woodblocks through the status quo of storage space and the condition of woodblocks.¹².

- On woodblocks preservation space:

Before October 2017, the woodblocks of Vinh Nghiem pagoda had no preservation space as well as introducing a full and appropriate value³.

The material used for carvings is *Diospyros decandra* Lour and most of them are exploited at garden of the pagoda. This type of wood is often used to make wood carvings because the wood is soft, plane, tough, easy for carving, less warping and hard to crack or split. The size of woodblocks is not even according to each book and sutra. The woodblock of the largest size is the type of official messages or royal ordinances longer than 100cm, 40cm to 50cm wide but usually 33cm x 23cm x 2.5cm.

Previously, the head-monks of Vinh Nghiem pagoda made the shelves with column legs (4 legs to 6, 8 column legs depending on big or small shelves) put on the rock blocks to make round feet of 25 cm to 45 cm high. The surface of the stone has a floating section to put pillars in the middle, pierce the wide and deep gap around, about 3 cm - 5 cm, filled with oil (vegetable oil) to prevent ants and termites. The woodblocks are sorted on shelves according to each book, set, sets of sutras. The pagodas call these shelves the sutra organs put absolutely separate, not contact with anything around. Shelves of woodblocks are always placed away from wall a minimum distance of 25 - 30 cm. Floor, wall, bracket, window of shelves, etc. do not use wooden planks but make the square timber put in horizontal / diagonal or vertical pattern to ensure a good ventilation. Inside the shelves, the planks are arranged in a horizontal pattern (slightly tilted, so that there are spaces between the planks, avoiding the two-sided carved contact with each other). Each block round is a separate round, not overlapping woodblocks.

Previously, the sutra organs were placed in the three securities, near the window, airy, without direct sunlight, so it can restrict the impact of climate, weather to the woodblocks. In addition, the buildings are built in the traditional way: thick tile roof, the pagoda ground is made of mixed materials, including rice gravel, powdered lime and rammed and compacted carefully, so it can absorb moisture well when it is slightly hot and highly humid. Tile roof is thick with the evaporation of clay soil when the weather is dry etc. making the sub-climate of the woodblock shelves is always dry, airy, and light enough.

¹In this report, we would like to use the results of our colleagues at the Forest Science Institute of Vietnam.

²Ha Tat Ngan and colleagues (2015), Architectural space orientation for preserving and promoting the values of Vinh Nghiem pagoda and Bo Da pagoda, in the Scientific Seminar on the value of the woodblock heritage of Vinh Nghiem pagoda and Bo Da pagoda associated with sustainable development.

³2016 and 2017, the District People's Committee has built a warehouse and a display of traditional design, by socialization sources, about 20 billion, is not yet in use.

The woodblocks are stored in two places: Upper Temple of Tam Bao and two corridors in the right side of the pagoda, in the West. In the Upper Temple, there are 4 cabinets containing woodblocks, the size of each cabinet is 1.32m x 0.44 x 1.75. The architectural form takes on traditional elements. In the corridor there are 2 cabinets of woodblocks, each with size of 3.62 x 1.13 x 2.705. The cabinet is made mainly of wood bars to create a ventilation of the woodblocks. Similar to the way cabinet architecture in the Upper Temple, but cabinets of woodblocks in the Lobby of the corridor has a larger size, including 2 cabinets. The cabinet is 1.12 m high and 1.95 m long and 3.6 m long.

Thus, woodblocks preserving space in Vinh Nghiem pagoda is divided into 2 different positions. In Upper Temple of the Three Securities, there is a large space (105.17m² wide (12.1x8.7, 5.8m high), while the corridor, inside house is only 2.45m high (3 corridors with 8,1m long, (reach up to the highest girder) 4m high.

At Bo Da pagoda⁴: the woodblock storage contains 3 compartments, in the horizontally compartment with 5 ones. The warehouse is made of ironwood, with three doors often closed, on the door there are open air cells. In front of the front porch, there are two panels covering two side compartments with ironwood, half on the panel there are airy cells to prevent the effect of rain, limit sunlight shining on the woodblocks storage.

The woodblocks are listed on three-storey 10 wooden shelves, 1.34 m high, 0.35 m wide and 1.8 m long. Each storey holds a series of woodblocks, in which the woodblocks are sorted lining on with an angle of about 80-85⁰. The wooden bracket is listed on 4 bricks with 9 cm thick, isolated from the ground, protecting the feet from moisture.

The environmental parameters in the archives are as follows: average temperature is 20-27⁰C, average humidity is 84%, and average light intensity is 20 lux.

In addition, the woodblocks of Vinh Nghiem and Bo Da pagodas are currently sorted on shelves, mostly close and overlapping. This not only makes it difficult to inventory, inspect and clean the materials, but also facilitates the development and spread of organisms and microorganisms destroying wood. In addition, the organization, arrangement of woodblocks are not in the right way causing chipping on the texture of the woodblock. The text on the woodblocks is carved with trapezoidal profile (large feet, thin strokes), so when the texture of a woodblock is collided with another woodblock or other hard material, it is easy to chip, especially when transporting the woodblocks during printing process and/or relocation of woodblocks.

- About the current status of the woodblocks

During the study, scientists randomly selected about 15% of the woodblocks in each pagoda to check the status quo. Specifically, there were 374 Woodblocks at Bo Da pagoda and 599 Woodblocks at Vinh Nghiem Pagoda strictly checked the defect level on the sample. Based on this, the results are shown as follows:⁵

Curls in the groove and on the texture: Of the 973 woodblocks evaluated, only 29 woodblocks are not bent, while 944 woodblocks are curved at varying degrees.

⁴Nguyen Thi Bich Ngoc and Colleagues (2015), Orientation of preservation solutions in Vinh Nghiem pagoda and Bo Da pagoda in Bac Giang province in the Scientific Conference: The Values of woodblock heritage of Vinh Nghiem pagoda and Bo Da pagoda associated with sustainable development.

⁵Nguyen Thi Bich Ngoc and Colleagues (2015), Orientation of preservation solutions in Vinh Nghiem pagoda and Bo Da pagoda in Bac Giang province in the Scientific Conference: the value of woodblock heritage of Vinh Nghiem pagoda and Bo Da pagoda associated with sustainable development.

Up to 870 Woodblocks are curved in the groove and on the texture, in which there are 20 woodblocks only curved in the groove, and 54 woodblocks only curved on the texture. Most of the woodblocks curved in the groove have a deviation in the range of 1 mm to less than 3 mm. There are 127 woodblocks curved in the groove with a deviation of 3 mm or more, some samples have a deviation of up to 10 mm. Most woodblocks (810/890) curved on the texture have a deviation of less than 2mm. There are 15 curved blocks with a deviation of 3 mm or more, the largest deviation recorded is 6 mm.

Cracking: Of the 973 woodblocks, there are 779 woodblocks suffered at least one type of damage due to cracking. The percentage of cracked woodblock in Bo Da Pagoda is 82.3%, slightly higher than that of Vinh Nghiem Pagoda (78.6%). The most common occurrence on woodblocks is cracking from the top of the woodblock, along the wood grain (766/973 woodblocks in both pagodas).

With woodblocks with cracking at the top, most of them have only 1 to 4 crackings. Of the total of 766 woodblocks with cracking at the top, there are up to 385 samples suffered from 1 to 2 cracks and 235 hardwoods suffered from 3 to 4 cracks. Notably, there are 19 samples suffered more than 8 cracks, of which half (9 woodblocks) are in Bo Da pagoda. Measurement of crack length at the top of the woodblocks shows that the majority (97%) of the cracks are 5 mm to less than 30 mm in length, of which 46.6% are from 10 mm to less than 20mm. Measurement of the depth of the cracks at the top of woodblocks shows that the crack depth is from 10 mm to less than 100 mm.

Damaged Inscriptions: The main damage is loss of character, or loss of entire word. There are 479 out of 973 (49.2%) woodblocks losing character or entire word at the level that may affect the accuracy of the printing. Cause of damage to inscriptions, most commonly is due to mechanical impact occurring when there is a direct impact on the woodblock texture.

In 434 woodblocks with the texture losing characters or entire words due to mechanical causes, the number of damaged letters on each texture is not much, of which up to 220 textures (50,7) are damaged only with 1 letter, 94 textures damaged with 2 letters. The number of damaged textures from 5 letters or more only take account for 9.9%. In contrast, if the woodblocks are damaged due to the cause of split or crack, the number of words lost or missing text on the texture can be from 1 to 4 words, in particular, there are up to 3 woodblocks damaged with 15-16 words.

- Harmful organisms⁶

The major groups of insects and fungi in Vietnam have been identified at Vinh Nghiem and Bo Da pagodas: Coptotermes sp., wood eaters, Cerambycidae, Mildew, Mold, Changeable color Fungi. As for Bo Da pagoda, the termite species, *Microtermes pakistanicus* are discovered actively, but at Vinh Nghiem Pagoda have not been detected. Organisms damage on woods that are active in the campus of pagodas are one of the potential hazards to the woodblocks. Organisms damage on woods should be controlled with as much control as possible, on the one hand, protect the woodblocks, and on the other hand, protect the wood structures in the buildings of both pagodas.

- The level of damage of organisms to the Woodblocks.

⁶Nguyen Thi Bich Ngoc (2016), General report on "Application of scientific and technological advances to preserve woodblock heritage of Vinh Nghiem Pagoda and Bo Da Pagoda in Bac Giang Province".

The survey on 601 woodblocks in Vinh Nghiem pagoda shows that a lot of woodblocks are affected by molds that change color, white, black or brown and affected to the beauty. The rate of woodblocks with fungal infection on one side is 17.1%, the fungal infection on both sides is 69.6% and without the fungal infection is 13.3%. However, the level of harm is not great. The level of invasive fungi on each woodblock is on average of 22% of the area. In addition, the invasive fungal parts are only scattered, not continuous. The decayed fungi are almost harmless to woodblocks. Only 2/601 woodblocks damaged by decayed fungi, accounting for 0.3%. Probably because the woodblocks are listed on the dry shelves and racks that are not flooded so there is less damage cause by the decayed fungi.

The survey on 376 woodblocks at the site of Bo Da pagoda reveals that a lot of woodblocks with molds are changed color, white, black or brown and affected to the beauty. The percentage of woodblocks with fungal infection on one side is 16.7%, the percentage of woodblocks with fungal infection on both sides is 80.3% and without fungi is 3%. However, the level of harm is not great. The level of invasive fungi on average of 39.6% of the area. The ecological and architectural conditions of the area of Bo Da pagoda affect the extent of fungal damage. Bo Da Pagoda is located in the campus with shady trees, the average temperature is about 23-24°C, relative humidity is high, 75-80%. The pagoda's architecture is also unique with its successive buildings, shallow drainage system, open-air drainage along the architectural system of the pagoda. This is the characteristic that makes the humidity sub-climate in the Bo Da pagoda higher.

The woodblocks are almost not decayed. Only 2/376 woodblocks damaged by decayed fungi, accounting for 0.5%. Accordingly, the results of the investigation show that the woodblocks in Bo Da pagoda are harmed by mold with a higher rate of infection. It should be noted about measures to prevent and limit the impact of fungi on the wood.

The number of woodblocks damaged by termites and wood eaters is very low. Particularly in Bo Da pagoda, the number of woodblocks damaged by termites and wood eaters is 12 times more than that of Vinh Nghiem Pagoda. This indicates that at Bo Da Pagoda, there is strong activity of this harmful object.

3. Establishment of local preservation system:

3.1. Technical issues:

- Develop the preservation process and criteria:

Preservation includes necessary activities, including technical intervention, to prevent further deterioration of the woodblocks. For the effective preservation of the woodblocks, the following procedures should be followed: Preparation of the records for the preservation; Establishing a suitable preservation environment: The preservation environment needs to control the factors including: temperature, humidity, light, air pollutants, animals, insects, and physical safety - all the factors that affect the life of the Woodblocks. An ideal preservation environment for Woodblock documents can not be the same as any document preservation environment in other forms of information such as paper, leather, film, videotape etc. An appropriate preservation environment is considered to be an effective preventive preservation method that slows down the deterioration and damage of the material, which, on the other hand, is far more cost-effective than any other restoration process for damaged or degraded materials.

The original woodblocks must be stored safely: This criterion ensures the integrity of the material, which means that information is not lost and is more likely to be selected for preservation and access to materials. No matter how many copies have been made,

maintaining the safety and integrity of the originals remains to be considered. Copying the document to another format (digitization or microfilm) for extensive access to copies helps to reduce the pressure on the original document as a long-term preservation strategy. Properly cleaning and repairing the woodblocks damaged with molds, etc. is a scientific method to extend the life of the materials. Preventive preservation measures will be prioritized for the woodblocks. In order to do this, measures need to be taken to slow down the deterioration and damage of the material and at the same time follow the procedures for preservation, exposure, safety security and carefulness when exploiting and using documents.

The preservation, storage, and use of woodblocks in the two pagodas are carried out by the monks, so the training activities, professional training for people assigned to keep woodblocks at the pagodas should be noted. Information migration or format conversion is a useful and essential method for preserving the integrity of the original document. Forms such as digitization; capturing microfilm; database creation, online introduction about documents; developing technical solutions (data preparation, service model, software system, hardware system etc.) is a very necessary work for people to access.

- Application of some traditional technical solutions

In Vietnam, the most commonly used wood preservative method is to soak the cut wood in water, lime water, in muddy ponds for a period of 6 months to 1 year. The results show that traditional wood preservation solutions such as soaking wood in lime and boiled wood do not improve much in termite prevention. Boiled wood is less likely to be damaged by termites through indications showing the loss of sample weight. When soaking wood in lime water, the wood after soaking is eaten stronger by termites. This result also provides the true nature of termites' biology. This is the fact that the main food of termites is cellulose, in which the cellulose content is not reduced during the boiling or soaking in lime water. Consequently, the post-treatment wood that is preserved by traditional methods is still damaged.

- Research on technical solutions for preservation by gas formulation:

Preserving woodblocks by means of gas formulation is a method of steaming to remove mold and insects. This is a common practice in controlling insect damage in storage. The most commonly used drug that have been evaluated is CELPHOS (Phosphine), a dose of 2 grams of PH₃ / m³; Sauna time: 3 days; processing temperature: 20 - 30°C. CELPHOS, 2 grams of PH₃ / m³; Sauna time: 3 days; Temperature of treatment: 26°C ensures effective removal of insect damage on woodblocks if it is treated directly. 3.3.3.2. Evaluation with mold Take the sample of *Diospyros decandra* damaged by mold and the sample of wood without damage into the sauna environment with CELPHOS. The sample of post-treatment of sauna is placed in a humidified atmosphere at 75% and 90%.

- Research on technical solutions for preservation with liquid preservation drugs

Liquid preservation drugs included in the study for woodblock preservation consist of the followings: Water-soluble drugs: LN5 90SP and KAA-Antiblu CC 55SC. Organic solvents- soluble drugs: Cislin 2.5 EC and Wopro1 9A1. Preservative capacity in water-soluble form and in organic solvent of *Diospyros decandra* is comparable. *Diospyros decandra* Lour after impregnation preservation drugs are able to absorb ink equivalent to wood without impregnation. Preservative drugs after treated in wood do not cause discoloration of wood, cracks, or curls on the sample of wood.

Apply chemical preservative treatment: The preferred drug is Antiblue, a drug that is soluble in water. In the test, *Diospyros decandra* only needs to be preserved by soaking

method (short treatment time, simple technique) to ensure effective against mold, decayed fungi and insects. In particular, Antibl's antifungal capacity are superior to molds that are currently the main pests in the woodblocks.

- Design rack, listing and sorting system

The advantages of racking, listing woodblocks currently at Vinh Nghiem and Bo Da pagodas should be promoted: Wooden material to make racks. The distance from the last row of woodblock rack far 0.45m from the ground floor is reasonable (Vinh Nghiem Pagoda) so that the air circulation is easy and the woodblocks are limited to absorb moisture from the ground. The legs of the racks are placed on stone pillars, with grooves used for lubricating oil, creating isolation layers against insects such as termites, ants penetrating the woodblocks as in Vinh Nghiem pagoda, which is reasonable. At Bo Da Pagoda, the woodblocks are stacked on a row, the woodblocks are not overlapped. A number of points on the racks should be corrected as follows: The racks are designed height to ensure people with average height from 1.6 to 1.7 m can manipulate the woodblocks easily.; The rack of Bo Da pagoda has the last row 0.2m away from the ground, 0.45 - 0.5m above the ground to limit the moisture absorption from the ground, and the air circulation is easy in storage; The racks should be designed so that each floor can only be loaded with one woodblock row. It should not list two woodblock rows on one floor as presenting in Vinh Nghiem Pagoda to limit mechanical collisions between woodblocks. It's easier to check, control and use the woodblocks for printing when sorting in one row. At each floor of the rack, it is necessary to design the fulcrum so that each woodblock on the rack will lean on the fulcrum to help the woodblock always stand upright and steady. Two adjacent woodblocks are 2 - 4cm apart. The woodblocks are not close to each other (as in both pagodas nowadays). Limiting mechanical collision, creating airiness on the texture of woodblocks, even moisture exchange on the texture of the woodblocks will limit the phenomenon of curl, crack and split.

Using and cleaning of woodblocks: Handle and transport when using woodblocks. Woodblocks are at risk of damage, leading to major damage that usually occurs during transportation and use. Therefore, take notice that: - Take pick up the wood with the most carefulness; Ensure that the intended route of transportation of the woodblocks is neat and free of obstacles; and make sure the space for the woodblocks when transported to the place. Always use both hands when holding a woodblock. Do not try to carry a lot of woodblocks at the same time, in case it can not be properly supported and may drop the woodblock. The woodblocks in the course of storing are not kept out of dust stacked on the texture, preventing moisture exchange with the environment, easy to arise curl, crack and mold. Therefore, it is necessary to set a regular cleaning schedule with woodblocks at least once a year.

- Building the warehouse

Proposing the map of the building of the wood-burning storehouse in accordance with the general planning of each pagoda:

At Vinh Nghiem pagoda: agree with the current plan that the pagoda is building the warehouse. The architectural model of the warehouse preserving the woodblocks of Vinh Nghiem pagoda is designed with the shape of "工", consisting of 3 courts: the outer court has one roof, the wall of two ends recalled the traditional architectural style. Structure of the house used trusses is a triangular style, column with 4 rows of legs, 2 columns hid. Tiled floor. The function of the external court is to display and experience the material and non-material value of the Woodblocks. Front and rear corridors to create shade on walls and floors; The middle court connecting the outer and inner courts, the empty space - where relaxation and traffic. One storey roof structure, four roofs, four talons; Interior-function as

warehouse to preserve woodblocks and printing of pagodas. The architecture consists of 3 two-room, two-storey roof, eight roofs, eight blocks, frieze surrounding; design lobby cover. The tiled corridor floor, the clay floor mixed with clay soil, lime, broken bricks; For walls, under is thick brick, clay on walls. In the warehouse, lay a wooden shelf around the wall, in the middle is the printing space of the pagoda.

Architectural model of storehouse preserving woodblocks of Bo Da pagoda has the design of the letter shape of “三”, including:

The front courter is a space for displaying and experiencing half-open space, with a roof-top architecture, creating a transition zone between the house and the yard so that visitors can use the courtyard space. The behind is a woodblock preservation storehouse with the function of preserving the original woodblocks and researching and printing space of the pagoda with two-storey traditional roof design. The antique area will be a place of air ventilation in vertical dimension with the design of the corridor around; Clay floor warehouse mixed with clay, limestone, broken bricks, walls, under is thick brick, clay on wall.

At Bo Da Pagoda: there are 02 options: Option 1: the warehouse location is proposed in front of Tam Bao house, left side and after Tam quan and bell tower; It is expected to be built on the main axis, in front of Tam Bao. The direction of the construction is at the same direction of Tam quan. Option 2: The proposed warehouse location on the right side of the pagoda, next to the entrance to the pagoda. The direction of the same direction. This area is outside the area of the temple. Therefore, it is built more gates and fence surrounds.

Have proposed design and construction of woodblock warehouse in Vinh Nghiem pagoda and Bo Da pagoda 5.1. Have proposed changes in design and construction materials of the current warehouse construction project that Vinh Nghiem pagoda is operating to create a more suitable environment for the purpose of preserving woodblocks. 5.2. The warehouse preserving woodblocks of Bo Da pagoda has a total construction area to ensure the function of preservation, display, and experience, 322m². Of which, the storage and printing room has an area of 87.5m². Area of showroom and experience is 117.5m². The two houses are connected by misting pipes, which have corridors that allow easy access and ensure the safety of the woodblocks.

3.2. Issues of policy mechanism and improving capacity

The community play roles as both a cultural subject and an organizer, and at the same time participate in the preservation and promotion of the heritage. For Vinh Nghiem and Bo Da pagodas, the community also participates in a series of activities for tourism. At the same time, the local community is also the cultural destination for visitors to visit Vinh Nghiem and Bo Da Pagodas and explore the local culture in the future.

- Mechanism of operation

Organizational structure: the management Board of monuments at Vinh Nghiem / Bo Da pagoda will consist of 5-7 people. Depending on the nature of the work, the management board decide the number of people and sign the contract to work in the Board.

The structure is composed of: 1 head and 2 deputy heads, including the head-monk of the pagoda, the district culture and information department, members of officials of the Finance-Accounting Department, public security, of the commune, commune culture, public security of the commune and, community representatives.

Monuments Management Board of Vinh Nghiem Pagoda / Bo Da pagoda has functions to manage, preserve and promote the value of monuments; organize the

management and guiding cultural and tourist activities at monuments; It is managed professionally by the Department of Culture, Sports and Tourism of Bac Giang Province and the Yen Dung/Viet Yen Culture and Information Department.

Vinh Nghiem pagoda now has five units directly managing the monuments and heritage: Department of Culture, Sports and Tourism of Bac Giang province; Department of Culture and Information of Yen Dung district; Monuments management of Yen Dung district; Monuments Management Board of Tri Yen Commune; Head-monk of Vinh Nghiem pagoda. That is the fact that there are so many departments and management units leading to overlap, limit when operating. On the contrary, at Bo Da pagoda, there has not yet built a Monuments Management Board. Having too many management departments or not establishing a management organization causes difficulties in the operation, preservation and promotion of heritage values.

Draft regulations on activities include:

- Management of religious activities, organization and management of tourism activities and services at the monument.
- Development of long-term and short-term planning about preservation and development of monuments and monument management activities, in coordination with the authorities to obtain agreement.
- Organizing the management, preservation, promotion, propaganda and introduction to promote cultural values according to the regulations of the State and the province.
- Managing, supervising the inventory, preservation, restoration and embellishment of monuments.
- Presiding and coordinating the concerned units in organizing traditional festivals, cultural and art activities to ensure security and environmental sanitation.
- From these contents, the delegation of authority should be clear. How jurisdictions of the sides in the management of the activities of the heritage are. Discussion on the operational zoning of interested sides is agreed as follows:
 - The ritual and worship activities at the pagodas are the responsibility of the direct administration of the head-monk, the monks and the nuns in the pagoda. These activities must strictly comply with the regulations on religion and belief.
 - Monuments management activities, security and order, environmental sanitation, traditional house activities etc. (temporarily called outside the pagodas) are operated by the monuments management board based on specific regulations that the management board mutually agreed.
 - Funds received from sources of merit, funding, services, etc. should be in details and partitioning revenue/ expenditure.

After organizing the organizational apparatus, the contents of the operation need to establish a legal basis and approve the authority of the monument management board. The Management Board of monuments should be organized sample activities implemented with the management of the District People's Committee in coordination with the help of related departments.

Professional training courses for staff in the Management Board of the monument and related subjects should be considered and quickly implemented.⁷

- Benefit sharing

Currently, most of the work is related to the pagodas run by the head-monk and organization. Organizational structure and benefit sharing also poses many problems. With current potentials, in the future Vinh Nghiem and Bo Da pagodas will have great potential for tourism development. Particularly, spiritual tourism combined with ecotourism is expected to bring a great tourism revenue for the indigenous people and travel companies.

Obviously, the benefit relationship revolves around groups that have direct impact, such as the pagodas and the people and the local authorities. Like many other localities, the boundaries of the main groups are the gate of the pagoda. According to the regulations, from outside the gateway is the people's self-management and business. This leads to conflicts of benefits between the pagodas and the people. In fact, people perceive the "auxiliary" services around the pagodas as serving the pagodas and attracting visitors to the monuments. In contrast, the pagoda perceive that services, instead of bringing benefits for the pagodas, bring benefits to the people around. In addition, local authorities do not play a coordinating role in these relationships. Regulating and sometimes resolving relations is almost nonexistent. The fact is that local authorities usually only ensure security and order around the site.

In the near future, Vinh Nghiem Pagoda and Bo Da Pagoda are a comprehensive list of tourist attractions. Therefore, the revenue of the monument will increase significantly. That is the reasons why the distribution of merit, ticket sales, profits from the practice, money gained from selling souvenirs, etc. need to be discussed carefully with the interested sides. Besides, it should pay attention to the resources to reinvest the monument.⁸

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- Training on identification of heritage potential
 - Training on operating regulations
 - Training on guides
 - Training on preservation
 - Training on planning
 - Training on financial management
 - Training on tourism promotion
 - Training on risk prevention

⁸In details, we estimate revenue and expenditure of the Management Board in the coming time, these sources of revenue should be transparent, what items are collected by the MB and what items are held by the abbot of the pagodas:

a / The revenue of the Management Board consists of the followings:

- Revenues from services for business households to hire
- Revenues from the merit
- Revenues from ticket sales
- Revenues from the sale of souvenirs
- Revenues from the benefits of the monk training course

Expenditures of the MB include the following:

- Expenses for the MB activities
- Expenses for the pagoda festivals
- Expenses for embellishment, preservation of woodblocks
- Expenses for protection / security for the festivals
- Expenses for daily hygiene in the monument area
- Expenses for operation of the electric system inside and outside the monument area
- Expenses for health / risk management during the holiday season

b / The items managed by the abbot include:

The model of value preservation and promotion of woodblock heritage based on the community should be based on the principle of preserving the primitive state of the woodblocks. In this model, a separate management board for each pagoda should be established with the participation of many parties, which can not lack the role of the community. This model is divided into the roadmap and implementation steps, which are linked to the objectives of preserving, conserving and treating the woodblocks system, and step by step raising awareness and maintenance skills of preserving of the people. They must be trained in an appropriate heritage management model.

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- The treasures inside the pagodas itself (there is an agreement between the monument management and the abbot)
 - Money drops, set on the boards.
 - Money from the visitors giving to the head-monk.

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