Practical training on conservation science: cleaning metal objects

Cultural Heritage Protection in the Asia Pacific Region
- Conservation Science for Museum Objects
- Investigation, Preservation and Management of Archaeological Sites
- Documentation of Cultural Properties
- Community-centred Approaches to the Preservation of Historic Towns and Villages
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Preface

The Cultural Heritage Protection Cooperation Office, Asia-Pacific Cultural Centre for UNESCO (ACCU Nara) has been conducting training programmes on cultural heritage protection since 2000. A total of 365 heritage practitioners from 37 countries of Asia-Pacific region have joined in the training courses held in Nara, Japan and 193 experts have participated in the regional workshop organised in each country so far. In 2018, we received 5 participants to the Thematic Training Course, 16 to the Group Training Course, 15 to the Regional Workshop and 9 to the International Workshop.

The Thematic Training Course and the Group Training Course are the programmes to invite mid-career and young professionals to Nara, and the themes of 2018 are “Conservation Science for Museum Objects” and “Investigation, Preservation and Management of Archaeological Sites.” In the first sessions of the course, the participants make presentations on the current situation and problems on cultural heritage in respective countries and have discussions among participants and Japanese resource persons. The country reports are the summary of their presentations. The participants are expected to compare the conservation methodologies and cases conducted in Japan and those in their countries through the programme and assigned to write a final report about learning experiences and ideas to utilise their new knowledge.

The Regional Workshop was held in Suva, coorganised with the Fiji Museum. Under the theme of “Documentation of Cultural Properties,” the 15 participants from the museum and the relevant institutions had lectures and practical trainings on classification, measured drawing, ink rubbing, photography and making artefacts cards. The training reports, written by the participants who learnt these documentation methods for the first time, are contained in this volume.

The International Workshop, the newly launched programme in 2018, was held for the senior professionals who are play active roles in the preservation practices of historic townscape in the Asia-Pacific countries. Through the one-week programme on “Community-centred Approaches to the Preservation of Historic Towns and Villages,” the participants observed the cases of Japan and exchanged opinions with the Japanese experts as well as local people in Nara and the excursion sites. On the first two days, they had the symposiums and presented the case studies on the preservation of respective historical towns and villages. The reports in this volume are based on their presentations.

Finally, I would like to express my gratitude to the Agency for Cultural Affairs (Bunkacho), National Institute for Cultural Heritage, and all those who supported our training programmes. I sincerely wish that the participants of 2018 will utilise their experiences in the future work and that this volume will help readers know current situations of cultural heritage protection in the Asia-Pacific countries, some of which rarely visited.

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I. Thematic Training Course

1. Country Reports
2. Final Reports
As is well known, the situation of Afghanistan is sometimes stormy and this critical situation directly affects cultural and historical heritage, and we can briefly note that the insecurity has had a direct effect on the Museum as well, which in this area has experienced tremendous damage during the civil war.

Many artefacts were looted, damaged or destroyed in the last few decades of war. The damage prevented the development of the National Museum, and this was a very dark period for the cultural heritage of Afghanistan. (Figure 2,3,4)

The National Museum is completely ready for the treatment and conservation of the broken objects and artefacts which have arrived from historical sites and the countryside. At the conservation lab, there are eight conservators, but some of the older conservators, people who have learned conservation work through workshops and training abroad and inside the country, do not have a strong conservation background and they are not professionals in this field, so the conservation department requires more young, specialist chemists to ensure the future of the conservation department. Fortunately, there are two young conservators who have been working with the conservation department for few years who have bachelor’s degrees in chemistry and need to promote their knowledge up to the Master’s level in the field of conservation science. (Figure 5,6,7)

The conservation lab is only an ordinary room with no special facilities or equipment to do analyses. The facilities that do exist in the conservation department comprise a microscope, a distiller, computers, a magnifying glass, and a digital camera. Of the pieces of equipment we have in the lab that have been donated by the assistance of foreign countries, the majority of them are broken or damaged by rust.

Most of the time we are confronted with a lack of chemicals which are not available in Afghanistan; also there is no specific budget for buying them from abroad. Even the days before I moved to Japan we did not have essential and primary materials such as alcohol, acetone, etc. However, recently, Tokyo University of the Arts donated 11 chemical materials for the use of the National Museum, and we appreciate that very much.

The conservation lab does not have facilities and or systems such as a fume ventilator, a specific place for preparing the material, an emergency shower, first aid kits, standard electricity, a thermohygrometer or humidity meter, thermometers, firefighting equipment, or other technical facilities that are necessary for a conservation lab. (Figure 8,9)
The National Museum building was built around 1925 without the addition of any new facilities, and during the decades under the Soviet Union and civil war, 70 percent of the building was destroyed, and rebuilt again in 2001, and this is the reason the Museum lost the majority of its artefacts, facilities and equipment. Right now, it does not even have a security camera inside the building, strong gates for the storeroom and exhibition space, a humidity meter, thermometers, a sound system, showcases, etc. (Figure 10,11)
The exhibition halls are small, with the biggest one being around 50 square meters, without proper facilities. The showcases are metallic and small; most of them have been contributed by the Japanese government to the National Museum of Afghanistan. (Figure 12, 13)

The storerooms are non-standard without any controllers; there are only a few small fans to change the condition of the air. Whole objects are stored on metal shelves and due to lack of space, most of the objects made from different substances are preserved in the same storage and are also vulnerable to moisture, environmental contamination, and insects. (Figure 14, 15)

For the transportation of objects, there are no transitional devices or elevators, and all objects are moved manually.

In the end, I would like to remind everyone that museums show the background of culture and also fortifies recent and former relationships between countries, and we hope that countries help each other in the area of cultural properties.

Indeed, the National Museum of Afghanistan really appreciates the assistance provided by the Japanese government, which has helped us from the beginning, and we are hopeful to have an even stronger relationship in the future.

![Figure 12](image12.png)
![Figure 13](image13.png)
![Figure 14](image14.png)
![Figure 15](image15.png)
Bangladesh is a country with an area of about 147,570 sq. km, mainly consisting of flood plains inundated by a large number of great and small rivers and channels. It is bounded by India, Burma, and the Bay of Bengal. The country lies between 21° 30' and 27° 39' north latitude, and 88° 3' and 92° 52' east longitude. The climate of Bangladesh is characterized by tropical variations of temperature, heavy rainfall, often excessive humidity and seasonal changes. Although Bangladesh is a nascent state, it has a rich cultural heritage. The Department of Archaeology of the Ministry of Cultural Affairs has taken steps to nominate and declare monuments, sites, artefacts and collections as cultural heritage, and 480 monuments/sites and a huge number of antiquities have been protected on a priority basis including two World Heritage Sites—Ruins of the Buddhist Vihara at Paharpur and Historic Mosque City of Bagerhat—under the provisions of the Antiquities Act 1968. The archaeological laboratory of Bangladesh needs to address the chemical conservation of antiquities which are preserved and displayed at 23 archaeological site museums in the country. Chemical conservation of heritage monuments is also done by the archaeological laboratory. The peculiar climatic factors of Bangladesh such as heavy rainfall, high humidity, salinity, air pollutants in the atmosphere and other natural calamities affect the cultural properties and gradually lead the way to destruction.

A large number of antiquities are recovered each year through surface collection from ancient sites and from archaeological excavations conducted by the department. After recovery, these are sent to the archaeological laboratory for examination, chemical conservation and analysis. Having done the necessary work, some artefacts are sent to museums for display and the rest of them are kept in storage. These artefacts are made of bronze, iron, copper, stone, pottery, etc. Very rare silver and gold objects are also recovered.

As some of these objects remain buried for a prolonged period, they chemically react with minerals in the soil, and depending on where these objects are found, different changes are observed in the metals due to several types of underground environmental conditions. These objects are often highly corroded with hard calcareous deposits and corrosion products of metals. It may be mentioned that sometimes objects have hard lumps of soil attached. For example, five bronze images were rescued from the archaeological excavation of Joggodal Bihara, attached to which was a large amount of hard as above soil.
Highly corroded objects with very little metallic core or no core left are seen sometimes. For example, 14 iron ingots were recovered from the departmental excavation at Bagerhat. (Figure 3)

In addition, rescued artefacts are affected by minerals like chloride, sulphates, etc. But more minerals are observed in excavated objects.

The archaeological laboratory applies the best method of chemical treatment for these objects in order to conserve them. Both mechanical and chemical treatments are applied according to the preservative state of the antiquities. Sometimes chemical treatment is carried out on the spot if necessary. In a broad sense, the most common methods applied comprise mechanical cleaning and chemical treatment. The superficial deposition of calcareous materials is removed by mechanical treatment with a scalpel blade and vibrospatula, whereas the soluble salts present in the metallic antiquities are removed by chemical treatment.

In the case of copper, bronze, iron and other metallic objects, a 10-15% solution of sodium hexametaphosphate in water is used to remove the hard incrustations. But this treatment for some objects is not found to be suitable to complete removal of incrustation, and thus a cleaning solution consisting of 10% citric acid and 4% thiourea in water with a non-ionic detergent is utilized and is found to be effective. Alkaline Rochelle salt (solution of 50 grams of caustic soda and 150 grams of sodium potassium tartrate in 1 liter of water) is also used for this purpose where the patina of objects of copper and copper alloys is not considered. A sesquicarbonate and paper pulp method is applied for the gradual extraction of soluble salts. This process is continued for a long time. To detect the removal of salt, a conductivity instrument and test kits are used. Finally, a thin protective coating effective for each respective object is applied on the surface to obtain a uniform film coating as a future safeguard. In the past, we used P9A dissolved in sulphur free toluene as a protective coating. But nowadays we apply petaloid B with xylene instead of PVA. Apart from this process, in the first stage of the treatment of terracotta and pottery objects, the objects are allowed to soak in water for a few days to loosen the hard soily deposits settled on them and for the effusion of salt. Then they are dried and the soily accretions are removed from their surface mechanically. After that, the pulp method is applied for complete removal of the salt. On the other hand, due to prolonged storage in unfavourable environmental conditions, organic objects are prone to decay and attacked by insects. The processes required for preservation of these artefacts are selected according to their state of preservation. The PEG method for wood and leather dressing (mixture of 200 g lanolin, 30 ml cedarwood oil, 50 g beeswax, 330 ml hexane) is applied. Sometimes the PEG method cannot be used for large-sized wooden objects, such as boats, because of financial restrictions. (Figure 4,5)

For protection from insect attack, fumigation with thymol is adopted, and for museums, an insecticide such as 1,4 dichlorobenzene or pentachloro phenate is used.

In addition, we want to talk about the present condition of monuments of our country. Biological agents such as plants, moss, lichen, and algae grow on the walls and roofs of our monuments and cause damage to them. When plants grow on the walls and gradually develop, their roots penetrate deep into the wall and form cracks. Finally, the monuments are liable to break up and fall. When moss, lichen, and algae grow on the monuments, their roots change the surface of the building, such as staining, changes in the original colour, loss of beauty, etc. Besides, they absorb water through capillary action from the ground during inhabitation and through the wetting and drying process, the building becomes damaged. Sodium arsenite is used for destroying the plants and a 2-5% solution of ammonia in water is used to remove moss, lichen, algae, etc. But after a certain period, these biological agents again grow on the same places. (Figure6)

As Bangladesh is a developing country, we face many challenges in the field of chemical conservation. Firstly, our budget is not adequate to maintain our archaeological sites and museums. For
the same reason, the archaeological laboratory of Bangladesh is not well equipped with modern instruments. Secondly, employees of the archaeological laboratory have not acquired modern techniques of chemical conservation due to the lack of proper training. On the other hand, most archaeological site museum buildings were built before the liberation period, i.e., before 1971. So, museum buildings are not suitable for the exhibition of antiquities.

We hope that we shall be successful in overcoming this situation very soon and deliver fruitful chemical conservation for our country.
Pakistan

Present Situation and Challenges for Conservation of Museum Works in Pakistan

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Cultural Heritage of Pakistan:
The land where the present-day nation of Pakistan is located has been an important seat of a number of the world’s leading civilizations. There is much archaeological evidence ranging from the pre-historic to the colonial period to support this claim. Traces of human activity during the Stone Age are well attested on the soil of Pakistan in the Potwar region of Punjab province and at Kot Mondahi and Las Bela in Balochistan province. The remains of the earliest Neolithic period have been discovered on the Kacchi Plain near Sibi at Mehgarh, Balochistan. It was here that settled life and cultivation began during the 8th to 9th millennia BCE. This provides the base for the subsequent emergence of one of the world’s oldest civilizations in the form of “Indus Valley Civilization” during the 3rd millennium BCE.

The Achaemenian period of Persia established their sovereignty during the 6th century BCE over most of the lands comprising present-day Pakistan. Buddhism reached Gandhara (the northern part of Pakistan) in the 3rd century BCE during the reign of Asoka the Great of the Mauryan dynasty, and flourished under the royal patronage of the successive ruling dynasties of the Indo-Greeks, Scythians, and Parthians. It reached its climax in the 2nd century CE under the Kushans. The first impulse of Islam was felt in the south-western regions of Pakistan when Muhammad Bin Qasim entered Sindh province in the early 8th century CE. The Mughal’s rule from the 16th to 18th centuries CE is witnessed as an important episode in terms of the socio-cultural as well as political history of Pakistan.

The main objectives of conservation work:
It is widely understood that all materials decay over time, even when they are housed in apparently beneficial conditions. Among them, some barely change at all; some change more rapidly. In this context, conservation has two main aims: the first is to limit the rate of decay; the second is to make objects physically accessible to those interested in them. The foundation of both these aims is the need to understand objects in all their complexity and difficulty.

Conservation concepts and applications:
A number of concepts guide conservation practice. It is often argued that the most ethical approach to conservation is to accept an object in its current material state and, as far as possible, prevent further change, or preventive conservation. This normally involves modifying and controlling the environment in which objects are housed or displayed. However, few objects are stable or undamaged. It is generally agreed that as conservators, we should aim to retain the original material and that conservation treatment should involve doing only what is necessary to ensure the desired safety and stability of the object. This is often called ‘minimum intervention’. The concept of minimum intervention may sometimes seem contradictory in practice because in some cases the condition of an object is such that it actually requires very extensive treatment and regular maintenance to ensure some form of continued existence and accessibility.

Conserving the different materials of objects:
The objects are given conservation attention depending on the way they are to be used in the museum. How they are conserved then depends on their materials and condition, and available resources such as time and expertise. Hence, the assessment of their condition requires an understanding of materials and the causes and effects of deterioration.

Significance of Conservation work:
Objects are more than just material things as they have meaning for people. Assessment and determining the significance of an object depends on consultation and on understanding and weighing the many possible views of those with an interest in an object.

Conservation by accurate decisions:
There is a range of factors relating to both material and significance which are considered by curators and conservators before making a decision on conservation treatment. There is rarely just one possible course of action, so various conservation options are considered and the risks and benefits of each are weighed and compared. This ensures that future conservation actions are based on understanding the state of the object at the time, and the thinking which influenced the conservation choices.

Current situation for conservation of museum works in Pakistan:
The ancient land of Pakistan served as a hub of cultural interaction between different civilizations. This fact is evidenced from the rich cultural wealth discovered through archaeological
explorations and excavations in the different areas of Pakistan. Further, it should be noted that during the long history of this country, the objects in daily use were in fact *objet d’art* made of gold, silver and other precious and semi-precious metals and stones. Numerous pieces of this art—illustrated manuscripts of classical Persian works, albums of painting and calligraphy, gold and silver coins, and other artefacts—are now the proud possessions of different museums and art galleries in Pakistan. The rich immovable and movable cultural heritage of Pakistan can be viewed from the following histograms (Figs. 1 & 2 with Tables 1 & 2):

### Repositories of tangible cultural heritage at the national level:

I. **Peshawar Museum**
   - Main Collection: Gandhara, Pre and Islamic period, manuscripts, paintings, numismatics

II. **Lahore Museum**
   - Main Collection: Gandhara, Pre and Islamic period, manuscripts, paintings, numismatics

III. **National Museum of Pakistan, Karachi**
   - Main Collection: Gandhara, Pre and Islamic period, manuscripts, paintings, numismatics, armory, ethnological

IV. **Dir Museum, Chakdara**
   - Main Collection: Gandhara

V. **Hund Museum**
   - Main Collection: Gandhara

VI. **Sir Sahibzada Abdul Qayyum Museum**
   - Main Collection: Gandhara

VII. **Archaeological Museum, Moenjodaro**
   - Main Collection: Archaeological site material.

VIII. **Archaeological Museum Harappa**
   - Main Collection: Archaeological site material

IX. **Archaeological Museum, Umerkot**
   - Main Collection: Archaeological site material

X. **Archaeological Museum, Bannbore.**
   - Main Collection: Archaeological site material

XI. **Archaeological Museum, Taxila**
   - Main Collection: Archaeological site material

XII. **Archaeological Museum, Swat**
   - Main Collection: Archaeological site material

XIII. **Islamabad Museum**
   - Main Collection: Gandhara, Pre and Historic, Islamic material

XIV. **Quaid-i-Azam Birthplace Museum, Karachi**
   - Main Collection: House Museum, furniture, costumes, manuscripts, etc

XV. **Quaid-i-Azam House Museum, Karachi**
   - Main Collection: House Museum, furniture, costumes, manuscripts, etc.

XVI. **Allama Iqbal Museum, Lahore**
   - Main Collection: House Museum, furniture, costumes, manuscripts, etc.

XVII. **Allama Iqbal Museum, Sialkot**
   - Main Collection: House Museum, furniture, costumes, manuscripts, etc.

### Material of cultural wealth in the repositories of Pakistan:

<table>
<thead>
<tr>
<th>Description</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schist stone objects (individual and panels)</td>
<td>1</td>
</tr>
<tr>
<td>Stucco objects (individual and panels)</td>
<td>2</td>
</tr>
<tr>
<td>Bronze objects (deities, armlets, vases, plates, oil lamps, decorative objects, etc.)</td>
<td>3</td>
</tr>
<tr>
<td>Terracotta/ceramic objects (animal toys, figurines, etc.)</td>
<td>4</td>
</tr>
<tr>
<td>Architectural Elements (arched panels, capitals door jambs, decorative panels, brackets, cornices, arch fragments, etc.)</td>
<td>5</td>
</tr>
<tr>
<td>Ivory/bone objects (miniature pots, toys, etc.)</td>
<td>6</td>
</tr>
<tr>
<td>Wooden objects</td>
<td>7</td>
</tr>
<tr>
<td>Metallurgical objects (gold, silver, bronze, iron, copper) numismatics</td>
<td>8</td>
</tr>
<tr>
<td>Paper (manuscripts)</td>
<td>9</td>
</tr>
<tr>
<td>Costumes/textiles</td>
<td>10</td>
</tr>
</tbody>
</table>
Main conservation laboratories responsible for the preservation of cultural heritage in Pakistan:

i) Central Archaeological Laboratory, Lahore
   It is responsible for proper conservation of tangible cultural heritage in the form of building materials.

ii) National Museum of Pakistan’s Paper Conservation Laboratory, Karachi
   Its responsibilities are to take necessary steps for the conservation of manuscripts, books, paintings, etc.

iii) Water & Soil Investigation Laboratory, Moenjodaro
   This laboratory is responsible for the conservation of different materials pertaining to the World Heritage Site of Moenjodaro.

iv) Tile & Mosaic Laboratory, Lahore
   This laboratory takes necessary steps for the proper conservation of different materials used in the buildings of the World Heritage Monument of Lahore Fort and Shalimar Garden, Lahore.

Some of the main issues related to conservation laboratories in Pakistan:

1. There is an acute shortage of trained conservationists and chemists for proper preservation of cultural assets in the shape of both movable and immovable antiquities (Fig.3)

2. Technical services for the purpose of research, documentation and conservation of movable objects need to be strengthened and enlarged to come up to the required international standards. For instance, no provincial departments of archaeology can provide services involving various methodologies of chemical treatment of antiquities and their dating in terms of scientific standards such as C-14, Thermo luminescence, etc.

3. The establishment of more conservation laboratories at all World Heritage and national level sites/monuments is required.

4. The latest and most modern equipment needs to be supplied for existing laboratories.

5. Conservators usually use chemical and scientific analysis for the examination and treatment of cultural works. However, the modern conservation laboratory uses equipment such as microscopes, spectrometers, and x-ray instruments, and these are required to better understand objects and their components. The data thus collected helps in deciding the conservation treatments to be applied to the objects.

Basic factors responsible for deterioration of artefacts in the museums:

1. Physical Factors
   (i) Humidity
   (ii) Temperature (moisture)

2. Chemical Factors
   (i) Pollution of the atmosphere
   (ii) Dust etc

3. Physical + Chemical Factors
   (i) Light

FIGURE 3. Human resources working the field and conservation laboratories.

4. Biological Factors
   (i) Microorganisms
   (ii) Insects and pests (e.g. termite)

Challenges & problems regarding conservation works in the museums:

In Pakistan, museum collections comprise different materials such as schist, wood, metal, clay, terracotta, stucco, paper (manuscripts), ivory, etc.:

1. The wooden cultural heritage comprises artefacts such as wooden buildings, wooden structures, wooden craftwork, wooden furniture; and the archaeological artefacts are found through archaeological excavations. The former is damaged by abiotic factors such as UV rays and hydrolysis; and by biotic factors such as insects and brown rot fungi. The common damage from such factors are wood cavities, small pits on the tree surface, pulverization into wood powder, and colour changes. The latter, mostly damp wood or waterlogged wood, is damaged by soft rot fungi, bacteria, and borers. The damage from such factors consists of softening, colour changes and massive loss of wood. Damage to wooden artefacts is closely linked to the water content inside the wood, which is affected by its surrounding environment.

2. An essential cause of deterioration in metal objects is corrosion of the metal objects or object deterioration by interaction with the environment. The most influential factors in the deterioration of historical objects are the relative humidity and air pollution, while in archaeological objects, composition, depth, humidity and amount of gasses in the soil all play a crucial role.

3. In terracotta/clay objects the degradation of an object occurs as a result of the interaction between the environment or with the materials that form the object.

4. However, in the case of ceramics, environmental factors are the major cause. There are several ways in which ceramics break down physically and chemically.

5. Similarly, manuscripts, textile artefacts, and stone objects are also vulnerable to deterioration due to different physical, chemical and other problems.
Current situation of conservation techniques and practices applied:
The treatments which we usually apply to damaged wooden, metal and ceramic artefacts can be summarized as follows:

1. For wooden objects it is essential to control the humidity and the overall environment the, as well as biotic problems with the help of humidifiers and dehumidifiers.

2. Similarly, for metal objects the main treatments applied are to control moisture, humidity, and environmental control, and to curb the impact of chemical reactions.

3. However, for ceramics/clay objects the treatments which we usually apply are to control environmental problems with the help of the available human and material resources.
Metal Objects:
In Afghanistan, the majority of objects made from metal such as bronze, iron and copper involves several types of corrosion, which means that some of the active powdering patina needs to be removed from the surface of the object so that the non-active corrosion would be better preserved. In this course, I learned how to recognize and preserve corrosion without the assistance of new technical devices (e.g., X-ray, XRF, XRD) that we do not have at the National Museum, and I also learned about the variety of chemical materials which can be used on iron artefacts to help maintain an absence of oxygen, moist air, free air and air contamination.

For realizing the activity of iron in the moist environment we did practical tests with different types of materials (such as MgCl₂, K₂CO₃, NaBr, KBr, and K₂SO₄) in the existence of water and at the end, we knew that iron displays various types of activity distinct humidity and temperature conditions. (Figure 1, 2) For the maintenance of iron objects, we packed a piece of iron with an RP System humidity absorber and left it for one week. After this period, we reviewed our test and found that the iron was still stable. This test shows that the preservation of iron artefacts need low humidity and temperature. For cognition, the component of iron take trace corrosion for analysis the surface of the object and when XRF and XRD device, certain types of corrosion were discovered (limonite FeOOH, magnetite Fe₃O₄), which is the cause of deterioration of iron artefacts in a moist environment; to survive, iron needs an environment devoid of oxygen and with low humidity.

During the experiment, we learned about advantageous subjects such as the mechanism of corrosion of metal objects, the thermodynamic stability of metal artefacts, circulation of metal, Pourbaix diagrams, standard reduction potentials, Evans Drop Experiment, the activates of cathode and anode reactions and as well as the same time occurred dehydration and usually corrosion of iron formed in the anode. The result of corrosion on iron objects, the effect of chloride ions on the surface of iron objects and problems in preservation of metal artefacts.

Bronze artefacts are more stable than iron in that the mechanism of bronze disease starts at 68% RH at 20°C with iron activity beginning at 56% RH at 20°C, so the preservation of these artefacts needs much attention, as is known, we have not been able to maintain the proper humidity at the Museum. In this regard, I am thankful for the advice that ACCU contributed device (HOBO) to the National Museum of Afghanistan.

Wooden Objects:
Most wooden artefacts in Japan are discovered underwater and there is a need to consolidate these with RBG and then use a vacuum freeze dry device for drying them gradually. This procedure took a long time and we filled gaps using several types of material and methods. For example, one of the methods that we used was filling with epoxy and balancing the colour with acrylic.
In Afghanistan, the majority of wooden artefacts are obtained from the land, with the condition being tolerable for restoration. We carry out cleaning with distilled water, damp sponges, cotton wool, wooden skewers, hard bristles and soft brushes, dental picks, and chemicals such as ethanol.

As an example, we conserved and restored a window panel from the old city of Kabul, and the damage on the wooden panel was compensated with new pieces of similar wood, which were carved and cut to look like the original piece. The new replaced pieces were not painted in order for them to look different to the original piece. (Figure 5, 6)

XRF, XRD, X-Ray

In this course, I have learned some very important and useful information about XRF and XRD. The practical experiments and new details were memorable for me, because before, when I had faced graphs of these devices, I did not realize the significance of the spectroscopic notations (Kα, Kβ, Lα, Lβ…) and as well as the measurable elements of XRF analysis, outline of XRF analysis, fluorescent X-ray generation, mechanism, performance and limitations of XRF quantification based on XRF analysis. So fortunately, in this programme I gained knowledge of the features and details of XRF.

There are several sizes of XRF that using the different type of artefacts, which depended on the size and also destructive and non-destructive objects, so this device is using for identification of elements in the compound of artefacts.

For the investigation of compounds require to using the XRD and for this test need to take a sample and grind then placed inside of the device, but this process is impossible for non-destructive objects.

Difference between XRF and XRD is this, XRF recognizing and showing the percentage of elements and XRD recognizing the internal combinations.

At the National Museum of Afghanistan, the types of objects are specified via colour and recognized by professional persons who have extensive experience in the field of curator and conservation.

X-ray:

To assessment of the structures, basis, corks on artefacts necessary using this device which is in this course I got plenty of information about it, such as the application of X-ray to conservation science, X-ray characteristics, X-ray radiography, so if we raise amount of energy that is raising the number of electrons not the power of energy, for energetic objects necessity high energy.

The enormous collection at National Museum of Afghanistan is Clay and Stucco they have a basic foundation which prepared the shape of relics on it and also there are numerous risks inside of objects, In this case, X-ray is the best device to understanding, as well as we can use this device for assessment of several artefacts which are covered up by strict clay, dirt, dust, and find out cracks, join, losing parts, filling parts and etc.

In finally, I really appreciate from ACCU to give me this opportunity to be a participant of this programme.

Fortunately, all content of this course was in the field of conservation science which I have gotten a lot of information from the beginning to the end.

Thanks
Bangladesh

Final Report

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Duration of the training Course:
24.07.2018 to 07.08.2018.

Participants:
There were five participants in this training program: one participant was from Afghanistan, two were from Bangladesh and two participants were from Pakistan.

Orientation program and opening ceremony:
The orientation session and opening ceremony were held on 24.07.2018.

Features of this training course:
Both practical and theoretical lectures were included in this training course. Besides this, there were also on-site study sessions (Conservation Practice at Laboratory, Environmental Control at Exhibition Room).

Museum and storage artefacts are deteriorated by environmental change. So, the environment is very important for the preservation and exhibition of artefacts. Some of the main deterioration factors of cultural property in the environment include temperature, humidity, illuminance and air quality. Other deterioration factors are living organisms, natural disasters, vibration, human acts, etc.

Most artefacts must be kept at around 20°C. But black and white film has to be kept at 21°C. Humidity parameters for different artefacts are as follows:

<table>
<thead>
<tr>
<th>Artefact</th>
<th>Humidity (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Excavated artefacts</td>
<td>50–65</td>
</tr>
<tr>
<td>Ivory, leather, parchment</td>
<td>50–65</td>
</tr>
<tr>
<td>Oil paintings</td>
<td>50–65</td>
</tr>
<tr>
<td>Fossils</td>
<td>45–55</td>
</tr>
<tr>
<td>Metal, stone, ceramics</td>
<td>&gt; 45</td>
</tr>
<tr>
<td>Film</td>
<td>&gt; 30</td>
</tr>
</tbody>
</table>

We learned how to control the deterioration factors in the environment for artefacts from this training.

Analysis is very important for museums and excavated artefacts before conservation work. Non-destructive analysis is applicable for museums and excavated artefacts. Non-destructive analysis is done by X-ray, XRF, XRD. We learned how to address non-destructive analysis by X-ray, XRF, XRD.

Some conservation work is similar with that carried out in Japan and some is dissimilar. Similarities between current practices in Bangladesh and Japan are as follows:

<table>
<thead>
<tr>
<th>Bangladesh</th>
<th>Japan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dust is removed from artefacts with a soft brush.</td>
<td>Yes</td>
</tr>
<tr>
<td>Salt is removed by chemical methods.</td>
<td>Yes</td>
</tr>
<tr>
<td>Paraloid B is used for coating.</td>
<td>Yes</td>
</tr>
<tr>
<td>PEG is used for coating of wooden artefacts.</td>
<td>Yes</td>
</tr>
<tr>
<td>Epoxy resin is used for pudding of wooden artefacts.</td>
<td>Yes</td>
</tr>
<tr>
<td>A vibra spatula is used for cleaning.</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Dissimilarities between current practices in Bangladesh and Japan are as follows:

<table>
<thead>
<tr>
<th>Japan</th>
<th>Bangladesh</th>
</tr>
</thead>
<tbody>
<tr>
<td>X-Ray, XRF and XRD are used in Japan for analysis.</td>
<td>X-Ray, XRF and XRD are not used.</td>
</tr>
<tr>
<td>Air-abrasive techniques are used for metal artefact cleaning.</td>
<td>Air-abrasive techniques are not used.</td>
</tr>
<tr>
<td>Temperature and humidity are controlled in museums and storage areas.</td>
<td>Temperature and humidity are not controlled in museums and storage areas.</td>
</tr>
<tr>
<td>Cleaning is addressed by mechanical ways.</td>
<td>Cleaning is addressed by chemical ways.</td>
</tr>
<tr>
<td>Temperature and humidity recorders are always running.</td>
<td>Temperature and humidity recorders are not always running.</td>
</tr>
<tr>
<td>Air conditioning is used in all museums.</td>
<td>Air conditioning is not used in all museums.</td>
</tr>
<tr>
<td>The RP system is used.</td>
<td>The RP system is not used.</td>
</tr>
<tr>
<td>Dehumidifiers are used.</td>
<td>Dehumidifiers are not used.</td>
</tr>
<tr>
<td>A dehumidification agent is used in showcases.</td>
<td>A dehumidification agent is not used in showcases.</td>
</tr>
</tbody>
</table>

I have learned many new methods for the conservation of museum and storage artefacts from this training course. I will try to apply these new methods in my country gradually. At first, we will install air conditioners and dehumidifiers in all museums and storage areas. Besides this, dehumidifier agents and RP system methods will be applied in showcases in all museums. Added to that, temperature and humidity recorders will be set up in all museums and storage areas gradually. In my country, I will try to reduce the chemical cleaning of artefacts but increase the mechanical cleaning of artefacts. I must say that the non-destructive analysis of artefact is very important before starting conservation work. But it will be difficult to use non-destructive analysis of artefacts in my country because we do not have X-ray, XRF or XRD. But we will try to solve this problem in my country.

Many topics for conservation of artefacts were included in this training course. So, it turned out that 15 days was insufficient. The duration of this course should instead be 30 days.
Overall, training is very important for the conservation of artefacts because a conservator may destroy the artefacts during conservation without such training. This type of institute is not available in all countries, and there is no such type of institute in my country. So, it was very necessary for us to receive this type of training.
Thematic Training Course (Final Report)

Artefacts and monuments all over the world are threatened by numerous factors such as population pressure, irregular planning, haphazard development and expansion, the lifestyles of local dwellers and many other reasons. On the other hand, the environmental effects on archaeological artefacts and monuments have acquired a new dimension throughout the world due to the industrial and technological advancements of modern civilization. The production and use of a vast number of chemicals, the greenhouse effect, acid rain and consequent global warming have also been responsible for the degradation and decay of historical artefacts and monuments. Excavation and exploration, conservation planning, supervision and management of conservation works, and exhibition of artefacts in a proper manner are some of the responsibilities of the Department of Archaeology of Bangladesh. Chemical conservation is one of the most important of these. Proper management skills, correct decision making and the correct approach being taken at the right time are essential to fulfill this task. Having experience in this field is very important for achieving good results. So far, I have been engaged in different types of conservation projects in my career from time to time, and that involvement has helped me to gain good experience in the chemical conservation field in my country. Again, I have been rewarded with an opportunity to gain further experience at the international level by participating in this training program.

A training program was arranged, titled “A thematic training course for mid-career professionals of cultural heritage protection of the Asia-Pacific region” and especially “Conservation science for museum work” by ACCU Nara, Japan from 24 July to 7 August, 2018. There were five participants, from Pakistan, Afghanistan and Bangladesh. I was one of the participants in that training program. I arrived in Japan on 23 July, 2018 and was cordially received at Kansai International Airport in Osaka, and all necessary arrangements for the training program were made for me by the ACCU Nara office. They gave us all the support we needed so that we could get maximum benefit from the training course.

The opening ceremony and orientation of the training program was held at the ACCU Nara office on 24 July, 2018. After the opening ceremony the scheduled work began. On 25 July, 2018 every participant delivered a presentation on their country report as per the schedule. (Figure 1)

After that, a step-by-step program followed covering the themes of the course. The theoretical part was covered through lectures using PowerPoint presentations and the practical part was covered by working. I had a good opportunity to gain experience and knowledge in a vast area in the field of chemical conservation during the training course. I would like to mention briefly some of the things that I have gathered from the program.

In the training course I learned about the modern and traditional techniques which should be used for chemical conservation in Bangladesh. Consequently, topics such as the mechanism of corrosion of metal objects, environments for preservation and exhibition, desalination, and restoration were delivered by experts. (Figure 2)

Both the theoretical and practical work was carried out by the participants under the supervision of experts. We were also taught how to use electronic devices for the examination and identification of the conservation state of artefacts and for the elements of inorganic objects. The latest modern technology for chemical conservation is used in Japan. They have many facilities and laboratories to acquire knowledge and for becoming more efficient in the related ground especially in chemical conservation. The experts showed us how humidity affects artefacts and causes deterioration. On the other hand, they also taught us remedies that could counter the effect of humidity on artefacts. (Figure 3)

Nara National Research Institute for Cultural Properties has many electronic devices such as XRF, XRD, radiographic equipment, scanners etc. to detect the conservation state and elements of an artefact. It is therefore very easy to identify the condition of an artefact and also know what kind of treatment is needed for that artefact. Not only that, through the help of these types of devices, a researcher can obtain answers to many of the questions that he/she has. Chemical treatment work has become easier with these devices through the identification of problems. During the training period I learned how to operate these devices. Although it is not possible to fully learn how to operate such devices in two or three days, the trainers tried their best to teach us to gain maximum benefit from the training. By using XRF and XRD we analysed some samples like iron, copper, lead, nickel, cobalt, zinc, calcium carbonate, calcium oxide, iron oxide, etc. (Figure 4)

The trainers discussed the desalination techniques used in Japan. Salinity is one of the greatest problems for artefacts and monuments all over the world. So, in this case, all participants were very alert during the discussion session so that they could know about new methods or techniques. The trainers discussed in detail so many methods and techniques relating to desalination.

Bangladesh

Similarities and differences in chemical conservation between Japan and Bangladesh

Md. Liaquat Ali, Archaeological Chemist
Department Archaeology, Ministry of Cultural Affairs
Apart from this, the experts have talked about chemical conservation of metallic and wooden objects. It was very nice and educative to me. I was surprised to know that the Nara National Research Institute for Cultural Properties does not use chemical materials for cleaning artefacts. They apply only mechanical methods. Among these methods, most of them are similar to what we use in our country. But we use both mechanical and chemical methods in for cleaning artefacts. Some of the points were confusing to me, but overall, the discussion was fruitful. I also learned about the restoration of wooden objects. In Bangladesh there are few wooden objects. So I may not need to restore a huge number of wooden objects in the future. However, I think that this kind of restoration work is not so complicated. (Figure 5)

As part of our training program we visited the “Gango-ji Temple Institute for Research of Cultural Property.” As a private organization, it is most unique, and possesses a wealth of equipment. There is a large space for researching cultural property. We also visited Nara Palace Site Museum, Nara Palace Site Museum, Kitora Tumulus Mural Experience Museum and Asuka Historical Museum. Among these, Nara Palace Site Museum is an excellent one. (Figure 6)

During the training period, I got to know that chemical conservation in both Japan and Bangladesh is very similar. Only some of the methods are different due to the use of technology. Since Bangladesh is a nascent country, it has no well-equipped laboratories or electronic devices such as XRF, XRD, radiographic equipment, CT scanners, etc. So, the majority of our chemical conservation work is carried out with chemical materials. On the other hand, Japan has more than one research institute like the Nara National Research Institute for Cultural Properties which uses modern instruments. So, they use the highest technology for chemical conservation. The opinion of Japanese conservators is that prevention is better than cure. But we have no option to think in this way because of our lack of technological devices and other limitations. But I think that there are many similarities in chemical conservation between Japan and Bangladesh. The techniques that I have learned through the training program can be applied to chemical conservation in Bangladesh. I also would like to use the knowledge that I gathered, and I shall gain a great deal by applying it in the context in which I work. It was interesting to study the similarities and differences in the application of techniques of chemical conservation between Japan and our country, Bangladesh.

The program was really interesting and educative to me. I hope the experience that I have obtained from the training program will help me in my professional duties in the future as I belong to the chemical conservation field in Bangladeshi archaeology. My opinion is that it would have been even better if the course had been longer; i.e., at least one month. Finally, I pay my heartiest respect to those distinguished people who organized this program, and who gave me the chance to participate in it.
Pakistan

Conservation Problems of Cultural Artefacts and Treatment with Modern Equipment

Arshad Ullah, Curator
Department of Archaeology and Museum, National History and Literary Heritage Division

Cultural heritage whether it is moveable or immovable is a great asset for a country, which becomes its pride in the comity of nations. Pakistan has one of the great cultural heritages, and in this part of the world, history goes back to the Stone Age. The conservation of these artefacts, which are composed of stone, clay, stucco, bronze, iron, copper, gold, ivory, glass, wood, and other auxiliary materials, is a gigantic task for Pakistan as conservation laboratories are not equipped with the modern devices which are prevalent in developed countries. A lack of professional expertise further aggravates the problem, and in this scenario, conservation of artefacts is the top priority of the Department of Archaeology and Museums of Pakistan, which is the custodian of cultural heritage of Pakistan. In this thematic training course for mid-career professionals on cultural heritage protection being organized by ACCU, we learned about the latest equipment which diagnoses problems according to its proportion and enables conservators to apply the latest techniques to solve these problems.

In Japan, for conservation and repair of pottery, they apply modern techniques like CT scanning, and join fragments with acrylic resin, epoxy resin or other material with extreme patience to reconsolidate the earthenware. During conservation, tube ducts which suck up dust are used. In Pakistan we possess much older earthenware from the Mehargarh period (8th century BC) and the Indus period (3rd century BC), bearing motifs of fish, animals, flowers, etc., but for their restoration we use rudimentary techniques and normally apply epoxy for joining parts of the pottery. For missing motifs, we do not apply any new additions; rather, after restoration, the missing pieces are left as they are.

Conservation experts in Japan apply great techniques for paper conservation, such as the method of sukibame (leaf casting) for treatment of historical documents damaged by insects, which was very interesting to observe. They explained how to segregate the paper sheets of a document stuck together due to bug holes, temporarily fixing the fragments, pushing in washi paper and making holes to bind the paper. We learned that by maintaining proper relative humidity between 55% and 65%, the manuscripts can be preserved without applying any chemicals or techniques. Pakistan has ancient manuscripts which are displayed in museums and kept in storage, but their condition is generally not good, as they are victims of weathering and biological effects. Insects such as termites are a constant threat to manuscripts being preserved in storage. Our department also has a paper conservation lab, but it is not equipped with much modern equipment or prudent technical staff, but by maintaining relative humidity between 55% and 65% we will be able to preserve our priceless manuscripts.

The methodology for metal ware conservation treatment shown to us was marvellous. The stages from pre-treatment investigation of metal artefacts, desalination, resin impregnation, coating, joining, restoration, and post treatment investigation were elaborated and practically demonstrated to our group. In Pakistan, our museums have a great number of metallic objects, especially made of bronze and copper, but they are rusted and constantly in a state of decay due to humidity, weather conditions, dust and other auxiliary problems.

An X-ray Fluorescence Analysis (XRF) machine is a great instrument to find out the values of components that exist in metallic artefacts. It identifies the elements that comprise a material in a non-destructive way. XRF (X-ray) analysis can be applied to inorganic materials like gold, copper, iron, ceramics, bronze, etc. Using this machine, through technique and constant practice, one can learn to extract exact information about the composition of a metallic object and obtain a hard copy of the result which clearly explains the information via a paper chart. By examining the chart on which K, L and M lines are mentioned, a conclusion can be reached by matching the graph lines that appear on a PC screen. The XRF machine needs a great amount of attention and practice for the operator to master its operation. The instructor demonstrated how to obtain good results through an XRF device. It needs human attention to avoid any kind of miss measurement of the composition of elements. Inorganic material like iron, bronze, copper, pigments, etc. can be analysed using this device to find out the composition of artefacts. In this phase of the training, all the groups were able to practically handle the machine and had calculated the ratio of different components through given columns of values of different chemical materials. There are many types of XRF devices, such as devices with a chamber, hand-held devices, and a number of others. But the accuracy of information can be enhanced through a device with a chamber with Manual calculation of data.

In Pakistan, the Department of Archaeology and Museums lacks these kinds of modern devices. We possess a great number of artefacts ranging from the Stone Age to the British period, and they are composed of various materials like stone, iron, bronze, copper, gold, silver, terracotta, stucco, clay, wood, ivory, glazed ceramics, etc., but a shortage of modern equipment and lack of highly qualified technical staff is a hindrance to keeping these artefacts in perfect condition, and whenever there is a need for any kind of repair or maintenance, our department finds itself unable to solve the problem according to the need. Our
and joints with epoxy is prevalent, along with applying colour on surfaces, pulverization into wood powder and colour changes. From such factors includes wood cavities, small pits on the surface, pulverization into wood powder and colour changes. From such factors such as insects and brown rot fungi. Common damage is a great loss to the cultural heritage of Pakistan. For XRF (X-Ray Fluorescence) device. Operation of a hand-held device can smoothly be done by a crew of two or three experts.

In this group training we also learned how to use an X-ray Diffraction Spectroscopy (XRD) device for finding out the components of organic artefacts. The usage is quite difficult compared to the XRF device though in many cases it is necessary to first apply the XRF X-ray method and then proceed with XRD analysis to accumulate the exact values of the composition of the artefact in question. Neither of these modern devices are available to cultural heritage departments in Pakistan, and it is almost impossible to analyse artefacts in such a fabulously perfect manner. Many foreign archaeological missions engaged in archaeological activities have taken materials back to their respective countries in order to analyse their composition, and most of the time they apply the destructive XRD method, which has eventually culminated in the annihilation of artefacts, which is a great loss to the cultural heritage of Pakistan. For XRD (X-ray) analysis, the sample has to be grinded completely to make it even, put onto the designated glass and placed under the camera of the XRD device. In this process, first-hand knowledge of the composition of elements of the artefact sample—from where it was retrieved, its period, age, and comparative information with other artefacts of the same age—has to be known, which is necessary for the computer software to make graphs of the various elements in the artefact, otherwise, the PC will carry out research, which can be erroneous. If the element is completely unknown, then it is unavoidable to resort to XRF X-ray analyse for first-hand information. Many items of Pakistan cultural heritage like manuscripts, textiles, animal bones, etc. In storage are subjected to high humidity and are therefore vulnerable to constant decay and erosion, which can be treated with these modern devices.

Wooden artefacts and architecture in Pakistan are highly vulnerable to weathering. Wooden artefacts are damaged by physical factors such as UV rays and hydrolysis; and by biotic factors such as insects and brown rot fungi. Common damage from such factors includes wood cavities, small pits on the surface, pulverization into wood powder and colour changes. The conglomeration of various disadvantages plays a significant role in the degradation of wooden artefacts and architecture, which are a glorious reminder of the flabbergasting Muslim architecture in Pakistan. In Japan, the technique of filling pits and joints with epoxy is prevalent, along with applying colour on the retrofit part of the wooden artefacts. In Pakistan, we also use the same method, but some of the wooden artefacts are so extensively eroded by insects that it can be hard to restore them with that method. In Japan, PEG (Polyethylene Glycol) is used for the dimensional stabilization of wood and wood products, preventing shrinkage, discoloration and cracking, and helping to maintain the wood’s softness. Dipping large wooden piece in PEG solution extracts moisture from it, but the process has to be monitored properly. In Pakistan, the same mechanism is applied for large wooden pillars. Another big problem for wooden architecture in Pakistan is biotic factors such as insects, especially termites, which infest the wooden doors, wooden pillars, columns of old wooden architecture and other cultural heritage composed of wood. We normally use pesticides to control this threat by drilling underground and pouring in pesticides, which penetrate towards the base of the wooden architecture to erase termites from that level. Pesticides are also sprinkled on the surface. But this method can be counterproductive and can be hazardous for the wooden architecture.

The procedure of cleaning metallic artefacts is marvellous, as in laboratories of Japan; metallic artefacts are cleaned with the help of modern devices and advanced techniques which leave no room for rust and corrosion to remain on the artefacts. In Pakistan, we normally use old, rudimentary techniques and procedures for the cleansing of metallic objects of bronze, iron, copper, etc., involving a simple brush and methyl alcohol to remove the dust, or to some extent rust. However, these methods entail the danger of erasing the surface of objects, as sometimes if a brush or some hard instrument is used with force, it can scratch the surface of the artefacts.

In Japan, they also use methyl alcohol, which is applied by a brush for cleansing the surface of metallic objects like bronze and copper if the dust can easily be removed. Use of the AIRBRASIVE 6500 system device is exceptionally helpful in removing the dust perfectly. This kind of device is not available in our Department in Pakistan. For removing rust, another method involving EDTA solution is also used in Japan. In this case, a solution of EDTA with ethyl alcohol is prepared. Then a polymer is mixed into this solution as EDTA removes the rust and corrosion from the artefact, but this entails the risk of penetrating through the surface into the inside of the artefact. To counter this threat, the polymer plays the role of an impregnable wall and stops the penetration of EDTA solution into the metallic artefact.

Metallic artefacts like iron, bronze, copper, etc. are very prone to corrosion and deterioration in Pakistan. Objects lying in storage are particularly affected by humidity, which paves the way for corrosion and deterioration of artefacts. An iron artefact contains ferrous chloride and at high humidity creates ferrous chloride deliquescent, which promotes corrosion of the iron artefact. The formation of akaganeite also causes fragmentation and cracking in the artefact. We have learned that in Japan, to save iron artefacts from deterioration, relative humidity (RH) must be kept at 20% and shall not exceed 56%—for which various methods are available, such as dehumidifying devices, air...
conditioning, or an RP system (Revolutionary Preservation) to be installed in the display halls of museums and storage areas. These methods are actively prevalent in Japan. The best option is to install air-conditioning along with dehumidifier devices, but at the current juncture in museums and storage areas in Pakistan, the optimum and most easily available mechanism for saving metallic artefacts from deterioration is the RP system.

Pakistan has a great number of bronze artefacts ranging from 5000 BC to the later Muslim period. The appearance of pitting corrosion and formation of a light green powdery substance within the pitting corrosion is common in the priceless bronze artefacts of Pakistan. Some of the oldest bronze utensils have developed cracks, and are prone to further decay. The current condition of storage areas in Pakistani museums is pathetic and they have become dens of humidity and dust pollution, which pose a great danger to the priceless artefacts lying there. In this training course, we studied that air conditioning, dehumidification agents and the RP (Revolutionary Preservation) system are necessary to keep relative humidity under control in the storage and display areas of museums. Due to constraints on resources, Pakistan cannot install air conditioning or dehumidifiers in storage areas to control humidity in the near future, but the placement of the RP system along with metallic artefacts is feasible in the first instance, along with the shifting of artefacts to storage where air ventilation is available. Use of dehumidification agents which absorb moisture in high humidity conditions and release it in low humidity conditions can also be arranged for the museums and their respective storage areas to impede the development of corrosion in bronze artefacts.

In Japan, the removal of mural paintings from The Kitora Tumulus, involving jumbling to stick closely broken pieces by applying conservation methods with the use of modern equipment and devices is marvellous. Among other things, we learned that resin should be applied from the back side on broken pieces of mural paintings with the utmost care. This methodology can be applied to a mural painting of Buddha found in Ghandara which dates back to the 2nd Century BC.

In a nutshell, we learned and practically observed various modern techniques and usage of the latest devices for the conservation of artefacts, but it is next to impossible to compare the laboratories of Japan with those of Pakistan. Lack of modern devices, methodologies and experts are some factors which we have yet to overcome. The knowledge and training imparted to us in this training course will prove to be a great leap in the right direction, despite constraints on resources. And last but not least, the expert’s presentation style and the environment for learning in this training course were simply superb.
Pakistan

Challenges and Needs for Conservation of Museum Works in Pakistan

Tahir Saeed, Deputy Director
Department of Archaeology and Museum, National History and Literary Heritage Division

This training programme course at ACCU, Nara, Japan provided me with an excellent opportunity to learn the latest and most modern scientific approaches for the preservation of museum objects. The aim of this training course was not merely to explore conservation treatment or methodology but also to focus on the research/study of deterioration factors and the environment which promotes these factors. Furthermore, participants were able to learn and acquire practical experience on different analytical devices, especially on the usage of XRD (X-Ray Diffraction Spectroscopy) and XRF (X-Ray Fluorescence) for proper preservation of museum objects. The XRD technique is applied to the identification of different types of minerals or crystalline materials including rust, pigments, etc. found as applied to the identiﬁcation of different types of minerals or crystalline materials including rust, pigments, etc. XRF analysis technique is useful for the examination of inorganic materials such as gold, electrum, silver, copper alloys, lead, tin pewter, iron, stone, ceramic, glass, etc. It was profusely acquainted during these two weeks training course about the systems and mechanisms of these analytical devices. Besides this, very useful practical sessions were held to analyze inorganic material through destructive and non-destructive methods. However, in Pakistan, XRF and XRD are currently not available in our laboratories for chemical analysis and diagnosis for proper treatment and thus preservation of museum objects.

The restoration of wooden artefacts was taught in lectures, followed by practical sessions using the technique of filling the damaged parts with epoxy putty and colouring the restored parts with acrylic paint. In addition, PEG (Polyethylene glycol) is useful for restoration and treatment of wooden objects, as impregnated PEG is a hygroscopic material that dissolves when the relative humidity is over 85%, especially in complex objects like wood. In Pakistan, the common damage is wood cavities, small pits, pulverization into wood powder, and colour changes. Damp wood or waterlogged wood is damaged by soft rot fungi, bacteria, and borers. Furthermore, the damage from such factors includes softening, colour changes and massive loss of wood (Fig. 1-2). The restoration of wooden objects learnt during this training course can be applied in our country to small restoration works of wooden objects. For the treatment of wooden object, it is essential to control both humidity and biotic with the help of humidifiers and dehumidiﬁers. The study of the environment (temperature and humidity) for preservation and exhibition was taught in length and the weather was monitored during the training course with the help of a portable device. In Japan, the wireless Thermo Recorder device is used to monitor temperature and humidity. There are three methods for controlling the environment for preventive treatment: air-conditioning, humidification agents, and the RP System (Revolutionary Preservation System). Air-conditioners reduce changes in humidity. Moreover, humidity can be decreased by means of dehumidiﬁers in storage places. Humidity can also be kept constant by means of humidification agents and airtight exhibition cases. RP agents absorb moisture and oxygen from the air. The RP system consists of an RP agent and high gas barrier ﬁlm. The relative humidity is reduced to below 10% with the RP system and this system creates a microenvironment that is suitable for storage of artefacts. In our country, simple devices for monitoring the temperature and humidity in museums and reserve collections (storage) are applied as well as the RP system. In addition, weather stations are installed to monitor the weather at archaeological sites such as Moenjodaro, Taxila and Peshawar.

The mechanism of the corrosion of metal objects was another important topic of this training course. This included Evan’s experiment, desalination of iron objects, and treatments for proper preservation of metal objects. The conservation practices for museum work not only enhanced my knowledge to cope with the deteriorating condition of museum objects but also provided an opportunity to better understand conservation problems as well as to comparatively evaluate the current practices in my country. An essential cause of deterioration in metal objects in Pakistan is the corrosion of metal objects through interaction with the environment. The most inﬂuential factors in the deterioration of museum objects is inconsistent relative humidity and air temperature (Fig. 3-5). The main treatments applied to metal objects are controlling moisture, humidity, and environment, and curbing the impact of chemical reaction, which was learnt during this training course. Similarly, due to environmental factors, ceramics made of different materials break down physically and chemically, and therefore, regular monitoring of temperature and humidity is highly necessary for proper preservation of museum objects. For proper conservation of object is, however, important not only to use chemicals but to identify the environmental factors which cause deterioration and also to control the environment to inhibit the deterioration of museum objects (Fig. 6-8).

The desalination of iron objects (ﬂuid extraction method or sodium hydroxide method) was also experienced with the help of chemicals used for this purpose. This type of applications being used in our laboratories for inorganic material. Further, practical hands-on work was carried out to understand the process of desalination with the use of chemicals known as polymers. This kind of substance is used for removing corrosion from inorganic materials.
objects and practical experience was acquired on use of an air pressure chamber known as an air-abrasive for desalination of inorganic objects. In our country, this method of using polymers is also used for removing corrosion from the surfaces of inorganic material. The study tour of Gango-ji Temple Institute for Research of Cultural Property provided another opportunity to observe and examine the different methodologies adopted for preservation of cultural heritage, such as research on cultural heritage objects, and conservation and restoration treatment of different inorganic materials. Besides this, environment control in an exhibition room was monitored and studied during the visits to The Kitora Tumulus Mural Experiential Museum, and Asuka Historical Museum, which helped me to better understand environmental problems and the application of different techniques for preservation of museum objects.

In Pakistan, both the federal and provincial departments of archaeology lack suitable facilities for undertaking various methodologies for proper treatment of museum objects. Therefore, the establishment of more conservation laboratories and provision of the latest and most modern equipment, such as microscopes, spectrometers, X-ray devices, and XRD and XRF facilities, for better understanding of cultural objects and their components, are essential to enhancing conservation techniques for museum objects in Pakistan.
II. Group Training Course

1. Country Reports
2. Final Reports

On-site study at Imperial Villa Garden Site, Nara city
Afghanistan is among the territories which have involved the world’s civilizations at an important territorial point, the intersection of world cultures and civilizations, with rich natural resources and a good climate, which have drawn the world’s most powerful civilizations such as the Chinese empire, the Romans, the Parthians and the Achaemenids, whose cultural and artistic phenomena and ethnic structure, and their specialties with their religious beliefs have connected to this land continually. In ancient times people of this land followed the Buddhist and Brahmanic religions. The existence of temples, stupas, and Buddhist statues are all the relics of the Kushans and their survivors.

In recent years archaeological research at the archaeological site of Mes Aynak has shown that this region is one of the most important archaeological locations in Afghanistan. The site is located at a distance of 35 km southeast of Kabul.

Mes Aynak
A magnificent Buddhist city, it is one of the most important archaeological discoveries in recent decades. Unfortunately it is located on the top of a copper mine and most probably is going to be destroyed when the extraction of ore from the mine begins. The ancient site of Mes Aynak of Logar province was discovered in 1963, and further explored in 1976, by a committee including G. Fisman and M. Leibar. Later, Russian scientists Kuzmina and Vinogradov, as well as the French scientists Bakhtil and Gordan, visited the site. But in 1978, based on a survey conducted by the archaeological team of the Délégation Archeologique Français en Afghanistan (DAFA), the site was connected to the Kushan period in history. In 1970, Russian geologists reported the existence of ancient ruins at this site and mentioned some long tunnels in the eastern part of the original mountain of the Mes Aynak mine. Based on that survey, those tunnels were excavated for 120 meters towards the interior of the mine (the copper vein). Unfortunately, due to the surveys carried out by geologists to stabilize copper extraction at the Mes Aynak site, many ancient features were destroyed. However, during the survey conducted by DAFA in 1980, the archaeologists J. S. Gardin and Bertille Lyonnet collected some ceramic vessels from the site (Preserving the Cultural Heritage of Afghanistan, Chicago: The Oriental Institute, 2017).

In 2004, 2005, and 2007, a team from the Archaeology Institute of Afghanistan surveyed and visited the site, and it came under the protection of 012 Police Unit (012 is a special police unit for the protection of archaeological sites and historical monuments). In 2009, based on an agreement between the Chinese company MCC and the Afghan Government, preliminary surveys and archaeological excavations began at the Mes Aynak site. The first location within the site, Tepe Gul Hamid, was selected for scientific and professional excavations. This ancient site is located at a distance of 900 m west of Kaferya hill. As a result of excavations performed in 2009 at this site, a temple of the Buddhist period was found below masses of soil.
The site of Mes Aynak has been victim of illegal excavation by looters over the course of its history. This has caused destruction at the site; not only did they destroy the site but also looted the antiquities that were hidden underground.

Extensive archaeological sites have been excavated at Mes Aynak. The most important among them are the following:

1. Gul Hamid ancient site
2. Kafaria Tepe ancient site
3. Aynak mountain ancient site
4. Shamar Tepe ancient site
5. Shah Tepe ancient site
6. 045 archaeological site
7. 058 archaeological site
8. 013 archaeological site

During the scientific excavations that were carried out at these sites, hundreds of movable and immovable archaeological objects have been discovered. Most of the movable objects have been transferred to the National Museum of Afghanistan, where there is a special exhibition for materials from Mes Aynak.

Challenges and problems

Over the past 10 years, archaeological excavations have taken place in various archaeological areas of Mes Aynak, and thousands of movable artefacts and hundreds of non-transferable treasures have been discovered, with those movable artefacts being transferred to the national and local museums, but the immovable ancient relics of this area which are mostly heavy in weight and include large clay sculptures, medium and small stupas made of stone, and architectural structures, still remain on the site.

The most important issue for the site is that it is located on top of a copper mine, and when the extraction of ore begins, the site will be destroyed. Our aim is to protect the site because it reflects the nation’s identity and the history of our country, but on the other hand the extraction of ore from the mine is also important as one of the ways to save the country from its current situation of illiteracy, various illnesses, hunger, insecurity, and hundreds of other problems our people are facing.

Our main problem for this ancient area is the transfer of heavyweight relics, stupas, and other archaeological remains from the site. For achieving this goal, we need financial and technical support from international organizations. (Figure 1,2,3)

One of our main problems also is the lack of laboratories for the analysis of ancient artefacts and especially for the samples which are taken from different sites. Another problem is the lack of sufficient budget and access to funds in order to survey, excavate and protect the ancient region; this is also an obstacle to the growth of archaeology.

Poor security, lack of strong management, lack of protective laws for precious cultural heritage, are other problems in the maintenance of cultural heritage, which contribute to the destruction of the country’s ancient artefacts and thus to the lack of growth in the introduction of the cultural heritage of Afghanistan to the world.

Another challenge in Mes Aynak and all other archaeological sites of Afghanistan is the absence of the necessary chemicals and professionals for restoration and conservation of the archaeological objects which are obtained during the excavations. At present we have 27 archaeological sites under investigation in the entire Mes Aynak area, but we have only two conservators. This is not enough; we need more conservators.

New discoveries in Mes Aynak of manuscripts written on papyrus have raised the problem of how to protect them, because we do not have specialists in this field or facilities to keep such objects.
I have been working on the excavation of ancient sites and I know well that each winter causes significant damage to these sites and monuments. I am aware of the kind of repair that is needed every year. We make do with the rudimentary resources available to us. We cover the most important among the relics, which are statues, stupas, and other small artefacts. However, we are not able to stop the damage that accrues continuously. The walls and large buildings that have been excavated over several years are moreover all at risk because of the extraction of copper. (Figure 4,5,6,7)

One of the other problems in preserving heritage is the existence of unexploded land mines, although the Mes Aynak area has been demined, but since the beginning of the excavations we have seen several land mines at various sites in Mes Aynak, and unfortunately one of these mines exploded during the excavations and caused injury to a worker. (Figure 8)

Site number 052 is one of the residential archaeological sites located at the central part of the Aynak Mountain Range, approximately 2,530 meters above sea level. Excavation of this site started in 2014 and ended in 2018. This site is divided into two parts, the first one measuring 23 x 25 m, and the other 20 x 20 m, and by the end of excavation at this site, we had discovered 35 rooms, including living rooms, work rooms, food storage areas, and so forth. The finds from the site include ceramics, stone objects, and clay and iron artefacts. They have all been documented. (Figure 9,10,11)

As a result of the excavations that took place at this site, three caves have been discovered which were blocked with stone. These caves show the first phase of life in this area, and a clay stupa has also been found from this area, but unfortunately most of the parts of this stupa had been destroyed by looters.

In order to address the challenges and save the heritage of Afghanistan, particularly Mes Aynak, we need the support and assistance of international organizations. In recent decades there have been many countries and organizations that have helped us to preserve the cultural heritage of our country for which we are very thankful, but it is still insufficient. The government of Afghanistan and especially the Institute of Archaeology of Afghanistan are thankful for the generous cooperation of different countries, especially that of Japan. Your contribution to our heritage will never be forgotten.

In this regard, hereby, on behalf of the Archaeology Institute of Afghanistan, I would like to ask the support and assistance of Japan for preserving the unique archaeological site of Mes Aynak. In case we do not get the support of international organizations, most probably we will lose this heritage and so will the world, because cultural heritage does not belong to a specific country, it belongs collectively to humanity, and so does the responsibility for its preservation.
Introduction
Bangladesh is a country in South Asia, bordering the Bay of Bengal to the south and entirely encircled by the Republic of India to the west, north and east, and by Myanmar to the southeast. It occupies an area of 147,570 square kilometres. The Bengalis constitute the overwhelming majority of the population of Bangladesh. They have been culturally and ethnically such a strong, firm, unyielding and rock-solid human group that they have emerged as a nation and formed a state of their own. The Bengalis are a relatively homogenous ethnic group both linguistically and culturally. Their language, literature, art, music, other accomplishments, customs, interests, and values make up their culture. Language is the most dominant element of Bengali culture.

Problems of Cultural Heritage Protection
The Bangladesh Liberation War (Muktijuddho) also known as the Bangladesh War of Independence, was a revolution and armed conflict sparked by the rise of the Bengali nationalist and self-determination movement in what was then East Pakistan during the 1971 genocide. The Liberation War began after the West Pakistani military junta launched Operation Searchlight against the people of East Pakistan on the night of 25 March 1971. The war ended on 16 December 1971 after West Pakistan surrendered and ceded control of the former East Pakistan to the Government of Bangladesh. In the Liberation War period, the West Pakistani military destroyed many cultural heritage sites in Bangladesh. The two major sources of the problems of cultural heritage protection for the country have been environmental factors and political factors. In order to look after the affairs of culture and heritage of the country, the Government of Bangladesh has created a separate ministry by the name of the Ministry of Cultural Affairs.

What is the Need for Cultural Heritage Protection?
Heritage is one of the unique elements of national identity. It is the foundation upon which the culture of a people is built. The law helps us define and categorize heritage and has developed appropriate mechanisms for heritage protection based on its particular features. The deliberate destruction of cultural heritage not only affects the people’s historic identity, but also hampers efforts at post-conflict recovery and peace building. Heritage law has many applications to current issues of sustainable development, such as climate change and environmental protection, tourism education, etc. Accordingly, it is important to make certain to use the law and resources in such a way that future generations are not impaired. Cultural heritage embodies the wealth of knowledge and skills that is transmitted through it from one generation to the next. Theft, war, civil disorder, terrorism, neglect and vandalism are human factors contributing to the accidental or wilful destruction of our heritage.

Cultural Heritage Protection and Restoration Activities
The state’s obligation is clearly inscribed in the constitution of the country as one of ensuring the equal rights of the people in every sphere of life.

Article 23 of the constitution says “The State shall adopt measures to conserve the cultural traditions and heritage of the people, and so to foster and improve the national language, literature and the arts that all sections of the people are afforded the opportunity to contribute towards and to participate in the enrichment of the national culture.”

Article 24 of the constitution declares “The State shall adopt measures for the protection against disfigurement, damage or removal of all monuments, objects or places of special artistic or historic importance or interest.”

The Government of Bangladesh has classified heritage into two broad divisions: cultural heritage and natural heritage. The major task of the Ministry of Cultural Affairs is to look after the public cultural institutions in terms of policy, finance and administration and to help the private cultural institutions financially as far as possible. It is extremely important for every cultural institution to pursue two standards, legal standards and ethical standards, which constantly interact. Understanding this interaction provides a realistic framework for effective cultural governance. The law imposes three obligations on the governing body: care, diligence, and honesty.

Cultural Heritage Protection Organization
Cultural and heritage institutions of Bangladesh, whether public or private, are non-profit organizations. A public organization is either a purely government institution or a statutory one. The protective organization bodies’ functions are listed below.

1. Bangladesh National Museum: The Bangladesh Jatiya Jadhughar ordinance No. LIII of 1983 established the Bangladesh National Museum. The Museum seeks to extend the perception of culture to its widest anthropological sense, linking our present day life to man’s creative search of the material world, both natural and man-made, on the one hand, while helping visitors discover on the other a purpose that is common to all. The Bangladesh National Museum and its seven branch museums have catalogued their collections in accordance with a detailed object
identification system. This system has been designed to describe each of the 106,000 objects making up the collections. This helps capture vital information relating to each object, and this information includes the item’s classification, date of accession, accession number, name, material used, measurements, distinguishing features, estimated price, place of origin, acquisition history, physical condition, location within the museum, etc.

2. Department of Archaeology: The Department of Archaeology is the premier organization for the archaeological research, scientific analysis, and excavation of archaeological sites, and for the conservation and preservation of protected monuments and areas of national importance, the maintenance of site museums, and the regulation of legislation related to antiquities and treasures, as specified by the Antiquities Act of 1968 (amended in 1976). Its main responsibilities include the maintenance, conservation and repair of “protected” sites and monuments all over the country according to the Archaeological Works Code. Decipherment and study of ancient epigraphic records including stone inscriptions, copper plates, coins and manuscripts in Sanskrit, Arabic and Persian are entrusted to the experts of the Department. The Department also collects and preserves ethnological objects of tribal peoples and preserves them in the Ethnological Museum. It Coordinates the UNESCO mission activities for the restoration and preservation of our World Heritage sites of the country.

3. Bangladesh Shilpakala Academy (Bangladesh Fine Arts Academy): This academy was established through an act of Parliament in 1974 as a statutory organization under the Ministry of Cultural Affairs. But subsequently the Act of 1974 of Bangladesh Shilpakala Academy was amended through a new act of Parliament in 1989.

The duties and responsibilities of the Academy include the promotion of the arts and national culture and the creation of necessary facilities for their development. The activities of the academy also include organizing workshops, seminars, discussion meetings and short-term courses in specialized training, and providing scholarships and financial grants for talented artists in the various fields of the fine and performing arts.

4. Bangla Academy: Bangla Academy is the national academy of arts and literature of Bangladesh. Since its inception on 3 December 1955 Bangla Academy has played a remarkable and amazing role in the collection, research, translation, compilation and publication of Bengali language materials, as well as in various activities related to language and literature and for the promotion of Bengali culture. It has collected a huge corpus of oral traditions. There are many enthusiastic scholars whose contributions to folklore research are praiseworthy as is evident from their numerous publications concerning folktales, nursery rhymes, folksongs, proverbs, riddles, and local dialects.

Bangla Academy has established three museums, namely, the Folk Heritage Museum, the Language Movement Museum, and the National Literature and Writers Museum. Amar Ekushe Grantha Mela, the greatest and most attractive book fair of Bangladesh, is held annually at the behest of the Bangla Academy.

5. National Book Centre: The National Book Centre (NBC) executes the goal of UNESCO regarding the dissemination of knowledge through book promotion. It is an autonomous organization. It launches worldwide programs of book development with a view to making systematic and sound promotion of books within the country.

6. Bangladesh Folk Arts and Crafts Foundation, Sonargaon, Narayanganj: This was established on 12 March 1975. The main tasks of the foundation are to collect traditional monuments and folk art and craft elements of Bangladesh, to ensure their preservation, to restore them where necessary for the present and future generations, and to arrange exhibitions. The foundation has two folk art and craft museums to display objects of folk culture and handicrafts.

7. Directorate of Archives and Libraries: The government of Bangladesh promulgated the National Archives Ordinance in 1983 in order to provide for the establishment of a National Archives and for the collection, preservation, maintenance and administration of permanent records and archives of the Government of Bangladesh.

8. Copyright Office: The Copyright Act of 2000 (amended in 2005) contains, among others, the subject matters of the Trade-Related Aspects of Intellectual Property Rights (TRIPS) Agreement with respect to copyrights and related rights, including those involving computer programmers, databases, rental rights, cinema, broadcasting rights, performer’s rights, sound recordings, etc. In 1962 a copyright ordinance was promulgated, amalgamating the different copyright laws which existed at that time into the Copyright Ordinance of 1962. Bangladesh has been cooperating with the World Trade Organization (WTO), World Intellectual Property Organization (WIPO) and UNESCO for enriching the copyright system.

9. International Mother Language Institute: The International Mother Language Institute was established on 21 February 2010 for promoting Bangla language and literature at home and abroad, making Bangla an official language of the United Nations, circulating our Language Movement history among member countries of UNESCO, and conferring fellowships for language research. The International Mother Language Institute has a museum of its own. The museum and the archive act as spearheads for the International Mother Language Institute.
10. **Small Indigenous Group Cultural Academy (Khudra Nri-Ghosty Cultural Academy), Rangamati:** This Academy was established in 1978 in order to promote, preserve and develop indigenous cultures of the Southern Hill Tracts region and to bring such activities into the mainstream of national culture of Bangladesh.

11. **Cox’s Bazar Shanskritik Kendra (Cox’s Bazar Cultural Centre), Cox’s Bazar:** This Centre was initially established for the then indigenous Rakhain community. It arranges seminars, conducts research on the customs and traditions of different communities of people including the Rakhain community living in the city of Cox’s Bazar. It also publishes magazines and books for maintaining their origin cultural heritage which is at risk of being lost.

12. **Tribal Cultural Academy, Birisiri, Netrokona:** This Academy has been established for ethnic groups such as the Garo, Hajongs, Koch, Banai, Hadi, and Mandai, etc., living in the northern districts of Bangladesh, for the preservation of each group’s society and their practices of culture and life style, such as language.

13. **Manipuri Lalikala Academy (Fine Art Academy), Maulabazar:** This Academy has been established for the development and protection of the culture of the Monipuri indigenous people.

14. **Khudra Nri-Ghosty Cultural Academy, Khagrachhari:** This Academy is working to protect the cultural heritage of small indigenous groups of this region.

15. **Rajshahi Bivaghaia Khudra Nri-Ghosty Cultural Academy, Rajshahi:** This Academy is working to protect the cultural heritage of small indigenous groups of this region.

**List of Designated Cultural Heritage**

The designated cultural heritage assets include antiquities, works of art, objects of scientific interest, ethological specimens, relics connected with the liberation struggle of Bangladesh, traditional crafts and artefacts, products of intellectual activities, audio-visual documentary items, and other such objects. According to the Antiquities Act of Bangladesh, an antiquity is an object which has been in existence for at least one hundred years. Bangladesh is rich in antiquities, which are both movable and immovable.

There are more than 100 designated cultural sites. The major sites are (1) Wari-Batehswar, (2) Mahasthanart, (3) Buddhist Mahavihara at Paharpur, (4) Mainamati, (5) Sat Gumbad Mosque, (6) Lalbagh Fort, (7) Kusumba Mosque, (8) Kantaji Temple, (9) Sonargaon, and (10) Sundarbans.

The World Heritage sites include the Buddhist Mahavihara at Paharpur, the Sat Gumbad Mosque, and Sundarbans, along with Baul songs as intangible heritage. The traditional arts of Jamdani weaving and Shital Pati weaving have also been inscribed on the list of Intangible Cultural Heritage of Humanity.

**Images of Some Important Culture Heritage (tangible and intangible) in Bangladesh:** (Photo source: Internet)

- **FIGURE 1.** Paharpur Buddhist Bihar, built in the 8th century AD
- **FIGURE 2.** Kantaji Temple, built in the 18th century AD.
- **FIGURE 3.** Traditional art of Jamdani weaving, which has been inscribed on the list of Intangible Cultural Heritage of Humanity
- **FIGURE 4.** Traditional art of Shital Pati weaving, which has been inscribed on the list of Intangible Cultural Heritage of Humanity
Experience in the Protection of Heritage Sites

Sonam Tenzin, Cultural Officer
Division for Conservation of Heritage, Department of Culture, Ministry of Home and Cultural Affairs

1. Initial experience in the field of protecting heritage sites at Lhuentse Dzongkhag

I was appointed as the Dzongkhag (District) Cultural Officer in Lhuentse Dzongkhag, eastern Bhutan, from May 2005 to June 2010. This is the one of 20 districts in the country and is located 465 km from Thimphu, capital city of Bhutan. In general, all the Dzongs (fortresses) in the country house the District Administration office and the Rabdey (monastic body). Lhuentse Dzong houses the same, and serves as the highest decision-making body with an elected chairperson from amongst its members and Gewog Tshogde in the Gewogs (blocks) with the Gup (local elected leader) as de facto chairperson. The Dzongkhag takes pride in being an ancestral home of our Kings, with the impressive Nagtshang (castle) of Jigme Namgyel (father of the first King of Bhutan) still standing at its original place. It is also blessed with the visits of holy figures. It is popularly known as the ultimate destination for Buddhist pilgrims because of its important secret places.

Technically, I did not understand the main essence of protection of heritage sites; rather I was charged with taking the following major responsibilities.

1. Implement plans and polices, and coordinate them to promote and preserve culture.
2. Create an environment conducive to research and learning in the field of culture.
3. Promote Driglam Namzha (the official behaviour and dress code).
4. Liaise with Headquarters concerning cultural matters.
5. Monitor, review and evaluate cultural activities.

As Cultural Officer, the duties of the position extend to the supervision of all categories of staff in the Dzongkhag. Accordingly, we are responsible for ensuring that the programs and plans are implemented efficiently and effectively, so that routine services meet the given standards. The position of Cultural Officer is important in maintaining and updating the social behaviour of people. The position has to develop new systems to suit the changes in behaviour. The culture and tradition of the country as preserved in written form can hardly be supported unless put into practice. Therefore, the quality of the work of this position has significant impact on the socio-cultural development of the nation. (Figure 3)

However, as I was appointed as the first candidate to this post, I did not appreciate that the current economic condition, demographic statistics and people’s strong sense of attachment to materialistic goals would cause heritage sites to lose their popular appeal. Since Bhutan is considered a living culture in the world, facing a loss in the value of its culture and tradition, heritage sites were not the highest priority. Further, with the rapid modernization and integration of external influences, the preservation, conservation and protection of heritage sites were given little consideration. Thus conserving our heritage sites did not weigh on my mind during that period at Lhuentse Dzongkhag.

However, I arrived at an understanding of the term "conservation"
While the plan for Dzong conservation came into the picture, implemented by the office of the Division for Conservation of Heritage Sites, Department of Culture. (Figure 4)

2. Second transfer, to Trashiyangtse Dzongkhag from July 2010 – March 2015

The Government has the policy of transferring officials from one place to another periodically. Having worked in the post of Cultural Officer for five years, I was reshuffled and transferred to another Dzongkhag, namely Trashiyangtse. This Dzongkhag is located to the extreme east, 585 km from the capital city of the country. (Figure 5,6)

Although transferred to a new place, the work for which I was responsible was the same as mentioned above. Under constant guidance from the team of the Division for Conservation of Heritage Sites (DCHS), of the Department of Culture, Ministry of Home and Cultural Affairs, and in line with the policy of cultural preservation and promotion, we understood that learning, studying, promoting and transmitting Bhutanese culture and its essence is an obligation for each and every Bhutanese today. However, due to modernization and a lack of available resources, most builders are opting for more fashionable designs rather than the valuable and unique traditional one.

While working at Trashiyangtse Dzongkhag, I was given the privilege by the office of DCHS to attend an Educational Workshop on Archaeology in Bhutan, organized by the Division for the Conservation of Heritage Sites, from 27 March to 1 April 2011. The term “archaeology” was very new for every one of the participants as well in Bhutan as a whole, and we did not even know what it meant or how it should be implemented. It was like a man with a blindfold walking over a street without knowing the situation of the street. With this educational workshop, we gained some understanding of the term “archaeology” and related topics including conservation, protection and so on with regard to cultural heritage sites. Subsequently, conservation and protection of the heritage sites have been intensively carried out. Nevertheless, due to the lack of knowledge about protecting heritage sites in the community, these sites are vulnerable and there are threats especially to heritage sites in the remote villages of the country. In the same year, the Division for Conservation of Heritage Sites organized the “Rescue Excavation Training Program” (Archaeology) from 17 October to 13 November 2011, which gave a better understanding and field knowledge about surveying, documenting and mapping sites. (Figure 7)

The main objective of the field training was to understand the field work of archaeology and to gain diverse interests regarding the investigation of archaeology sites. We were taught how to initiate documentation using instruments and techniques for finding potential sites. Further, the Division for Conservation of Heritage Sites conducted a program on the operational management of sites, archives, handling of the finds and other related aspects of data management. We have been provided with training on inventory and documentation to understand the issues and challenges during their implementation.
Through participation in these workshops, talks, and seminars in the field of conservation and protection of heritage sites, the knowledge imparted by the experts, conservators and other renowned scholars has helped us become more effective in protecting heritage sites.

It has been some years since gaining this understanding of the need for documentation and registering of heritage sites to protect them from the threats of economic developmental. Also, we still have much to learn about the establishment of a database and its importance in the Department as well to the field staff who work at heritage sites in the Dzongkhags. But in this manner, the team is becoming sensitized with knowledge about protecting heritage sites. (Figure 8)

3. Third transfer, to the Division of Conservation of Heritage Sites, Archaeology Section, Department of Culture, April 2015 – present

The knowledge imparted by the experts during my stay in the Dzongkhags with regards to protecting and safeguarding all the important heritage sites really assisted me when I was transferred to the Department. The main responsibility in the office is to facilitate the provision of guidance, and to sensitize and promote awareness in the general public regarding the importance of heritage sites, cultural landscapes, archaeological sites and other related important sites. The office has designated nationally important monuments for restoration and conservation.

Knowing of the demolition of heritage sites and the implications of this, the Division has coordinated documentation of heritage sites, cultural landscapes and potential archaeological sites in the country. The landscape, both rural and urban, is of great importance as historical background and we can unravel it through observation, investigation and recording. Nevertheless, the initial step for documentation is to survey and record the sites in the field to a standard which is acceptable to the profession today.

The concept of archaeology has been the focus of national interest after carrying out the first ever archaeological project (Drumpham Dzong ruin) in Bhutan. Since then, the majority of Bhutanese citizens have gained no new knowledge regarding the content of archaeology. Bhutan, though being a small country, has a rich culture and environment, with architectural and cultural landscapes and other human materials as heritage which needs to be recorded. With the rapid economic development, the view of archaeology in Bhutan held by some of the developers seems to be as a highly complicated and time-consuming obstacle to construction. (Figure 9, 10)

Despite these obstacles, the Archaeology section under the Division for Conservation of Heritage Sites has documented a number of vulnerable and important archaeological sites over time, as follows.

1. Excavation of Drumpham ruin, Bumthang District.
2. Rescue excavation at Sangkha village, Sarpang District.
3. Documentation and survey of Obtsho Dzong ruin, Gasa District.
4. Survey and documentation of Chubjakha Dzong ruin, Paro.
5. Survey and documentation of Do-choten ruin, Paro.
7. Documentation of the centre tower of the Wangduephodrang Dzong reconstruction project.

This documentation can serve as inspiration for academic researchers to enrich our understanding, as well as encouragement for local people to protect and promote heritage sites by understanding their value. (Figure 11-17)
4. Issues and challenges
Being given the opportunity to attend this training, implementing the skills and knowledge gained from the instructors will be very crucial in the field, since we are at the early stage of documenting and surveying the vulnerable heritage and archaeological sites in our country. At the moment, we have surveyed and documented sites as listed above, however the following are the issues and challenges for us in managing these sites.
1. Lack of local expertise in the field of protecting heritage sites.
2. Lack of technical human resources.
3. Need for financial assistance.
I. Site Location

The province of Kampong Thom is located in the centre of Cambodia, 168 km from the capital, Phnom Penh, or about halfway between Phnom Penh and Siem Reap. It covers 15,061 sq. km, and is bordered by Tonle Sap Lake to the west, and the provinces of Siem Reap to the northwest, Kampong Cham and Kampong Chhnang to the south, Stung Treng to the northeast, Kratie to the east, and Preah Vihear to the north.

Sambor Prei Kuk is located in the northeast part of Kampong Thom province, in the commune of Sambor and district of Prasat Sambor. It is about 30 km from the provincial city of Kampong Thom, and 180 km from the temples at Angkor in Siem Reap. The perimeter of the site is situated in the middle of the country.

The Sambor Prei Kuk Archaeological Site is located on the west bank of the Sen River, a tributary of Tonle Sap. West of the river and near the monuments, a marsh spreads over an area approximately 2.5 km wide. In addition to the large swamp called Boeung Chik Kay, the area is entirely covered by paddy. Further west of the lowland is a plateau approximately 5 m higher than the lowland. The major structures of the Sambor Prei Kuk Archaeological Site stand on this plateau. The lowland generally accommodates ponds.

II. Site Description

The Sambor Prei Kuk Archaeological Site was introduced to Europeans at the end of the 19th century by Adhemar Leclere and later French explorers. Subsequently, several surveys were conducted by L’Ecole française d’Extermin Orient, establishing the basic boundaries of the complex and cataloguing many of the monuments and features. Basic preservation measures, including the clearing of vegetation from parts of North and South Sites, was carried out by Conservation d’Angkor in 1927–28, with further conservation work and archaeological research conducted during the period 1958–70.

<table>
<thead>
<tr>
<th>DATE</th>
<th>ACTIVITIES</th>
<th>REFERENCES</th>
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<tbody>
<tr>
<td>1890–1900</td>
<td>Site survey and reports; establishment of lettered identification system for monuments</td>
<td>Leclère 1894; Aymonier 1900; Lajonquière 1902; Morand 1904</td>
</tr>
<tr>
<td>1910–1927</td>
<td>Intensive survey; architectural and artistic studies; epigraphic studies</td>
<td>Finot 1912, 1928; Parmentier 1927, 1935</td>
</tr>
<tr>
<td>1927–1928</td>
<td>Preservation works including the clearance of vegetation and soil at the South Group and part of the North Group, conducted by Victor Goloubew and Lucien Fombertaux of Conservation d’Angkor</td>
<td>Chronique 1927 (pp. 489–492), 1928 (pp. 331–332)</td>
</tr>
<tr>
<td>2001–ongoing</td>
<td>Ministry of Culture and Fine Arts (MCFA) preservation work</td>
<td>Sambor Prei Kuk Conservation Project (SCP)</td>
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<td>2013–2014</td>
<td>The Sambor Prei Kuk Administrative and Conservation Office established to implement the management plan on a temporary basis</td>
<td>Sambor Prei Kuk Conservation Office</td>
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<td>2015</td>
<td>Organization and Functioning of the National Authority for the Protection and Development of Cultural Site of Sambor Prei Kuk</td>
<td>Royal Decree</td>
</tr>
<tr>
<td>2015</td>
<td>Organization and Functioning of the General Department of the National Authority for the Protection and Development of Cultural Site of Sambor Prei Kuk</td>
<td>Sub-Decree</td>
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The restoration and investigation of the site was disrupted by the outbreak of civil war in Cambodia in 1970. During the era of conflict in Southeast Asia, the Sambor Prei Kuk Archaeological Site suffered damage from all the hostile forces engaged in the struggle that spanned almost 30 years (early 1970s–1990s). The area was the scene of air raids as well as ground conflict. Bomb craters can be seen, although over time erosion and vegetation have made them less obvious. During the period of conflict, efforts at research, maintenance, and protection of the monuments as well as movable artifacts suffered seriously. Degradation of the monuments was unchecked, and artifacts were looted. The number of pieces looted or destroyed can only be estimated. Very few looted items have been recovered. War damage was also inflicted on several monuments and valuable archaeological features. In the early 1990s, the Royal Government of Cambodia was free of conflict and re-established control over the area. The Ministry Culture and Fine Arts (MCFA) as well as other ministries began the arduous task of identification to protect this valuable asset. With little funding, a lack of trained conservation/restoration and managerial professionals, and a greater focus on the Angkor area in Siem Reap, the efforts appeared rather small, but in the end their results have been significant.

The Temple Zone of the Sambor Prei Kuk Archaeological Site has been identified as the religious centre of Ishanapura, the capital city of the Chenla polity at the beginning of the late 6th to early 7th centuries CE. The specific boundaries of the Chenla polity are undetermined, however Vickery (1994, 197–212) argues that Chenla in the 6th and 7th centuries, or even earlier, was located entirely within the boundaries of modern Cambodia; thus, one cannot avoid the logic that the two parts (Water and Land) into which Chenla allegedly split would also have been the same area. Apparently with the establishment of Jayavarman II at Angkor, the Chinese soon stopped referring to “Land” and “Water” Chenla and reverted to simply Chenla, implying that the two parts were reunited. Although there is no clear statement to that effect in the literature, Cœdès says the New T’ang History still attributes an embassy of 813 to “Water Chenla.” O. W. Wolters says “Water Chenla” occurs again in the Chinese record in 838, but he argues cogently that the Chinese misunderstood Cambodian politics, and that the terms “Land” and “Water Chenla” were geographic, not political divisions, and that both lay within Cambodia south of the Dangrek Mountains. According to the textual evidence of Sanskrit and Khmer inscriptions, archaeological investigations and art historical analysis, large-scale habitation and building of religious monuments at the site began in the late 6th to early 7th centuries with the construction of the urban complex (under evaluation at the time of nomination), its temple precinct, and the landscape features of the site. Prior to this period, mainland Southeast Asia had been dominated by the coastal Funan centres of Angkor Borei and Oc Eo. With the decline of Funan, the centres of power along with their religious affiliations moved inland to the Sambor Prei Kuk Archaeological Site, precipitating key developments in statehood, planning, building, and the plastic arts. As evidenced by the Site and especially the Temple Zone, Chenla’s political and building structure, religious practices and material culture were important advances that had a lasting impact on the region. The developments that took place at the Temple Zone of the Sambor Prei Kuk Archaeological Site laid the foundations for the later achievements of the Khmer Empire, most notably the sites on the Kulen Plateau, Lavo, and the great cities, monuments and features associated with Roluos, Angkor, Koh Ker, and in later periods in the Siamese kingdom at Ayutthaya and Sukhothai. It must be considered that until the beginning of the 14th century most of Southeast Asia was controlled or at the least administered by the Khmer Empire, and that together with its religious monuments (Temple Zone) and practices, the Sambor Prei Kuk Archaeological Site was the catalyst for the future development of that empire, and subsequently others of later periods.

The Sambor Prei Kuk Archaeological Site has been identified as Ishanapura, the capital city of the Chenla polity in the beginning of the 7th century CE. Recent field surveys have documented the remains of this ancient city, including the brick temples and their embanked causeways, the moat and rampart of the city, and water works for irrigation and the town’s supply. This ancient city primarily consisted of three zones: the eastern temple zone, a satellite temple zone, and the western habitation zone. Several monument complexes and many brick structures are concentrated in the Temple Zone of the Sambor Prei Kuk Archaeological Site. However, many other remains were also confirmed in the western area, where the habitation zone surrounded by a moat is located. A further satellite temple site is located to the north within the nominated property.

The Sambor Prei Kuk Archaeological Site contains numerous ancient temples and other structures. The number of sites totals 133, many of which are comprised of multiple individual structures and features. The majority of the features are brick with sandstone architectural elements such as lintels, door heads, sills and jambs. There are some laterite and sandstone buildings. Section 4 of the World Heritage nomination document covers the present state of conservation and provides additional details on the state of conservation, while an annex to the nomination provides a complete description of each of the 133 known buildings, unexcavated building mounds, and structural features, with hydraulic features excluded.

The Temple Zone to the east of the site contains three main sites: Prasat Sambor (North Group), Prasat Tao (Central Group) and Prasat Yeay Paon (South Group). Each of these temple sites contains a central main tower on a raised platform, surrounded by smaller towers and other structures. Each temple complex is surrounded by two concentric brick and/or laterite walls; Prasat Sambor was recently discovered to have a third, much larger enclosure. The complexes are oriented on an east–west axis, with two causeways linking the Temple Zone to the river east of the site. Two additional complexes, Prasat Srei Krup Leak and Prasat Robang Romeas, are located at the north end of the site. Additional temples, structures, and features are located outside of the main complexes in the Temple Zone, and throughout the
moated city area. Most of these temples are individual buildings, though Prasat Tamom, located within the city zone, has several ancillary structures and water features.

The buildings contain an impressive array of decorative elements carved in brick and sandstone. The brick artwork is integrated into the 7th century buildings and structures. Many of the brick temples have multiple carvings on their external walls, including fringes with geometric and stylized floral and animal designs as well as “flying palace” motifs. Each flying palace motif depicts the residence of a god or king, kept aloft by winged animal and human figures. The site also contains a series of brick-relief medallions depicting mythical scenes, including an engraved medallion on the outer wall of Prasat Yeay Poan (South Group) depicting the mythical event of the goddess Durga fighting the demon Mahishasura. These medallions are unique to the site; no similar carvings have been found at other Khmer sites.

The sandstone elements include lintels, statues, pedestals, colonnettes, and pediments. Some are carved in the distinctive 7th-century Sambor Prei Kuk Style and others represent Angkor period styles. The Sambor Prei Kuk style is the earliest known consolidation of the Khmer artistic style and includes important early masterpieces of Khmer art. These include ornate lintels characterized by intricate elements such as jeweled garlands, makaras, and medallions, as well as statues of Durga, Harhara and Brahma, and the distinctive mandapa (ante-chamber in front of a main sanctuary) at Prasat S2, and the Asram Moha Russei temple (N17). Later artistic elements include the well-preserved lintels, colonnettes and lion statues of Prasat Tao which exhibit the transition between the pre-Angkor and Angkor styles. Many of the sandstone elements remain in situ, and several have been

<table>
<thead>
<tr>
<th>DATE</th>
<th>POLITICAL AND RELIGIOUS ACTIVITIES</th>
<th>CONSTRUCTION ACTIVITIES</th>
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<tr>
<td>PRE-ANGKOR (“CHENLA”) PERIOD</td>
<td></td>
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<tr>
<td>c. 550–600</td>
<td>Capital of Bhavavarman I established at or near the Sambor Prei Kuk Archaeological Site</td>
<td>Earliest possible date for construction of Prasat Sambor</td>
<td>Jacques 2004; Vickery 1998b</td>
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<tr>
<td>600–616</td>
<td>Mahendravarman takes over his brother’s realm and capital</td>
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<tr>
<td>616–637</td>
<td>Ishanavarman I establishes his capital Ishanapura at Sambor Prei Kuk Archaeological Site</td>
<td>Prasat Yeay Poan constructed; latest possible date for construction of Prasat Sambor; carving of bas-relief medallions</td>
<td>Jacques 2004; Vickery 1998b</td>
</tr>
<tr>
<td>616–617</td>
<td>Ishanavarman I sends embassy to court in China</td>
<td></td>
<td></td>
</tr>
<tr>
<td>639–655</td>
<td>Bhavavarman II reigns, maintaining Sambor Prei Kuk as capital</td>
<td>Earliest possible date for construction of Central Group</td>
<td>Vickery 1995b (pp. 350–356); Jacques 2004 (p. 139)</td>
</tr>
<tr>
<td>657–681</td>
<td>Jayavarman I moves capital from Sambor Prei Kuk to Purandarapura in Angkor region</td>
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<tr>
<td>ANGKOR PERIOD (802–1431)</td>
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<tr>
<td>802–850</td>
<td>Jayavarman II</td>
<td>Latest possible date for construction of Central Group</td>
<td></td>
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<tr>
<td>944–968</td>
<td>Under Rajendravarman, a successful campaign against the Champa was undertaken; the campaign leader, Sinhavikrama re-established the cult of Gambhiresvara at the Northern Complex of Sambor Prei Kuk</td>
<td>Renovation of Prasat Sambor</td>
<td>Cœdès 1952; Shimoda &amp; Nakagawa 2008</td>
</tr>
<tr>
<td>(r. 1002–1050)</td>
<td>Suryavarman I</td>
<td>Additional renovation and construction activities</td>
<td></td>
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<tr>
<td>POST ANGKOR PERIOD</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>c. 14th–15th centuries</td>
<td>Construction of Wat Mahor near Sambor Prei Kuk</td>
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<tr>
<td>c. 16th–17th centuries</td>
<td>Installation of Buddhist statues at Sambor Prei Kuk</td>
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<td></td>
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<tr>
<td>Modern era</td>
<td>Establishment of Neak Ta ceremonies and other worship practices at Sambor Prei Kuk</td>
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removed for safekeeping. One lintel of the Sambor Prei Kuk style, housed in the National Museum in Phnom Penh, depicts early Khmer musical instruments; however its provenance is unknown.

A total of 23 inscriptions have been found, mostly located within the door jambs of the temples and other structures. The inscriptions are in Sanskrit and Khmer, and date to the 7th, 10th and 11th centuries during the reigns of kings Ishanavarman I (r. 616–637), Bhavavarman II (r. 637–657), Rajendravarman (r. 944–968), and Suryavarman I (r.1002–1050). These inscriptions constitute an important part of the historical record of the site, detailing dates of temple activities, names of kings and other personages, and details of the religious and political life of the city.

II. Architectural Diversification

Hindu temples were a prototype to an extent for the Khmer architects of Ishanapura. During the Gupta period of northern India (320–550 CE), in which the reign of Chandragupta (II) Vikramaditya (375–415 CE) was the high point of the period and probably most influential, temples were basically an enclosed rectangular hall with a multi-tiered roof or square hall with pillared porch and flat roof. As architecture and the arts progressed during the period the decorations became more elaborate, and the roof was multiplied by additional false stories diminishing in size, but not decoration, upwards in a pyramidal shape. Platforms and terraces were added, wall space was covered with a multitude of relief carvings, and statues were placed in niches, on pedestals and beside doorways (Mabbett, Chandler 1995, 184–186). This set the stage for Khmer construction design, keeping in mind that much of the Indian construct was of stone. Groves quotes the archaeologist Charles Higham who said “Many uninformed guesses were subsequently offered as to the nature of the monuments and their origin, virtually none of which give credit to the Cambodian [Khmer] people.”

During the period of the construction of the late 6th to early 7th century temples of the Temple Zone of the Sambor Prei Kuk Archaeological Site, distinctive features with fired brick as the principle construction medium began to develop, such that the tower design of previous periods borrowed from India became slenderer, bricks were sculptured, a stucco finish applied to the surface, and bricks were adhesively bonded to form smooth inner and outer surfaces.

Few monuments where there are detectable architectural traits were built to the exact same template. The construction in brick with sandstone accoutrements was restricted only by the limits derived from the foundation, construction materials, craftsmanship, and architectural design. There is a minimum of four basic ground plans, two different roof plans, three variations of projections, seven variations of entrance plans, three variations in step plans, and three variations in corbelling currently identified. It is also very prevalent among the basic ground plans to be variations in the size of the interior space and the thickness of the walls. These variations would indicate that although a basic design was utilized, it was the responsibility of the architect and the builders to execute without the aid of a specific template although Hindu texts on the arts (shilpa shastras) may have provided indirectly the source of the architectural design concept.

The four basic ground plan designs are square, rectangular, equilateral octagonal (all sides equal in length with equal intersecting angles), and octagonal (a polygon with eight sides of different lengths). There can be monuments with no projections while others have either a front projection or four side projections. The configuration of the entrance and placement of doors was found to have at least seven variations. Entrance steps are found in three variations while there are three variations in corbelling: linear, step, and refraction. The porches that can be applied are either high tier or low tier. As pointed out, diversification of Khmer brick structures disappeared by the 9th century with the advent of the Angkor period. (Figure 4)
IV. Intangible Heritage

Certainly, today, the Temple Zone of The Sambor Prei Kuk Archaeological Site is regarded as having strong religious value. Local communities regard Prasat Sambor as the home of a Neak Ta (powerful ancestral spirit), who is worshipped in daily rituals and two annual festivals. Currently eight Neak Ta wooden shrines share space within the Temple Zone. Many more are scattered throughout the site. These festivals contain several elements not practiced elsewhere in Cambodia, including the creation of unique ritual objects and the use of powder from the stones of the ancient causeway to bless worshippers with the power of the Neak Ta. The age of these ritual practices is unknown, but markings on the stones caused by rubbing have been found during excavations, suggesting that the ceremonies may have historical roots. Most of the accessible temple shrines continue to be used as places of worship by both local villagers and visitors to the site. (Figure 5,6)

V. Sambor Prei Kuk Protection Zones

The Sambor Prei Kuk Archaeological Group is strongly protected by the Royal Decree (Preah Reach Kret) NS/RKT/1214/1488 dated 24 December 2014, and by Cambodian heritage legislation. The Sambor Prei Kuk Conservation and Development Community, established in 2004, has played a major role in the sustainable conservation and development of the cultural heritage and community. The site is managed according to the Sambor Prei Kuk Comprehensive Cultural Heritage Conservation Management Plan by the Sambor Prei Kuk Archaeological Group of the Ancient Ishanapura Authority which provides a robust framework for the ongoing conservation, preservation, restoration, revitalization and general management of the site, and the interpretation of its heritage values to visitors.

15 August, 2015 (Royal Degree): Creation of Sambor Prei Kuk National Authority, the Authority for protection and management of Sambor Prei Kuk Archaeological Site. This decree declares the Sambor Prei Kuk Archaeological Site to be a protected property as an archaeological and cultural heritage site. Three areas are designated, including a buffer area as well as a satellite area for economic and social development.

In Article 4 of this Royal Decree, Sambor Prei Kuk shall be divided into 3 areas which shall be afforded different degrees of protection, as follows.
Core zone: This area is the most significant, which receives the highest level of protection. It contains the temple groups, along with archaeological artifacts, features, ponds, and open space that are effectively defined as the Sambor Prei Kuk Archaeological Site. The initial zoning was by Royal Decree (Preah Reach Kret) NS/RKM/0303/116 dated 11 March 2003. The property was defined based on the extent currently known in 2003, of each of the three areas in terms of the cultural heritage content, and did not follow the artificial boundaries formed by roads, canals, rivers, property ownership demarcation lines, or administrative arrangements. These three areas cover 381.11 hectares.

Buffer zone: This area covers the cultural and physical landscapes surrounding the temple site. It includes potential archaeological sites containing traces of artifacts. This area must be protected against inappropriate use of land and development. This area is a total of 2,982.45 hectares.

Satellite zone: This area is a total of 2,982.45 hectares. It is a distinct adaptation of Indian in- terface formed by roads, canals, rivers, property ownership demarcation lines, or administrative arrangements. The landscape design was carefully crafted and engineered to the needs of this large capital with the simultaneous operation of three hydraulic systems to manage and control the water flow, providing a continuous water supply throughout the year.

Criteria (vi): In Sambor Prei Kuk, we see the first official introduction of the Harihara and Sakabramana cults, both striving for the universal values of tolerance and peace. The site also harbored the first inscription in Southeast Asia referring to the universal teaching of Buddhism. Inscriptions also make use for the first time of the Khmer language next to Sanskrit in referring to its centralized system of rule, and the introduction of the god-king concept, which would remain central in Cambodia society until the beginning of the 20th century.

VI. World Heritage Criteria

The 41st World Heritage Committee adopted Decision 41 COM 8B.15 for the Temple Zone of Sambor Prei Kuk, Archaeological Site of Ancient Ishanapura (Cambodia) Inscription, on July 8, 2017 in Krakow, Poland, based on criteria (ii), (iii), and (vi). The Sambor Prei Kuk Archaeological Site Representing the Cultural Landscape of Ancient Ishanapura is accordingly designated as World Heritage under criteria (ii), (iii), and (vi), for the following reasons.

Criteria (ii): The Temple Zone of the Sambor Prei Kuk Archaeological Site and Cultural Landscape of Ancient Ishanapura has a unique architecture and town planning, which is a distinct adaptation of Indian influence, introducing for the first time the octagonal building and translating itself in new aesthetic forms, such as the flying palaces and medallions, carved on the brick walls or temples and enclosures, stone lintels and sculptures currently known as the “Sambor Prei Kuk Style.” The bas relief of a lintel show us one of the first representations of an orchestra and musical instruments, of critical importance for the universal study of ancient and contemporary music. Ancient Ishanapura thus embraced a language, religious ideas and concepts of governance of universal significance. Recently Sambor Prei Kuk archaeological World Heritage Site is managed by the National Authority for Sambor Prei Kuk under the Ministry Culture and Fine Arts Cambodia.

VII. Conclusion

The monuments at the Sambor Prei Kuk Archaeological Group display a unique diversification of architectural ground plans and configurations that cannot be attributed to cultural exchanges directly but only indirectly from India, possibly via the earlier Indian-influenced structures in Funan or later visits, for trade and diplomacy, prior to the late 6th to early 7th centuries. Moreover, Sambor Prei Kuk has been occupied since the 6th century until today with some modification in religious ideology, influencing the plans of architectural additions and areal extensions. The whole site of Sambor Prei Kuk contains a very unique art and architectural arrangement which is considered as having universal value. The buildings that are in a good to moderate state of preservation contain an impressive array of decorative elements carved in brick and sandstone. The brick artwork is integrated into the late 6th–early 7th century buildings and structures. Many of the brick temples have multiple carvings on their external walls, including friezes with geometric or stylized floral and animal designs, as well as the “flying palace” motif. Today, Sambor Prei Kuk is regarded as one of the religious and cultural centres of Cambodia in which parts of ancient tradition still survive in the local people’s lifestyle.
1. Introduction

In China, the protection of cultural heritage is a national undertaking. According to the Law of the People's Republic of China on Protection of Cultural Relics, “All cultural relics remaining underground or in the inland waters or territorial seas within the boundaries of the People's Republic of China shall be owned by the state.” While legitimate ownership of memorial buildings, ancient architectural structures and cultural relics which belong to collectives or individuals is protected by state laws, archaeological sites are all owned by the state.

The state administration of cultural heritage (SACH) takes charge of the work concerning cultural relics throughout the country. Local governments at various levels take the responsibility of protecting the cultural relics in their areas. Usually there is an office in charge of cultural heritage administration in each government. The expenses for the protection and management of cultural relics are listed in the budgets of the central and local governments. The state encourages the establishment of cultural relics protection funds through donations.

When dealing with specific problems, the office of cultural heritage administration in each local government hires institutions with relevant expertise to serve as consultant. The general procedure is that the management office applies to the superior department and local government for approval and funding to set up a specific project. Then the professional institution composes the conservation plan or engineering project plan.

According to the type and level of protection for each example of cultural heritage, the professional institution must have the requisite qualifications. There are different management standards for the different levels of cultural heritage. The National Key Cultural Relics designation is the highest level.
Archaeological sites comprise the main part of the Cultural Relics Protection Unit. To better protect those sites having great importance and covering vast amounts of land, SACH announced a list of “large-scale archaeological sites (serial sites).” The state government will be more supportive of the conservation and management of listed sites. The list alters every five years through assessment, along with the state’s five-year plan. There are six “large-scale archaeological sites of concentrated area” (Xi’an, Luoyang, Jingzhou, Zhengzhou, Chengdu, and Qufu). A total of 67 national archaeological site parks are to be built and 36 national archaeological site parks are already open to the public. Certain criteria and management norms are set for large-scale archaeological sites and national archaeological site parks.

The administrative offices, professional institutions, and researchers from universities have been working on the study, conservation, and management of cultural heritage for decades. Constant explorations have been made in the technical field of earthen site protection. New methods are applied to protect and monitor archaeological sites. I have worked on different projects, and in each project we worked with experts in different fields, carrying out interesting work, discovering new problems, and finding proper solutions. I believe that in the future, we can find more and better protection and management methods at the technical level.

There are some problems for archaeological site protection and preservation that I have observed while working. I found them difficult to solve and I would love to learn new approaches to them from this training course.

2. The definition of cultural heritage
As stated above, funds for protection expenses are from government financial allocations. Only the archaeological sites listed in the national protection system can get prompt and sufficient protection. As China is a country with a long history and a vast amount of land, it usually takes a long time for a site to be listed. (New discoveries with breaking archaeological value will be protected immediately.)

According to the latest national cultural relics census there are 766,722 heritage sites registered, and among them 332,740 are archaeological sites. The state council has announced 4,296 national key cultural relics protection units, of which 1,415 are archaeological sites. Even with additional cultural relics protection units at the provincial, municipal, and district levels, this still means that many archaeological sites have not been protected in timely fashion.

Even if listed in the national key protection system, there are still problems to be solved for archaeological sites.

One of the most unique characteristics of archaeological sites is their uncertainty. There will always be undiscovered areas and new discoveries that can change received knowledge. To apply for national key protection status, the cultural heritage site must be well defined as the object for protection, with lines drawn as the borders of the protection and construction control areas. Once such lines are established, they will be valid for a long time. Accordingly, if there are new discoveries outside the protection area, they are likely to be damaged, especially for large-scale sites in urban areas.
The Jinsha site, located in downtown Chengdu city, is one of the most famous archaeological sites in China. It represents the Shu civilization in ancient literature that had long been regarded as legend. When first excavated (1995–2003), it was known as a sacrificial area along the river, where many beautiful alien crafts were unearthed. Faced with pressures for urban development and expansion, the Chengdu government drew up the first edition of a conservation plan (announced in 2004), defining the sacrificial remains as the object for protection with a focus on the protection of sacrificial pits.

As archaeological excavation and research progressed, new sites were discovered, changing the initial picture. Jinsha turned out to be the capital city of ancient Shu, with the sacrificial and palace areas located on different sides of the river bank. Dwellings and cemeteries were scattered around these areas. Many of the new discoveries outside the protection area were destroyed by urban development.

Currently the Jinsha site museum is trying to protect the integrity of the site through a conservation plan revision that will include redefining the object of protection and drawing new boundaries for protection and construction control. The new version defines the Jinsha site as an ancient city, making provision for new discoveries and trying to involve community participation in the site management.

3. Routine maintenance
The personnel of basic level site management offices are mainly engaged in administrative work. Professionals in archaeology and site conservation are in short supply. Only some of the very important sites (listed large-scale archaeological sites or national archaeological site parks) or sites in provinces with rich experience in protection have sound staffing. Concerning technical issues, the management offices prefer to engage in engineering projects rather than conduct daily routine maintenance, because those projects seem to be more effective and are carried out by professional institutions. By contrast, the work of project review is demanding, nonurgent, and minor deterioration usually cannot get funding. This leads to a lack of routine maintenance work in most cases.

Unified job training is not sufficient to equip the staff to discover and deal with hidden dangers scientifically. Even if the conservation plan includes a daily maintenance and monitoring program, when facing a change in the site’s status, the basic level management staff are poorly prepared to make necessary adjustments.

In one of our projects, the conservation plan and conservation projects were still undetermined after excavation, and the local management office did not know what to do next to preserve the site. They used plastic sheeting to cover the remains and replaced the sheets regularly. This kind of method is applied at many sites in China as a temporary protection measure. But the temperature in this area changes drastically between day and night, causing the humidity to change rapidly under the plastic sheets. The protection effect was not very good.

4. Presentation and interpretation of sites
It is very difficult to interpret archaeological sites properly to a public audience. Archaeological sites in China are mainly earthen sites, which are more difficult to present to the public. At present, there are certain methods for site presentation generally applied in China. These methods are quite similar, making most sites look like each other.

China has a long history of studying its own historic record. Most visitors view archaeological sites in the way that ancient scholars would visit a historic spot. They tend to relate the site to famous people, famous events, or even to a poet, neglecting the value and scientific information of the remains. At many archaeological sites the preference is for telling such stories to the audience, rather than interpreting the archaeological information, thus making the site more like a theme museum. Audiences leave the site still having no idea of what archaeology really is. How to convey archaeological information more scientifically to the public is a problem worth discussing. When the public understands archaeological sites, they can better take part in heritage management.

5. Community and public
Since the protection of cultural relics is carried out mainly by the government, the public participates very little in the protection of cultural heritage. But there are many people in China who love cultural heritage and pay attention to matters of its protection. They have established some NGOs that conduct mapping and surveying of the domestic cultural heritage. The NGOs mostly take part in helping to promote cultural heritage and supervise the government’s actions related to it. However, they hardly take any part in the management of heritage, especially the management of archaeological sites. Many “public archaeology” activities have been held in China recent years. Most of the activities have focused on teenage education.

Public participation is very important for the protection of archaeological sites, for providing knowledge of and support for site protection and complementing the routine maintenance. Social capital participates in the protection of archaeological sites under the guidance of administrative departments, and professional institutions can also benefit the sites.
1. ABSTRACT

Cultural heritage has been recognised to be intrinsic, economical and environmentally valuable; however the challenge is that it is continuously under pressure from a range of processes and impacts. The threats to it have been acknowledged by the global community, national governments and local people alike. Fiji is a nation with a rich history and cultural heritage and there exist many cultural remnants throughout the country that are still undiscovered or unexcavated. Fiji’s history goes back as far as 3,000 years ago during the Lapita era. According to our oral traditions, Fiji was settled before this and our ancestors had come through a different route as compared to the widely known and well documented linguistic and socio-cultural evidence. In the eras that followed, coupled with the Lapita migration, Fiji was a site traversed by different migrations often following a southerly coastal route. Various cultural forms and traditions integrated with the existing matrix, resulting in that which is evident today.

Fiji is rich in terms of its intangible and tangible cultural heritage features. The two forms are intertwined. There exist more intangible cultural features as compared to the tangible ones. And with tangible heritage, the intangible aspect is very much implicit. For Fiji, the effort towards the protection and restoration of cultural sites is a priority of the government. With this, the inscription of the old capital of Fiji, Levuka, as a UNESCO World Heritage site in 2013 has contributed enormously to the awareness of cultural heritage in Fiji.

Efforts by the Fiji Museum towards the protection and restoration of cultural heritage sites in Fiji are faced with many issues that range from the lack of public knowledge and awareness to the development of infrastructure, and land development as well. In the midst of these issues, while relevant legislation has been in place, it is too out of date to facilitate effectively the protection and restoration of cultural sites. The main legislation directly relating to the identification, research and protection of cultural heritage in Fiji is the Preservation of Objects of Archaeological and Paleontological Interest (POAPI) Act – Cap 264 (1946).

The Fiji Museum is a statutory body that is governed by the Preservation of Objects of Archaeological and Paleontological Interest Act and the Fiji Museum Act. The Archaeology Section of the Fiji Museum utilizes the Act in all its operations with the aim of identifying, protecting and preserving archaeological and cultural heritage sites for the current and future generations.

There are other pieces of legislation in place that ensure the protection of cultural heritage sites from major development processes, and these include the following.

(a) National Trust of Fiji Act and its amendment. This addresses the protection and management of cultural and natural heritage alike.
(b) Environment Management Act-2005. This is administered by the Department of Environment under the Ministry of Local Government, Urban Development, Housing and Environment.
(c) Mining Act-1978. This is administered by the Mineral Resources Department, Ministry of Lands and Mineral Resources.
(d) Town Planning Act-1978. This is administered by the Department of Town and Country Planning, Ministry of Local Government, Urban Development, Housing and Environment.
(e) iTaukei Lands Trust Act-rev 2006. This is administered by the iTaukei Lands Trust Board.

2. DRAWBACKS TO THE WORK OF THE FIJI MUSEUM

Out-of-date Fiji Museum Legislation. A major drawback has been the ongoing implementation of the POAPI Act. Given the act was passed in the 1940s, many of its provisions are poorly suited to current conditions, especially the penalties as compared to the severity of penalties in other acts, such as the destruction of a cultural site which will incur only a $200 fine on the part of the individual penalised.

Implementation of the POAPI Act. The implementation of the Act requires appropriate resources including the provision of thorough legal advice to the museum by a legal practitioner whose expertise extends to matters of cultural knowledge, archaeological principles and heritage ideals. Sound knowledge in these areas would greatly assist the Fiji Museum in fulfilling its function and also help deter those who wish to cause destruction.

Lack of proper equipment, hardware and software. The Fiji Museum lacks proper equipment to enable the technical staff to carry out their functions. Areas of deficiency include GIS equipment, appropriate software, a server fully suited for storing all information, digital cameras, proper hardware and software.

Limited Staffing. The limited staff of the Fiji Museum has reduced its capability to implement a fully-fledged field survey and site assessment. Requests from communities for mapping of their sites continue to increase annually.
Standard setting of fees. A thorough consultation on fees charged to users of our services needs to be addressed. According to practice in the past, which is still being followed, fees were imposed on an ad-hoc basis, benchmarked on advice given by the government. This is pursued today even though the museum is a statutory body.

3. CASE STUDY: Kaba Site disturbances, collaboration with the Fiji Roads Authority

Development greatly impacts our cultural heritage, and therefore the process should be inclusive. As landowners and indigenous people, protection of our heritage places is a basic cultural right according to the Nara Document on Authenticity which defines the value of heritage property or site as deriving not from external assessment, but through a process of stakeholder consensus (1994). In Fiji, Cap 264: the Preservation of Objects of Archaeological and Paleontological Interest Act, which is administered by the Fiji Museum, plays a significant role in the preservation and protection of cultural sites.

Among the many development plans of the Fiji Government in its efforts to reach out and assist rural communities, the construction and upgrading of roads around the country is an immediate goal. Currently, the Fiji Roads Authority is constructing and connecting road networks from the existing Kiuva road to Kaba point. In the process, excavators unearthed a massive shell midden of Anadara shell, or kaikoso as it is called locally.

The Fiji Museum was commissioned to inspect and assess the discovery of the shell deposit that was unearthed by construction contractors while excavating the new road to connect Kaba point to the existing Kiuva road network. The Kiuva-Kaba road project is situated in the south of Tailevu Province, with Daku, Waicoka, Kiuva and Anitioki as the closest villages to the project area. The vanua (traditional home area) of Kaba and the yavusa (clan) of Naitodua consists of two villages, Vatani village facing the north and Dromuna village at the point. The two villages are almost 350 meters apart. Both villages have their traditional role and commitment to the vanua.

The history of the people of Kaba states that they were called rebel fortress because no army was able to defeat them (Derrick, 1945). In August 1853, Cakobau led a flotilla of war canoes and a large force against Kaba, but whether because of treachery or stout resistance, he accomplished nothing. His warriors broke and fled and he was forced to retreat leaving several of his principal men dead on the beach. Kaba was well fortified, and crowded with warriors from Rewa, nevertheless, Waterhouse (1975) says, it would have been taken but for the treachery of some of Cakobau’s men who alarmed their comrades and fled, leaving some of the Bau chiefs unsupported. Cakobau was not able to defeat Kaba. Cakobau suffered a serious reverse at Kaba because Qaranio was pouring warriors into Kaba and strengthened its defences and they were impregnable (Derrick, 1945). Today the people of Kaba treasure these stories but there are only a few people who know about the story, and this underscores the fear of losing these historical events of which today’s younger generation may be ignorant.

The vanua of Kaba is rich with cultural heritage, both intangible and tangible, thus the assessment created a good platform and relations for the collection of oral narratives and for documenting the significant cultural values and aesthetics of the vanua. Development is a positive step towards community growth and with the construction of the new road, the villagers of Kaba will have better opportunities for health, education, social benefits and other services. However, stakeholder collaboration during the initial stages of the Environment Impact Assessment is preferable as far as cultural heritage values are concerned, to identify areas of cultural significance. A cultural heritage site is part of the identity of a group of people, unique and irreplaceable if destroyed.

In this case study, the report gave the assessment of the shell deposits and recommendations. In addition to the assessment of the required site, the Fiji Museum team carried out a survey of possible cultural heritage sites along the infrastructure alignment. There were sites that were identified, recorded, and demarcated.

Following the assessment conducted by the Fiji Museum Team, the following conditions at the site were observed and ascertained. The initial disturbance to the cultural heritage site probably occurred during the first attempt to construct the road from Kiuva to Kaba (the year unknown), which destroyed the northwestern portion of the fortification ring ditch, and the road excavation work was not deep enough to expose the shell deposits. The current road excavation was working on the already disturbed portion of the cultural heritage site, and ultimately unearthed the shell midden. This shell deposit most probably was on the outskirts of the site, as a rubbish dump. Some shell middens are the remains of food-processing activities: areas where aquatic resources were processed directly after harvest and prior to use or storage at a distant location and are associated with past human occupation. These shells are normally taken in for radiocarbon dating to date an archaeological site. In this case, the Fiji Museum has a rough idea on how old the site is based on accounts by missionaries. (Figure 2)
There is evidence of shell deposits in the wall of the road cut, and there is also evidence of pottery sherds of both plain and decorated wares. Shells described by the team are two species of kaikoso (Anadara and Gafarium) and oysters. The size of the shell midden in thickness ranges from a height of about 8–10 meters above the road. (Figure 3, 4, 5)

4. The Fiji Museum’s major needs for the protection and restoration of cultural sites

The development of cultural heritage protection and restorations mechanisms. This is where the Fiji Museum can work together with the communities and developers on ways we want to preserve cultural heritage sites by following proper procedures certified through UNESCO and other institutions for the protection and restoration of cultural heritage sites.

Another need is for increased and inclusive community awareness programs for the Archaeology and Gazetting section, so there is no ignorance or lack of interest on the part of the public in the protection and restoration of cultural sites.

A third need is for capacity building. Due to the rise in requests from individuals, local communities, government and non-government agencies, and with the Fiji Museum lacking efficient and experienced staff, the need for capacity building is extremely important as the Fiji Museum maintains the ground work for the implementation of legislative protection, preservation and restoration of cultural sites around the country. (Figure 6, 7, 8)
According to an ancient Indian text, Vishnuharmottara Purana (3rd Khanda), the practice of painting is the chief of all arts in this world. Rock art is one of our greatest surviving art treasures. It possesses the largest body of evidence of artistic, cognitive and cultural beginnings of humans. It plays a vital role in the study of human beliefs and practices of past people. In fact, it is a global phenomenon through the ages. The art continues even at present. It is widely considered that rock art represents and communicates certain ritualistic ideas on a global platform. It is therefore a vital source of information for our understanding of some aspects of past human beings unknowable from other sources. It consists of paintings, drawings, engravings, stencils, prints, bas-relief carvings and figures in rock shelters and caves, on boulders and platforms. It also reflects humankind’s rich spiritual and cultural heritage and has great significance to its creators and their descendants. Its continued existence is important to help global communities recognize and learn about the diverse cultural traditions, their ancient origins and relationships to the landscapes they have inhabited.

Therefore, it is important to emphasize that rock art is not casual decoration; it is part of the archaeological record and it has the potential to illuminate many parts of a culture. However, due to development pressures, graffiti/vandalism, poor tourist management and natural impacts, thousands of sites have been damaged or destroyed on every continent. Thus, preservation of this art is very necessary owing to the rapid rate of destruction caused by an unaware society.

Interestingly, India has one of the largest, richest and most diverse repositories of rock art. This art has been found throughout the length and breadth of the country although the major concentration is in Central India. The fundamental principles for rock art conservation are to work actively to promote rock art as a valuable heritage for everyone, while allocating sufficient resources specifically to its future care. In this regard, the Adi Drishya Department of Indira Gandhi National Centre for the Arts (IGNCA), which is the premier and only organization in India that has a separate department solely working on Rock Art Studies, is doing remarkable work to document and conserve this art, and disseminate knowledge to the public at large and promote awareness of the need to save this cultural treasure for posterity.

The main objective of the department is to save this precious art form in every possible aspect. The primary work is to make textual, contextual video, and photo documentation and communicate with people in the hinterland for archaeological research, and to build up an ecological atlas of the rock art landscape. The documentation does not just consist of the paintings and petroglyphs, but in fact, includes the various tribes which still associate themselves with this art. Their indigenous traditions and beliefs are also being extensively documented. Some of the major works done by the Adi Drishya Department, IGNCA, are as follows.

**Multidisciplinary Field Documentation:** The Adi Drishya Department has initiated field documentation at a national level for preserving the rock art sites/data, which are otherwise open to human vandalism and natural factors beyond one’s control. A programme of field documentation in phases has been planned in different states of India with rock art concentrations. A number of survey and pilot study programmes are organised as part of IGNCA’s outreach programme and so far, field documentation in fifteen states has been completed comprising more than 800 sites. The documentation is done in collaboration with the local experts and institutions of the areas/zones concerned. The data are being collected in a uniform format at the national level. A huge database has been compiled in this process and thousands of images have already been digitized.

**Digital Database:** A digital and manual database of numerous sites of most of the states of India is being created. After the preparation of this database, the data will be put on IGNCA’s server to make them available for scholars worldwide. The urgent need to document the rock art sites spreads along the different geographical regions of the country as they are being damaged at a very fast pace.

**Awareness Programs – A Key to Saving this Art for Posterity:** A very significant aspect of rock art studies is to sensitize the public, which is vital for successful planning and budgeting for conservation and management. Genuine community involvement can result in greater awareness of rock art, increased economic opportunities and higher quality display and interpretation for visitors. Thus, frequent organization of awareness programs at the ground level is being done to make people aware of our rich rock art heritage. Moreover, not many people can travel to another city to see the exhibition, so why not take the exhibition to the public? Accordingly, a mobile exhibition, titled ‘The World of Rock Art’ and which is primarily about the rock art of all five continents, with a special focus on Indian art works, is being taken to different cities. The mobile exhibitions are specifically organized at universities/colleges to make them available to students. Special lectures on rock art of particular regions by renowned scholars are also being organized, to
enlighten students and other interested people. During the mobile exhibitions, children’s workshops, called ‘Impressions’, are organized as well. Building awareness among students/children about this rich art treasure and inculcating a feeling of ownership at such a tender age will help in curbing vandalism at the sites.

**Academic Programs:** Many international and national conferences, seminars and workshops have been organized in different states of India. Eminent scholars from all fields share their views and formulate new strategies for proper conservation and management of the rock art sites. An important point to note is that collaboration with premier national and international research institutes is being done to work efficiently in preserving this art.

**Publications on Rock Art:** The Department brings out a publication on every academic event it organizes, which helps the scholars/students working in the field. So far, fifteen publications have been produced. A brief account of all of these publications can be found on the website of IGNCA. Rock art is an archive of indigenous arts and history, documenting complex knowledge and spiritual beliefs for which there may be no other record.

**Memorial Lectures:** A memorial lecture series in the memory of Dr V. S. Wakankar, who is the father of Indian rock art studies, has been initiated from 2017 by the Department. The memorial lecture is being delivered by an eminent scholar of rock art annually.

**Conclusion:** Despite all these efforts invested in the research, documentation and conservation of rock art, many sites are still experiencing ongoing and new threats to their survival. It is the duty of each one of us to help organizations like IGNCA and many others in their efforts to conserve this valuable art, which is an irreplaceable cultural resource that needs utmost protection and preservation for posterity.

**Acknowledgements:** I would like to express my sincere thanks to Dr B. L. Malla, Project Director, Adi Drishya Department, IGNCA, for allowing the use of photographs and for various other forms of help in making this report.
Introduction
As for many wars that were recorded in human history, the Second World War is one of the most memorable events in the twentieth century, and it is haunting us as the second instance of industrialized global violence after the Great War. Its massive and global impact was reflected in its three main theaters: Europe, Africa, and the Pacific.

One of the regions affected by the Second World War was Southeast Asia, as manifested both in narrative and material sources. From the historical sources, the Second World War in Southeast Asia was set in the context of struggles of the European and American colonies to achieve independence. The Second World War brought an end to the European and the American colonial empires in Southeast Asia, instigated by the movement of Japanese troops to the south [1]. Another abundant yet neglected source of data is presented by the various military installations spread throughout the region.

Among the other affected areas in Southeast Asia, the Netherland East-Indies (now the Republic of Indonesia) was a stage where the Axis and the Allies struggled during the Second World War. Soon after toppling the Netherland’s colonial power in 1942, Japanese troops spread and established their occupation administration throughout the archipelago which lasted until 1945 (see Figure 2). During this occupational period, the Japanese left many material traces that can be found in (1) the main cities that were ruled by the Netherland East-Indies colonial administration, (2) the plantations, factories, and mines that were taken over from the Dutch, (3) the main transportation routes for resource and minerals, and (4) military bases of the Netherland East-Indies, etc.

When the Japanese troops invaded, Southeast Sulawesi was one of the earliest areas taken [3]. This so-called Kendari area held abundant Japanese military installations that spread out throughout its mainland and insular areas such as Muna, Buton, Wawonii, and Wakatobi Islands. Mainly, those military installations consist of various defensive structures such as airfields, jetties, pillboxes, bunkers, artificial hideout caves, ammo dumps, and military and administrative buildings.

One of the significant sites that has been investigated is Kendari II Airfield. This has been surveyed and excavated intensively since 2012 by the Archaeological Office of South Sulawesi (Balar Sulsel) and the Archaeology Department of Universitas Halu Oleo (ARCHEOLOGY UHO) [4, 5]. In 2015–16, Archaeology UHO in cooperation with Balar Sulsel conducted survey and excavation work. The field walking survey covering about 1.624 ha in area involved more than 70 students from Archaeology UHO. Excavation was conducted of five selected areas by the students as part of their excavation training and supervised intensively by archaeologists from Balar Sulsel. Both the survey and excavation were primarily aimed at reconstructing the Kendari II Airfield as a battle landscape during the Second World War by uncovering remains from the pre- to the WWII periods.

This report will summarize the three years of archaeological fieldwork at Kendari II Airfield. The first part of this report provides a brief historical background of this historic airfield. The second part gives a summary of archaeological findings related to the Pacific War. The last part discusses some points regarding this airfield in relation to Pacific War heritage protection in Indonesia.

Historical Background
In anticipation of the Japanese military expansion, in the 1930s the Dutch had started to strengthen their defensive structure in the Netherland East Indies. As part of the so-called “Defense Fundamentals for the Netherlands Indies” policy, the Dutch poured in a significant defense investment beginning from 1936 [3]. The investment included the establishment of a network of airfields that spread out over the archipelago. One of the airfields built during this period is the Kendari II Airfield in Southeast Sulawesi. Since then, this airfield was utilized continuously and expanded through time as elaborated in the following table.

Based on the chronology collated above, the Kendari II Airfield can be seen as a landscape occupied and utilized by various “regimes,” leaving many remains as markers of their presence.
Up until now, the airfield has been utilized as a domestic airport named Haluoleo Airport and as a military base of the Indonesian Air Force.

**The Second World War Remains**

The accumulation of data collected from field research conducted by the Archaeological Office of South Sulawesi in 2012, and cooperative research between the Archaeology Department Universitas Hala Oleo with the Archaeological Office of South Sulawesi in 2016 and 2017, found 198 spots that contain archaeological findings. In general, there are 22 kinds of findings observed from the survey, namely bunkers, ammo dumps, revetments, gun emplacements, toilets, septic tanks, bridges, beer bottles, projectiles, ceramics, and so on. The spatial distribution is visualized in the following map. (Map 2)

Summarizing the results, the excavations conducted in five locations aimed to find, identify, and reconstruct (1) artifacts related to military activity during the Second World War, (2) features of buildings or structural remains, and (3) activity areas and spatial patterns based on the distribution of artifacts and features. The archaeological excavations revealed some findings related to the military activities in Kendari II Airfield. Most of the artifacts are closely related with the Japanese military such as ammo projectiles, bottles, ceramics, gas mask filter canisters, porcelain ware, and many more.

Reconstruction of the battlefield landscape of Kendari II Airfield was done by deploying COCOA analysis, a terrain analysis model developed by the US military [6]. COCOA analysis was deployed in order to understand the spatial distribution of archaeological findings from Kendari II Airfield. The elements of the analysis, i.e., Critical Terrain, Obstacles, Cover and Concealment, Observation and Field of Fire, and Avenue of Approach, were considered in placing defensive features on this airfield. Control of the critical terrain was maintained by distributing several anti-aircraft gun emplacements around the runway. The kinds of the gun caliber used were calculated in consideration of the field of fire of the gun. Vegetation and topography around the airfield were also effectively used as a cover and concealment for the personnel working in the administration and maintenance area.

<table>
<thead>
<tr>
<th>Period</th>
<th>Important Events</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dutch East Indies Administration</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Period 1936/37 – 1942</strong></td>
<td>- Construction of Kendari II Airfield began.</td>
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<tr>
<td></td>
<td>- Dutch Air Force plane first landed (7 Oct 1938).</td>
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<tr>
<td></td>
<td>- Emergency runway constructed and airfield area delineated (Apr 1939).</td>
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<td></td>
<td>- War logistic stocking by the Allies (Jan 1942).</td>
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<tr>
<td><strong>Japanese Period</strong></td>
<td></td>
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<tr>
<td></td>
<td>- Runway reoriented and expanded.</td>
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<tr>
<td></td>
<td>- Airfield defense, administration, and maintenance structure developed.</td>
</tr>
<tr>
<td></td>
<td>- Suffered a series of bombing missions by the Allies (28 Jan 1942 – 16 Feb 1945)</td>
</tr>
<tr>
<td></td>
<td>- Development of supporting airfields at Boro-Boro, Ambesia, Kolaka, Muna, and Buton.</td>
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<tr>
<td><strong>Netherland Indies Civil Administration</strong></td>
<td></td>
</tr>
<tr>
<td><strong>The Period of the Republic of Indonesia</strong></td>
<td></td>
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<tr>
<td><strong>1950 – now</strong></td>
<td>- Indonesian Air Force plane first landed.</td>
</tr>
<tr>
<td></td>
<td>- Kendari II Indonesian Air Force Detachment established (Oct 1950).</td>
</tr>
</tbody>
</table>

**TABLE 1. A brief overview of the development of Kendari II Airfield, South East Sulawesi [5]**
Dealing with Wartime Heritage in Indonesia

As a large and extensive Japanese military installation during the Second World War, it is surprising that this site is never mentioned in the text of the National History of Indonesia [7]. What is more surprising is that this site has never been visited by students from the surrounding area, even though the Second World War period in Indonesia is a specific topic in their history textbooks.

Because of its status as an air force base, the strict access to archaeological remains in this location is a benefit on the one hand and a disadvantage on the other. As benefit, it helps to prevent any further destruction caused by cultural transformation, beyond deterioration already resulting from natural factors. The disadvantage concerns the limited access for the public to visit it for academic research as well as educational purposes. Furthermore, proposing a heritage management plan for the war heritage located on a military base is another issue because there are no clear regulations, nor inter-institutional cooperation pacts, that can be used as a basis for developing such a site. The term “national security” is a recurring issue faced by any efforts to develop this kind of site.

Archaeological remains from a difficult period such as the Second World War in Indonesia are abundant. Despite its significance in Indonesian historiography as well as the Second World War history in the Pacific Theater, this kind of heritage, due to the historical process that caused it to come under the
jurisdiction of Indonesian military forces, receives a lack of proper attention. Ever since the beginning of Indonesian historiography, the mainstream narratives on the Second World War in Indonesia have focused on the bitterness of life during the Japanese occupation. That kind of narrative can be found in the official history books such as the series National History of Indonesia [7] and several history school textbooks [8–10]. Despite the positive effects that Indonesians gained from the Japanese through their war mobilization efforts, we can sense glorification of the Allies’ narratives. That kind of glorification was reflected when the government of the Republic of Indonesia spent almost 30 billion rupiahs to build a Second World War Museum in Morotai, a famous Allied military base in North Maluku during the Second World War. State budget in that amount was never spent on the Japanese war heritage in Indonesia. Up to this point, the issue is not only about the comparison of the preservation of the Japanese vis-à-vis the Allied war heritage in Indonesia, but also about an imbalance in the Second World War heritage data in Indonesia.

References
Since 2015, the National Museum has been cooperating with the National Research Institute of Cultural Heritage of the Republic of Korea (Daejeon). On the basis of a bilateral agreement, museum staff have been trained in the ACPCS program and have a joint project in archaeology titled the “Kazakh-Korean cooperative archaeological expedition.” This project is designed to explore cultural and historical ties between the ancient state of Usun in Central Asia and Silla on the Korean Peninsula. The target of research is located in the Almaty region, Raiymbek district, rural district of Qarasaz, in the funerary complex of Qatartobe.

In ancient times in the territory of Kazakhstan there was a state of famous tribes of Scythians called Saka; in history this period is called the time of the early nomads or the era of the early Iron Age. The Saka tribes considered their ruler as the representative of the creator on earth. This power was considered supernatural and was inherited from generation to generation. Many legends were written about the power of the Saka tribes, which were preserved in the writings of the Greeks, Persians and Chinese. The proof of the honor of the rulers is the famous Saka royal tombs, which are found widely throughout the territory of Kazakhstan. Thus today, according to official data, a total of six so-called “golden men” have been found. The reconstructions and original finds are kept in the exhibits and stores of the National Museum of the Republic of Kazakhstan. The very first “Golden Man” that was found in the Kazakh land in 1969–70 in the Issyk Kurgan — today this is a national treasure of the country and a symbol of our independence. The remaining five "golden men" were found relatively not long ago. Altogether there are five men and one woman. There are many royal burial mounds in Kazakhstan, but the problem is that they were looted by the tribesmen themselves or within one or two centuries after the burial ceremony.

Among the most outstanding archaeological discoveries pertaining to the era of the early nomads and being an invaluable source for a perspective on the ancient tribes are the finds from the mounds of Issyk, Besshatyr (Zhetysu), Arzhan 1, Arzhan 2 (Central Tova), Shilikty, Berel, Pazyryk (Altai), Taldy II (East Sary Arka), Taksai I (West Kazakhstan) and Filippovski (Southern Ural). Particular attention should be paid to the fact that many of these finds date back to the very beginning of the era of the early nomads. Such monuments as Arzhan 1 and 2, Shilikty, Taldy II, Besshatyr indicate the fully developed image of the culture of the population, which created those amazing monuments of antiquity. The early stage of the animal style development is striking in its perfection of form and the complexity of the ancient masters’ intention. The following fact is truly amazing. The finds from these mounds, with distances between them being many hundreds of kilometers, are extremely similar up to the point that some items may be recognized as identical to each other.
Excavations of the royal burial mounds under the international project “Kazakh-Korean cooperative archaeological expedition” began in early August 2015 at the funerary complex of Qatartobe, which is located on the Shalkode steppes. In Kazakh, Qatartobe means “hills in one row.” The complex consists of more than fifty different dated burial/funerary constructions stretching along the chain from the north to the south. This necropolis is conditionally divided into four groups.

Its main mass is formed by mounds with a height of 1 to 4 m, and a diameter of 10–60 m. The mounds’ structures are basically piled stone and earth. Some are surrounded with ditches and stone paving. In the first year of the expedition, excavations were carried out on mound No. 1, which is located in the northern part of the chain. This earthen structure was built with the local soil, and covered with a layer of rounded stones. Around the perimeter of the structure, a stone paving of square shape with an entrance from the eastern and western sides was set. The width of the burial mound is 24.6 m, and the surviving height of the structure is 1.8 m. A log roof was built of solid trunks, which was set across the long walls of the grave pit, dug into the center of the embankment, on an axis from west to east. The grave’s occupant stretched out on its back, its head to the west. The burial had been robbed.

In 2016, excavations were carried out on mounds No. 8 and No. 10. Kurgan, or mound, No. 8 is located just north of the central part of the necropolis. The diameter of the embankment was 27 m, and the height was 1.5 m. The mound was built from the ground, three grave pits with wooden log houses were identified, and an “underground passage” to the central large pit had been provided. All three burials in one mound had been looted. Mound No. 10 was originally in critical condition, the diameter of the embankment was 36.2 m, and the height was 2.8 m. The mound was built of several layers of soil and stone slabs, and inside it was found to contain one unusual pit. In the third and final year of expedition work, burial mounds No. 10A and No. 14 were excavated. Mound No. 10A is located within mound No. 10, as a small stone mound with a grave pit of the late period in which a human skeleton was found. Mound No. 14 is a dirt embankment with a covering of stones and is surrounded with a stone paving of square shape. During the excavation within the embankment of the mound, a grave pit was found with a wooden covering and an entrance pathway set to the west. The bones of the deceased were scattered inside the wooden frame and along the pathway, due to the robbery of the burial. From the accompanying inventory were found ceramic vessels, bronze mirrors, arrowheads, beads, fragments of golden items, ironware, etc.

As mentioned above, the project’s goal was to identify historical and cultural ties between the early nomadic peoples of Central Asia, represented by the Usun and Silla states. The fact is that the monuments of the Early Iron Age (dating back to the 6th–2nd centuries BC) in Kazakhstan and Korea (dating from a later time, 4th–6th centuries AD) are very similar in the construction of the mounds, as well as the inventory of finds, in particular gold products. As a result of a comparative analysis, it turned out that the gold finds of the royal mounds of the early Iron Age are almost identical to the gold finds in the Korean mounds, but dated to a later period. Therefore, there was a hypothesis that the Korean peninsula was inhabited by tribes from central Asia at the beginning of the current chronology. The basis for this hypothesis was the fact that the finds in the royal barrows in Kazakhstan were dated early, while the Korean ones were late, from which the question arose whether the culture of making gold ornaments of the sovereigns of the two countries was borrowed by the resettled tribes.

Although the dating of Kazakh and Korean gold artifacts is different, from the point of view of stylistic elements and symbolism, they are very similar. In this case, it should be noted the difference between the Korean and Kazakh periodization. A noteworthy surprise is the following circumstance: the finds from these barrows, the distances between which are many thousands of kilometers, are extremely similar. The view of many nations in the past held the idea that the ruler is symbolic of the world order. With his personality he communicated both favorable and negative events regarding the lives of people he led.

If at the beginning of the project it was assumed that the kings of the Usun state were buried in Qatartobe burials, then the study revealed that these monuments belong to the earlier Saka tribes. The results of the project are not clear yet, the work is proceeding at full speed, and all finds are being analyzed: wooden logs, remains of human bones, and ceramics. All of the excavated mounds were robbed in antiquity, and these burial mounds were mostly of royal families. This is evidenced by the size of the mounds, the complexity of the construction, the inventory of finds, as well as the presence of fragments of golden ornaments and plaques on clothing.

The complex of ceramic products found during the three-year excavation is being processed and restored in the laboratory as the primary act of restoration.

A ceramic artifact as a source of archaeological data contains immense and diverse information about culture, ideology, belief, the development of technology, family-marriage relations, and socio-economic relations, and therefore it goes through several stages of processing, which begins with documentation, still photography, cleaning, preservation, gluing and restoration if necessary, according to a determined sequence of processing. In case the artifact lacks sufficient integrity, it undergoes restorative procedures.

Among the ceramic products were found middle-sized jugs and bowls. Basically, the entire ceramic complex consisted of damaged items. Ceramics are mainly made of medium-sized clay with natural impurities of brown iron ore, or limestone. Presumably the dishes were made on a firm pattern, in some vessels inside the bottom there were traces of padding – chopped
As artificial additives, large-sized pellets were used in an amount of ≈20-25% of the organic materials. The walls of the cups were completed with the help of banded clay, the diagonal seam being of different widths, from 1 to 2.5 cm. The outer surface of the vessels was slightly polished. Some striations were applied on the dried surface, horizontally. The paste is loose. The firing was carried out in an oxidizing environment, with insufficient holding at a temperature of 400-600 degrees. Light products vary from gray-yellow to reddish shades. Some vessels contain carbon black. For conservation works of the ceramic complex of Qatartobe, restoration work was carried out using the epoxy filler Quikwood.

In addition, we should note that some prospection work was done on all burials of the funerary complex with Korean equipment. It helped to explore the underground content of all burials which were not excavated.

The head of project is Byun Younghwan, and from the Kazakh side the responsible person is Onggar Akhan.
Kiribati

I-Kiribati, the native people of Kiribati, are culturally and ethnically homogeneous with a shared genetic history, cultural traditions, values, historical experience, and language. Traditional knowledge and cultural heritage sites are a rich resource for Kiribati. Culture is implicit in the Kiribati community, although the intrinsic value tends to be overlooked. Tangible cultural heritage in the form of archaeological sites and artefacts is becoming increasingly undervalued and is also deteriorating.

Kiribati has 33 islands in total while 24 of these are inhabited. In each island there are many cultural heritage sites, traditional buildings known as te mmareaba and monuments that all tell the history of how Kiribati people lived in the past. All components of the cultural heritage (sites, monuments, buildings) were associated with the traditional skills and knowledge of the people, which form the I-Kiribati culture. Most of the sites were located in coastal areas. The issues and needs for cultural heritage preservation and restoration in Kiribati will be discussed in this report.

Issues/problems for preservation and restoration activities on archaeological sites

1. Most of the sites located in coastal areas are severely affected by high tides and coastal erosion due to the impact of climate change. Some have already been lost and some are deteriorating. Since climate change is the major issue faced by Kiribati, it also affects most of the cultural heritage.

2. Some sites have been lost due to infrastructure development. Communities from the Nonouti and Abemama islands reported during the community consultations that some of their cultural sites had been destroyed during the construction of new causeways and airports on these two islands. Therefore, these places/sites are less known by people nowadays, especially among the younger generations.

3. In some cases, many cultural sites such as monuments and traditional buildings have been destroyed by human activity due to inadequate understanding, especially by the youth, of how important it is for cultural sites to be preserved to maintain their identity. In serious cases, local people may be conflicted regarding some cultural properties that portrayed power and authority in their respective villages. For such reasons, people have decided to destroy traditional buildings and cultural sites in order to abolish the associated power narratives, to make people more equal. This is the most difficult type of situation, in which people are unwilling to support the preservation and restoration of their cultural heritage.

4. There is a lack of local expertise, in the skills and knowledge in the field of heritage preservation and restoration and associated skills/knowledge, which is one of the main problems in Kiribati. Capacity building for staff is lacking especially now since most of the staff are newly recruited. This presents difficulties for the staff to initiate restoration and preservation activities, especially for archaeological sites. The office is currently focused on raising cultural awareness to encourage cultural heritage preservation and protection at the community level, but practical and research activities are poorly developed.

5. Another problem is financial constraints. This is the most common problem but the office is still working to seek funding from developed countries and other sources of aid that can assist.

Specific report on endangered cultural heritage mapping in Kiribati: Nnabakana (Stone warriors) This project was carried out in 2013 by former officers from the culture and museum division supported by the Secretariat of the Pacific Community (SPC) and funded by a European Union project entitled ‘Structuring the cultural sector in the Pacific for improved human development’. This is one of the unique cultural sites located on Tabiteuea Island which is nominated to be protected as World Heritage. The process was not completed due to financial constraints as the funding was not adequate. The final report on this work proposed some actions to be done to this site such as the following.

• Reconstruction of broken and lost Nnabakana (stones)
• Drafting of a regulatory framework for the protection of endangered cultural heritage
• Identification of elements of endangered cultural heritage that need immediate preservation and conservation
• Documentation of all oral traditions through publishing, transmission and storage for future generations and publication of Tabiteuea’s version of the story on this site

However, these proposed actions have not yet been carried out due to the lack of skilled staff to conduct the work and limited financial support to recruit retired local experts to facilitate the activities.
NEEDS: What we need in order to resolve the issues mentioned above, and what we need to do in order to secure our NEEDS

1. Raise awareness in local communities so they can also assist to preserve their heritage and identify knowledge holders in respective communities so they can assist in restoration/conservation work (for traditional buildings and monuments). This is a new government focus so there is an increase in the budget compared with before, but it is still not enough.

2. Staff needs to be trained in conservation and restoration skills/knowledge and other relevant capabilities required for cultural heritage preservation and restoration.

3. The culture and museum division needs to work together with local communities, and other sectors involved in infrastructure development (rural planning division, local government, and the Ministry of Infrastructure and Sustainable Energy) to identify cultural sites for protection on each island so they can consider those sites in their operational plans, to avoid destruction due to their cultural value and significance.

4. Financial assistance is needed for those offices always seeking funding from available donors who assist in the provision of funding to implement the work.

5. There is no legislation or policies related to cultural heritage preservation.

Problems/issues for preservation and restoration activities for artefacts

1. There is limited space inside the museum for the exhibitions, and for storage and conservation work if required. The office is already requesting for an extension of office space and the work on this is in progress, but due to financial constraints there are work delays. Also, the shelves and other furniture required for displaying and storing the objects are not sufficient.

2. The temperature is not controlled, which causes most of the artefacts to deteriorate. Most of our artefacts are made from coconut fibres and strands, or pandanus strands and wood. We also have some paintings and photographs and a lot of printed documents. Most of these artefacts have deteriorated due to the hot temperatures.

3. There are no staff responsible for restoration/conservation, so some of the objects have become damaged. There is also a lack of skills and knowledge among the staff in the field of cultural heritage restoration/conservation.
Report on a case study of a cultural mapping project which also shows some issues for preservation and restoration of cultural heritage: Documentation of cultural heritage in all Kiribati islands. The work was conducted from 2005 to 2010 with the main purpose of collecting and documenting all of the cultural heritage such as oral stories, cultural sites, traditional performing arts, etc. After completion of the mapping, the final book of cultural stories for all of the islands will be produced to be kept and preserved in the museum for future generations to know their cultural stories. The work also involved recording of the sites on GPS and collecting of artefacts to be displayed in the museum. The cost was so high that the government could not afford it, so it was funded by the SPC.

However, this work has still not yet been completed even now. The problem is that some of the recordings are not clear which caused difficulties in completing the report, and most of the coordinates were lost. The information on the artefacts that had been collected was also lost and there are no quality photos that we can use for exhibition after this work. This shows the lack of skills and knowledge regarding documentation, photographing, etc., by the staff members who conducted the work. The office is now continuing the work and revisiting the islands to do a review, to correct the names and stories mentioned. This was started from 2015 and is yet to be completed. The issue faced during this revisit is that some of the informants have already passed away without transmitting the stories. Based on personal observation during the work, most people did not know the stories and even the location of the sites mentioned in the previous mapping. Elderly people who are experts in traditional skills do not pass on their skills/knowledge. So, the loss of traditional knowledge/skills for building, etc., is also a major issue.

NEEDS: What we need in order to resolve the issues mentioned above, and what we need to do in order to secure our NEEDS

1. Museum development is needed, in terms of expanding the building and providing more furniture and storage (shelves, cupboards, cabinets, etc.) in order to preserve the artefacts, and for more space required for storage and conservation work. The government is now working on this and seeking more funding from other developed countries. They are seeking donations from big museums (e.g., the Auckland Museum through the Pacific Collection Access Project).

2. Staff members need to be trained in specific skills/knowledge relevant to the preservation and restoration of cultural heritage. We always seek opportunities related to this field in terms of short training courses, intern programs and available scholarships (e.g., the intern program with Auckland Museum funded by the NZ government, First Aid to Cultural Heritage in Times of Crisis training of ICCROM, funded by the Prince Claus Fund, and ACCU training) and hope to get more.

3. Requests for foreign technical advisors to work with the Kiribati museum.

From the above discussion of the issues faced by Kiribati for cultural heritage preservation and restoration, I do hope that this course is a very great opportunity to learn and acquire skills and knowledge that are important to resolve such issues. I would like to thank all the organizers, ACCU, NARA, ICCROM and others, for giving such a great opportunity which is worthwhile and very helpful for Kiribati.
1. Introduction

Laos is a landlocked country located in mainland South East Asia, surrounded by China, Thailand, Vietnam, Myanmar and Cambodia. It covers 236,800 square kilometres, with around 70% of the geographic area made up of mountain ranges, highlands, and plateaus cut through by rivers. There are two main seasons, which are the rainy season and the dry season. It has a population of around 6,973,554 million as of 2017. Laos is rich in natural resources and has been inhabited by humans for thousands of years, and as a result there are many varieties of archaeological evidence and monuments distributed around the country. These archaeological remains are a reflection of the arts, culture, knowledge, and intellectual life of our ancestors in Laos over many thousands of years.

As well known, research in prehistory in Laos was previously undertaken by French geologists during the French Indochinese period with the establishment of the Geological Survey of Indochina (GSI; Zeitoun et al., 2012). J. Fromaget joined the GSI in 1923 and conducted extensive excavations in northern Laos and Vietnam, discovering Indochinese hominid remains. Similar to many of his geologist colleagues around the world, he was not only interested in soil formations but also concerned about prehistory. Along with other GSI members, M. Colani, E. Patte, and H. Marsuy, he conducted numerous archaeological surveys in the region, resulting in many publications in the Bulletins and Memoirs of the GSI. The prehistoric sites are mainly in the northern part of Laos such as Houei Hoc, Tam Pa Loi, Tam Pong, and Tam Hang (Demeter, 2009).

After a long period of inactivity due to the geopolitical situation, prehistoric cave sites, rock shelters and monuments were revisited beginning in 1999–2000 by a Laotian team under the direction of Thongsa Sayavongkhamdy. Exploratory survey work was done at many prehistoric sites as well as test pit excavations in several caves and rock shelters in the northern and middle parts of Lao PDR.

Since 2005 there has been new interest from international teams in prehistoric surveys in Laos, focusing especially on the prehistoric chronology, namely, the (pre-)Hoabinhian lithic technocomplex in northern Laos, but also concerning rock art on the Mekong River banks. Meanwhile, lithic assemblage remains, human bones, and other objects have also been discovered in this region.

Previous research has suggested that the Mekong basin was rich in archaeological remains dating throughout the Middle Pleistocene to Holocene. However, I will highlight some cultural heritage sites in Laos, particularly the World Heritage sites of the Town of Luang Prabang, and Vat Phou and Associated Ancient Settlements within the Champasak Cultural Landscape, as well as the Plain of Jars site (a site for which application for recognition as World Heritage, the third such site in Laos, is currently underway).

2. The cultural heritage sites

Currently, there are two cultural heritage sites that have been inscribed on the World Heritage list, and one site is in progress of being assessed for such recognition.

2.1 Town of Luang Prabang (World Heritage)

Luang Prabang is situated between two rivers, the Mekong and the Khan, and surrounded by a ring of mountains; Luang Prabang is rich in cultural heritage with monasteries, monuments, traditional customs, and surrounded by beautiful nature. The Town of Luang Prabang was inscribed on the World Heritage list in 1995. It is an outstanding example of traditional architecture and Lao urban structures, built by the European colonial authorities in the 19th and 20th centuries. Its unique, remarkably well-preserved townscape illustrates a key stage in the blending of these two distinct cultural traditions. Many traditional Lao houses remain; they are built of wood using traditional techniques and materials introduced in the colonial period.

Temples in Luang Prabang play an important role in the daily life of residents. Ceremonies to appease the nagas and other evil spirits, and Buddhist religious practices perpetuate the sanctity of the place. Natural spaces located in the heart of the city, and along the riverbanks and wetlands (a complex network of ponds used for fish farming and vegetable growing) complement this preserved natural environment. Furthermore, there are numerous archaeological sites and monuments including natural tourism sites in this town as well (Poong et al., 2015). Luang Prabang as a World Heritage site has experienced tremendous change caused by rapid development and growth brought by tourism. Existing studies are critical of the impact of tourism, as negatively transforming this town, but lack in-depth analysis and a significant sample size to clearly discern the changes (Leong et al., 2016).

As well known, the Town of Luang Prabang World Heritage site is surrounded by a ring of mountains which gives a limited frame for extending the city, so this can be a barrier issue in cultural heritage preservation. The capacity of Heritage House is
pressed from development around the listed property, posing significant risks for its future and has already led to deterioration of this World Heritage property, particularly in its traditional component. Around the perimeter of the Town are several proposed development projects, including a new airport and a new town on the right bank of the Mekong, that would have an impact on World Heritage property, both in terms of visual integrity and from noise pollution. Within the core area, illegal building activities include the demolition and reconstruction of listed properties. This is leading to the loss of important elements of the historic urban landscape, in particular the Lao traditional structures and gardens, etc. On the other hand, the current socio-economic trends are causing a progressive reduction in size to local communities, and with the loss of their intangible heritage, to an alteration of the spirit of the place. In the long run, this might compromise the viability of the monasteries of Luang Prabang, which traditionally rely on alms giving for their support (UNESCO, 2008).

Regarding the issues mentioned above, the Lao authorities are planning for the safeguarding of the Town of Luang Prabang, as shown by the recent adoption of the new law for the protection of the national heritage, as well as the revival of the National Heritage Committee.

2.2 Vat Phou and Associated Ancient Settlements within the Champasak Cultural Landscape

Vat Phou Temple is situated on a hillside and offers stunning views over the surrounding land and Mekong River. Visitors who appreciate art and history will be amazed by the magnificent workmanship in this temple ruin complex in the form of temple pillars, lintels, pediments, terraces, courtyard walls, doorways, sanctuaries, shrines and palaces. There is also a natural spring that is believed by locals to emit holy water. One temple in the site was constructed around the 5th century but most buildings found in the complex are from the 11th to 13th centuries. It was constructed using sandstone, laterite and bricks. Among many of the outstanding carvings there are those of Indra, the Hindu god of war, storms, and rainfall, riding a three-headed elephant and of Vishnu riding on a garuda, an eagle (Messeri, 2008).

Vat Phou Temple was inscribed on the World Heritage list in 2001 under the name of Wat Phu and Associated Ancient Settlements within the Champasak Cultural Landscape. The inscription includes not only Vat Phou Temple but also the sacred mountain of Phou Kao, Hong Nang Sida Temple and the city of Lingapura, the ancient roadway that once led to Angkor, Thao Tao Temple, Tham Lek cave of inscriptions, Vat Oubmung Temple, Tomo Temple, the ancient city of Shrestrapura, Champasak Town and the island of Don Deng. Vat Phou has been an active temple for Buddhist religious practice for quite
there was an altar at the front section of its sanctuary featuring four big Buddha images with more Buddha images around the ruins (Messeri, 2008).

There are many archaeological remains that must be safeguarded, and still have to be studied; certainly, the vernacular architecture must be protected before the onslaught of modern development that will destroy the traditional dwellings to make way for poor quality brick buildings, as is seen in other nearby districts. Crucially, efforts should be made in both the routine and urgent maintenance of the site, with a more detailed inventory of all heritage in the area. The efforts should also include general surveillance of all the sites, even those not easily accessible, as well as improvement in the local infrastructure and general services. In fact, over the past few years, there has been progress in adapting national and local rules and regulations; the site is attracting an increasing number of tourists, so much attention must be given to this and to improving residential structures. Moreover, it should be considered an important site from a religious point of view, and there needs to be proper management in the peak period for tourism during the Vat Phou Festival, a sacred Buddhist festival that attracts worshipers from all over the country. Only a dynamic, evolving and interactive management plan will be able to bring success to the sustainable development of the site while maintaining its identity (Messeri, 2008). One part of the solution would be to increase the number of experts and to attract fruitful international projects while involving the indigenous community in these activities to safeguard the needs of the local population. The challenge is to balance the modernization of the country with the historical and spiritual identity of this ancient site.

2.3 Plain of Jars

The Plain of Jars in Xiangkhouang province is one of the significant and outstanding cultural heritage sites of Laos. The Plain of Jars is a megalithic archaeological landscape in Laos. It consists of thousands of stone jars scattered around the upland valleys and the lower foothills of the central plain of the Xiangkhouang Plateau. The jars are mostly arranged in clusters ranging in number from one to several hundred. French researcher Madeleine Colani concluded in 1930 that the jars were associated with prehistoric burial practices. Excavations by Lao, Japanese and Australian archaeologists in the intervening years have supported this interpretation with the discovery of human remains, burial goods and ceramics around the jars. The Plain of Jars is dated to the Iron Age (500 BC to AD 500) and is one of the most important prehistoric sites in Southeast Asia. More than 90 jar sites have been identified within Xiangkhouang Province. Each site has from one to 400 stone jars. The jars vary in height and diameter between 1 m and 3 m and are all hewn from rock. Their shape is cylindrical with the bottom always wider than the top (Genovese, 2009). The stone jars are undecorated, with the exception of a single jar at Site 1. Stone discs have also been found.

There are many challenges in terms of cultural heritage management at this site due to the million pieces of buried unexploded ordnance (UXO; impeding any research or excavation), damage from tourists and visitors who still climb or step on the jars during their visits, and from tree roots that are also invading the jars at some sites. Nevertheless, over a period of 20 years, to 1992, several jars were moved from Site 1 to various other locations. There are jars currently in the Smithsonian Institution, USA, taken there during the war in 1970s. Some jars were airlifted to the capital, Vientiane. The following story was recently recounted to the author by two villagers at Site 17, namely, that in 1999–2000 two jars were moved from their original location to be presented as gifts to the temple in the nearby village. The challenges affecting the fragile heritage of the Plain of Jars are many and varied, ranging from the elements, including temperature extremes and tropical climate, to urban sprawl. Most sites are set on mountain slopes in wind-prone areas, in a region characterized by hot daytime temperatures and cold nights, with abundant summer rainfall. Cattle roam freely among the jars, a source of damage when cows rub their horns against the urns. Erosion is a major problem for limestone jars, as vegetation can split a jar in half as already observed (Genovese, 2009).
3. Conclusion

Laos is rich in archaeological remains which are valuable cultural resources, with a value that is hard to determine but since these cultural remains have been created by their ancestors, all the cultural remains from the past are a part of the proud heritage of each Lao citizen. However, the economic development of the country has brought rapid change to the way of life, and this change will affect culture, art, architecture, the environment of the historic monuments and other things of value of the past, and as long as the standards of management are insufficient and their enforcement through action also not thoroughly implemented, the future will put the archaeological and historical sites in danger or at risk, and then the entire value of the heritage from the past can be destroyed and links to past identity can be lost. Even though experts from different countries have contributed technical and advisory support and have been involved in some projects, this is still insufficient and it is necessary to develop many facilities, particularly human resources.

Because of the importance of the cultural remains of the past, the Department of History and Archaeology, Faculty of Social Sciences, was established at the National University of Laos in 2009, to take responsibility for cultural preservation, and the curriculum has been developed to promote the archaeological and cultural resource management disciplines. Currently, the Department of History and Archaeology has been encouraging our staff and lecturers to upgrade their capacity in order to develop archaeology and cultural heritage management tasks, particularly for the educational degrees, skills, experiences and research skills needed in the above-mentioned disciplines. The Department has been particularly seeking opportunities for lecturers to develop their capabilities in the discipline of archaeology and cultural resources management. Furthermore, the Department of History and Archaeology has also encouraged staff and lecturers to pursue advanced training, particularly leading to MA and PhD degrees in foreign countries, in order to improve our capabilities and to apply this knowledge to the teaching process.

References


Maldives

Problems and needs for cultural heritage protection and restoration activities in Maldives

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Maldives is a chain of atolls situated in the Indian Ocean, made up of about 1,200 coral islands. Mostly the country is described as having more sea than land. In ancient times the location of the Maldives made the country a famous transit point for seafarers crossing from east to west and vice versa. Hence, the country was exposed to various cultures and traditions. The native population practiced Buddhism until the country embraced Islam in 1153. It is known that heritage sites are mostly influenced by their countries’ respective religions. There is no written history of the Maldives before its conversion to Islam. However, various archaeological and heritage sites bear evidence that the country has been inhabited for at least two thousand years. These heritage sites are the most reliable asset for conserving and researching Maldivian history and culture.

From the chronicles of Maldives history, it is evident that islands which were inhabited in the past have become uninhabited now for different reasons. Traces of various settlements on those islands bear evidence to those narratives (see Figure 1). However without a complete heritage site inventory, some sites are yet to be discovered. Whenever a new site is discovered on an island, the island council informs the responsible authorities. To further investigate, a technical team visits the island. However, the response and support from the local community plays an important role in the further investigation of these sites. This is evident from incidents that took place on two islands which had recent discoveries of archaeological sites.

The first site, which is shown in Figure 2, was discovered in 2014 in Ha. Ihavandhoo. In this case the Heritage Department was informed that some structural ruins were found during the installation of water pipes. The island council halted the work immediately and sought technical assistance from the Department of Heritage. Subsequently, the path of the water pipes was changed to avoid any damage to the structures. This island has one of the coral stone mosques among the six mosques that were nominated to the UNESCO World Heritage tentative list in 2013. Hence our technical team has worked closely with the island community. Due to these frequent encounters with the island people, they have developed a good basic knowledge about cultural heritage. The excavation work was carried out for few days, led by a local archaeologist and information required for further research was collected. The island council as well as the island community worked closely with the technical team to uncover more about island history and culture. After the investigation, the site was backfilled and this disappointed some enthusiastic helpers of the project. However after explaining the negative impacts of leaving the structures exposed, the crowd was convinced of the need.

The next case was the discovery of the foundation of an old mosque from Gdh. Thinaadhoo in 2016 (see Figure 3) This structure was discovered while preparing the groundwork for constructing a new mosque on the island. This new discovery stopped the construction of the new mosque, which provoked a negative impression among the island community towards the newly discovered site, as the new mosque building was a desired development anticipated by the residents. At the time there was no local archaeologist present, and the project was led by a technical team. After the site was excavated, future plans to display the site were discussed. With the excitement of discovering an intact foundation of an old coral stone mosque, the technical team started planning ways to develop the site to benefit the island. Hence to avoid repetitive excavation, the team decided to leave the site without backfilling until the development plans could be put into action. However, the continuing resentment among the island community for not getting the new mosque exploded into vandalism of the excavated site. Regrettably, due to a weak legislative framework for protecting and conserving these sites, no proper actions have been taken against these crimes. This was a huge loss and a shock for the Heritage Department, as the site discovered in the island had a similar typology to other ancient coral stone mosques and could have been very useful for the ongoing research work for the coral stone mosque nomination project.

These two cases portray the range of difficulties and challenges that we face in safeguarding and protecting cultural heritage sites. Being an archipelago nation, cultural heritage sites in the Maldives are scattered and are located on various islands. But the Department, responsible for safeguarding heritage and culture throughout the country, is located only on the capital island, Male’ City, and has limited staff. In a similar vein, support staff are located only in a few of the islands, so regular monitoring of all surviving heritage sites is an obstacle to be faced. The centralized system of managing cultural heritage sites is not very effective for us, hence a more successful heritage management system that can be applicable to the Maldives needs to be studied and explored. The Maldives, as is common with other developing nations, faces budgetary constraints and also conserving cultural heritage is not considered a high priority, which results in a lack of funding for the Department. Hence, funds allocation and manpower in this field are very limited. Especially in a field like this, there are various sets of technical expertise and knowledge that are required, but currently there are only a handful of people with such qualifications and experience. Moreover, training and education related to the cultural heritage field are not available in the Maldives and higher education scholarship opportunities in this field to train abroad are rare.
Furthermore, the scope of career growth in the cultural heritage field is perceived to be narrow, and this has created an enormous challenge for efforts to increase the workforce of the Department.

Apart from this, excavations of many archaeological sites of the Maldives have been conducted without any future management plans. As these sites were left exposed to the sun and rain, most of the structures have deteriorated due to weathering. Being abandoned for years, some sites now have thick growths of vegetation and have even turned into piles of rubble. Sadly, some of the islanders have misinterpreted these sites as dumps of debris and have picked these stones and used them to build their houses. In earlier days, each island lived as a much more closed community and the heritage that had been left by their forefathers was considered a source of pride. Many traditions, beliefs and customs were associated with these cultural heritage sites; hence they were honoured and treated with respect. Later on, with the ease of transportation and better health and education facilities available elsewhere, people started migrating to different islands seeking a better life style.

Consequently, people started to become more knowledgeable and started to realize that most of the customs and beliefs that were considered as traditions contradicted the religion of Islam. So many of the earlier practices were stopped, resulting in the bond between the people and cultural heritage sites to diminish. It has gradually become forbidden to treat these sites in a way that was deemed to be in conflict with modern religious beliefs, and the sites consisting of shrines, tombs and memorials are no longer given the same respect. Therefore, subsequent generations never developed such a relationship with these cultural heritage sites. The archaeological sites were no longer maintained well and the people lost their love and respect for the sites. The islanders never fully understood the significance of these sites, which were usually from the Buddhist era (see Figure 4). Maldivians today, being Muslims, find it hard to relate to these archaeological sites and feel reluctant to preserve and promote them. New archaeological sites and artefacts are still being discovered each year on different islands during development projects. Some sites consist of foundations of old mosques, temples, statues, bathing tanks, and so on.

Each cultural heritage site has multiple stakeholders with overlapping mandates to protect and preserve these sites. Each stakeholder role remains ambiguous leaving conflicts and confusion. Hence, these sites are not well preserved and restored due to confusion in roles and responsibilities. Currently, the government solely takes the ownership of the cultural heritage site, which has put the sites under huge risk for vandalism. In the recent few years the country has been politically unstable and some have targeted and vandalized the heritage sites to express their frustration. The developments as highlighted above that are ongoing in the country for the past century have been a huge threat to the cultural heritage sites. The country’s old fabric is being peeled off due to a lack of awareness regarding these sites. Reserving space for cultural heritage assets in a land-scarce country such as the Maldives is a challenge.
This report identifies the problems and needs in relation to the protection, preservation and management of archaeological sites in New Zealand. New Zealand is located in the southwest Pacific and there are over 60,000 archaeological sites recorded on the two main islands (North and South). Archaeological sites are protected by the Heritage New Zealand Pouhere Taonga Act 2014, which provides for the identification, protection, preservation and conservation of historical and cultural heritage. The Act defines an archaeological site as any place in New Zealand (including buildings, structures or shipwrecks) that was associated with pre-1900 human activity, where there is evidence relating to the history of New Zealand that can be investigated using archaeological methods. The following problems and needs identified in relation to archaeological sites are based on my perspective as an archaeologist for the Heritage New Zealand Pouhere Taonga (HNZPT) Lower Northern Area office in Tauranga, located in the Bay of Plenty region on the east coast of the North Island. In the Bay of Plenty, there are over 8000 sites recorded but with many more yet to be discovered. Most of the archaeological sites relate to the settlement of the indigenous population, Maori, and common types found in the area include: pa (fortified Maori villages or defended settlement), shell midden (refuse from shell fish processing for subsistence), hangi (earth ovens), gardening soils, terraces, pits (food storage for crop cultigens) and a variety of artefacts made from wood, bone and various lithic material. Later historic sites relate to European settlement of the area dating from the mid 1800’s.

Problem 1: Limited Public Recognition and Appreciation

In general, the New Zealand public has limited knowledge and understanding of archaeology. This is in part because of the nature of the archaeological record itself. In comparison to the rest of the world, New Zealand has a relatively young history. It is one of the last land masses to be populated by humans, with people migrating from East Polynesia approximately 700 years ago (Higham and Jones 2004). As such, some people do not think New Zealand is ‘ancient enough’ to have archaeology and are unaware of the significant archaeological landscapes found across the country. Another factor that contributes to the lack of understanding is the condition or physical characteristics of the archaeology itself. For most archaeological sites, the organic material, including wood and vegetation that was used to construct structures was either removed once no longer in use or after abandonment has deteriorated. In addition, various post-depositional processes, including modern farming practices such as ploughing have contributed to the concealment of archaeology. This means that a large percentage of archaeological sites are subsurface, with no visibility on the ground surface. The limited visibility and partial preservation of sites means people can have a hard time understanding what they are looking at and therefore recognising or appreciating it. Unfortunately, in some cases this can result in the unauthorised destruction or modification of archaeological sites. It is illegal to ‘modify, damage or destroy’ an archaeological site without an authority consent issued by HNZPT. An authority mitigates the loss of the archaeological record through archaeological investigation and recording.

Problem 2: Urbanisation - Development Pressure

Development is one of the key problems in New Zealand causing the loss of archaeological sites. As New Zealand’s population grows, we are seeing an increasing amount of urbanisation. Over the last decade there has been a significant push by the government to accommodate this growth. As a result, large areas of complex archaeological landscapes are becoming more fragmented, modified and destroyed. To get some perspective on the situation, the HNZPT Tauranga office processed 70 archaeological authorities for the year July 2014 to July 2015 and over the following years this has increased substantially, jumping to 155 authorities for July 2017 to June 2018. This significant increase has mostly been the result of residential development, horticultural development and infrastructural upgrades (such as roading and utilities). In the Bay for Plenty, large areas of land once used for pastoral farming or horticultural practices are now being ‘zoned residential’ and subject to intensive development. One example of the mass scale of development that is occurring, and the resulting loss of archaeological sites is on the Omokoroa Peninsula in the Western Bay of Plenty. Archaeology has been found for almost all the authorities issued, mostly relating to Miōri settlement including horticultural practices. Of note, was that for most of these properties there were no previously recorded sites. Again, this is in part because of the subsurface nature of archaeology in the Bay of Plenty, which in turn makes it difficult to provide for the avoidance and preservation of sites prior to the commencement of development works that have otherwise already received their consent.

Problem 3: Environmental Concerns

Environmental processes and weather events can have a significant impact on the preservation of archaeological sites. New Zealand is made up of islands and has the 9th longest coastline in the world. A vast majority of archaeological sites are near the coast, particularly shell midden or sites within sand dune environments which are vulnerable to coastal processes.
such as wave action that cause erosion and consequently the loss of archaeological material out of situ. Another environmental concern is natural hazards. In the Bay of Plenty earthquakes are a threat and because of this, buildings are required to comply with certain safety criteria as part of risk management. In the central business district (CBD) of Tauranga on the Te Papa peninsula several older buildings, with some retaining architectural elements built prior to 1900, are now being subject to strengthening works. For some buildings, the strengthening works are not economical, and owners see an opportunity to redevelop the site and therefore decide to demolish the building. Consequently, this is having a flow-on effect on the preservation of archaeological sites. Although archaeologists are provided with the opportunity to build up a better picture of the history of the Tauranga township, there is also the physical loss of archaeological remains, both pre-1900 buildings and features that relate to early Maori settlement and later European settlement and military occupation of the Te Papa peninsula.

These problems which are causing damage and the loss of archaeological sites have long been recognised by the New Zealand archaeological community (Walton and O’Keeffe 2004) and efforts are being made by HNZPT, the New Zealand Archaeological Association (NZAA) and individuals to overcome these. The following needs relate to what measures are being carried out to combat these problems and what is needed in the future for better protection and preservation of archaeological sites.

**Need 1: Professional Development**

It is important for heritage specialists to continue training throughout their professional career by attending training courses, conferences and building upon their skill sets. Keeping up with the latest advancements in technology is just one example. New information technologies provide archaeologists access to tools that can efficiently record information with improved precision and can offer better management tools to communicate and share results. Today, the application of information technology is a means to improve understanding and public access to cultural heritage. For example, geographic information systems (GIS) have had a significant impact on aspects of archaeological method and theory; the way archaeologists record, analyse, and represent archaeological data and provide an opportunity to change the way others perceive the archaeological record (McCoy 2017). One example of the application of this technology is the New Zealand Archaeological Association’s archaeological site recording scheme (NZAA ArchSite). ArcSite is an online database that contains information for over 60,000 recorded archaeological sites across New Zealand. Each site has been mapped and an associated site record form provides further information. This information is accessible to all and is a primary resource used for both research and management purposes.

**Need 2: Dissemination of Information**

To achieve better protection and appreciation it is important to facilitate the dissemination of information to interested stakeholders, communities and the public. It is about heritage specialists being proactive with their approach rather than being reactive. This can be achieved with:

- Site Interpretation. Communicating the history of a place on site is vital for on-going recognition of significant cultural heritage. This can be something as simple as signage. For example, Otuamotoi Pa is a significant landmark in the history of Tauranga in the Bay of Plenty. The pa was occupied by Maori for many centuries and later considered the historic capital of Tauranga. The last remaining section of the pa was made a historic reserve by the local council in 2004 and pou (traditional Maori carved wooden poles) have been erected at the entrance to the reserve and interpretation panels installed throughout the reserve to convey this rich cultural heritage to visitors. This work was carried out as part of a joint project between the local council, tangata whenua (local Maori) and HNZPT. To ensure the cultural, archaeological and historic values are looked after, conservation and management plans have been implemented.

- Site management or conservation plans. Are a resource used by private land owners and local authorities who manage archaeological sites by providing operational guidelines for day to day activities. This is to ensure the preservation and protection of sites on a long-term basis, and at the same time maintain authenticity and that the values of the site are respected (Jones 2007).

- Public Engagement. Organising events open to the public to attend or participate is a way to celebrate heritage as part of a community and society. One of the most recent ways that this is coming to fruition in New Zealand is through ‘Archaeology Week’. This yearly, week-long event is coordinated by the NZAA with the aim of increasing public awareness and highlighting the importance of protecting New Zealand’s archaeological heritage. There are a variety of events which happen throughout the country including public talks, lectures, guided heritage walks, displays of artefacts and tours of archaeological sites.

**Need 3: Protection and Preservation of Archaeological Records**

One of the biggest needs facing the archaeological profession today is ensuring the long-term protection and preservation of archaeological records. These records are a key part in preserving New Zealand’s cultural heritage. To help achieve this the HNZPT Lower Northern office is currently in the process of developing an overall research framework structure for implementing regional research plans as part of the archaeological authority consenting process. One of the main objectives is to develop a sustainable archaeology information management system that improves access to data sets, the analysis of information and the preservation, integration and use of data. It is critical to promote better digital archiving practices in New Zealand.
Zealand and facilitate the re-use of data for non-destructive analysis and research. Regional scale research frameworks can also be tailored in response to specific problems identified. For example, research can be directed towards identifying areas at risk of coastal erosion and ensure significant sites on the coast can be managed appropriately; such as investigating the site before it disappears or measures to protect the site from further erosion. Another important aspect of archaeological research is being able to draw together the results of multiple excavations into a wider scale synthesis to generate new narratives that can be disseminated to the wider public. Ultimately, the aim of the framework is to ensure any future archaeological work will support policy development, standards of practice and to make informed decisions regarding the protection and preservation of archaeological sites.

Conclusion
This report provided a brief introduction to legislation that protects and manages historical and cultural heritage in New Zealand. Examples from Tauranga illustrated some of the problems in relation to the archaeological record and in response different needs that will help to achieve better protection and preservation of archaeological sites in the future.

Bibliography

Cultural heritage management and protection is an important issue at all levels of Papua New Guinean (PNG) society. This can easily be seen in the country’s many (similar) claims to being home to, for example, “800 scattered tribes in a difficult terrain...”, as recently articulated by our Deputy Prime Minister Charles Abel. These individual tribes have their own unique cultures and traditions, which are still strongly cherished today (indeed, the PNG Tourism Promotion Authority’s slogan is “Papua New Guinea—a million different journeys”). Hence traditional culture, cultural sites and livelihood are very much intertwined.

PNG is also an economic power on the rise, as shown by its impending role of hosting the 2018 Asia-Pacific Economic Cooperation (APEC) Leader’s Summit in November. However, despite the country’s increasingly global presence, the close cultural connections, coupled with the country’s rapid economic growth in its various forms and associated impacts, has further highlighted the need for proper management and protection of the cultural sites that mean so much to everyday Papua New Guineans.

The problems associated with (the lack of) cultural heritage protection in PNG can be seen at three different levels: community, bureaucratic, and national.

At the community level there are two main issues; firstly, there is a lack of knowledge or clear understanding by ordinary Papua New Guineans regarding who to turn to for the protection of their sacred sites if and when those sites are threatened. While this may seem unlikely in today’s Internet and globalized world, keep in mind that only 13% of PNG’s 7.6 million people live in urban areas with likely access to better information, and although the United Nations lists adult literacy rates at 64.2% (United Nations Development Programme, n.d.a), this statistic is calculated on whether a person can, “with understanding, both read and write a short simple statement on everyday life” (United Nations Development Programme, n.d.b). Thus there is a lack of information filtering through to communities, especially in the rural parts of PNG. Secondly, and from my own experience, there is a misunderstanding of the purpose and role of archaeology as a discipline. For instance, there have been many times when we have had to clarify to locals that we were not looking for gold when digging on their land. On another occasion, I recall a particular instance in 2009 when a national member of our parliament, while hosting a congratulatory lunch for our team which had just excavated the Kosipe site in the central highlands (Summerhayes et. al, 2010), now known to be 44–49,000 years old, made the comment that his people were the “first” Papua New Guineans to settle (New Guinea); here then, he was using archaeology to make a (favorable) political statement. Whether spoken in jest or not, it shows an uncertainty around archaeology’s role as one which is dedicated to the production of knowledge for its own sake. Whilst these examples may seem innocuous, they speak to a more concerning trend, i.e., that the role and aims of archaeology are still misunderstood by many Papua New Guineans.

At a bureaucratic level, I again see two issues. The first is the lack of enforcement of cultural heritage protection laws by responsible authorities. One of the custodians of cultural heritage in the country, the National Museum and Art Gallery (NMAG),
is more often than not understaffed, underfunded and with no clear leadership, due largely to politics; for instance, a permanent appointment to the position of Director (of NMAG) was pending for almost a year until the recent appointment this August. However this uncertainty in key institutions and funding problems has sometimes led to blatant flaunting of cultural heritage laws. For example, a foreign construction company in the capital Port Moresby was responsible for destroying Allied bunkers and gunnery sites that were used in the defense of Port Moresby during the Second World War to make way for property development in 2016 (“Demolition of War Relics Clarified,” 2016). The destruction took place despite official protests from the NMAG. This example leads me to the second issue, which is the apparent lack of coordination and cooperation between these government agencies, including law enforcement officers and policy makers. An instance of this is illustrated in the case of the “Swamp Ghost,” a B-17E Flying Fortress that was ditched after a bombing mission in 1942 on New Guinea’s north coast. Lying idle and intact for more than 60 years, it was removed by an American salvager in 2006 (Darnton, 2007) and eventually found its way overseas. All of this was despite concerns by some national leaders that the sale (for US$111,000 by the state) and removal of the aircraft was illegal, with two of them stating that “the PNG Museum took no steps to protect the property of the citizens of PNG, but actively engaged in an illegal sale with complete disregard to that ownership” (“Anger that PNG Government has given Swamp Ghost salvagers the green light,” 2008).

At the national level, there are a number of pressing issues that have a direct impact upon the proper enforcement of cultural heritage laws in PNG. Foremost are the regular cuts in government funding to numerous government agencies over the years, not the least of which include those responsible for overall cultural heritage management and archaeology in the country: the NMAG, the Conservation and Environment Protection Authority (CEPA), and the National Cultural Commission (NCC). The second issue concerns political interference or inaction in the running of the abovementioned agencies. As previously noted, the current Director of the NMAG has been there on an acting basis for close to a year now (“National Museum chaos exposes cultural treasures,” 2018), with no news of a permanent appointment anytime soon. Thirdly, there is a threat to cultural heritage protection from the large foreign...
multinational corporations that operate in the various resource development industries, especially those that demand the clearance of large tracts of land (e.g., oil palm, mining, and logging). Not all of these corporations adhere to cultural heritage laws. For instance, I am a member of the Nakani Caves Cultural Heritage Project, a joint collaboration between different institutions including James Cook University, the Australian National University, the Australian Museum, Extent Heritage, and the University of Papua New Guinea (UPNG). This project began in 2013 and aims to document and integrate the natural and cultural values of the Nakani Caves in Pomio, East New Britain; this is in preparation for a cultural landscape World Heritage listing nomination. The first time I visited the area was in February 2015; the hills behind the main town are home to large oil palm plantations, run by a foreign company. Not only was there the expected environmental damage to the land (see Figure 1), specifically, hectares of forest stripped for this purpose, but many cultural sites were also destroyed. One positive aspect to come about as a direct result of the project’s work was that we were able, in November last year, to have three archaeological sites, including a rock engraving site close to an oil palm plantation called Nutu Lilía (see Figure 2), all added to the process of being gazetted by the NMAG, meaning they are being put onto the country’s national heritage list for protection.

For the problems described above, there are a number of solutions that can help alleviate and at the same time strengthen cultural heritage protection in the country.

Firstly, there is the need for stronger law enforcement from the respective stakeholder agencies, including law enforcement, but also through educational institutions such as UPNG. The laws that govern cultural heritage themselves – primarily the National Cultural Property (Preservation) Act 1965 and the War Surplus Material Act 1952 – are quite strong and clear regarding what is expected in terms of protection and restoration. Hence, improved enforcement and adherence from all concerned stakeholders will prevent similar situations as the Swamp Ghost incident from occurring again.

Secondly, and connected to the first point above, is the need for more trained cultural heritage officers working in the stakeholder government agencies in order that the appropriate skills and expertise be applied towards the enforcement and management of culturally relevant sites. The former Chief Archaeologist at the NMAG, Herman Mandui, writing some twelve years ago (Mandui 2006), pointed out that there is a shortage of trained staff and lack of coordination among concerned governmental agencies to implement cultural heritage laws. This is still very much the case today. Personally, this is where I see institutions such as UPNG playing a major role. Indeed, UPNG is the only higher education institute in the country that houses an archaeology department. It is the only institution in the world that has university courses solely dedicate to teaching PNG archaeology and cultural protection. Whilst many of our graduates are already holding key positions in agencies such as the NMAG and CEPA, there is always room for more. Earlier in August this year, UPNG Archaeology ran its annual Motupore Island Field School over two weeks; Motupore is located 16 km east of Port Moresby. This year we had about 20 volunteer undergraduates participate over two weeks, living on the island and carrying out excavations while learning about archaeological methods and theory (see Figure 3). In addition, we had a visit from a group of young school students, who were all quite eager to learn about archaeology (see Figure 4).

Thirdly, PNG needs more protected areas, recognized and protected by law and thus outside the approach of companies in mining, petroleum, oil palm and other extractive industries. Besides the Nakani Caves Cultural Heritage Project, I am also part of a separate team that is using genetics and archaeology to determine who were the first colonizers of the island of New Guinea; the Papuan Past Project is a collaboration between the Université de Toulouse, Muséum National d’Histoire Naturelle, the NMAG, and UPNG, amongst others.

This year between May and June, team members visited the remote Arfundi River area in the Sepik region in the northwest of PNG. This area is one of the more unique regions in PNG in that it is home to extensive rock art sites. The art, largely stencils of human hands (but also shell valuables, cassowary daggers, large leaves), was created by spraying/spitting red, yellow or orange clay onto these objects on the sides of sheer limestone cliffs high up in the mountains (see Figure 5).

In the opinion of Paul Gorecki, who was one of the first archaeologists to record some of the hundreds of rock art sites in the region in the 1980s, this area “constitute[s] the greatest example of rock art in the whole of Melanesia” (Gorecki & Jones, 1987, p. 3).

Gorecki and Jones go on to make the case that because of this, the whole area should be declared as National Cultural Property by the NMAG, and thus begin an “effective and comprehensive plan of protection and management” (p. 4). In the years since, nothing of the kind has happened except for one major expedition to record more sites in 2008 (Edwards & Sullivan, 2008) until our visit. Personally, they are some of the most beautiful art I have seen, and I believe that declaring this area as protected will go a long way in helping to safeguard them.

Finally, there is a need to involve local communities in the actual archaeological process. In this way, local communities not only feel empowered and are understanding the importance and reasons for recording and preserving sites, but they can also contribute directly to their own stories. This can be achieved by either creating educational programs aimed at schools and local communities at large, and/or involving the communities in actual excavations on their land. This has the effect of informing a wider audience. For example, in 2016, UPNG Archaeology was approached by clan leaders of a limestone quarry outside of Port Moresby. The clan was concerned that blasting at the quarry, by
a foreign company, would destroy or damage some of their culturally significant sites in the immediate area. The clan asked that we carry out archaeological surveys to record and ascertain the significance of their sites (see Figure 6), the results of which they would use as proof the foreign company should not encroach upon certain areas. This shows what can be achieved when knowledgeable communities work in partnership with archaeologists and trained cultural heritage officers.

Notes

References


relics-clarified/>


In 1993 Uzbekistan became an active State Party to the World Heritage Convention, with four cultural World Heritage sites currently inscribed (Bukhara, Itchan Kala, Samarkand, and Shakhrisiyabz). The inscriptions were accompanied by promotional activities such as TV and radio programs and the release of special coins and stamps.

The Institute for archaeological research has registered more than 9,000 monuments and archeological sites in the territory of Uzbekistan.

The register of monuments and sites includes about 8,645 archaeological monuments and objects at about 4,000 locations. However, there are large uncultivated and mountainous areas that have not yet been investigated. Research has shown that there may be as many as 500 unknown archaeological monuments or objects that have not been registered. The breakdown of sites by region is shown in Table 1.

Table 1 Archaeological Sites by Region in Uzbekistan

<table>
<thead>
<tr>
<th>Region</th>
<th>Sites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Samarkand</td>
<td>1,460</td>
</tr>
<tr>
<td>Jizzah</td>
<td>302</td>
</tr>
<tr>
<td>Andijan</td>
<td>222</td>
</tr>
<tr>
<td>Namangan</td>
<td>122</td>
</tr>
<tr>
<td>Ferghana</td>
<td>177</td>
</tr>
<tr>
<td>Tashkent</td>
<td>676</td>
</tr>
<tr>
<td>Surxandarya</td>
<td>1,898</td>
</tr>
<tr>
<td>Bukhara</td>
<td>1,675</td>
</tr>
<tr>
<td>Kashkadarya</td>
<td>1,325</td>
</tr>
<tr>
<td>Xorezm</td>
<td>3,456</td>
</tr>
<tr>
<td>Navoiy</td>
<td>206</td>
</tr>
<tr>
<td>Sirdarya</td>
<td>204</td>
</tr>
<tr>
<td>Autonomous Republic of Karakalpakstan</td>
<td>378</td>
</tr>
</tbody>
</table>

Some archaeological monuments and sites are easily visible, for example burial mounds, pitfall traps and drift fences, charcoal pits and hill forts. Others are more difficult to find because they are hidden under peat, earth and rock, such as Stone Age dwelling sites, iron working sites and some rock art sites.

We constantly receive reports on the destruction and loss of archaeological monuments. In most cases, agriculture is the reason for damage causing archaeological monuments and sites to be lost or destroyed.

Other activities with a major impact on land use, such as building and road construction, also damage and destroy cultural monuments and sites, as well as insufficient information and deliberate vandalism.

The Cultural Heritage Act provides strong protection for cultural monuments, but this is not enough to give cultural monuments the protection they need. Monuments and sites are illegally damaged or destroyed both deliberately and accidentally.

Grants for expenses related to archaeological excavations in smaller, private development projects are considered to be an important tool for the preservation of archaeological heritage. Another important tool in this respect is up-to-date registers of various types of cultural monuments and sites. In Samarkand and in other regions of Uzbekistan registers that contain information on the cultural heritage and the environment have been integrated into a single database. It is also important to give everyone who comes into contact with archaeological monuments and sites sufficient information and make them aware of the valuable cultural heritage.

Interventions at archaeological sites

The Institute of Archaeological Research of the Academy of Sciences of the Republic of Uzbekistan has an extensive collection of unpublished archaeological reports resulting from site surveys, excavations, research programs and archaeological authorities. In the collection there are over 1700 volumes of documents from 1938 until the present.

Professional training and capacity building is one of the component parts of the educational process leading to better knowledge of World Heritage. World Heritage education embraces a series of methods to develop interest and involvement among young people regarding heritage issues in general and World Heritage issues in particular. In the Asia-Pacific region, the percentage of young people in the total population of a country is higher than the world average. Consequently, if integrated into school curricula and started at an early stage, the impact of World Heritage education on the long-term preservation of humankind’s precious heritage could be substantial, and needs to be explored further.

New technologies for the presentation and promotion of World Heritage

On-site presentation of World Heritage properties can be enhanced through multimedia stations and interactive touch screens. On-site access to the property’s website can also be an easy way of providing additional and varied information to visitors. Electronic publications and free distribution of CD-ROMs further promote World Heritage properties off-site.
the infrastructure is acquired and the IT skills developed, electronic dissemination of information becomes an inexpensive and attractive way of presenting and promoting a site’s unique heritage. National authorities and site managers who are benefiting from these electronic means of promotion include those in Cambodia, China, Australia and New Zealand, where there is a very proactive attitude towards new technologies. The long-term requirements of conservation and management of World Heritage may also be accommodated via electronic or digital tools. Digitalization of archives and important documents secure the institutional memory of a site and assists site managers in analyzing previous trends in conservation and management of the site they are administering. In the Asian region, Indonesia has taken the lead in digitalizing archived information. Development of databases for management and monitoring purposes should also be encouraged. Visitor data systems, such as those in Australia, or the Central Asian Rock computer database developed by Kazakhstan in collaboration with UNESCO and the Norwegian Funds-in-Trust, and the Urban Management information system used for Kathmandu Valley in Nepal, are examples of how new technologies can positively enhance understanding of World Heritage properties, while at the same time assisting management authorities in keeping track of the site’s institutional memory.

**Geographical Information Systems**

Since 1995, UNESCO’s World Heritage Centre and the UNESCO Regional Adviser for Culture in the Asia-Pacific Region have been conducting a pilot program in five cities in Southeast Asia (extended to South Asia), designed to involve the entire city in the conservation and protection process. Below are excerpts from the report prepared by the UNESCO Regional Advisor for Culture in the Asia-Pacific region concerning the implementation of the pilot program, known as “LEAP – Integrated Community Development and Cultural Heritage Site Preservation in Asia and the Pacific through Local Effort,” with particular reference to the use of GIS. Developing practical, easy-to-use, yet state-of-the-art management tools and training local managers in the skills to use the tools are essential components of any successful program of local community management of heritage sites. The goal is developing easy-to use management tools such as GIS.

GIS is the most common non-destructive mapping technique used by the Asia-Pacific States Parties. Ten percent of the cultural World Heritage management authorities and 34.4% of the natural and mixed World Heritage management authorities declare they use GIS for management and monitoring purposes. The States Parties currently using GIS include Iran, India, Nepal, Sri Lanka, Cambodia, Indonesia, the Philippines, Vietnam, China and Australia. Still, approximately 30% of the site-specific reports do not answer the question about their use of GIS, which could either mean poor knowledge of the terminology or lack of interest in and/or awareness of such techniques. There is a strong will among some of the Asia-Pacific States Parties to develop their capacities in GIS.

Before even considering the training needs in these useful technologies in the domain of management and monitoring of World Heritage, one must consider the basic needs in equipment, consisting of appropriate software, hardware and access to the Internet. Only 63.6% of the cultural site managers and 84.4% of the natural and mixed site managers have access to PCs, and for some, this access is only possible at the regional or national office of their government agency, as in India for example. This lack of basic hardware for daily maintenance and management of the site hinders the utilization of management databases and more advanced information management systems (IMS).

One also should consider the discrepancies between cultural and natural sites, in their access to and use of new information technologies. On-site access to the Internet is gathering momentum in the region. However, still less than 50% of cultural sites, and around 76% of natural and mixed sites, enjoy speedy communications including electronic mail capability. Although the site managers do not consider access to Internet a priority, this should not be neglected as it contributes to strengthening communications between national and local heritage conservation agencies, and between site authorities and the international World Heritage community.

North-East Asian State Parties are particularly interested in developing a network of site managers in the sub-region to share expertise and provide good cases in management and monitoring of their World Heritage properties. Others agree on developing regional networks for the exchange of professionals by creating online databases or rosters. Although new information technologies may not be considered indispensable tools in the management and monitoring of World Heritage properties, they nonetheless contribute to creating a multiplier effect at the site level by broadening the possibilities of site managers, especially where sub-regional similarities could be tackled together rather than on a national case-by-case basis.

**Use of kites in archeology**

Aerial photographs are an important data source in the field of archaeology. Indeed, this is because archaeology is spatial in its nature; any remains of the past out of context lose their analytical value without location or index. Therefore, it is quite natural that archaeologists have always used maps and plans, and nowadays geo-information systems (GIS) are broadly used for recording and structuring archaeological data. Those data, including information on both buried and excavated materials, were mainly collected in the field. Two elements of the data are significant: firstly, the spatial descriptions of the remains and secondly, descriptions of their geographical context. Aerial photographs provide immediate support in assessing these two elements at the same time. Commonly, data from aerial pictures are used, at least, additionally to the field data, if not being essential to those data.
Aerial archaeology started developing rapidly after 1920, when Antoine Poidebard made the first photographs during flights in the Middle East. His innovation was adopted for the use of photographic equipment limited to operation on an in-flight aircraft. Archaeologists were greatly interested in the photographs, which are still useful. These documents are directly related to archaeology, but their use is within limits that are well known by specialists. Indeed, the main portion of archaeological remains, which record faintly at best in such photos, require more thorough survey for detection. The major portion of aerial images used by archaeologists until recently were photographs made from low-flying planes. The on-site use of ladders of different height, or cranes or scaffolding allowed archaeologists to get photographs from elevated viewpoints of their sites, but these methods only allow for photographing from oblique angles like those taken from on board airplanes. There is a significant gap in the range of scales which archaeologists can handle by these methods, which are not well suited for the comprehensive zenithal photographs required for GIS to get superposition of archaeological data. Undoubtedly, modern advances in technology capable of obtaining data from a distance have filled in the gaps. However, there is a more simple experience in aerial photography. It is photography from a balloon or with the use of a kite. Such experiments took place during the early phase of archaeological research in foreign countries. It has also been part of our own experience for decades, in the form of photography from captive balloons or kites. The development of simple and easy-to-use photogrammetric software may raise interest in these simple methods. They can provide interested people and archaeologists themselves with structured data, which can be analyzed according to their needs, and may reveal the strong and weak points of sites as well as their technical limitations. In addition to the basic photography techniques, we should also give thought to the basic areas of application before considering the potential importance and limitations of these methods. This discussion should take into account the physical, material/technical, administrative or other regulating influences applicable to any particular context. We should also consider the degree and possible contexts for kites bigger than those currently operated to be developed for use in combination with pilotless vehicles such as drones.

Such questions in the sphere of new methodologies in restoration and conservation are not well developed in my own country – most of the projects are carried out in an unsatisfactory manner, due to the lack of highly educated and skilled specialists in Uzbekistan. It makes our young generation, especially myself, worry about the future of our heritage. I believe that my country has much more potential, and therefore, as a true patriot I wish to contribute to the development of IT-related technology and knowledge in the restoration and conservation of archeological sites. In other words, taking part in this training course will hopefully give me an opportunity to broaden my knowledge in ways that will definitely be useful for satisfying the needs of the younger generation. Furthermore, it will make a priority of the possibility of establishing collaboration between Uzbek and Japanese specialists, reaching a high level of effectiveness and means of mutual support and understanding, and making possible close communication between our nations. To implement such a goal, I need to improve my leadership qualities and acquire special knowledge in my chosen field of education, which I hope will be possible through joining this training course for young professionals.
The Thang Long citadel was built from the autumn of 1010 by Emperor Ly Thai To, who was the founder of the Ly dynasty. One year after he founded the dynasty in 1009, Ly Thai To decided to move the capital from Hoa Lu to Dai La and renamed it Thang Long. From then on, Thang Long became the most important political, economic, cultural and societal center of Dai Viet. The successive dynasties of Ly, Tran and Le continuously built Thang Long into a prosperous and flourishing capital for centuries. Exposed to the ups and downs of history, the majestic imprint of the Thang Long capital is now only visible in ancient historical texts. No vestiges remain above ground of most of the palaces and pavilions, having all been destroyed in the 19th century when the French built the new Hanoi urban center and a new fortification modeled after Vauban in this area.

After centuries of lying underground, the mysteries of the Thang Long citadel have been discovered by Vietnamese archaeologists. From the winter of 2002 to the summer of 2004, when excavating at the site of 18 Hoang Dieu Street, vestiges of a complex of architectural foundations of ancient Thang Long’s palaces and pavilions were found. This is the first time the material imprints of the Thang Long citadel have been clearly and accurately displayed. From that moment, people began to know more about the capital of Thang Long. The results of these excavations yielded various types of architectural relics and millions of artifacts, reflecting the history of the continuous existence of this center of power through 1300 years, starting from the Pre-Thang Long period (7th–10th centuries) to the Thang Long period (11th–18th centuries). These important findings constitute the living history of the Thang Long capital from a thousand years ago, and at the same time allow us to imagine part of the appearance and scale of the Thang Long Imperial Citadel during the Ly, Tran and Le periods, along with some of the utensils and objects used within the royal palace of Thang Long. Having a unique and universal value, the site was soon recognized by UNESCO as World Cultural Heritage. Accordingly, such recognition brings with it the important, necessary and long-term tasks of preserving and promoting its value.

In 2008–2009, at the construction area of the Vietnam National Assembly House adjacent to the site of 18 Hoang Dieu Street, Vietnamese archaeologists continued to excavate and found various types of relics, artifacts of many overlapping periods, adding more evidence to confirm that this area is an integral part of the southwestern portion of Thang Long Forbidden City. This excavation's results vividly reflect the continuous and enduring developmental history of the central sector of the Thang Long Imperial Citadel. Simultaneously, this discovery has determined that the National Assembly House area was once an essential and principal component of the southwest part of the Thang Long capital, with its thousand years of history.

Given the great importance and significance of the archaeological discovery under the ground of National Assembly House area, the Vietnamese Government has devised a plan to preserve and promote the value of this heritage by extracting the archaeological remains from the ground entirely and then selecting important objects for re-display in two basements of the new National Assembly building once it is completed. Since then, this archaeological project for the basements of National Assembly House was established and carried out by Institute of Imperial Citadel Studies, Vietnam Academy of Social Sciences. This Exhibition project was officially initiated in the second half of 2011 and was completed by the end of 2016.

The general tasks of the project are as follows.

(a) The exhibition is designed as a lively archaeological museum of Vietnam, reflecting an important, indispensable part of Thang Long as a centerpiece of Hanoï's history and culture, and connecting harmoniously with the exhibition room of history on the National Assembly building’s first floor, and serving the needs of visiting and enjoying the culture for both the people of the country and international friends.

(b) Typical types of relics and artifacts that were discovered underground in the construction area of the National Assembly House through excavation in 2008–2009 are introduced to show vividly the history of site of the building located in the southwest portion of ancient Thang Long Forbidden City.

(c) The historical and cultural value of the underground archaeological findings at the National Assembly building in the general cultural space of the Imperial Citadel of Thang Long of Hanoi are introduced and widely publicized, along with the significant political meaning of the House of Parliament, the highest authority of the country in the period of renovation and integration.

(d) Contributions are thus made to promote national pride, strengthen understanding of the nation’s history and culture, create unique impressions of the National Assembly House, and reflect the eternal vitality of this center of power in the history of the national construction and defense of Vietnam.
Since taking on the task, researchers and staff members of the Institute of Imperial Citadel Studies have made great efforts to invest in scientific research, to seek ideas and technological solutions for creating a new and attractive display that is easily accessible to the Vietnamese public, bringing pride to the Vietnamese. In the process, we have conducted considerable comparative research, collecting documents as a basis for reconstructing the form of architecture of Vietnam’s palaces. This is a meaningful job, contributing to the promotion of the value of Thang Long Imperial Citadel as heritage, which had survived only as ruins. Since then, we successfully restored the Ly Dynasty palace architecture with 3D technology and made a 16-minute film to introduce the form of palace architecture of Vietnam during the Ly dynasty.

In addition, also drawing from the results of research and the experience of studying many countries around the world, we successfully reproduced the archaeological remains under the floor and display them vividly as an archaeological excavation scene. This is also a great success, because the reconstruction of archaeological sites for exhibition is extremely difficult, and accompanying this work is the problem of the preservation of artifacts. This is a very new field in Vietnam today.

At the same time, in order to be able to explain in an engaging and attractive manner the academic content being exhibited, in addition to research and development for written explanations to accompany the displays, with each topic we sought to apply modern technology in the areas of lighting, mapping, and the use of holograms and multimedia to provide a more vivid and understandable interpretation of the content and create a world-class exhibition.

We divide the displays into the following two main exhibition spaces.

- Basement 2: Exhibition on the Pre-Thang Long period (7th–10th centuries).

- Basement 1: Exhibition on the Thang Long period (11th–18th centuries), in which the main highlights are the architecture and the economic, cultural and social achievements of the Ly dynasty.

When carrying out this project for the “Exhibition of the sites and vestiges in the basement of the National Assembly,” scientific research was regularly planned out and considered as a top priority within the project. During that process, the Institute of Imperial Citadel Studies not only organized comparative research but also collected data to clarify the value of sites and artifacts, to ensure high scientific content when making the display. In particular, to be able to explain the value of architectural sites which are exhibited under the floor, we had to invest in building many display scenarios, using lighting technology, 3D technology, mapping and multimedia. As a result, people can easily imagine the scale, shape and unique shades of the wooden architecture of the ancient Thang Long Imperial Palace. Patterns based on the unearthed underground floors, and roofing tiles which are displayed in an integrated manner, give people a better and clearer picture of the palace architecture of the Ly dynasty with its beauty as before, thereby making people feel nostalgic about the unique and large wooden architecture with very special rare roofs that existed at the Thang Long royal palace under the Ly dynasty. It also helps convey a deep impression of the majestic space of palace architecture when people enter the exhibition of the Ly dynasty.

It can be said that the greatest achievements of the project are the result of the investment in scientific research. They are the result of finding unique, daring, attractive ideas and scientific solutions, the research that went into the detailed written explanations and in attractively enhancing the academic content of displays with modern technological solutions. It is also a result of the creative labor and great effort on the part of the staff of the Institute of Imperial Citadel Studies, Vietnam Academy of Social Sciences, in researching and applying new technology and conservation science to museums in Vietnam.

Since the Thang Long Citadel archaeological remains were discovered, they have received the special attention of the entire society. In particular, from the special value and importance of the site, the government decided to combine the construction of the new National Assembly building with the exhibition of the ruins of ancient Thang Long architecture into a single project. This is a typical pattern for how to deal with conservation and development in the context of contemporary Vietnam. It can be said that the preservation of archaeological heritage in the midst of the process of development requires nonstop creation and flexibility in the application of scientific rules to select suitable solutions for each specific site. The goal is to link the preservation of heritage with contemporary life, bring the value of heritage to the people, serve the people and contribute to promoting economic and social development with the message of the transmission of these cultural heritage values through professional, authentic and engaging ways, all at the same time.
FIGURE 1. Preparation for exhibition (Photo credit: Bui Minh Tri)

FIGURE 2. Ceramics (Photo credit: Bui Minh Tri)

FIGURE 3. Architectural decoration (Photo credit: Bui Minh Tri)

FIGURE 4. Architectural decoration (Photo credit: Bui Minh Tri)

FIGURE 5. Stoneware (Photo credit: Bui Minh Tri)

FIGURE 6. Stoneware (Photo credit: Bui Minh Tri)

FIGURE 7. Tiles (Photo credit: Bui Minh Tri)

FIGURE 8. Overview of the exhibition (Photo credit: Bui Minh Tri)
Afghanistan

Report on the Group Training Course for Young Professionals on Cultural Heritage Protection in the Asia/Pacific Region 2018

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Introduction
Cultural heritage is essential for a complete understanding of history. Culture is the soul of each country; it is the country’s foundation for its past, present and future. Therefore, proper research, analysis and protection of archaeological sites and other cultural remains are essential for us to preserve our important cultural heritage safely for future generations. Accordingly, ACCU Nara organized this course titled “Group Training Course for young professionals on Cultural Heritage Protection in the Asia/Pacific Region.” In 2018, the program consisted of presentations, lectures, discussions, workshops and educational tours of cultural heritage. The training was held from 4 September to 4 October 2018 in Nara, Japan. In this training, there were a total of sixteen participants from sixteen countries. The course enabled the participants to learn from Japanese heritage professionals and to share their own experiences, which opened my mind and provided an opportunity for me to enhance my knowledge. I strongly felt that the most important topics in the training course were photography, measured drawing, conservation science, reconstruction of historical monuments, management of archaeological sites, and museum science. In particular, the topics of conservation science, reconstruction of historical monuments, management of archaeological sites and museum science were helpful because they are all well conducted in Japan.

The first two days were dedicated to country report presentations on the part of all participants, explaining their problems and needs for cultural heritage. The presentations of the participants were very successful, especially because there was discussion after each presentation which allowed participants to share their ideas and comments on issues related to their own countries’ efforts to restore important cultural properties.

Lectures and On-site Investigations
This educational program was a great experience for me and enabled me to gain advanced understandings and interpretations of cultural heritage properties, including new methods and techniques for better protection of heritage sites. A series of lectures by highly experienced experts from Japan and overseas contributed to making the training program more fruitful. The lectures, particularly on the preservation and utilization of archaeological sites from a global perspective, on the cultural property protection system in Japan, on conservation science in relation to archaeological sites, and on the recording, photography, and documentation of cultural heritage and artefacts, gave me invaluable knowledge. The field investigations and on-site lectures at the World Heritage Site, Historic Monuments of Ancient Nara, were very fruitful for practitioners and professionals working in the field of cultural World Heritage properties and historical sites. Observations of ongoing excavations made Japanese archaeological excavation techniques clearer. In the second week we had a good introduction to the system of protecting cultural properties in Japan. We learned about the classification of cultural properties in Japan, which covers six types of cultural properties as follows.

1. Tangible
2. Intangible
3. Folk
4. Monuments
5. Cultural landscapes
6. Groups of traditional buildings

It was useful for us to learn about this system of classification, in which we can apply protection methods as suited for separate types of cultural properties.

Measured Drawing of Artefacts
I learned how to draw archaeological objects accurately, making a top view, side view and section illustrations. Archaeological illustration is not just creating a pretty picture of an object. It should be designed to provide information as accurately and with as much detail as possible. The goal is to provide the most information in a form that viewers can read. The object must be observed from all angles, making you examine its uses, its damage, and its complications. Knowledge about methods of recording, photographing and drawing artefacts will help my treatment of them become more accurate and clear, and this will help in the development of methods in Afghanistan for the thorough recording of and reporting on the conditions of artefacts.

Community Cooperation
In general, I understood that the most impressive thing for us is “combination,” the connection between heritage and communities, because conservation is the responsibility of the entire community, not just the responsible specialized agency. During the presentations, almost all participants talked about the shortage of manpower, but in this regard, Japan sets a wonderful role model for the world, which is community cooperation. They have stimulated the senior citizens of the country to work on the protection of cultural properties. They train them and help them to be protectors of heritage. Members of the community work in areas of site cleaning, guidance, school education programs, and many others.
This is something that has not been given enough attention in my country, and it is difficult to establish such a system in a country like Afghanistan.

Scientific Conservation of Archaeological Sites and Remains
I obtained much useful experience and knowledge from this training course, especially regarding the scientific devices that are used at site museums to monitor the environment in the exhibition halls, and the natural approaches to the control and conservation of artefacts and sites. At first lecturers showed us such scientific devices and then I saw many scientific devices used for studying and collecting data about the environment in the exhibition halls in Nara at a new museum, such as a humidity meter, light meter, temperature meter, etc. This was a good experience. On metal artefact conservation, the lessons are very important. We learned about metal artefact storage methods. Another important thing I have learned is first aid for fragile artefacts. We came to know about the use of casting tape and isocyanates plus polyol for solidifying the artefacts at the place of excavation and wrapping them in a box to bring them safely to a laboratory. In my work, we do many excavations and find many fragile artefacts. But still we use very old techniques for protecting them. Japanese techniques are modern and safe for fragile artefacts. Now I can share my experiences with my colleagues when I return home. To be honest the excursion to the Conservation Science Laboratory of the Nara National Research Institute for Cultural Properties left a deep impression on me, because I had not seen this kind of research laboratory equipped with modern and high-technology equipment engaged in cultural heritage conservation and preservation. Some of the experience I gained from these lectures and practical tasks will be applicable to me, and those parts that may not be applicable to me I can still share with our conservators.

Study tours to Todai-ji temple and other places helped us to better understand the rich and long history of Japanese architectural traditions. It would not be wrong to say that the history of restoration work in Japan began in ancient times. Seemingly it was connected with religious structures, which occupied an important role in the spiritual life of the Japanese people, and care was taken to preserve them for future generations. It seems to me that today’s restoration and reconstruction work at temples by Japanese restorers is a continuation of this tradition. In this connection I would like to mention the grand Todai-ji temple, which was built in the 8th century and has been damaged and reconstructed several times since then.

Photography
I found the sessions on photography a prominent component of this course on cultural heritage protection, because this was the first time I had come across modern techniques of photographing items with proper light, accurate exposure, and modern cameras. The methods of artefact photography in the session helped me understand the step-by-step procedures in photography and also photo processing, with which I had very little experience before the training. The use of a grey card in photography is something that I had not known before. Experiencing the way it works in bringing out the true natural colour of the target object is easily applicable in photo documentation, along with the format for saving, protecting and storing the file. This modern method of photography will be very important in Afghanistan for making catalogues of artefacts and of display cases of museums, and these catalogues will also be very helpful in maintaining a proper record of the artefacts. There was a practical session on the recording and documentation of cultural heritage (photography).

This practical session was very interesting. I could see a large studio and many kinds of cameras. I picked up many photographic techniques and I learned the basics of taking good photographs. We practiced indoors and everybody had an enjoyable and meaningful practice. After the workshop, now I know that adjusting the focus, aperture, and shutter speed, as well as the ISO sensitivity, and light management are compulsory for quality photographs. After participating in these sessions I learned a lot about photography. They also showed us methods with ordinary materials if we do not have such facilities, with which we can provide backgrounds for good photography.

We also visited some museums such as the Nara National Museum, Kitora Tumulus Murals Museum, National Museum of Ethnology, and Hyogo Prefectural Museum of Archaeology. I learned that Japan has many kinds of museums with all of them having impressive exhibition rooms with plentiful amounts of artefacts. Museums in Japan are modern and utilize high technology for the exhibitions, such as model displays of archaeological sites; I also saw nice arrangements of lights, colours, rooms and different ways to support artefacts. I learned many things from visiting the museums although it does not exactly match my job area, but it was very useful and effective and when I return to my homeland, I will share these teachings with museum staff members.

Conclusion
First of all, I made 15 new professional friends from the Asia-Pacific region and many others from Japan. From this basis we can share our knowledge and ideas in the future. Apart from the content of the training program, I also learned a lot through discussions with my fellows.

The Training Course on Cultural Heritage Protection in the Asia-Pacific Region 2018 has provided an excellent opportunity for me to get deeper information about the cultural heritage of Japan and its conservation, preservation, and excavation. I learned that we have to make proper preservation and utilization plans before conducting an archaeological excavation.

This training course has provided me with a wealth of technical information which I look forward to utilizing in my future research work. During the visit to different museums in Japan, I learned the latest methods and techniques of Japanese experts for the proper display of artefacts and their preservation in the museums.
I came to understand problems in the field of archaeological excavation, conservation, utilization and management among the participants from 16 different countries in the Asia-Pacific region, and that we have different kinds of problems, with different backgrounds. Therefore, it is essential to cooperate with one another and share our information and experience. The experience that I have gained during this training program will be applicable in many cases in my work.

**Acknowledgements**

First of all, I would like to thank the program for accepting me as a participant. I want to thank the organizers for their time and effort in providing this world-class training course: Mr Nishimura Yasushi, Director, and all the ACCU staff, for their excellent and wonderful organization during the entire course. And I also thank all the other participants in this training. Again, I am truly grateful to all parties concerned. And I look forward to sharing this knowledge with my institute upon my return to Afghanistan, and to continue to communicate with, and take joint steps with, all of the participants.

**Suggestions**

I suggest that the ACCU identify participants’ needs in specific areas and educate them according to their needs, so when participants return to their countries the experience can be significantly more helpful. I suggest that ACCU invite our conservators and architects and train them because in these two fields we do not have any experts.

Besyar zyad tashakor (thanks a lot) Thank you and Arigato gozaimasu.
Introduction: Participating in the Asia-Pacific Cultural Centre for UNESCO (ACCU 2018) training course, I gained a lot of knowledge, valuable experience, techniques and skills in protection and restoration activities for cultural heritage. The training course was very helpful not only for me but also for my organization and own country, as I can use the knowledge, experience, and techniques in my job as much as possible.

The day when I landed on the soil of the most diligent and hardworking people in the world, it was a happy moment as it is the first time for me to visit Japan. I was received by the Mr. Nakai Isao and Ms. Suzuki Sonoko at Nara JR station and reached the hotel without any problem. In hotel lobby Ms. Suzuki informed of the news of a coming major typhoon.

Opening ceremony: I attend the opening ceremony at the Hotel Fujita and met the other participants and organization members there. For the training, 16 participants were selected from 16 different countries within the Asia-Pacific region. On the day of opening ceremony one participant from India could not attend due to the typhoon. The program started with a welcome speech by Mr. Nishimura Yasushi, Director of ACCU Nara. Mr. Gamin Wijesuriya, a former staff member of ICCROM, and officials from the Nara prefectural and city governments were also present at the function. Lunch was arranged on the hotel’s fourth floor, and we took lunch while experiencing the typhoon.

Training course lectures and activities: The training course was scheduled from 4 September to 4 October 2018. This course included classroom lectures, practical training, workshops, and on-site lectures on restoration, preservation, excavation, etc. During this training we learned about designation systems for cultural heritage and world heritage, and the relevant legislation in Japan from a lecture by Professor Inaba Nobuko, University of Tsukuba, and other experts. Mr. Gamin Wijesuriya gave a lecture on the “Preservation of Archaeological Sites: Global Trends.” He discussed the basic meaning and importance of archaeological preservation, excavation, and conservation, and the role and responsibilities of the ICCROM as set out in its statutes. Mr. Joseph King, ICCROM, presented a lecture on “Research, Analysis and Preservation of Archaeological Sites and Remains.”

He gave definitions of ICCROM and other organizations such as UNESCO, ICOM, ICOMOS, IUCN, ALESCO, and SAFTA. In his lecture we gained knowledge of management systems, implementation, evaluation, frameworks, planning etc.

General ideas on the Japanese conservation and preservation system: Japanese conservation of cultural properties is very successful thanks to the comprehensive Law for the Protection of Cultural Properties. This law was initially drawn up in 1950, and with its subsequent amendments to the designation system, has provided a successful mechanism for, and broadened the scope of, heritage protection in Japan, which divides major cultural properties into different levels of categories such as National Treasures and Important Cultural Properties. Mr. Nakai Masatsugu, Senior Specialist for Cultural Properties, gave a lecture on the “Preservation and Improvement of Historic Sites in Japan: Current State and Policies.” He said that preservation is defined as reliably maintaining and passing down the intrinsic values of historic sites to future generations by ensuring a desirable state for them. We visited Byodo-in and observed the site, its central building and modern museum. We learned considerable knowledge about conservation science for archaeological artefacts, mechanisms of corrosion of metal objects, restoration of wooden artefacts with filling and colouring, etc. We attended on-side study sessions at the Umami Tumuli (Umami-kyuryo Park), Kitora Tumulus Murals Museum, and Ishibutai Tumulus. We were introduced to Japanese ancient culture and learned the conservation and restoration methods used in Japan. We visited the National Museum of Ethnology and visited many galleries and storage rooms, recognizing that it is one of the biggest modern museums in the world. We also learned the system of conservation treatment for ethnological materials. Mr. Hidaka Shingo explained preventative conservation and the IPM (Integrated Pest Management) system. We were also introduced to the Hyogo Prefectural Museum of Archaeology. We enjoyed the exhibition gallery, which displayed important cultural properties, and visited conservation rooms and the storage room.

Archaeological research (excavation methods): The main tool for archaeological research is excavation. Archaeological excavation is a systematic investigation of past human remains and activities to deduce patterns of behaviour. Ms. Jinno Megumi (Nara National Research Institute for Cultural Properties) introduced excavation research methods for archaeological sites and the classification of unearthed artefacts, which is important for measured drawing, restoration, etc. We visited the Imperial Villa Garden Site. This garden of the Nara period, discovered through an excavation conducted in 1975, is a precious cultural heritage of Japan. We also visited Todai-ji Temple, and gained much knowledge about the excavation system.

Significance of the training: This Training Course on Cultural Heritage Protection in the Asia-Pacific Region was comprehensively framed and structured to identify, analyse and
educate about issues in cultural heritage protection and restoration. During the course, Japanese methods of conservation and preservation were the main topics. We also had the opportunity to observe a number of sites and interact with professionals. Most Asian countries have similar kinds of problems regarding conservation, which can be addressed with this kind of discussions.

We visited the 8th-century Nagaoka Palace Site in Muko City, Kyoto prefecture, and learned about the utilization at an archaeological site of augmented reality (AR) application. We experienced through this technology the visual space and listened to the background of the site, learned of Muko City’s efforts, and about the function of the application. We also learned about “Recording/Documentation of Archaeological Sites and Remains” (photography). Here in this workshop I gained lot of valuable experience in photography. Therefore, I think with the knowledge from this course I could do some work in the field of photography in my country. We attend an ICOM presentation and discussion meeting held in Maizuru City, Kyoto, and gained knowledge about global issues involving museums and local communities, and learned how museum involvement and cooperation with the local community could be informative for not only the museum staff but also archaeologists.

Conclusion: This training made me realize that cultural heritage properties do not represent an issue for only one country, but are the common property of mankind and should be protected, conserved and restored, to be maintained and sustained for the future. This program provided all participants with equal opportunities to improve and upgrade their knowledge and skills in their own work for better efficiency, and study new techniques and implement these for the conservation and restoration of cultural heritage. This training course created a common platform for all of us to share our professional experience and knowledge with colleagues from other countries. This course has been of great value for me. I have gained new ideas, techniques and more advanced knowledge, which will help me in understanding the concepts of conservation of cultural properties. I will share my experience with others in my department as part of their training.

Words of Gratitude: I would like to express my sincere gratitude to the ACCU as well as other relevant institutions (ICCROM, UNESCO, Nara prefecture government) for their contributing to the training. I would like to thank Mr. Nishimura Yasushi, Director ACCU Nara, for inviting me to be a part of this training. My special thanks go to all of the staff of ACCU, the lecturers and other participants. Finally, I would like to express my deep gratitude to my Director General, Bangladesh National Museum, and the Secretary, Ministry of Cultural Affairs, for recommending my name to the ACCU through the Government of Bangladesh.

Overall, the trip was very rewarding and I return home with lots of new innovative ideas, good memories and new professional friends I made during the training time.
Acknowledgement

First of all, I would like to acknowledge the ACCU for organizing such a wonderful training course in Nara and giving this opportunity for Bhutan to participate. I would also like to thank their co-partners and many other organizations who helped us complete this training course successfully. I personally would like to thank all the members of the ACCU Office staff for accompanying us and being there for us until the end of the training. I also would like to thank all the fellow participants for spending a wonderful time together sharing their valuable knowledge and experience.

Introduction

I am pleased to write this report as an indication of having successfully completed the magnificent training course. In fact, this training was an eye-opening opportunity for me to learn about different sites and the management system of Japan developed for the protection of heritage sites, as well as about archaeological sites across the Asian-Pacific region and globally. This training taught us the importance of having a legal framework which provides room to protect, promote, conserve and manage the heritage and archaeological sites.

Bhutan has a rich tradition and cultural legacy in terms of tangible and the intangible cultural heritage. The national identity for the country is considered embodied in the centuries old Dzongs (fortresses), temples, houses, stupas, bridges, palaces, festivals, plus the dress and also the intangible culture. Bhutan is also known throughout the world as a country of living culture which continues to function from centuries ago. The nation at large takes part in the promotion and protection of our age-long traditions and culture, and in particular the Department of Culture under the Ministry of Home and Cultural Affairs takes responsibility for promoting and preserving the culture as a cornerstone of our development philosophy of Gross National Happiness. With this realization of our unique cultural identity, harmonious progression on the preservation, promotion and protection of our heritage sites has been carried out.

In addition, Bhutan has rich and undiscovered potential archaeological sites and ruins of monuments that date back as far as to 5th century without much deterioration both on the surface and underground. The history of archaeology in Bhutan began only from 1998 during the excavation of the foundations for the construction of the Renewable Natural Resources Research Centre (RNR–RC) Office building at Batpalathang valley in the Jakar Dzongkhag (Bumthang District) central part of Bhutan. Hence, the Division for Conservation of Heritage Sites under the Department of Culture was initiated for the investigation, preservation and management of the important archaeological sites in the country.

Cultural heritage protection and management system of Japan

The lectures delivered during the course and the on-site visits to the heritage sites were the most valuable opportunity to learn more about the quality of preservation as well as being an introduction to historical aspects of Japan. In most of the lectures in the classroom or on-site, we were introduced to how Japan has instituted ways of protecting cultural heritage sites. We heard lectures on the various types of legislation and guidelines for tangible and intangible cultural heritage protection in Japan. The protection of heritage sites in Japan is governed by strict laws that are jointly supported by relevant institutions and governmental agencies. We learned that the protection of cultural heritage through a proper legislative system is an important tool that enhances the lifespan of valuable cultural heritage sites, cultural properties, monuments, landscapes and other important historical sites.

In Japan, we came to learn that since heritage structures are mostly built from wood, they face a diversity of issues over time. Hence, they demand an adequate legislative framework for the maintenance of these sites and cultural properties. The value of cultural heritage sites and properties in Japan is considered in conservation and restoration planning and affirmed in the context of the Venice Charter 1964. Therefore, this document plays a crucial role in terms of the preservation and restoration of wooden heritage in Japan. Japan has had very comprehensive legal documents in place starting from 1871, and the system for protecting heritage sites dates back to Asuka period in 593 and has continued to the current Heisei period. The history of modern legal documents in Japan is impressive. We were informed that the first law, the Preservation of Ancient Artefacts (1871) was established to protect cultural heritage sites and this was followed by other laws such as the Ancient Temples and Shrines Preservation Law (1897). This law provides for the designation of historic buildings and national resources. As presented by the lecturer, the main statement is that Japanese legislation and guidelines are integrated with their national legal system and were implemented many decades ago. Therefore, cultural heritage sites and archaeological sites intact from the Nara period and before are being protected, conserved and promoted through many different mechanisms.
My way back home
I would like to thank the ACCU for letting me meet 15 new friends from the Asia-Pacific region. This group training gave us an opportunity to know each other and share our knowledge and ideas. Further, it provided the opportunity for us to develop a network among the participants. By attending the training, the lectures deliberated in the classroom and on-site impressed on my mind the understanding that if my country adopted a system like the Japanese cultural management and protection laws, the living culture could proceed for another thousand years in the future. In this training, I learned that Japan and Bhutan share similar characteristics of wooden heritage form and design that are very difficult to manage. However, we are fortunate to collaborate with legal experts from Japan in drafting a cultural heritage act for my country.

The documentation and recording of cultural heritage through photography has added to my knowledge about how to carry out such photographic documentation which is one of the important methods of keeping a record of valuable cultural properties and sites. Further, on-site lectures on conservation, maintenance and management of gardens was equally impressive, so that I hope my country can implement similar developments for archaeological sites and gardens in future.

Other experimental hands-on training, such as recording and documenting artefacts with measured drawing, was very tough for me since it was my first experience. However, as we carry out similar documentation and surveys of archaeological sites in Bhutan, this bit of experience will help me in documenting artefacts while surveying and documenting sites. The practice in taking rubbings was another exciting topic, although we use this rubbing technique in xylography for printing traditional books in Bhutan. The rubbing technique can be used for documenting hard archaeological artefacts in order to get detailed information of the object.

I came to learn that connectivity, awareness and sensitization to the local community regarding the importance of heritage sites is essential in this era. As a matter of fact, the Japanese citizens take pride in these voluntary works. In particular, Nara City conducts several community involvement activities and educational programs and excavation experience. This is one of the most important subjects that I have learned until now, that citizens can experience excavation work at archaeological sites in Nara City. I am impressed how this engagement of local people in archaeological work and cultural heritage protection could strengthen their sense of ownership in the sites and encourage them to protect their own heritage sites. Therefore, what I have learned from this training course is very important and relevant to my daily work and some of the techniques learned during this training can be implemented easily when I make my way back home.

Ka-drin-chey Thank you Arigato Gozaimasu.
Cambodia

Final Report
Young Professionals Training Course on Cultural Heritage Protection in the Asia-Pacific Region 4 September–4 October 2018
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i. Introduction
The training course for young professionals on cultural heritage protection, with participants from 16 countries of the Asia-Pacific region learning about survey methods for archaeological sites and legislation for cultural heritage protection, began on 4 September and continued until 4 October 2018. Every year, this training course is held by ACCU Nara in cooperation with the Agency for Cultural Affairs, aiming at human resource development for the protection and restoration culture heritage, and providing lectures and practical training under the theme of “Investigation, Protection and Management of Archaeological Sites” at Nara National Research Institute and other sites in Nara city and elsewhere.

ii. Preservation
One could say that archaeological sites are too important to be left to the archaeologist. At least to the archaeologist who is not also familiar with the processes of deterioration of ancient materials exposed by excavation, and with methods to ensure their protection once they have been uncovered. This workshop focused on archaeological sites, the utilization of cultural properties, Japanese laws about cultural property, first aid methods to be taken at sites as the initial stage of reinforcement of artefacts, and continuing through each stage until their removal. We should reinforce the soil to a depth of about 2.5 cm by placing resin and fiberglass. This way, it is easy to remove objects from the pit.

iii. Excavation
Excavation should be carried out in accordance with scientific standards and the recommendations defined in the national principles to be applied in the case of archaeological excavation. Ruins must be maintained and measured as necessary for the permanent conservation and protection of architectural features, and of discovered objects that must be removed. Furthermore, every means must be taken to facilitate the understanding of the monument and to reveal it without ever distorting its meaning.

The imperial villa garden site of the ancient Nara capital, a Special Historic Site and Special Place of Scenic Beauty, is an open exhibition of archaeological features (Imperial Villa Garden Site). This is a garden of the Nara period discovered through an excavation implemented in 1975. The garden is located in the southeast corner of the imperial palace grounds. As it may be considered to be an imperial villa-like facility or a residence of the royal family (palace), the garden is called the “Imperial Villa Garden.” Since the garden was buried underground for many years, the state of preservation was good enough for us to know the designs, gardening skills, etc., of that time period. In that sense, the Imperial Villa Garden is an extremely valuable site.

In the education program on site excavation by community cooperation, conducted at the Nara City Archaeological Research Centre, trainees acquire knowledge and techniques through this training course to become citizen archaeology supporters. Then, as supporters, they voluntarily participate and assist in excavations, in the cleaning and sorting of artefacts, in research, and in the dissemination and utilization activities. The supporters may enjoy these experiences and practices at their own pace, achieving deeper understandings of the subject, and thereby aim towards archaeological research as citizens. In other words, this is a model for helping citizens transition from passive learning to independent learning. Citizen archaeology supporters contribute to cultural property protection by assisting in the protection activities for buried cultural properties implemented by Nara city through their support activities. Citizen archaeology supporters also participate in the operations of exhibitions, seminars, field briefings, etc., provide explanations about archaeology, and share what they have learned with many other people.

iv. Restoration
The process of restoration is a highly specialized operation. Its aim is to preserve and reveal the aesthetic and historic value of the monument and is based on respect for the original material and authentic documents. It must stop at the point where conjecture begins, and moreover any extra work which is indispensable must be distinct from the architectural composition and must bear a contemporary stamp. The restoration in any case must be preceded and followed by an archaeological and historical study of the monument.

Restoration of wooden artefacts (filling and colouring), such as ancient wooden water pipes, is conducted with preservation by the PEG method. Using epoxy putty on the wood, we can use acrylic to paint over, and then follow a policy of colouring with non-coloured, almost the same as the original, or darker or lighter colour than the original.

v. Conservation
The conservation of monuments is always facilitated by making use of them for some socially useful purpose. While this is desirable it must not change the layout or decoration of the building. It is within these limits only that modification demanded by a change of function should be considered and may be allowed. Items of sculpture, painting or decoration which form
an integral part of a monument may only be removed from it if this is the sole means of ensuring their preservation.

In the conservation and utilization of cultural properties, it is not enough just to conserve and manage buried cultural properties, but to fully appreciate them, it is only when cultural properties are utilized that they can become significant as national treasures with historical and high academic value. The Nara City Archaeological Research Centre has conserved and managed a large store of data on the sites and unearthed artefacts, and plans various projects that enable citizens to directly touch cultural properties, to learn and to feel the importance of them first-hand. In addition, they properly reorganize artefacts in storage to create new utilization opportunities.

With regard to the corrosion and conservation of metals artefacts, many items are damaged due to inappropriate storage conditions, temporary storage packaging systems, examination before conservation treatment, temporary consolidation (post treatment before cleaning), mechanical cleaning (in ultrasonic grinding, the selection of particle size and shape/hardness of the powder is important, and the proper handling of inlaid portions requires work under the microscope, which takes a huge amount of time). Other significant processes include the removal of chloride (halide iron), autoclave method, stabilization of bronze artefacts (chemical conversion treatment), joining with thermoplastic or thermosetting resin type adhesive, or cyclododecanone as a temporary consolidant.

vi. Museology
A museum is an institution that cares for (conserves) a collection of artefacts and other objects of artistic, cultural, historical, or scientific importance. Many public museums make these items available for public viewing through exhibits that may be permanent or temporary. The largest museums are located in major cities throughout the world, while thousands of local museums exist in smaller cities, towns and rural areas. Museums have varying aims, ranging from serving researchers and specialists to serving the general public. The goal of serving researchers is increasingly shifting to serving the general public. The collection of particle size and shape/hardness of the powder is important, and the proper handling of inlaid portions requires work under the microscope, which takes a huge amount of time.

Other significant processes include the removal of chloride (halide iron), autoclave method, stabilization of bronze artefacts (chemical conversion treatment), joining with thermoplastic or thermosetting resin type adhesive, or cyclododecanone as a temporary consolidant.

vii. Photography
Basic knowledge of photography for cultural properties centres on digital records, having multiple choices and not choosing an incorrect one, such as desirable methods for saving records, whether to select SLR or DSLR, and features that can help in capturing special buildings and architectural structures. We should be aware of the functionality of the camera, such as the light source and use of the meter. Wide-aperture lenses are able to get more light than smaller ones. The key to knowing more about the camera is shutter speed, aperture, and exposure.

viii. Conclusion
It has been very important for me to participate in this workshop in the context of a country with the weather perhaps similar to Cambodia in this season, and as a country with more natural disasters, yet Japan can still overcome its difficulties and is a developed country. It has taught me that particular attention should be paid to the protection of cultural properties, and has inspired me to move forward through the training in this regard, and with participation from other countries in the region, it has certainly provided a wealth of experience and knowledge in international law on the protection of cultural properties, on restoration and conservation, excavation, preparations at special museums, and community involvement of the areas nearby cultural properties. I would like to thank the generous team of the ACCU Nara and the Agency for Culture Affairs which organized this training program.
To protect cultural heritage is to protect our culture and tradition in the contemporary world. We protect the past for the future. Without understanding the present, we cannot achieve that goal. The one-month training program helped a lot for me to develop such understanding.

Learning and observing with all other 15 participants from the Asia-Pacific region was a great experience. Coming from different countries, having different cultural traditions, we have different kinds of cultural heritage and we are now facing different problems concerning cultural heritage protection. Talking to them gave me a broader view of cultural heritage, especially the intangible part of cultural heritage and how it relates to tangible heritage. The challenges the other participants are facing and the work they are doing made me think more about my work in my own country, about whether I noticed similar problems, and how I can improve my projects.

But some problems are those we face together. Attending this training program and talking to my fellow participants, I got a clearer idea about how current global problems such as climate change and natural disasters affect our heritage.

Other factors such as economic growth and globalization change people’s attitude towards cultural heritage. The values of certain groups change from time to time. To protect the cultural heritage, we need to have deeper understandings of the present world, knowing not only what happened in the past, but more importantly, understanding what is happening right now. Mr. Gamini said that we should make a change from “PPP” to “p.” That is, we should pay more attention to what people value. The most important choices people make in terms of value are influenced by current affairs. In this regard, it is of tremendous importance to understand and respect the cultural traditions and the current situations of different communities.

I think the goal of sharing knowledge and promoting mutual understanding in the Asia-Pacific region in this training course has been achieved. And it is very significant. We will keep sharing our knowledge in the future.

The one-month program of lectures, workshops and on-site study in Japan has been thought-provoking and has given me clues to understanding the theory and methodology of cultural heritage protection in Japan. Indeed, their conservation science is quite advanced. The careful and serious Japanese approach to treating cultural heritage commands respect.

However, as all the lecturers continuously told us from the first day, there is no single answer to the problems we encounter in cultural heritage protection. We have to develop our own way to protect our cultural heritage, as Japan has been doing all these years. Embracing the concept of cultural heritage and actively taking part in the discussion of issues related to cultural heritage, both theoretically and methodologically, Japan finally arrived at the Nara Document on Authenticity 1994, expanding the universal understanding of authenticity. The Nara Document is of great significance for nations that bear different cultural traditions from the former European-centered world.

As for the archaeological sites, China and Japan have a lot of similarities. We can learn much from the Japanese experience. In fact, some of the ideas really impressed me from the lectures. I will pay more attention to these issues when I return to work.

1. The legislative system
China and Japan have similar procedures of application for permission to excavate a site or undertake construction in an area where archaeological remains are found. But in China, we are site-centered. That means only the already known archaeological sites have protected areas and zones of limited construction. The unknown archaeological remains can only be protected after rescue excavation and value assessment. Sometimes, the value of the site is only noticed years after the construction, when more information is gathered. In such cases, there is no way to provide adequate protection and site presentation.

The Japanese concept of LCCP (land already known to contain cultural properties) in a city is very helpful for most of the cases. It gives an outline of the buried cultural heritage in a city and provides initial suggestions for civil construction and heritage protection. It is easier to protect the archaeological sites if the government’s decision is made before the construction. This is related to another issue: It is better to have a team of archaeologists working in the government in charge of heritage-related work.

It is impossible and not necessary to change the procedure and personnel of government in China immediately. But it is better that we pay more attention to the unexcavated areas of sites, and study sites thoroughly before determining the areas for protection and limited construction. Also, when working with local governments we can suggest they add more measures for archaeological site protection in their city master plans.

2. The presentation of archaeological sites
It is a common problem for East Asian countries, that since our
ancient buildings were wooden structures, the only remains left at a site may be the pits where the pillars once stood. The image of the site can be difficult to be understand for the common people. But archaeological sites are resources shared by the public, and it is our duty to find out a way to make it easier for the public to understand them. Japan has tried various ways of presentation and interpretation of the archaeological sites, all of which are very interesting. The Nagaoka Palace site may be the most impressive example. It faces the difficulty of preserving and interpreting a large-scale archaeological site in an urban area, attended by problems of land ownership and limited space. The application of virtual reality (VR) and augmented reality (AR) technology is a very interesting endeavour.

3. Public involvement
It was also very impressive for me that the government and national institutes make great efforts to develop a system for the communities to take part in the protection and utilization of archaeological sites, and the huge enthusiasm on the part of the communities was equally impressive.

In China, volunteers are always young students who are willing to learn from the cultural heritage, and their participation is strictly limited and organized by the museums. It is not usual for working adults and retired citizens to participate in an archaeology club that is well supported. The public involvement is more like an educational project or experience to the public. I think we can pay more attention to this when composing the master conservation plans of archaeological sites. We should develop a system that can get the public actively involved in heritage protection and utilization.

There are many other things I learned from this training course, which I cannot list one by one. I sincerely thank the ACCU for organizing this content-rich training course and thank all the lecturers and ACCU staff members for their great work.

And thanks to all of the participants; we shared a wonderful month in Japan.
Fiji

Yesterday’s Trash, Todays’ Treasure: Linking Investigation, Preservation and Management of Archaeological Sites with Museums

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1. ABSTRACTS
The International Charter for the Conservation and Restoration of Monuments and Sites (The Venice Charter), drawn up in 1964 and adopted by ICOMOS in 1965, mentions that generations of people are instilled with a message from the past and are living witnesses of their age-old traditions. The current generations in most countries today are more sentient of the unity of human values and regard ancient monuments as a common heritage. However, while cultural heritage in many cases has been recognised to be valuable economically and environmentally, it also encounters many threats ranging from development to climate change to natural disasters. The protection of cultural heritage sites cannot be centred upon the application of archaeological methods alone. In this Asia–Pacific Cultural Centre for UNESCO group training, I have learned that there is more to focusing on archaeological preservation in situ alone. Different approaches can be acquired through proper planning, networking and management, not only locally but at the national, regional and international levels. Developing cultural-related policies will be a wasted effort if this is not understood from the individual to the community level, and up to the national level.

The theme of this final report is related to the fact that some ignore the significance of archaeological artefacts or cultural remains as of no value. However, these are and should be treated as treasure. Furthermore, the theme of this training can be seen as linked to how museums play an important role only after we have come to understand the different ways archaeological and any other cultural sites can be preserved and managed.

2. DISCUSSION
Linking Investigation, Preservation and Management of Archaeological Sites with Museums

According to Article 1 of the ICOMOS Lausanne Charter (1990), archaeological heritage includes all remnants of human existence and consists of places relating to all manifestations of human activity, abandoned structures and remains of all kinds (including subterranean and underwater sites), together with all the portable cultural materials associated with them. Archaeologists excavate to unearth the past but are sites conserved after carrying out excavation? Is it then a question of should we reconstruct these sites? Is it authentic to reconstruct? Conservation is not taking back the artefact or site to its original state or appearance but stabilizing it in its current appearance or position. In order to conserve and restore archaeological objects using scientific means the questions we ask ourselves as cultural experts is who are we preserving this for? Are we preserving for the people? This is where we link the role of museums in the preservation of archaeological sites. It is where the communities, visitors, school children have access to information and interpretations of archaeological sites. An example of this is the reconstruction of the Nara Palace site buildings as a new place for cultural exchange where the past meets the present.

Conservation can be done at the archaeological site in situ or with parts of the site reconstructed. In the case of sites visited in Japan, some sites had been preserved in situ. For this end, proper planning, networking and funding are needed. But is that enough? According to ICCROM expert Joseph King in his lecture, we as archaeological or cultural experts are not the only experts, we have the cultural custodians who are heritage experts themselves and we need to work together with them. So, in order to conserve and restore archaeological objects properly using scientific methods, it is first necessary to perform detailed examinations of their materials, structure and degrees of deterioration. Japan has all the necessary equipment and expertise to carry this out at the highest level. But as they train professionals from other developing Asia–Pacific regions, it is significant if we are able to adapt some of the methods applicable to our respective countries.

The benefits of proper investigations of archaeological sites may vary depending on the type of site. It may have spiritual, leisure, or educational benefits, or benefits through improvements in the quality of life which will contribute to sustainable development.

Management is about decision making, setting goals and making sure we achieve them. Archaeological sites can be managed in situ, and also reconstructed to be managed in museums. Due to the increase in use of the latest versions of technology, management of cultural sites can also be done using such technology to adapt to the changing trends of society. The restoration project of the historical palace site in Muko City, in Kyoto Prefecture, can be defined as a flat display because there is hardly anything on the ground with regards to archaeological features. To adjust to the current location of a low building residential zone, the heights of buildings are restricted and besides, as construction cost would amount to tens of billion-yen, management have developed the augmented reality (AR) Nagaoka Palace application that can stimulate the visitors’ five senses by using experiential augmented reality and visual space technology to further their understanding of the Nagaoka Palace Site with smart phones and tablets. In this way the archaeological site is restored in full scale at the original location with the original scenery.
Museums play an important role as this is where all historical information is stored. Housing most of the cultural artefacts from archaeological sites and others, they serve as a cultural hub. They connect local communities and visitors alike with local history. Museums not only display but also store artefacts and this needs proper monitoring methods. With this the Minpaku National Museum in Osaka exemplified the significance of proper conservation methods. Use can be seen of storage areas for activities ranging from receiving objects, to rescuing objects, to proper methods of fumigation, to treatment and to exhibiting the artefacts. The museum buildings are also disaster resistant where some forms of stabilizing equipment are used. All museums need to have proper disaster risk reduction methods to safeguard the buildings and the artefacts, because they are so valuable.

Activities provided in museums can also vary. This will promote more interest for not only children but also serve as a learning experience for parents as well. This way it brings a lot more interaction with the cultural objects and people or visitors, and by touching the artefacts it gives us a different feeling of pride in our respective cultures.

3. Recommended Implementation Methods

Developing an Archaeology Week Program
There is need for the Fiji Museum to increase and have inclusive community awareness programs, such as developing an Archaeology Week and inviting interested youth as district representatives from each province. Training them by providing guest speakers to lecture on themes based on the significance of archaeology and the results of their research, providing hands-on experience in excavation or archaeological impact assessments processes, and site visits to archaeological sites to familiarise them with the work, will give them knowledge and understanding on what role we play.

Involving Local Communities at the Excavation Sites
By involving the local communities in archaeological excavations, we can interest them as they will see first-hand how investigations of archaeological sites are carried out. This also makes work a lot easier as they are the custodians and they know their cultural sites better than trained cultural experts.

Developing Educational Activities for Children to Experience Archaeological Work
Development of archaeological base excavation in museums is the best way to promote awareness for children. This will not only attract them but also serve as a learning experience for Pacific Island countries where not much attention is given to archaeology and history alone, but using new educational programs such as having schools visit the Fiji Museum will be a good way to show students more about how interesting archaeology can be.

Capacity Building for Staff on Preservation and Protection of Archaeological Sites
Museum staff members need to be trained on the significance of the Archaeology and Gazetting Sections’ roles and on the process of the workflow. This will help build up interest among the staff to better serve the public at large.

Proper Training on the Conservation of Artefacts
There is a need for proper conservation methods for museums, and for proper management of temperature and humidity levels to avoid further deterioration of artefacts either on exhibition or in storage.

Developing a Proper Cataloguing Method for the Archaeology Store Room and Planning for Publishing of the Storage
The archaeology section has long-term plans for proper documentation of the archaeological remains in the archaeology store room. Developing this documentation will assist us in documenting all the materials properly.
India

Report on the Training Course on Cultural Heritage Protection in the Asia–Pacific Region 2018, Investigation, Preservation and Management of Archaeological Sites and Remains

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Introduction
The training course on Investigation, Preservation and Management of Archaeological Sites and Remains in the Asia–Pacific Region was immensely beneficial for my professional growth and for my country in various aspects, as it has provided me with valuable information and experience about the latest methodologies, techniques and experiences to be used for the preservation and management of cultural heritage of my country. The training course was attended by 16 participants from countries in the Asia-Pacific region and it provided me an opportunity to discuss and share ideas/information about various issues of investigating, preserving or managing the cultural heritage of all these countries through interactive fruitful discussions. Fortunately, research about cultural heritage in terms of documenting and investigation is conducted at quite a good pace in India. However, I believe issues of management, preservation and interpretation can be more enhanced or developed extensively through sharing research experiences between different countries, which was very well discussed during this training course.

Cultural heritage is like the soul of the country; it is basically a foundation for the past, present and future embedded in multiple layers. It should be the duty of each individual to safeguard it in every possible way for posterity. A perfect example in this aspect is Japan, which is worth appreciating. At all levels, the system of safeguarding the cultural heritage is very well structured and executed in an efficiently planned manner, which is something all countries in the Asia-Pacific region should try to adopt as much as possible. This course has broadened my horizon on the upkeep and protection of cultural heritage in my country in various ways. I briefly discuss a few of them below.

Management of Cultural Heritage Sites/Artefacts
I gained knowledge and information about the well-planned management strategies, and various methods of presentation and interpretation of information about archaeological sites in Japan. The most striking feature was the smooth and effective affiliation and coordination of regional and international professional organizations with local/national governments. Through this kind of proper communication arrangement, many problems of management can be solved.

Next, an important way to disseminate information about the sites is through prudent presentations and interpretations. The various methodologies used at Japanese cultural heritage sites were really interesting, for example the ground maps, wooden signage, reconstruction of few structures for educational purposes to give some idea to the visitors about the heritage value embedded in sites like the Nara Palace site, etc. Another interesting approach was the introduction of augmented reality/virtual reality applications at sites which are densely populated nowadays but hold rich cultural heritage remains, for example the Nagaoka Palace site. Here, visitors can actually feel the full ambience and enjoy the structures of the palace through these applications. It is also less cumbersome to manage and is highly involving and interesting for the visitors. Technology, if used in appropriate ways, can provide fruitful results in preserving the cultural heritage values of sites which are otherwise difficult to manage.

This kind of approach is very beneficial for cultural heritage sites in India which are facing the brunt of rapid urbanisation and industrialisation and slowly losing their worth. The cost involved in implementing these applications is also not great and can be easily managed and executed for the long term. In this regard, I am planning to write about my recommendation to various senior professionals/experts who work on these sites and are also members of national committees which formulates guidelines about the upkeep of various heritage sites, to put forward these ideas to higher authorities.

Museum Management and Storage
The museum system and marketing strategies used in the museums of Japan are very well executed. India, as a country having such a large area has many museums, however, the National Museums are only confined to the region of the nation’s capital. The most interesting aspect I learned from Japan is the decentralization of the national museum from a single location to multiple centres across the country, for example Nara National Museum in Nara, the National Museum of Ethnology in Osaka, etc. It is indeed a very well thought step especially in large countries like India, where it could be a good approach to be implemented because museums nowadays are not just mere research institutes but act as cultural hubs (which is also the theme of ICOM Kyoto 2019 Conference). With the implementation of this approach, more and more people can be involved in a much fuller and effective way.

Another interesting facet I learned is the disaster risk reduction and preparedness of museum collections. Japan has very efficiently and carefully planned its displays and storage of heritage collections to deal with natural disasters. Prior planning and vigilance can give better results in terms of crises as learned from the video presentation of the National Museum of Ethnology after the Great East Japan Earthquake of 2011. In
spite of the high magnitude of the earthquake’s strength, the damage was not extensive. Also, proper documentation of the rescue work was appreciated as a way to disseminate knowledge to other countries which can learn from the experience and prepare themselves well before any disaster. The storage room upkeep is something that India can learn from Japan. Taking small measures like putting criss-cross steel rods to provide extra support to the structure and keeping artefacts on shelves having plastic wheels can reduce the damage to a great extent. Also the timely and updated inspection on a regular basis of the museum objects both on display and in storage is commendable. Since I am presently working on site museums of India and my work includes regular visits to these museums in all corners of India, I will disseminate knowledge about these management strategies of Japan to Indian museums through presentations and open discussions.

Community Participation at Every Level
Inclusion and participation of communities at every level were key points of this training course which I found really fascinating and interesting, such as the involvement of senior citizens by the Nara City Archaeological Research Centre and Nara Palace Site Museum, or the Hyogo Prefectural Museum of Archaeology. This is not just confined to volunteer activities but also provides local residents with basic knowledge about archaeology, heritage, museums and conservation through short courses while conferring recognition on them as registered citizen members. The activities which involve the opening of certain specific areas of archaeological sites to children and ordinary people to excavate was something commendable, if they have proper and thorough vigilance on the part of the organisation involved.

The most vital aspect is to engage people and give them a sense of participating in something valuable, which inculcates a much deeper understanding of and concern for safeguarding the heritage of the country. Ultimately, the goal for all these museums, archaeological sites, and historical parks is to bridge the gap between our past and present while saving the heritage for the future, and this cannot be attained without involving communities. This approach is very thought provoking and I am wondering why we cannot do this in India, with such a huge population. Senior citizens always look for something in which to engage themselves once they retire from their work. This community involvement aspect can be very beneficial for museums in India if it can be implemented in a well-planned manner. For my part, I am planning to write some articles/blogs to generate more information about this approach and also hold talks with other people who are really interested in history/heritage and archaeology to encourage them to initiate such activities at their level as well. Most importantly, I will be writing to museums on their pages on social media and through emails about my suggestions as learned from my experience in Japan.

Conclusion and Recommendations
• To obtain optimal results in the process of investigation, management and preservation of cultural heritage, long-term planning is required starting at the grass-roots level in collaboration with different research institutes and governmental agencies.
• Capacity building and a flexible approach should be implemented to ensure that plans are developed at a pace which meets the community’s expectations and gives valuable outcomes.
• Public education is key for safeguarding the cultural heritage for posterity by engaging children, adults and senior citizens.

I want to put forward a request to ACCU Nara and other cultural agencies of Japan to collaborate with Indian universities and research institutes to share their valuable ideas and experiences through workshops or short-term training courses for safeguarding and conserving the rich cultural heritage of India.

Acknowledgements
I would like to express my sincere gratitude to ACCU Nara and other cultural and government agencies and their staff members for organising this well-structured training course and imparting detailed knowledge about cultural heritage protection. I am looking forward to implementing the lessons learned and to share the experiences with my countrymen.
Indonesia

Prologue
Being selected as a participant representing Indonesia in an international training course is a new experience for me. As expected, this training course has been an invaluable learning experience. To learn, to share, and to interact with fellow heritage practitioners from overseas in a country which has a long tradition in heritage protection has given me a profound understanding of cultural heritage protection. In this regard, this final report will provide some reflection on my participation in this training. This final report will be divided into three major parts. Firstly, I give a brief summary of some noteworthy course subjects. Secondly, I compare notes with present practices in Indonesia and on projected applications to my work in Indonesia. Thirdly, I offer some points of evaluation and conclusion proposed for the improvement of this training course.

Noteworthy Subjects
The curriculum of this training is designed so that participants can get an array of new perspectives on the investigation, preservation, and management of archaeological sites. By combining lectures, workshops, on-site studies, and discussion sessions, this training course has enriched me as a young heritage professional with knowledge and skills needed from various contexts, both global and local, as well as theoretical and practical.

The two introductory lectures in the preservation of archaeological sites in a global context and in the Japanese context provided insight into the entire spectrum of training topics. The first lecture shed light on the definition of archaeological sites with their own uniqueness in values and characteristics demanding discrete management, different from other kinds of heritage. The trends of heritage conservation in a global context have a long history, shifting from heritage-centered management to people-centered management. In the first-mentioned management, the quality and durability of the fabric were given the uppermost priority, while in the latter, the wellbeing of the society along with the heritage has become a priority. This so-called paradigm shift stipulates a series of changes in the way we manage our archaeological sites. A common practice where archaeologists play a central role in caring for their sites has to be put aside to give space for other practitioners from various academic backgrounds to be involved in managing archaeological sites. This multidisciplinary-based management is now becoming standard practice in global heritage management.

The second introductory lecture informed me about the long Japanese tradition in cultural heritage protection. With its own unique historical path, the Japanese approach plays a significant role in setting global trends in heritage management.

The evolution of their heritage protection law, their standpoint on scenic beauty and authenticity, the way they combine natural and cultural heritage as one category in their rules, and the decentralization of heritage management in governmental levels, is to some extent reflected in, and at the same time affected by, the global trends.

The workshop sessions in this training always fascinated me. Japan’s acknowledged accomplishments in science and technology clearly affect their archaeological practices. Application of various scientific methods, analysis, and equipment clearly demonstrate this, especially in conservation science, even though Japanese archaeologists still maintain their traditional ways of recording artifacts, such as measured drawing and ink-rubbing techniques in specific phases of their workflows. This mixture is quite exciting and has given me, a young archaeologist growing up in a transition age between “analog-digital,” a fresh perspective on archaeological practice.

The most anticipated sessions, the on-site lectures/excursions, must have been planned thoroughly by the training organizers. All of the theory and information shared in the lecture sessions was elaborated on and transformed into in-depth understanding through direct observations. Sites, museums, and on-going fieldwork sites were well selected to give knowledge and skills on the investigation, preservation, and management of archaeological sites.

Present Practices and Projected Applications in Indonesia
In light of the global trends in heritage management, and in comparison with Japanese protection laws, I have come to realize that Indonesia is going along a path similar to the Japanese. The inception of the new Cultural Heritage Law No. 11/2010 in Indonesia is considered as the beginning of a new cultural heritage management paradigm in our country. At present, cultural heritage management in Indonesia is developing more towards public participation, supplanting the state-centered paradigm that was based on the previous cultural heritage act.

After eight years of implementation of the decentralization of cultural heritage management as mandated by the new cultural heritage law in 2010, there is an imbalance in management quality between the national and local governments in Indonesia. The difference in budgetary amounts and discrepancies in human
The Japanese approach to the conservation, restoration, and research stages as much as possible. Despite the different demographic profiles between Japan and Indonesia, it is inspiring and prompts me to design our own strategy to engage the community in different archaeological practices in Japan. Each of the participants has a different experience in Japan. From excavation to the documentation in the laboratory, the public is welcome to get involved. How to improve public participation in cultural heritage management in Indonesia is maybe one of the most valuable lessons that I learned from this training. Several sites and museums that we visited during this training course shed light on practical aspects of community involvement in archaeological heritage management. Nara City Archaeological Research Centre provides an example of how they involve the public in each stage of their research. From excavation to the documentation in the laboratory, the public is welcome to get involved.

The knowledge and skill I gained from this training will be beneficial to my research institute, especially in designing and conducting heritage projects in the future. Improvement of the syllabus of courses for which I am responsible will be made based on some of the new knowledge I received from this training. As an example, I have bought supplies and equipment for ink rubbing, and I will share that technique with my students.

Epilogue

As a young heritage professional, not all subjects of this training course have a direct impact on how I conduct my job in my research institute. But as a lecturer, those subjects have been an invaluable contribution to enrich my course’s syllabus. To be true, there are so many things that I gained from this training that I cannot share them all in this limited space, not only from the formally scheduled programme, but also from this short living experience in Japan. Each of the participants has a different insight from their personal experience. Let that be part of our process of becoming better heritage professionals, and clearly, Japan has contributed an invaluable input into that process.
Kazakhstan

Final report: Some thoughts after the “Group Training Course for Young Professionals on Cultural Heritage Protection in the Asia–Pacific Region 2018”

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Introduction
This report is about the “Group Training Course for Young Professionals on Cultural Heritage Protection in the Asia–Pacific Region 2018,” on the theme “Investigation, Preservation and Management of Archaeological Sites and Remains,” which was held in the region. The theme of the course was “Cultural Heritage Protection in the Asia–Pacific Region.” The issue of becoming a member state of ICCROM can also be referred to at this point. Becoming a member of the International Center for the Study of the Preservation and Restoration of Cultural Property will help us solve many problems. As someone involved with culture, I deeply believe that becoming a member country of ICCROM will give new opportunities to specialists of cultural heritage of Kazakhstan.

Many times during the training course there was discussion about the preservation and utilization of archaeological sites after excavation. Nowadays this is beginning to emerge as an urgent problem. We understand that in our case an institution needs to check and control all archaeological monuments, but since the territory of Kazakhstan is more than 2 million sq. km, it is very difficult to monitor the situation. Recently, however, local centers for the restoration of cultural monuments have begun to work on the accounting and control of historical monuments, but it takes time to fix this problem. The Japanese method of conservation and preservation of archaeological sites after excavation, which we became acquainted with during the course, is a good example for all of our countries. And here I would like to note the diverse presentation of archaeological monuments of Japan, for example the Nara Palace site, or the Nagaoka Palace site, which impressed me very deeply. In Kazakhstan, we have several open-air museums that we are proud of, but the highly developed technology of Japanese scientists is many years ahead of us in this regard. Kazakhstan’s museums are trying to be competitive in the realm of world museology, however, technology such as AR and VR systems has unfortunately not reached us yet. Kazakhstan also does not have the opportunity to boast of restoration science, since there is no special training to become a “restorer of historical values” in the universities of our country. The restoration work carried out at the Kitora Tumulus Mound, I believe, is an indicator of the highest level of Japanese conservation science. I suppose that such work—the relocation of the cultural value of such a fragile quality, in order to preserve—is the only example in the world today. Planning and management of cultural heritage are two of the most important rules that I learned during this course.

As noted during the lectures on Japan, in the prefecture of Kyoto alone there are more than 300 museums, while in the whole of our country the number does not reach 400. However, despite being a sparsely populated and young country, we are working on this problem and in the last five years, two large museums of state importance, and two open-air museums were opened, with

Key points
Even though 27 years have passed since the collapse of the Soviet Union, the foundations of archeology in Kazakhstan were laid precisely during the period of the domination of the Union of Soviet Socialist Republics. Kazakh archeology is part of the Soviet school of archeology. However, today many archeologists of Kazakhstan have established close contacts with many foreign colleagues from different parts of the world, including many from Japan, South Korea, Germany, the United States, etc. As a very young state, Kazakhstan works very hard to develop the cultural heritage as initially defined in the national program “Cultural Heritage” since 2004. Among the problems in the management of cultural heritage issues and archeology of the country, there are a number of issues regarding the preservation and conservation of cultural properties. However, the proper authorities are constantly working on improving the current state of our cultural heritage management system.

As we learned during the lectures of ICCROM representative Joseph King, one of the main problems of the world cultural heritage is construction and recovery. This problem is one of the components of the problems of the cultural heritage of our country. Not only in terms of outstanding universal values, such as authenticity and integrity, but as a measure of appropriate education. This explains the acute need for training of staff of the relevant institutions and participation in courses such as the...
another in process, planned to open next year. Therefore, in ratio to the country’s population, our example may be viewed as satisfactory.

A special item to consider is the Japanese system of humidity and temperature control in the exhibits and museum collections. The thorough and accurate scientific approach of the Japanese to this issue was a source of wonder again and again. This was the first time I came across the concepts of relative and absolute humidity. In Kazakhstan, to our good fortune, the humidity is always low and this problem basically bypasses us. However, I will share with the managers of our museum’s storage facility the tables and formulas for calculating these indicators. As someone working in the primary restoration of artifacts, in the laboratory we have materials that come directly from excavation in the field, and we store them for a certain time (up to 3 years), therefore it is important to consider such climate indicators in our laboratory.

As a restorer of ceramics, the workshops held within the framework of the course were particularly important for me, and these were the measured drawing, restoration of wooden artifacts, and mainly I discovered some types of fillers that are very convenient for using and polishing. The photography workshop was no less important, because I need to carry out photographic documentation of ceramic artifacts.

The course gave us an opportunity to get acquainted with the highly sophisticated system of managing and protecting cultural heritage in one of the most developed countries in the world. We learned many details and innovations, as well as other features of Japanese cultural heritage management. In particular, for myself, I noted two points: one is getting children accustomed to the practice of using the museum, and the other is attracting citizens of the country to participate in volunteer activities. These two points are very important for the future development of cultural heritage protection in each country. They relate not only to culture, but also to education and society.

As a representative of Kazakhstan, I was especially interested in dealing directly with representatives of ICCROM. I learned a lot of new things about ICCROM, and I articulated Kazakhstan’s desire to join as a member state, which was one of my main goals. Mr. W. Gamini and Mr. J. King introduced us to the challenges and problems of world-class cultural heritage. They made us think about global problems that are poorly studied in my country. These are questions of intangible issues, such as the value of landscapes and scenic beauty.

**Conclusion**

Periodically trying to think about some proposals for improving this course, I came to a standstill. The ACCU thought through every detail, covering many challenges in just 30 days: how to learn a large amount of information, witness the high level of development in the science of restoration, reflect on global issues of cultural heritage, and acquire skills. This is another proof of the value of good planning and management.

Regarding all of what I wrote about above, I took careful notes, knowing these are points on which we have to work in the future, for the development of Kazakhstan’s cultural heritage. Upon returning to my country, I will speak about and share this precious knowledge that I gained here.

**Acknowledgments**

The Group Training Course for Young Professionals on Cultural Heritage Protection in the Asia–Pacific Region 2018, on the theme “Investigation, Preservation and Management of Archaeological Sites and Remains” is a top-ranking training course with high standards in archaeological site management and policy. I would like to express my deep gratitude to the Japanese government which made possible this high-quality course to be held. Special thanks go to the Cultural Protection Cooperation Office, Asia-Pacific Centre for UNESCO (ACCU), the Agency for Cultural Affairs, the National Institute for Cultural Heritage (Tokyo National Research Institute for Cultural Properties, Nara National Research Institute for Cultural Properties), and the International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM).

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Introduction
The course on the “Investigation, Preservation and Management of Archaeological Sites” from the ACCU Nara provided a great opportunity and extraordinary experience to young professionals participating for 2018. There were many skills and much knowledge learned during the course that will be vital for safeguarding cultural heritage in the Asia and Pacific regions. The course also disseminated important perspectives and concepts for young learners to understand and expertise to know when working in the field of cultural preservation to enable them to make initiatives that will contribute in preserving unique cultural properties and archaeological sites. The overall program (lectures, community involvement, meetings and on-site visits) of this one-month course has been very resourceful and fruitful for the future development of all cultural institutions around these regions.

The purpose of this report is to briefly discuss the knowledge and skills acquired during this one-month course with the aim of sharing those skills and knowledge with fellow colleagues at the Kiribati National Museum and Culture Centre and other colleagues from other countries that have time to read it. Also, it is to show great appreciation and acknowledgement to ACCU Nara and other co-organizers, to Nara prefecture, and different communities and institutions involved, for giving this opportunity and making it a successful one. Thank you all and Arigatou Gozaimasu.

In fact, there were lot of new skills and knowledge gained throughout the training, but the report will mainly focus on skills and knowledge appropriate to being applied in the Kiribati Museum and Culture Centre, considering the current resources in terms of staff, equipment and budget that we have. With no doubt, there are other skills and knowledge learned throughout the course that for various reasons cannot be applied at this time, but are also important and will contribute to the future improvement of the Kiribati National Museum and Culture Centre.

Results achieved
1. Archaeological research and excavating archaeological sites to safeguard artefacts or remains
This is one area of very new knowledge I learned during the course. Back in Kiribati, there is no expertise in archaeology, meaning no archaeologists, and these matters were not well known even among the staff of the Museum and Culture Centre. The excavation of archaeological sites Kiribati is not part of the work plan. The issue I encountered during work is when local communities asserted for some sites (places of their ancestors in the past) that they were sure they could find some fishing gear or other artefacts if they dug there. Their suggestion was “what the office can do to those sites, maybe they can find more things if they keep digging!!” The question of how to respond challenged me every time.

After learning more about archaeological sites and artefacts during the course I now completely understand and have confidence about how to do further research on archaeological sites in Kiribati. Since I learned basic knowledge and skills on this, I am sure that I can work together with archaeologists who always visit Kiribati for research purposes or I can request experts to come and help with excavation work. This is one of the projects I am ready to propose to my office to seek funding so we can do the excavation work soon.

Another plan concerning the lack of necessary expertise is to encourage final-year high school students to study archaeological courses in order to make a good team. It might take time but it is better to move forward toward positive goals. I learned how important this course is for cultural preservation work, so my aim now is for a new generation to know about it and to understand as well. It is a matter of awareness and reaching out to schools for this kind of archaeological training.

2. Cooperation, coordination, collaboration: Engaging communities as a means of promoting the role of museums to safeguard cultural properties
The course gave me broader understandings of how to engage communities at different levels to get them involved in the preservation of cultural properties as well as maintaining the value of their traditional cultures. Communities are the custodians of cultural properties though they can be the source of pressures to implement cultural properties preservation measures. So it is very important to work collaboratively with them.

From the lectures, involvement with different communities during the course, and attending the ICOM meeting, I managed to understand more about the different types of community involvement that can exist in a particular place. This can consist of groups of people sharing the same interest, students, volunteers, etc.

Referring to my own work back home, I have visited 13 islands to conduct community consultations with the aim of encouraging residents to maintain their traditional customs and skills and to preserve their cultural properties such as sites and artefacts in
their possession. However, the outcome has been unsatisfactory as only a few islands have managed to take initiatives as expected. This is my main concern and I want to find solutions for it. Thus, I learned from the course that working with the community means giving them a chance to make their own plan on how to manage their cultural properties, and that it is not for us to make a plan and present it to them as we usually have done.

3. Managing cultural properties

During the course, I also learned how to manage cultural properties well. There are various concepts that need to be considered when managing cultural properties and each requires specific skills and knowledge. This is one of our major tasks back home, so while I previously had some knowledge and skills for managing cultural properties, I learned new things that are very important and will contribute to the future development and improvement of our work, especially for our one and only museum.

i. Documentation – I knew in theory that this is the most important concept of managing cultural properties, but I was able to learn more and directly experience many specific skills and knowledge required, such as photographing, measured drawing and rubbing techniques for documenting artefacts, and others I saw through observation when visiting different institutions and museums during the course. I am eager to go back and share such important skills I learned with my fellow colleagues and request my office to purchase specific equipment required in order to continue to practice what I have learned. Since I know some of the relevant skills required, I will encourage my team to attend related courses so we can work together.

ii. Conservation and restoration – I learned a lot on conservation science and restoration skills for artefacts that was taught in the course. However, due to limited resources (human and financial resources) that we currently have, I will not be able to apply all the skills I learned but what is more important is the knowledge I have after learning that will help for the future improvement and development for our museum and cultural properties. I managed to pick up simple skills that I can apply, such as in the conservation and restoration of wooden artefacts. We have a lot of wooden artefacts so I will apply the skills that I learned such as controlling the temperature and humidity for storing these artefacts and the conservation of waterlogged wooden artefacts.

iii. Formulation of laws/regulations and guidelines – This is also important as part of good management of cultural heritage or cultural properties. In order to adapt to global changes whereby people will somehow abide by implemented laws, formulation of cultural preservation laws/regulations is important to help in management plans. Also, it is important to make guidelines to be followed while doing the work, such as cultural preservation management plans that include the main objectives of the work, methodologies and monitoring procedures. This will be a great help for attaining good understandings of the outputs and outcomes achieved and lead to further development of plans for improvement. I learned a lot about how to make management plans including procedures for nominating cultural heritage to be inscribed on World Heritage lists. These are the most important aspects of knowledge I gained and I am looking forward to sharing them with my fellow colleagues at my office and working together to apply them in our future plans and work.

iv. Collaboration with other institutions – This is also part of the work of managing cultural properties. One of the findings of my survey is the issue of destruction of cultural sites due to infrastructure development at outer islands. After learning a lot about how important it is to collaborate with other institutions to preserve cultural properties, especially archaeological sites, in the course, I understand that this might help to resolve the issues I mentioned earlier.

v. Disaster risk management – This is very important in planning for mitigation and preparedness for the preservation of cultural properties and for exhibiting artefacts with the aim to showcase and to maintain their original condition and to preserve them from any disasters that may occur any time.

4. Exhibitions of cultural properties in museums and on archaeological sites

All I knew before participating in this course is to exhibit cultural heritage in the museum and during national cultural and museum functions organized by the office annually, such as International Museum Day and National Cultural Day. This is what I was eager to learn more about in order to improve our work back home. Thus, I learned a lot of techniques on exhibitions inside the museum throughout the course and during my observations in different museums. What I learned that impressed me is to create specific themes of exhibitions that connect the past with the future. This is a very important aspect to be considered when planning and doing exhibitions. Another important thing I learned is to reconstruct cultural properties to be exhibited at their original locations. This will help people to understand more and will attract them to visit those sites and feel the lifestyles of their ancestors. I learned and observed a lot of reconstructions that have been done at archaeological sites in Japan that we visited. What I will apply back home is the reconstruction at sites by selecting only some buildings to be fully reconstructed and others to be exhibited by reconstructing only the foundation framework or by using indigenous trees that can show the building ground structures. I
am interested in these techniques partly due to the lack of resources of our office at present, but also because some of the knowledge I learned will be important for future plans. As quoted during one lecture, “money is not a problem if it is a matter of national identity.” We will work hard to get more funding in order to safeguard our cultural heritage, our national identity, and to apply all knowledge I learned with the help of further expertise from other institutions.

5. Educational programs as part of promoting cultural preservation and maintaining traditional customs for new generations

Culture has positive influences on children’s development on the other hand, while children have important roles in preserving culture as they are the future generation to maintain the continuity of unique traditional customs and to preserve valuable cultural properties. One of the issues faced in Kiribati is the ignorance about traditional culture on the part of new generations. Even though we tried to encourage families to teach their kids from their home, they argue that because of modern education, children started to feel bored learning and hearing about their own traditional cultures.

What I learned during the course to address this issue, is that the purpose of the museum and of cultural heritage should be known as cultural hubs which promote the past in order to save the future. The loss of culture means losing the past and this will affect the future. Involving children through educational programs in the museum is one of the best ways to help in promoting our cultural heritage to the children. These programs should provide entertainment during school visits through which students can experience and feel their ancestors’ traditional way of life, such as by playing local games, creating games that portray traditional lifestyles of people in the past, etc. This would really help to make students understand more if they could participate in the experience. We could also get them involved in local agricultural activities such as the cultivation of Babai and other indigenous plants.

Also, we should encourage high school students to participate in cultural activities organized by the office, and by local associations which are the main stakeholders in the office such as local artists, handicrafts associations, and other cultural practitioners’ local associations.

6. Some solutions I found for budget constraints

The important point I learned is to work together with local governments and encourage them to help with financial support for preserving their cultural properties, and also urge communities to be able to fund their own way and obtain financial support to preserve their cultural heritage and not to depend on the government. Also, the government needs to work for the nation to become a member of international cultural agencies, to be able to take advantage of funding and other opportunities provided for capacity building of staff members.

Issues and recommendations

- The only issue I faced is that some PowerPoint presentations were not translated, which presents difficulties if we want to refer to them later. I humbly recommend that translated versions of these PowerPoint presentations be provided as they can be important future sources back home to share with our fellow colleagues.

- Also, it would be helpful to provide information on conservation methods for some common materials in the Pacific, such as artefacts made from strands and fibres, if possible.

Conclusion

The training was very successful and the overall program activities we participated in were all done according to plan despite some bad weather that we sometimes encountered. This training is a beginning for the culture and museum staff from Kiribati to learn more and to promote similar courses related to preservation, restoration and management of archaeological sites, which are matters less well known by our people in general as well as by high school students. It also provided a good network of many experts around the Asia and Pacific regions, from Japan and from around the world to work with and help each other to safeguard our ancestors’ treasures which are very valuable to us all, our cultural heritage that connects us with the past and gives us our future.

No past means no future. Preserve our past for our future generations.

Thank you for your time to read this report.
1. Introduction

The training program by ACCU Nara for 2018 provided me with a lot of knowledge which included information about organizations contributing to cultural properties protection on both global and regional scales, while the long historic development of Japanese laws on cultural properties, methods and practices in cultural properties management, archaeological excavation methods and techniques, drawing methods and techniques of documenting archaeological remains, and pottery classification methods were also explained. Archaeological sites, cultural heritage sites and monuments were then visited in order to provide and share examples of the orientation methods and practices on cultural properties management in different conditions with various approaches. Meanwhile, I also gained knowledge on the possibilities of community cooperation regarding cultural properties. Also, the use of AR and VR applications to facilitate the presentation of cultural properties is one of the new significant aspects of management that I learned. The methods and techniques to conserve metal and wooden remains used at the Nara National Research Institute for Cultural Properties, and the methods and practices in museum management, storage management and first aid methods for cultural properties at the sites were also instructive, as well as other restoration methods and techniques. The lectures and workshops on photography, especially the on-site photography in this training program, provided one of the most valuable opportunities to improve my capacity in order to develop and apply these skills in Lao PDR in the near future.

2. Perspectives applicable to Laos

As can be seen, Japan has a very well developed awareness and approach to cultural properties protection and management, particularly the laws in cultural properties protection including their various methods and techniques, which can be seen in practice in Nara and elsewhere in Japan. Regarding my current position of work in an educational institute in Lao PDR, it is an advantage for me to apply the knowledge and experiences obtained from the training program on cultural heritage protection in the Asia-Pacific Region 2018 to work in my home country, particularly in educational institutes and related organizations from the central to local levels.

After returning to my home country, I have to write a report and deliver it to my colleagues and students, so I can share with them the knowledge and experiences obtained from this training program. I am also the one responsible for lecturing and developing the teaching program in the curriculum of archaeology and cultural resources management in the National University of Laos, the only educational institute in the country which contributes to human resource development in the fields of archaeology and cultural resources management for both BA and MA degrees, so I will apply this knowledge and experience to develop those curricula. For instance, I can already improve my teaching program which I currently conduct on topics such as ancient technology, environmental archaeology, computers for archaeology, archaeological excavation, etc. I can also share with my colleagues who are responsible for teaching subjects on cultural heritage law, archaeological drawing, archaeological survey, cultural heritage protection and museum management. The AR and VR approaches to facilitate cultural properties presentation is one of the new significant pieces of information I learned and may be one of the best choices for promoting and maintaining cultural properties in the present day, so this can be mentioned in the cultural heritage protection course and the computers for archaeology course. The knowledge on the methods and techniques to conserve metal and wooden remains observed at the Nara National Research Institute for Cultural Properties will be taken into the content of the museum management course, as well as various other methods and practices in museum management that were observed here that will be discussed, including their issues and limitations. For example, the cases of removing cultural properties from the original in situ location to another context for conservation, as seen at the Nagareyama Tumulus, Suyama Tumulus, Kitora Tumulus Mural Experiential Museum, etc. The cultural heritage site management of Nara Palace also provided examples of various significant methods and diverse technical approaches to manage parts of the site that had been excavated and for which restoration was conducted, sometimes displaying only the outline of a structure on the surface, etc., and these practices provided me larger knowledge of the possibilities of cultural heritage management. The storage management and first aid methods for cultural properties in the sites will be also taken into the content of the archaeological excavation course, and the restoration methods and techniques will also be discussed during the teaching and learning process at the National University of Laos. Learning the methods and techniques in photography, especially the on-site photography, was a significant experience to improve my capacity and to apply in my archaeological research in Lao PDR in the near future.

A capacity building project will be organized by the faculty of social sciences after my return and I am the one who will take responsibility for planning and managing the activities, which will include all of the public agencies involved in work related to archaeology and cultural heritage management in Laos from the
central level to the provincial level, district level and local communities (who live nearby cultural heritage sites, so I can apply the knowledge and experience obtained here to those activities, such as diverse methods and techniques for dealing with various conditions and characteristics of site environments practiced here in Japan, and we can discuss and apply these to similar cases in Laos as well). The local communities’ cooperation and awareness is one of the most impressive practices here in Nara Prefecture and elsewhere in Japan, and will also be applied. With regards to local community cooperation in Japan, I hope to convince my colleagues who are responsible for curriculum development in the educational system in Laos, such as primary and high school textbooks, to draw upon the impressive Japanese example and take the awareness of cultural properties as a goal for introduction into the curriculum in Laos as well.

In addition to lecturing and contributing to capacity building projects in Laos, I also conduct research on archaeology, cultural anthropology and cultural resource management, so the knowledge and experiences I gained from this training program will be of valuable benefit for contributing to the sustainable development of cultural properties protection in Laos PDR.

3. Conclusion
This training program provided me a great opportunity to learn and obtain a lot of new significant knowledge related to cultural properties protection, and I have learned much about cultural properties protection on a larger scale, and about various methods and techniques in diverse environmental conditions which are also linked to the purpose of cultural heritage protection and restoration tasks. Meanwhile, I have also learned about the outstanding progress and issues regarding cultural properties management in well a developed country such as Japan, their site excavation practices, their management of museums, monuments, temples and shrines. Another impressive area of knowledge for me involves the superb educational system in Japan, particularly the awareness instilled in people regarding cultural properties, as can be seen in the cooperation between different public agencies and local communities as volunteer activities for cultural properties protection such as archaeology support clubs and networks, etc. Alongside the knowledge and experiences obtained from this training program, I can also link into regional and international networks for cultural heritage protection which offer significant opportunities to share and develop knowledge to apply in various future approaches.

My highest gratitude goes to the Cultural Heritage Protection Cooperation Office, Asia-Pacific Cultural Centre for UNESCO (ACCU Nara) for providing this opportunity, and my sincere thanks go to all of the ACCU Nara staff members for their wonderful management and fantastic activities during the entire training program. I believe that I can apply the knowledge and experiences to contribute to archaeological work and cultural properties protection tasks in Lao PDR in the future.
There is no written history of the Maldives before its conversion to Islam in 1153 AD. However, various archaeological and heritage sites bear evidence that the country has been inhabited for at least two thousand years. Although these heritage sites are the most reliable asset for conserving and researching Maldivian history and culture, these sites are being threatened by the vast development that has been ongoing in the country for the past century. The country’s old fabric is being peeled off due to a lack of awareness towards these sites. Moreover, the weak legislative framework to protect and conserve these sites has exacerbated this issue even more. Reserving space for cultural heritage assets in a land-scarce country like the Maldives is a challenge. Similar to any other small island nation, the Maldives is also encountering difficulties, such as having a small domestic market, a narrow and fragile resource base, a shortage of field professionals, obstacles for inter-island transport and communication, heavy dependence on external trade, and vulnerability to external shocks and natural disasters. Hence, strategic ways to sustain and preserve the valuable cultural heritage of the Maldives need to be identified soon, so that future generations can cherish their heritage.

This training program gave me the opportunity to gather more knowledge in various ways to improve the management of cultural heritage of the Maldives. Moreover, the training sessions helped to deepen my technical knowledge in cultural heritage documentation and conservation techniques. Also, ways to increase our global network in this field were introduced through the meetings and exchanged conversation with the representatives of international organizations such as ICCROM and ICOM. The hands-on experience as well as the field trips to the cultural heritage sites and the museums helped immensely to comprehend and compare the different presentation methodologies of cultural heritage. Furthermore, the various creative ways of utilizing modern technology in the cultural heritage field demonstrated new ways to bridge the past with the future. Discussions with the field experts helped me to recognize the lessons learnt and the best practices of the cultural heritage profession. Especially the dialogues exchanged throughout this training program and the knowledge garnered through them have helped me to reflect on various ways to improve the current cultural heritage situation of the Maldives.

The participants of the training program came from different countries, ranging from small island nations to big land mass countries, with the cultural heritage varying between them. However, it was surprising to note that the challenges and limitations were more or less similar for all. More interestingly, through the discussions we were able to understand that the lack of funding and shortage of human resources are happening not only in the cultural heritage field, but that other sectors such as health, environment, education, etc., are facing similar problems as well. Hence, the solution is widening our perspective to work collaboratively with other sectors. All the related stakeholders of cultural heritage need to be consulted and their involvement needs to be made more prominent in order to induce people to support cultural heritage work, by exploring and finding ways to complement each other’s work and efficiently maximize the usage of limited resources. The importance of community involvement and support was emphasized throughout the training program by giving good examples from Japan. I believe that the Maldives needs to go a very long way to attain this level of community involvement, as volunteer work is not common in our country. However, promoting community awareness and increasing their love for the cultural heritage will be beneficial for safeguarding that heritage. Also, once the community becomes the guardian of cultural heritage sites there will be no need of high walls and locked doors to protect those sites.

Being an archipelago nation, cultural heritage sites in the Maldives are scattered and located on various islands. But the Department, responsible for safeguarding heritage and culture throughout the country, is only located on the capital island, Male’ City, with limited staff. However, understanding how cultural heritage is managed in Japan has opened up options that could be applicable in the Maldives. In Japan, the national authorities work cohesively with the prefecture and local governments or municipalities in safeguarding the cultural heritage. Most importantly, the active involvement of local government in the cultural heritage field illustrates the successfully decentralized system that is implemented in Japan. In my view, the local government or municipality must play an important role in town planning. Therefore, local government responsibility for safeguarding the cultural heritage should be considered when new development projects are carried out. In the case of the Maldives, local governments are unaware of the cultural heritage sites and sometimes development projects are conducted while unintentionally demolishing these sites. In Japan, trained field experts working in local governments carry out the cultural heritage work. Moreover, local universities provide assistance to this work. In order for Japan to establish such an efficient system, awareness about cultural heritage is cultivated through the education system from a very young age. Therefore, I believe that the first step for the Maldives is to review the cultural heritage content of the education system. We should also train people from the island councils and empower...
them to take care of the cultural heritage in the islands. Moreover, the role of the state government needs to be revised, as I believe that the local island councils and the atoll councils need to be empowered and the Department of Heritage (state government) needs to be the regulating body and overseeing the cultural heritage work carried out throughout the nation.

In the case of the Maldives, we have always held a vision and mission only aiming to safeguard heritage to protect the national identity and to pass this on to future generations. With the knowledge gained from this training program I believe that the vision and mission of safeguarding and preserving cultural heritage needs to benefit the past, present and future people of the Maldives. Moreover, identifying the attributes related to the cultural heritage and articulating their significance can be an important tool for advocating to everyone the importance of this work. In the training course I witnessed that most of the cultural heritage projects of Japan have durations of 50 to 100 years, meaning these projects evolve throughout their long life span. Also, greater numbers of people of the nation get the opportunity to be involved in such projects, giving them more significance. Therefore, I believe that the outcome of these projects are much more beneficial compared to the short sighted projects that we are mostly involved with. Hence in my view one of the shortcomings of cultural projects of the Maldives is the lack of a long-term vision. These projects become less meaningful and future development trends are not considered in these projects. Therefore, I believe that we need to change our projects to be longsighted and encompass goals that engage the cultural heritage in ways that improve the well-being of the communities, that a people-centred approach needs to be adopted, and that the final outcome needs to benefit all the generations of the country.

In the field of cultural heritage I fulfill multiple roles, ranging from being an architect to a heritage manager, and I am also actively involved in conducting awareness programs. I will use the knowledge I have gained in restructuring the cultural heritage organization and will offer my experience that I have learned in this training to initiate the formulation of a charter to standardize the cultural heritage activities of the Maldives. This charter can serve as a guideline for cultural heritage professionals of the Maldives.

I would like to thank ACCU Nara and all the organizers of this course for conducting such a fruitful program. I am very grateful for having been a participant in this training program. And I look forward to applying and sharing the knowledge that I have learned from this training. I assure you that the network of professionals that I have developed through this course will be in great use throughout my career.
New Zealand

Final Report: Group Training Course for Young Professionals on Cultural Heritage Protection in the Asia-Pacific Region 2018

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It is important for heritage specialists to continuing training throughout their professional career by attending training courses, conferences and building upon their skill sets. The ‘Group Training Course for Young Professionals on Cultural Heritage Protection in the Asia-Pacific Region 2018’ provides such an opportunity for young professionals like myself. Participants from various countries came together to share experiences and learn from each other whilst being provided a platform on which to further technical skill sets and knowledge base to help attain better protection and preservation of cultural heritage in our own countries.

The training programme provided me with not only understanding of cultural heritage and current practices for the preservation, conservation and excavation of cultural heritage properties in Japan but also the opportunity to understand cultural heritage in other countries. The country report presentations by each participant at the start of the training course highlighted some similarities in the issues we are facing in each of our respective countries. Some of the key issues that I identified in relation to archaeology in New Zealand included limited public knowledge and appreciation, destruction from development and threats from environment factors including natural hazards. Although the situation in each country is unique, I think these concerns in general were applicable to other countries including Japan and as a result of this course I have a better understanding of different possible approaches that can be taken to overcome these.

As identified above, one of the issues faced in New Zealand, is being able to further the education of the general public in regards to understanding and appreciating cultural heritage sites. The dissemination of information is a key measure needed to combat this problem. As part of this course we visited various cultural heritage properties that employed different ways of site presentation. Each demonstrated the multileveled cooperation between groups that was undertaken to achieve the desired outcomes. Projects were often managed over several years and involved a number of people, including experts/specialists, committees, the local or national government and volunteers and/or input from the community. It was interesting to see the different outputs from these projects including how the sites were interpreted based on the research and analysis undertaken, the different methods for the presentation of sites and ongoing management required including physical and digital reconstruction of buildings, preservation of the archaeology in situ, reburial and physical representation of findings for educational purposes. In particular, the Nara Palace site demonstrated the possibility of synthesising the results of research over a large area and how this information has and continues today to be presented to visitors in different formats. In New Zealand, I think through careful planning and consideration, more projects that are aimed at involving the community and achieving a greater appreciation for cultural heritage can be achieved.

The lectures provided by Mr. Gamini Wijesuriya and Mr. Joseph King provided a global perspective in terms of world heritage and the international context for the preservation and conservation of cultural heritage. One of the points highlighted during these lectures was the importance of considering all values, not just those that relate directly to the cultural heritage property, including others which may have an impact or influence the decision making process when trying to achieve better protection and the preservation or conservation of sites. I think the group exercise where we assessed the values of the UNESCO World Heritage sites was an valuable exercise, as it informs the decision making process and determines the work flow for any work which is going to be carried out on a cultural heritage site. Assessing the values and/or significance of cultural heritage sites is already in practice in New Zealand, however, I think more emphasis could be placed on how the outputs of this decision making process can feed back to inform future preservation and conservation work. For example, archaeological research in New Zealand is used to identify and provide physical evidence of Māori heritage places; providing a tangible link to the intangible stories of the past where material culture has sometimes thought to have disappeared. Through research we can gain a better understanding of the archaeological values which along with cultural values and other values identified can support the preservation and conservation of Māori heritage places.

It was interesting to visit the Imperial Capital Garden in Nara found in the 1970’s where a proposed a post of ce was to be located. After the well preserved significant garden site was found the national government purchased the land and the site was designated and protected. The site today has been preserved as is after the archaeological investigations and provides an opportunity for members of the public to understand the original design elements of the garden and what the archaeological remains look like. As a comparison, in New Zealand we do not often takes this approach with the presentation of sites. The New Zealand archaeological record is similar to Japan in this sense that often archaeological sites themselves are below ground level with no physical manifestations above the ground surface, unknown prior to the start of development works. Although we assess the potential for archaeology before works begin, we
cannot always determine the absolute values of a site. This can make it difficult to plan and provide for outputs beyond standard practice and as a result, sometimes there are missed opportunities with sites that could be used as educational opportunities. Aside from preservation issues like environmental controls, very rarely do we get the opportunity to excavate a site and preserve it in situ, and make it visible to the public. I am currently involved in the development of a research framework that will used to help evaluate archaeological work which aims to promote and initiate research to improve our understanding of archaeological site management and contribute to understanding New Zealand’s past. As part of the implementation of this framework it is hoped to achieve outcomes that contribute to the preservation and conservation of sites that provide an opportunity to be utilised for educational purposes.

I would like to thank all those who made this experience possible. Firstly, I would like to thank and express my gratitude and appreciation to the Agency for Cultural Affairs, Japan (Bunkacho), the Asia-Pacific Cultural Centre for UNESCO (ACCU Nara), International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM) and the National Research Institution for Cultural Properties for organising this course and the support of the Japanese government and local administrative bodies. I would especially like to thank the following ACCU staff who were often with the group on a daily basis: Mr. Nakai Isao, Ms. Wakiya Kayoko, Ms. Suzuki Sonoko and Ms. Miyado Marumi and all of the lectures who gave up their time to present. I also would like to acknowledge Ms. Hata Chiyako for translating and the accompanying student assistants Mr. Wakizono Daishi and Ms. Fukami Risako who were always on hand to guide us. To my fellow participants, I am very grateful to have been a part of a group of professionals who are passionate about cultural heritage and to have been able to share this learning experience with you. I would also like to say thank you to Heritage New Zealand Pouhere Taonga, who provided me with the time and support to attend this course in Japan. I look forward to be able to share with my colleagues in New Zealand the experiences and knowledge that I have gained from participating.
The Japanese approach to cultural heritage management is surely one of the more detailed, rigid yet adaptable systems practiced globally. The recognition that the protection and preservation of cultural property is paramount exists not only in the higher echelons of Japanese politics and governance (e.g., the creation of Bunkacho, the Agency for Cultural Affairs), but more importantly, it is shown in the actions of everyday Japanese citizens, whether that be locals protecting the Nagareyama Tumulus (Umami-kyuryo Park) from complete destruction from road work in the 1970s, or the creation today of voluntary groups such as the Nara Palace Site Support Network (NPO Heijo) or the citizen archaeologists of the Nara Archaeology Club (Nara City Archaeological Research Centre). In light of this, it is perhaps unjust to compare cultural heritage management approaches in Japan and Papua New Guinea (PNG) in certain aspects, especially given the obvious differences in both countries. However, it is safe to say that much can be learned from the Japanese experience in terms of protections, and can indeed be encouraged and implemented in PNG.

First and foremost is the systematic and strong, broad and inclusive cultural heritage legislation that Japan has, legislation that has been constantly evolving and responding to internal as well as external pressures and movements for the past 150 years (as brilliantly highlighted by Professor Inaba). In contrast, the first legislation (regulating the export of cultural objects) for PNG was introduced by colonial authorities in 1913 in the then Territory of Papua; these laws have obviously evolved given changing local attitudes and international standards, but not to the same degree as in Japan. The National Cultural Property (Preservation) Act, PNG’s primary legislation that protects cultural properties (cultural heritage in PNG is largely restricted to archaeological/historical objects and the intangible), has a broad definition for what constitutes cultural property; at the same time however, enforcement remains problematic. Secondly, Japan has a highly organised bureaucracy which translates into effective cultural heritage management. Here, experts exist at national and prefectoral government levels, as well as in the municipalities and local communities. In PNG, the bureaucracy is highly centralised and so are its responsibilities. This makes provincial governments null, but also has the added consequence of concentrating the handful of cultural heritage professionals PNG has at one level of bureaucracy (i.e. national level), so that expertise and knowledge that can be gained from operating at the other levels are not adequately considered. Thirdly, in Japan, procedures and methods for dealing with cultural properties and doing archaeology are set out in black and white; for example, there are guidelines for how to take a photograph of an archaeological object and a site (as we learned from Mr Nakamura and Mr Sugimoto respectively). In PNG, guidelines for such activities in some cases either do not exist or are not as detailed or indeed are unknown outside of those stakeholders who directly deal with such matters. Fourth, (the shortage of) funding for cultural heritage management is an issue in all countries globally (as pointed out by Mr Wijesuriya), including Japan but more so for PNG. Finally, there is a shortage of local archaeologists and cultural heritage experts in PNG; this is problematic given the size, cultural and linguistic diversity, and 50,000-year history of human settlement in PNG. Hundreds of trained Japanese conservators and archaeologists are employed at the various tiers of bureaucracy, creating a large, organised network of professionals with shared goals. In contrast, there are more local archaeologists employed in, for example, the Hyogo Prefectural Museum of Archaeology, than in all of PNG (who are directly involved in the discipline)! While being a small group has its advantages (especially with developing expertise when working together or with international collaborators), it also means we cannot expand our work across the country as we would like.

The knowledge, experiences and insights I have gained as a result of this Training Course are numerous and it will take time for me to review and assess what is applicable in my context, and how best I can utilise such information. However, on the onset I wish to make a few remarks. There are two mediums through I wish to share the knowledge and experiences I have gained. Firstly, there was the opportunity to participate in the short-course for undergraduates/professionals called ‘Cultural Heritage Management’ but that has not been offered for some time (largely funding and administrative issues); if it were to be revived in the near future, I can certainly see myself contributing to its running. In terms of research, and on a more personal level, the training has reinforced my understandings of the importance of archaeological objects and cultural sites, as well as identifying and recognising their values and associated attributes (Mr King’s engaging lectures).

In all, the Training Course has been extremely beneficial to me...
both professionally and personally. Again, there are aspects that are not applicable to archaeological research/cultural management in PNG, but certainly the theory and some of the practical work can be applied to my context.

Finally, it would be amiss for me not to make mention of those who made this possible; I acknowledge and thank the Asia-Pacific Cultural Centre for UNESCO (ACCU Nara) and its wonderful staff, the Agency for Cultural Affairs, Japan (Bunkacho), the International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM), the Nara Prefectural Government, and the Nara City Government. I also thank all the participating lecturers and cultural heritage experts and volunteers, as well as the wonderful people of Nara city. Finally, my warmest thanks and best wishes go to my peers in this Training Course, all without whom this experience would have been significantly less rewarding.
Uzbekistan

Training Course for Young Professionals on Cultural Heritage Protection in the Asia-Pacific Region 2018
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Introduction
The training program in Nara provided me with a lot of knowledge, such as knowledge of the history of Japan, architectural conservation, working in the laboratory, museum management, wooden architecture, planning and arranging an exhibition, temperature control in the exhibition hall, lighting, packing cultural heritage objects, and many other topics including the volunteer activities of citizens and students.

Moreover, in this training course the participants had the chance to visit World Heritage sites in Japan and make field visits to many museums and archaeological sites in Nara, Osaka, and Kyoto prefectures. This training course gave me the chance to obtain new knowledge and experiences that I will be able to apply to my work in Uzbekistan.

I am aware that all of the research, excavation, conservation and work to establish a museum can be realized only with support and permission from the government.

I also learned much from the lectures about topics such as the current situation and issues of the International Charter for the Conservation and Restoration of Monuments and Sites, the curator systems, Japanese museums, current issues of Japanese national museums, the foundation of cultural properties administration in Japan, the Museum Act and also about important organizations and systems of work related to World Cultural Heritage, such as ICOM, ICCROM, etc.

Conservation
Conservation is very important for cultural properties collections, which include diverse types of objects such as ceramics, metal, stone and wood, etc. Through the lectures and observations in this training I have learned much about the processes of conservation of objects, how to use different methods and techniques. For example, the various processes of conservation include cleaning, drying, sketching, taking photos, making reports and using a database to save information about objects. One more aspect is the use of various equipment for analysis, which can be very important for conserving cultural property items.

Photography and Recording
Photographic documentation is part of the initial processing of an accession, and a comprehensive photographic inventory is kept. Photographs are thus taken when an object enters storage of the museum and also, before and after conservation work. Understanding the importance of photographic documentation for subsequent research and restoration, and learning step by step the basic technique of how to make precise images of artefacts, and how to document and manage image files, made me realize that photographic documentation work at my institute of archaeological research is not up to an adequate standard, because most of the time our photographs are not helpful for conducting future research.

Storage
I visited many storage facilities in the museums and archaeological research centers and found very good interesting examples. These can provide me with models for my country in dealing with issues such as how to sort materials when putting them in storage, and preservation matters such as dividing according to the appropriate environment for a particular artifact, because different types need to be kept at different ranges of temperature and humidity.

Museums and Laboratories
Some museums have been constructed nearby historical sites after research or excavation has been conducted at those sites. The aim is to link the landscape with the artifacts and works of art which were found at those sites, in order to provide visitors the chance to visit both the museums and the historical sites. I think this is important. Some examples of the site museums are the following.

- Nara Palace Sites Museum
- Nara National Museum
- Kitora Tumulus Mural Museum, a Special Historic Site where visitors can learn the historic value of the Kitora Tumulus and mural paintings
- Nagareyama Tumulus, Umanmi Kyuryo Park
- Hyogo Prefectural Museum of Archaeology
- Todai-ji Temple
- Imperial Villa Garden Site of the Ancient Nara Capital

Artifacts found during excavation such as pottery, metal objects, roof titles, wooden tablets and other items need to be studied and worked on in the laboratory before being put on display in an exhibition. The tasks involved include cleaning, joining broken parts, documentation and so on, as we saw done at the Nara National Research Institute for Cultural Properties. Museums need to have conservation laboratories for analyzing and checking objects before conducting work, to prevent any harm to the materials. Sometimes it is necessary to conduct an X-ray check to examine the interior part of an object before proceeding with conservation prior to exhibiting, as we saw done at the Hyogo Prefectural Museum of Archaeology and Nara National Research Institute for Cultural Properties. Now I understand that the system of management for the protection of cultural heritage in Japan is also a good way to contribute to the education of visitors.
museums utilize the space within the museums by dividing it into lecture rooms, exhibition rooms, storage and conservation rooms, souvenir shops and restaurants, etc. Storage space and conservation facilities must be compatible with the exhibition room. They take permanent care of all artifacts in the museum and have a good communication with other museums for loaning items. Museums have specialized curators, for example an archaeology museum must have an archaeology expert, conservation experts, planning and exhibition experts, etc. I could see that the case of Japan is an example of good practice in these matters.

Local Community Involvement at the Nara Palace Site
I was very interested in seeing examples of cooperation with the local community, such as the organization and activities of The Nara Palace Site Support Network. It is very important to encourage participation by people who are very close to and familiar with the heritage sites. This is one way to help involve the local people in efforts to conserve the heritage site. In my country there are many archaeological and historical sites but the government does not encourage citizens to participate in their care, and sometime historic sites have been destroyed because the central authorities could not look after them well enough. I am going to promote this example for developing cooperation with local communities.

Consolation
During the month-long training course on Cultural Heritage Protection in Asia and the Pacific 2018, I have learned through the lectures, practical works, and case studies. I have obtained much knowledge and observed many of Japan’s methods regarding the preservation and management of archaeological sites such as excavation, conservation, storage systems and other aspects of the protection of cultural heritage. In Japan, in addition to research at the excavation site, the management of site museums and community cooperation such as the volunteer work done by local residents who help maintain the sites helps spread knowledge of ancient sites in each area. I found this training program very useful and I am very glad to take back this knowledge and experience. I promise to use this knowledge and experience from this training course to teach to all of the staff at the Institute of Archaeological Research, Uzbek Academy of Science.

Japan keeps looking ahead of the others right into the future, moving on and meeting the requirements of the time by broadly developing the spheres of science and technology, giving opportunities for both its local and international researchers like us to study such a discipline with the help of brilliant professors and tutors, investing in promising technological start-ups, creating great facilities for World Cultural Heritage and establishing proper institutions, while also maintaining high collaboration with many other countries around the world, which has a remarkably positive influence on developments within Japan itself.

I would like to express my sincere thanks to the Director of the ACCU Nara Office, the Director of the National Institute for Cultural Heritage, and the Director of the Nara National Researching Institute for Cultural Properties. I would like to express my warm thanks to ACCU Nara staff members Mr. Nakai, Ms. Suzuki, Interpreter Ms. Hata, and assistants Mr. Wakizono and Ms. Fukami for paying attention and looking after me the entire time during the training to make it more convenient. I also want to express my thanks to all of the lecturers in each of the museums in Nara and elsewhere, and for the lectures about management, restoration, and recording for the documentation and protection of cultural heritage! This training is very important for me for my work in the Institute of Archaeological Research, Uzbekistan Academy of Science.
The 19th training course of ACCU Nara has contributed significantly to my professional career in many aspects. Knowledge of the principles and methodologies for cultural heritage protection from global as well as Japanese perspectives is very important for us. We have had a great opportunity to be trained in basic knowledge and techniques in the fields of investigation, preservation and management of archaeological sites. Much of the course content is relevant to my current professional work, including the skills-based techniques for documentation and analysis, as well as for the preservation and management of archaeological sites and archaeological artefacts.

During the one-month program at ACCU Nara, we have participated in three groups of activities including (1) a series of lectures about global trends in the preservation of archaeological sites, delivered by Mr. Gamini and Mr. Joseph King from ICCROM, as well as lectures about the protection of cultural properties in Japan given by Japanese scholars; (2) a series of workshops about recording and documenting archaeological artefacts as well as on conservation science for archaeological artefacts and sites, guided by Japanese archaeologists from Nabunken (Nara National Research Institute for Cultural Properties) and Nara city; (3) a series of on-site studies at many museums and archaeological sites both in and out of Nara city.

1. Trends in protection, preservation of cultural heritage in the world and in Japan
The lectures delivered by Mr. Gamini and Mr. Joseph King from ICCROM provided us with a general yet comprehensive background about global trends in the field of protection of the cultural heritage. We were introduced to the historical development of the cultural heritage protection field from a global perspective as well as the international bodies/agencies that are directly involved in and create trends in the field such as UNESCO, ICOM, ICOMOS, and ICCROM.

The lectures about the Japanese system of cultural heritage protection provided us a general picture about the situation in Japan. These lectures, in combination with the series of on-site tours, explained why Japan is considered a leading player in creating trends and methods for cultural heritage protection.

The activities of Nabunken and the management at the Nara palace site were great examples illustrating the advanced nature of Japanese-style cultural heritage protection. Once while visiting the Nara palace site, we observed that there is a combination of various methods used in presenting the cultural heritage with the on-site museums, the assistance of modern technology, the preservation of the archaeological site, and the reconstruction of old buildings. We learned that Japanese archaeologists are playing a crucial role in this process.

2. Museum as a cultural hub for communities
During the training course at ACCU Nara 2018, we visited many museums in the Kansai region, including various types and levels of museums such as national museums (National Museum of Ethnology in Osaka), prefectural museums (Hyogo Prefectural Museum of Archaeology in Kobe), city museums (Tumulus Museum), private museums. This shows us how diverse and advanced the system of museums is in Japan.

There are several good points that I have learned from visiting museums in Japan.

Firstly, new methods of exhibiting the objects. In the past, most of artefacts were put into display cabinets or cases and visitors could only see them from a certain distance. The situation, however, has changed comprehensively in almost all museums in Japan. As I have observed, the museums here are trying to apply a new way of exhibiting the objects, or in other words, they are letting the artefacts to tell their own stories to visitors with the assistance of modern technology. The combination of traditional and modern ways of exhibition could be seen at the Hyogo Prefectural Museum of Archaeology where visitors could still see some nostalgic glass cases displaying objects like in the old days, and they can also see the new integrated and interactive exhibitions.

Secondly, cooperation between museums and local communities. Most of the museums in the Kansai region where we visited are implementing good cooperative programs between the museum and the local community. The activities of the Nara Palace Site Support Network (NPO Heijo) for the new Nara Palace Museum is one of the best examples of this cooperation. Japan’s museums are a good example for the targeted goal set by ICOM Kyoto 2019 of “Museums as Cultural Hubs: The Future of Tradition.”

Despite the many good things that we could learn from Japanese museums, there is still room for improvement in the future. Some museums, the Hyogo Prefectural Museum for example, are facing decreases in the numbers of annual visitors and are struggling to deal with this situation. Many solutions have been implemented such as disseminating museum information to the schools or train stations to obtain the targeted visitors’ attention. This conventional method of marketing, however, is not as effective as expected, as the Hyogo Museum staff revealed. This
seems to be a universal problem that many museums around the world are faced with. To deal with this situation, I think that museums need to launch new marketing strategies, especially applying new online technologies (using Facebook ads, Google ads or email marketing) to reach their targeted audiences. In combination with this, museums themselves also need to invent new activities and programs to get more visitors. It is worth making more effort to cooperate with tourism agencies to bring more tourists to visit museums as well.


The Institute of Imperial Citadel Studies - IICS (former name was Research Centre for Imperial Cities) was established in 2011 with the immediate task to research and evaluate the values of Thăng Long Imperial Citadel. IICS’s functions include doing fundamental and in-depth research on Vietnam’s ancient citadels, providing scientific evidence for planning strategy, preserving and promoting the value of Vietnamese cultural heritage, participating in training high quality human resources in academic fields related to imperial citadels and museums, and preserving the ancient heritage of Vietnam.

Being a scholar at the Institute of Imperial Citadel Studies (IICS) means that I am committed to contributing my best for the task of promoting cultural heritage in Vietnam. Our long-term vision is to build a standard database system of Vietnam’s ancient citadels throughout history in the areas of archaeology, history, culture, religion, and social life; to expand the investigation, excavation, and archaeological research of the remains of political and cultural centres of the historic dynasties in an attempt to comparatively study and evaluate the architecture, history, culture, and daily life of the dynasties on various aspects; to develop conservation science and museology; and to develop the applied sciences. With the professional knowledge I have learned from the ACCU Nara program, I strongly believe that I can make an important contribution in turning IICS’s long-term vision into reality.

Since the Thang Long Citadel Archaeological Relic site has been discovered, it has received special attention from the entire nation. The project of exhibiting the archaeological artefacts and relics under the grounds of the Vietnam National Assembly House undertook by Institute of Imperial Citadel Studies (IICS) could be seen as a typical pattern of how to deal with conservation and development of urban archaeological sites. Our goal is to link the conservation of heritage with contemporary life, bring the heritage values to the people, serve the people and contribute to promoting economic and social development with the transmission of messages embodying these cultural heritage values in professional, authentic and engaging ways, all at the same time. The lessons that I learned from Japanese museums could help us in various aspects, especially in developing a long-term plan to have more citizens and tourists participate in our museums’ activities in the future.
III. Regional Workshop

Training Reports

Mr Nakamura (centre) explaining the camera function
This one-week workshop organized by ACCU Nara and the Fiji Museum has enabled participants to take part in large number in a training. In this collaboration between these two cultural institutions, all 15 participants –14 of which are local people (Fijian) working on cultural heritage related fields around the country, plus myself from the neighbouring island of Tonga came together to learn, practice and share experiences based on the various topics covered during the workshop.

As with the theme of the workshop – documenting cultural heritage, the topics taught during the week included that of; measured drawings, ink rubbing and techniques in photographing cultural objects. All these skills were taught and practiced and the gathered information were transferred into organizing cards and from there to artefact cards. The whole course of topics flowing into the theme whereby at the end of the week, we had in our possession an artefact card with the information we have worked on during the week.

The first three days focused on; pottery measured drawings, sorting, sketching and ink rubbing of (Lapita) potsherds. I found it daunting to try to complete the exercises in measured drawing as drawing is not one of my strongest skills, but the instructor was very clear and detailed in his descriptions and demonstrations, that I succeeded in completing this exercise successfully although in my line of work and from the country I am from, I am unlikely to be working with pottery as artefacts. As with the ink rubbing session, this was very interesting as we prepared everything from scratch, beginning with making the small round tool used to dip into the ink jar to rub onto the paper covered potsherd. From the care and skill in making and preparing this tool, to the amount of pressure applied in rubbing so as not to damage the paper or to have the patterns come out too dark and unclear, I found the session in ink rubbing informative and a skill that will be useful in my line of work. The processes in tapa making in Tonga involves rubbing of mangrove or red clay dyes into plain tapa cloth/ textile with the stencils underneath so that the designs appear in the cloth. Thus, why I found the ink rubbing topic not only very interesting but also very useful to learn of this technique and the tools used in Japan for this practice.

The final three days dealt with sessions on photography, with a step by step demonstration on how to set the camera, looking at shutter speed, aperture and white balance to name a few. We were also given a demonstration on how to set up a set for the photo shoot before the object was put in place for the shoot. The preparations that go into a seemingly simple task of taking photographs are remarkable and having experienced this, I gained valuable insights and appreciation of this art and practice and especially when used in museums to document its objects or artefacts.

Overall, this training has provided fundamental basic knowledge, skills and know-how that are very useful in my line of work in our national museum especially when it comes to documenting our collection. Since Tonga is still in the stage of reviving their national museum, this training has come just at the right time in assisting museum staff like myself with skills and added experience in vital museum work skills such as documenting cultural heritage objects. I look forward to follow up training such as these in future – thank you very much!
I have learnt that more can be done to preserve cultural properties and there are different methods that could be applied to preserve heritage arts. As I am working for the Fiji Arts Council, and its role and important task of preserving, revitalizing and promoting of all art forms which currently includes performing arts, heritage arts, visual arts, literary arts and oral arts. The Fiji Arts Council is mandated to implement some activities annually such as Craft Exhibition, The National Fine Art Exhibition and Participation at Regional Cultural Events. Some of my duties and responsibilities are to provide artistic support and advice on request from individual and groups that represents the different art forms in Fiji, to provide technical assessment in the areas of cultural importance wherever necessary and assist in coordinating Fiji’s participation in events and festivals.

After this one-week workshop, I can say that some of the topics are useful and can be implemented at the office. Proper documentation of cultural heritage needed to be implemented at the Fiji Arts Council. As I have stated from the top, At Fiji Arts Council, one of main things we focused on is Arts exhibition, which includes Craft and Paintings. After the exhibition and competition all these art works will be collected as Fiji Arts Council National Collections. All these needed to be documented properly and there is no proper storage provided. After learning all these topics, I think I could implement all these highlighted topics at my work place.

The two-lecture topics relevant to my work area are “introduction to the documentation of cultural properties” and “making and management of museum inventory.” These topics are useful and could help in documenting artefacts at my workplace. All these methods can be applied at the Fiji Arts Council. To learn this skill step by step, I can proudly state that I was honoured on the opportunity of being selected to be part of this useful workshop. All types of equipment that are useful for documentation that I have learnt would be listed in my workshop report for the office to purchase in order to document all the artworks.

I understood the necessity of making an artefact card. This would be very valuable as there are different and many artefacts that are kept and collected at my workplace but there are no proper documentation and proper storage. For ink rubbing and measured drawing, I have understood the methodology but this would not be applied at my work place as I am not an archaeology and these methods could be applied only at Fiji Museum but I am glad that I have learnt the topics. As for the practical training, photography was the main topic I was looking forward to. Learning basic knowledge of cultural properties photographs was the best as this was one of my roles and I do not have the proper skills on capturing photos and taking good pictures.

After the six days workshop, I am able to practically apply the above methodology of classification and documentation to my work.
I find the workshop very useful and essential as a museum professional. Dealing with objects or collections, it is vital to properly document the various objects so that it is easy to locate and refer to the objects when required. We live in a digital world and many at times we use cameras and a scale to capture objects however, as was alluded to during the workshop, photographs do not offer the correct details—distortions therefore understanding the measured drawings is truly beneficial in capturing the true scale of objects which enhances the details and information on the organizing and artefact card.

The Fiji Museum Archaeology Section is in a process of sorting and cleaning its storage room, and during the workshop, I find that we lack in so many ways considering the documentation of the archaeological collection. The current collection is generally sorted according to sites, types, researchers etc. however, the lessons learnt during the one-week training will allow the team to properly document the archaeological material collections.

The ink rubbing technique was also very interesting which can be best utilized on Lapita pot sherds that have intricate dentate designs. Given that the Fiji Museum was donated with limited ink rubbing tools by ACCU, the team will prioritize on the use of pieces that stand out and include this in the organizing and artefact cards.

I was captivated with the topic of photography because it is an area that we as museum professionals need to develop to properly document the collections. Similar to the above, the training on taking photographs comes as an opportunity as the team plans to take photos of all archaeological collections that was repackaged to allow the team and researchers to know of the contents of the various boxes. Similarly, the team hopes to implement a bar coding system where the photographs will be crucial for researching and database purposes.

Overall, I wish to acknowledge ACCU and the facilitators for the wonderful opportunity in knowledge enhancement on the proper documentation of archaeological materials. Similarly, the Fiji Museum has been overwhelmed with the kind donation of ACCU on materials necessary for the successful implementation of what we learnt during the workshop and on behalf of the Fiji Museum management, I sincerely thank the team from ACCU and its Directors for the continuing support of Pacific Islands cultural practitioners in developing capacity necessary for the preservation, protection and documentation of its cultural resources.
The knowledge acquired from this wonderful workshop will enable me to practically apply them to my museum setup as we have a very young and limited edition of artefacts and monuments back in Ba Town. Firstly, the knowledge of inventory is very useful to me as we don’t have a proper inventory for the limited number of artefacts and monuments. Making of classification card, organising card, and artefacts card will surely be a challenge for me at our museum and also measured drawings will be a huge challenge if undertaken at our museum as most of our monuments are very big. Photography of artefacts and monuments will be also interesting and very useful for making of pamphlets and brochures for the general public as well as publication for dissemination of information and details to general public and schools especially. I am indebted to ACCU for giving me a chance to be part of this workshop and the information and training to which I was oblivious. All in all, the things I learned here at the workshop will tremendously help me in setting up an inventory system for our museum in Ba Town.

Overall, I can say that there is a lot to take back into our individual institution, in relate to this one-week workshop we did here in Fiji. I’m thankful for their ideas and kind hearts to share their experience, knowledge and wisdom for this workshop and I’m confident that there is a lot for us to do in our different areas of work, and mostly for a brighter partnership we have for the future.

The curriculum they set for us in the one-week long training is into a standard that really have the quality in this modern era. And most of all the resources they have is really encouraging to develop our own and utilize the skills we have it here. Their value of their culture and heritage is far more than us, and importantly is their use of their own language is one tool that really strikes me of how treasured it connects into their learning environment. These are valuable lesson that will remain with me forever. In our case here in Fiji, our multi-lingual skills can be applied to our learning institution that is progressing well now days. But the fact is that the drawing and the documentation of artefacts is something that I think it really works well with us at the Museum to safeguard our identity. And likely is the photographic techniques with the basic ideas connect well to get the correct information of the objects and for proper storage for easier handling and maintenance for the future. Even for us we have our Education, Marketing, Installation and Exhibition Unit that comes under one Department and this workshop is applicable for our education programed in creating some activities for the children and the public; in correspond also with the curriculum we have it in Fiji to engaged their time in learning, especially lifelong learning. And the materials used was so related to the needs we have that we really need to put into force that necessity of relating our different units to be a holistic institution for all citizens of this nation Fiji.
The one-week Workshop facilitated by the ACCU in collaboration with the Fiji Museum has really been an eye opener. I have learnt how to sort pottery pieces from various designs, ink rubbing, a little bit of measured drawing and I think the one which I could relate to the most is photography. I have also had the opportunity to meet new friends from Japan and other government agencies in Fiji.

Firstly, I would like to point out that of all the participants which attended the workshop this week, I was probably the odd one out. As most of the participants hand prior knowledge of working with archaeological artefacts, as a botanist I dealt with herbarium voucher specimens. In a way, I could relate the importance of the systematic labelling, storage (inventory) and digitization of archaeological artefacts. This is part and partial of work done at the South Pacific Regional Herbarium with thousands of voucher specimens from various taxa (plants, herpetofauna, avifauna etc.) deposited there. Without a systematic way of inventory and storage, digging through all these piles of specimens.

More specifically, at the South Pacific Regional Herbarium it is important to understand how voucher specimens are stored for future references. There is a systematic way of how plant specimens are stored based on their evolution with respect to their individual families (this differs from one herbarium to another). Our plant collection begins with terrestrial bryophytes, ferns to complex gymnosperms and angiosperms. All plant specimens that are deposited at the Herbarium have labels (similar to artefacts card), its respective accession number, collection number, picture taken (using mechanism of photography, exposure setting, lighting, colour temperature and shooting techniques) and all this are digitized and stored into a database. Handling of herbarium voucher specimens along with archaeological artefacts should be done in a cautious manner as they both fragile and are easily damaged.

This six days’ workshop was a very challenging and also very intensive for me as a Conservation Officer. This type of workshop was to assist cultural heritage institutions and museums in the Pacific region to improve the protection of our cultural heritage on a sustainable basis. The six days workshop offered by ACCU was properly targeted for its purpose of documenting and photographing skills in cultural heritage protection and preservation by participants. The experience of the group training equipped me as a Conservation Officer to implement what I have learnt from these professional trainers within the six days’ workshop. I further realized that more training should be introduced in the cultural institutions here in Fiji and also to the neighbouring countries in the Pacific in protecting our Cultural Heritage Identity.

What I learnt in this one-week workshop really applies to my work that I do in the Museum. I work mostly with objects like clays, wooden objects and textiles and one of the main purposes of my work is documentation of each object looking from the conservation aspect. Photographic technique work sessions 1-5 were very useful to my work knowledge. Despite the short duration of this workshop, I myself have grasped some techniques to apply when I return to work. It came to an extend that taking images of objects is very important especially when getting a high quality of an image for a record keeping. This also will help other researchers to know and understand what types of images are taken by viewing each artefact cards. This has the photograph of the whole object, the ink rubbing image and its cross-section image. This makes the work much easier and also much safer in terms of protecting our cultural objects. Lesser handling is put on objects.

Just to conclude, I would like to encourage more training to be held in future. Thank you and Arigato.
My line of work involves the digitization of the Fiji Museum analogue audio and visual materials as well as photography. The workshop has equipped me in terms of understanding the classification of pottery shards together with the preparation of the organizing and artefact cards. More importantly, the ink rubbing process and the measured drawing which has given me a practical understanding of measuring and drawing that can be applied to the Fiji Museum artefacts. The session that I was looking forward to, was the photography session as this is where my interest is and where my work is aligned.

The knowledge obtained from the workshop is valuable to the work carried out at the Fiji Museum, especially for the Collections and Conservation Unit. Documentation of collections received is an important process and photography of such collections is of utmost importance. In understanding the exposure setting (function of aperture, shutter speed), lighting, color temperature (white balance), shooting technique, capturing the details of the artefact will allow for keeping track records of the condition of the artefacts. Given the limited knowledge that I have, this workshop has given me some basic understanding to carry out the necessary work for my Unit. Furthermore, the cataloguing and storage system of the photographs is vital in the fluid access of information together with the safety and protection of such information.

Measured drawing is also an important aspect in documentation. Some objects in the Fiji Museum collection would most certainly require measured drawings such as that of complete clay potteries. The conservation officer has also attended the workshop and this, I believe, is an added advantage as handling of such objects needs to be cautious; and measured drawings require handling and measuring instruments coming into contact with the objects. The conservation officer will have an idea of precautionary measures taken before the measured drawings. The training has provided the most basic tools in completing these drawings and we were fortunate to be recipients.

Moreover, our Archaeology team usually request other technical staffs to accompany them to their field work on old village sites and old fortification sites in Fiji. This training prepares the trainee to have some understanding in identifying pottery shards and differentiate between the unique and older forms of pottery (Lapita) to the more later dated potteries. Given the small staff that the Archaeology Section has, staff who have undergone the ACCU training can assist the team in the documentation process of sorting and documenting the pottery shards. This is also advantageous as staff are multi skilled in Museum work.

All in all, the one-week workshop has been a fruitful experience and has taken us out of our comfort zone or outside our field of work. I extend my gratitude to the Asia-Pacific Cultural Centre for UNESCO (ACCU) and the Fiji Museum for organizing the training; the trainers/ facilitators for their resourcefulness and bestowing their knowledge to the participants; and the participants for an engaging in interactive discussions and forming a professional relationship in the protection of cultural heritage.
The workshop by ACCU is a very informative and important workshop, especially for a country such as Fiji where there are many cultural properties. These cultural properties are beginning to be forgotten due to global interconnectedness and have not been valorized; however, this workshop has emphasized the technical requirements of protecting cultural properties especially for cultural stakeholders in Fiji.

One of the important lessons that I have learned from this workshop is treating our cultural properties with great care and respect. This is through detail classification, preparing necessary catalogue requirements such as creating cards and artefacts card, accurate measured drawing, and the different techniques of taking photos of each artefact. It has also emphasized the need to pay attention to details when it comes to protecting cultural properties, as any detail, big or small, has a story behind them.

This workshop is useful in my department, the iTaukei Institute of Language and Culture. The iTaukei Institute of Language and Culture, under the Ministry of iTaukei Affairs provides policy advice on the study and the development of iTaukei language and culture in addition to the formulation and implementation of appropriate policies for the documentation, preservation, promotion and dissemination of information on all facets of iTaukei language and culture. The department is also mandated to carry out an inventory exercise known as the Cultural Mapping Program (CMP) which began in Fiji in 2004 and is currently on the 14th and last province this year. This inventorying exercise is in line to the 2003 Convention for the Safeguarding of Intangible Cultural Heritage (ICH) in which Fiji ratified in January 2010. Although the department main focus is to document intangible cultural heritage of each village in Fiji, however, as it is apparent to indigenous communities across the world, the intangible aspect (or the story) cannot exist without the tangible or the artefacts. The ICH gives meaning to the artefacts, and vice versa. Therefore, during this inventorying exercise (CMP), our field officers have been privileged to be given unique artefacts from locals, and these artefacts are kept in our office.

The department also conducts Special Revitalization Workshop (SRU), where specific ICH or traditional knowledge of a particular village which are on the verge of disappearing due to knowledge bearers being of old age, are being revitalized so that it can be continued and transmitted to the upcoming generation. Most of the Revitalization Workshop that the department has conducted deals with the ICH domain of traditional craftsmanship, and some of these crafts/artefacts are kept in the department.

Thus, the knowledge learned from this workshop is very useful in the iTaukei Institute of Language and Culture, considering the numerous unique and special artefacts that are displayed in the department. Through this workshop, artefacts in the department will have a proper cataloging system, with each artefact having an artefact card, and possibly for a database of these artefacts in the near future. Through this workshop, proper photographs will be carried on each artefact and have a measured drawing for some of them. Adopting the knowledge from this workshop is very useful in the sense that the department deals with researches on a daily basis and with the techniques learned from this workshop, artefacts will be protected from physical damage since researches can just look at the organizing card, artefacts card, and pictures of them.

Lastly, a big ‘Vinaka vakalevu’ to ACCU Nara for giving their time, funds, and resources to come over to Fiji to teach these important lessons of protecting our cultural properties, and in the broader sense, the protection of our identity.

Sa re vaxalevu.
Firstly, I would to thank ACCU team for this workshop. I really enjoyed it because I got to learn a lot of new things. The workshop was interesting because the first part was dealing with pottery and how to maintain its parts that has been discovered. How to separate the parts of the pottery from the plain rim, the plain body, grooved body and the nubbin. That every piece is counted that all the pieces have to be sketched and entered in the artefacts card. Even the height and width of the pottery have to be taken. I also learnt a lot about ink rubbing and how important it is in this field of work. The ink shows all the patterns on pieces of pottery. Even though the pottery is old, it has important designs.

To compare to my work in the library, it is the same as doing cataloguing. Every detail of the book has to be written down. This will help us maintain the book and know which section the book belongs to. Like sorting the different pieces of artefacts, in the library we have to sort the books into different sections. It teaches us that the information the book has is still important even though it is old.

I also learn a lot about photography because it teaches us that all the artefacts have to be taken because they are all important. Even if it has designs on it, they also have to be taken. All designs are important enough to be put in the artefacts cards. In photography, we learnt how to use the camera and how to focus with a camera, how to take photograph of an object from the side and from the top, how to block out the light and how to control the light on an object.

For my work in the library this will help me maintaining the condition of the book. The methodology of taking photographs of the book will help us know the condition of the book. When it was given to the schools and when we go to audit in the library, we can then compare the book to the photograph. If books have their cover torn out or if the book gets stolen, we can know if the book belongs to Library Services of Fiji in this way. Also, we can know if the library has already purchased the book. We can take this photograph and paste it along with the catalogue cards. In addition, photography helps us take pictures of our new users in the library rather than sending them back to his or her passport size photo. It is helpful for our library set-up when we take pictures before and after it because we use this pictures for our report and we can know the condition of the library.
This workshop is very unique as it is the first of its type to be conducted in Fiji, and I am thankful that though I am a conservator from the National Archives of Fiji, I was selected to attend, and I found that this was relevant to my field of work. I have learnt that detailed documentation is very important in not only describing an artefact or a group of records, it will also create data that will be very useful for researchers. I have also learnt that documentation is very useful when one wants to find a single item, and that is where the artefact card comes in handy, as it is a description of a single piece of pottery or heritage. Documentation right down to the individual item is very important to the inventory of a museum and archives too.

What I have learnt from the measured drawing sessions that I could use in my work was the details of the dimensions before and after a restoration of a document or an archival volume. These are important aspects as all treatments and restorative works of archives are not permanent and are required to be reversible, so documentation of every process is very important. They are useful references too for future workers who might want to confirm if a record had previously undergone treatment.

Photography in conservation processes is a new thing to the conservation unit of the National Archives of Fiji (NAF), and currently we are using a lightweight basic function camera for documenting treatment processes, and lighting was never considered an important part of this. But the photography lectures and practical sessions has helped me to understand areas where recording our work can be improved.

Also, very important to learn was the storage media of raw data as in digital photographs, actual photographs and the different materials which films are made from. Most important too is the conditions of storage, that air conditioning lengthens the life of storage medias and records, and most importantly is the relative humidity should be at the right range, i.e., not too humid and not too dry. This information is not new to my field of archival conservation, and what I found useful in this regard was that there are different levels of relative humidity for different medias.

What was very interesting to me was the area of photography settings, how we have to custom make the white balance requirement, and the details of setting the ISO and shutter speed as these details actually affect the quality of your image. Another point of interest to me was the light settings, and that one doesn’t need to have the latest technology to produce a quality image. We can improvise from the equipment and tools that we currently have, but a good camera like the Canon or Nikon brand will produce the best results. As long as we have a good understanding of our final product which is: a good quality photograph, ink rubbing and the calculations of measured drawings of the piece of heritage, we will have a good inventory of the items in our care in museums, and in the case of my work the archives conservation unit processes and records department too.

Arigato gozaimasu
Vinaka.
The topics covered during the week-long workshop were very informative, enlightening and useful for my line of work as a project officer responsible for the development of a new Cultural Centre, and also for the types of culture and heritage projects administered by the iTaukei Trust Fund Board.

At first, I was captivated by the meticulous ways of which data is extracted from basically sorting and classifying pottery shards. I have never thought of how excavated materials can be studied closely and documented in a very organized manner. The results can be overwhelming because the layer of soil from which the artefacts/shards were extracted could determine a certain time in our history. As the layers of soil increases, the motifs or design on the pottery shards also change to signify historical transition or time periods. This is valuable information, which will be useful for the Cultural Centre in terms of documentation and collections management. I was also captivated by how ACCU pays close attention to detail and accuracy using crucial methods of documentation such as ink rubbing and measured drawings. These methods involve the use of innovative techniques and tools of measuring artefacts for accurate recording of data and information. I learnt that measured drawings are not sketches (as usually done by architects or draftsmen), but they are exact measurements of the artefact. Many thanks to the ACCU for donating some of the measuring tools and devices to assist us in implementing what we have learnt, as they will be very useful with our current and future collections, and research.

However, when we look at the innovations some tools involve the use of very simple materials, while others involve sophisticated methods. We may think we are under-resourced with tools and techniques, but we in Fiji need to determine what local materials can be used as substitutes to achieve the same results. For e.g. what can we use instead of the Japanese marking combs and how can we develop our own?

Organizing and recording data in a systematic manner made me realize that each artefact contains a significant amount of data. The flowchart of recording and organizing artefacts showed me that the more we separate artefacts according to some categories, the more assumptions we can make about them. For instance, pottery shards were sorted and classified into major categories such as dentate, incised, paddled-impressed and plain. But these were broken down into smaller categories or separated according to whether they are body parts, or rim parts of a pottery. The most significant ones were selected for ink rubbing and measured drawings. This process is crucial in archaeology and anthropology and must be adopted to enhance research outcomes for Museums and Cultural Centres. Personally, I have learnt to take documentation measures seriously, and begin applying them in the workplace. Inadequate efforts and resources are invested into documentation of physical properties with culture and historic significance. The Great Council of Chiefs Building for example, needs proper documentation and research in order to preserve original data/information. To prevent original data from deterioration, a lot of attention needs to be given to systematic recording and documentation of data. The accuracy of recorded data could also improve efficiency and accessibility.

In the photography lectures and practical sessions, I learnt how to take photographs of cultural properties with affiliated data. The sessions were very useful because photography and shooting techniques if not carefully observed, could alter or reproduce the images and data. I only wished the practical sessions were longer so I could master the skills of photography. Nevertheless, they were very fruitful because it has helped me to look at artefacts holistically and not only from a certain angle.

Data maintenance and preservation are critical issues for most institutions in Fiji, due to lack of technical expertise and conducive environmental conditions. It is sad that most recorded information in cultural databases have degraded and deteriorated because they were not well maintained. Without databases (which are often expensive to buy) we could begin listing down objects/artefacts and their images. I learnt that photographs in TIFF and JPEG have significant data and must be preserved in the database, because once they are shared/resized/copied etc. the image quality changes and data altered.
The Department of Heritage Arts is the government institution through the World Heritage Unit that specifically focuses on the preservation of our cultural heritage sites, monuments and buildings in Levuka. As Levuka Historical Port Town is Fiji’s first world heritage site inscribed under the UNESCO World Heritage listing in June 2013 at the 37th session of the World Heritage Committee. One of our main and important role is to help maintain the status, authenticity and integrity to avoid delisting of our first World Heritage Site. The workshop is very useful in a sense that these cultural objects are not only important but are of outstanding value. The preservation as such is also important for our future generation as they will be able to witness and understand how we value and preserve them. How we document and record them is vital as this will determine its long sustainability. We not only look after the tangible but intangible objects, elements, sites as well.

In addition, the safeguarding, inventorying of this properties and objects is pivotal as the current climate evolves every now and then, without proper security, storage climate change will affect them and this will all result to the damages of it and all will be a waste, funding, human resources etc.

I have also learnt the basic information about photography, its features, the angles in which to take as those past collection of photos in the office are blurry and are not of high resolution. This overall affects the image of the report that we submit. This workshop has enabled a clear understanding of the camera settings that are very crucial as it determines the clearness of pictures.

On this note, the documentation of such records is useful, its backup. We have a library in the office, and from the workshop I have learnt the importance of cataloging. I will also share in the office the way forward for its proper indexing, cataloging for easy access of this resources and books for researchers and future generation. I’ve also learnt the set up and climate condition of the artefacts e.g. mats, pottery and camera storage in the office. This information will also be relayed in the office so that they are safe and that nothing is damaged. The designing and measurement of pottery is also important as you are able to know the size and measurement of where to store them, the standard in which we have to take heed of. I am so privileged to be part of this workshop as it is one of a kind. It is my first time to attend such a workshop that commences and ends with practical work. I really loved it. What was learnt is practiced and helped me understand what it is in reality. I will for sure share this information so that my colleagues are well informed as there are a lot of artefacts, cameras, laptop, records in the office that we should protect and maintain its condition and I do hope that more of this workshop will be introduced for better enhancement of our knowledge.
This first ever in country workshop for the protection of cultural heritage instilled a major impact of knowledge and experience which enhanced my learning and most of all for future reference.

I’m working in a public library, this new learning experience really broadens my knowledge and understanding of how to preserve or protect our archaeological artefacts and cultural heritage. I may not be familiar with all the work that needs to be done in the museum but I’m very grateful and blessed being part of this workshop. It really boosts my knowledge and understanding of how things are being handled prior to the storage and preservation of cultural heritage in the museum.

Some of the important lessons that I had gathered so far are; classification of pottery shards - I was able to have a good understanding of the various types of pottery shards and its documentation. This includes making organizing card, making artefacts card, ink rubbing, and measured drawing. Another important lesson that I have learnt is the mechanism of photograph and its functions. It was a bit challenging for me since I never have the experience to operate cannon camera or any digital camera that was being used during lessons. The application of other procedures and steps were being well presented and delivered which made this photography lessons easy to understand and thanks to the help and advice from the hardworking facilitators. I had new experience with shooting technique and how to adjust and concentrate on the focus button and white balance. It was indeed a great and interesting experience at all with all the workshop tools and equipment being provided and easy to handle with care. Overall, all I can say that I’m blessed and overwhelmed with the great knowledge, interesting and educational lesson now being instilled in me throughout the one-week long workshop.

My work involves school library set-up, listing of new books, stocktaking, services at circulation desk but with regarding to what I have learnt so far, I’ve managed to figure out what should be done with the drawers full of catalogue cards, book cards, and mostly how to deal with storage issues. Also, when making library set-up report, photos will be needed before, during and after set-up, I now know what shooting technique I will use for accuracy and relevant information to be submitted in the report. I will also apply my knowledge in creating database for recording data during stock take by using Microsoft excel, access.

Upon completing six days of the workshop, I now have a clear understanding of the important of the main theme of the workshop and how it related to our day to day routine at work, as for me working in a different environment apart from Fiji Museum, Heritage and Arts Council Department I somehow able to put the pieces or sections of the workshop together. And manage to create a sense of belonging with regarding to the protection and documentation of our artefacts.

So, overall, I would like to acknowledge the facilitators for the interesting and educational deliverables, by being able to deliver the three lessons i.e. the documentation of artefacts, ink rubbing and photography with hard work and commitments. Despite the translation process of the language being used I was able to gauge the main purpose of the workshop with patience and good understanding. A big Vinaka Vakalevu to ACCU Japan team.
IV. International Workshop

Case Study Reports
The kingdom of Cambodia has begun its history many thousand years ago. The remains of Cambodia’s historical event and civilization have reflected through many different forms of tangible and intangible cultural heritage such as vernacular and architectural monument, archaeological and pre-historical site, art craft, traditional song, music and dances, custom, traditional life ways, and ritual practices. So, both tangible and intangible cultural heritage have registered by UNESCO in the list of Tangible and Intangible Heritage of Humanities.

A part from a considerable legacy in Pre-Angkor and Angkor period, Cambodian cities present a highlighted Urban Heritage with a wide variety of history, architectural styles, and their evolution. The cities of secondary cities benefit from public and private investment in a planned framework during the pre-protectorate, protectorate and the Independent’s period such as wooden traditional houses, the religious building called wats, the remarkable colonial architectural like shop houses, colonial villas, publics amenities and facilities, and the modern Khmer architecture in 1960.

The project “Sustainable development of Cambodian cities: Implementation of inclusive urban projects for 3 secondary cities” involved Cambodians counterparts – Ministry of Economy and Finance, Ministry of Public Works and Transport, Ministry of Tourism, Ministry of Culture and Fine Arts with the support of UNESCO expertise. Three cities have been selected, Battambang, Kampot and Kratie and base on their historical context and unique heritage. This legacy of the past results in a historic building stock largely shapes during the last century which could be protected, enhanced and promoted from inhabitants and the touristic point of view in order to build the future. The project has a general vision by respecting the national orientations of the Royal government of Cambodia in particular to implement sustainable development projects in secondary cities for promoting social, including gender approach, and economic inclusiveness and taking into account the best advantages of the natural and urban heritage for the benefits of communities. And also diversify the economic activities of secondary cities, notably by strengthening the touristic assets of city centres. Other specific objectives are to define a coherent urban project to drive the sustainable development of city centres, to upgrade utilities and public services for the benefit of the population, to reduce urban sprawl, and to support job creation for a local community.

Battambang one of this three secondary cities located in the western region of Cambodia near Thai border. This province has a high potential in many sectors such as agriculture, the first rice production in a country, agro-industry, transportation system connects both national and international markets made the province a business hub. City centre are characterized by mix use main market, surrounded by shop-houses, public administrations, housing, and some ancient monasteries call in Khmer “wats”. Urban Heritage in this city centre is an asset, as yet unharnessed, for the diversification of economic activity, the fostering of investment, de development of more inclusive urban policy, the enhancement of living conditions and education of population and users.

The city has been developing since the end of the 18th century. In the 19th century, the city had 2,500 inhabitants living from fishing, commerce and agriculture. The Chinese community was already present and the existing Chinese pagodas on the river” bear witness to this presence. The governor’s residence was built during this period. During the French protectorate (1907-1953) the urban layout was extended with the construction of shop houses governed by strict design rules, villas, market, a railway station and a first concrete bridge (1917). The Independent period (1953-1970) extended the previous urban perimeters 5-fold and develop trading and industry, making Battambang the second city in Cambodia. The legacy of this intense modernization is still significant with building like the University, large amenities (hospital, museum…) and industrial building. This dynamic stop by civil war, was renewed at the beginning of the year 2000, with the support of German co-operation to prepare land registration and urban planning.

The largest Urban Heritage in Battambang includes several remarkable elements as market, colonial houses, a Chinese pagoda, Governor’s house, National Bank, several wats, cinemas, schools, public administration and hotels or restaurants, about 800 Chinese shop houses, the railway station and extensive public spaces along the river, the museums, old bridge, 31 pagodas, and around 190 traditional wooden houses in 2 villages. The inventory is not yet complete.

Urban heritage is actually facing several challenges:

- Rapid development and dynamic investment due to economic boom and modernization backlog.
- Speculative private land market with irrational price inflation
- Poor urban management and weak law enforcement.

Then regarding to the field of urban conservation, many challenges in this skill are lacking in particular the lack of
knowledge and awareness about heritage values in civil society, lack in human resources, lack of inventory, law, regulation for heritage conservation, lack of funds for renovation… etc. The city centre affects some threads by several change of building appearance through advertisements and billboard façade wrapping, lack of maintenance or usage, inappropriate new construction on empty plots disrespecting the urban context, demolition of old building for new infill building, etc.

A pilot project established since 2001 by the Administration institution in the province, urban planning office, the municipality collaborated with the deed “German team”, and Asia Urvs reformed some focal point: administrative structure, transparency and public participation, district budgeting and finances, tourism development. This pilot project aims to establish professional urban planning on local level, develop and test participatory planning methods, develop sustainable capacity of staff and develop contents of and technical definitions for urban master planning.

In addition, and following the sustainable development of Cambodian cities project, The Heritage Centre of Ministry of culture and fine Arts and UNESCO team in Phnom Penh are working on:

- Research of the documentation
- Identification of heritage building. It is not only in the city centre but also in old villages such as the temples, monasteries, traditional architecture.
- And try to elaborate a protecting zone

For awareness education and communication, Ministry of Culture and fine art, ministry of Tourism and provincial institution concerning work together by organizing a talk/meeting with the owner of the Heritage buildings, provide several local and international conferences and tour guide. A workshop on Heritage protection and conservation has done 2 times per year since 2016 by the Royal University of fine arts and the university Toulouse in the cooperation program. Next month the workshop will concentrate on the restauration methodology project of the Market in city centre.
I. Overview of the Historic City Suzhou and Its Gardens

Suzhou, located in the middle and lower part of the Yangtze River, is one of the most famous historic cities in China with a history of more than 2500 years. The city was built in B.C. 514, when it was the capital city of Kingdom Wu in Spring and Autumn Period in the Chinese history. In the long history of 2500 years, the city site and layout kept basically unchanged according to the Pingjiang Map drew in South Song Dynasty (A.D. 1229). The Layout of the city is like a double checkerboard, which roads and waterways are paralleled. The streets are built by waterways and the residences are constructed neighboring rivers, the bridges, water and residential part together forming a unique feature of water town.

Up above there is heaven; down below there are Suzhou and Hangzhou. As an ideal living place, historically, Suzhou was the centre of the politics, economy and culture that has a large number of culture relics. There are over 500 cultural relic protection units in Suzhou, of which 15 are national-level and 89 are provincial-level. In the vast number of cultural heritages, Suzhou gardens are the most charming ones, regarded as the representatives of Suzhou. Suzhou has long been known as the “Garden City”. There’s a saying goes: Gardens in the south part of Yangtze River are the best, but the Suzhou Gardens are the best of the best. The private gardens of Suzhou are essence of the Chinese gardens, representing the top achievements of the Chinese garden art. The history of Suzhou garden can be dated back to the Kingdom Wu’s royal garden in the 6th century B.C., and the earliest private garden appeared in the East Jin Dynasty (the 4th century A.D.), named Pijiang Garden. Then, it developed in the Tang and the Song Dynasties (about A.D. 618-1279) and flourished in the Ming and the Qing Dynasties (about A.D. 1368-1912). From the 16th century to the 18th century, Suzhou gardens reached their peak and there were more than 200 gardens in the city. A poem vividly described the grand scene of the gardens: “Garden City”. There’s a saying goes: Gardens in the south part of Yangtze River are the best, but the Suzhou Gardens are the best of the best. The private gardens of Suzhou are essence of the Chinese gardens, representing the top achievements of the Chinese garden art. The history of Suzhou garden can be dated back to the Kingdom Wu’s royal garden in the 6th century B.C., and the earliest private garden appeared in the East Jin Dynasty (the 4th century A.D.), named Pijiang Garden. Then, it developed in the Tang and the Song Dynasties (about A.D. 618-1279) and flourished in the Ming and the Qing Dynasties (about A.D. 1368-1912). From the 16th century to the 18th century, Suzhou gardens reached their peak and there were more than 200 gardens in the city. A poem vividly described the grand scene of the period: Suzhou is a good place and the gardens occupied half of the city.

The Gardens are the material carriers of history and culture, reflecting the high level of living civilization and the scientific and technological level of urban construction in the ancient Jiangnan area. The large numbers of Suzhou classical gardens are organically integrated with ancient rivers, ancient buildings and historical blocks into an inseparable whole. Preserving classical gardens and protecting Suzhou ancient city are complementary. Suzhou ancient city cannot be without classical gardens. Classical gardens cannot be without the ancient city environment.

II. Suzhou garden Conservation History

Preserving Suzhou gardens is protection of the city’s history and culture. The preservation of Suzhou gardens is earlier than that of the old city of Suzhou. Suzhou gardens were so famous in the history that they attracted the attention of many experts and scholars. As early as 1937, the famous architect Tong Jun conducted a scientific investigation on Jiangnan classical gardens including Suzhou gardens and wrote a book “Jiangnan Garden Records”. In 1953-1959, the famous Architect Liu Dunzhen, systematically investigated Suzhou classical gardens and published “Suzhou Classical Gardens”. From 1957 to 1958, Chen Congzhou of Tongji University also conducted surveys, surveying and mapping of traditional Suzhou houses, and published the “Record of Old Residences in Suzhou”. All of these works compiled valuable information for the basic conditions of Suzhou classical gardens and traditional houses.

In 1950s and 1960s, under the active appeal of professionals from universities, institutions as well as social conscious people, the Suzhou Garden Management Division was set up and the first garden restoration projects were carried out targeted at the historical famous classical gardens such as the Lingering garden, the Humble Administration Garden, the Master of Nets Garden, the Lion Forest Garden etc. The implementation of these restoration projects accumulated experience and established a professional team, which was a good start of Suzhou classical gardens preservation.

In 1982, Suzhou was listed in the first national historical and cultural city by the State Council, which promoted the overall conservation work of the city. The local government formulated the Suzhou City Master Plan and clearly defined the guiding ideology of city conservation: Protecting the old city of Suzhou and actively building modern new area. The scope of protection is one old city, two lines (the Shantang Line and the Shangtang line) and three areas (the Tiger Hill area, Hanshan Temple area, and the West Garden and the Lingering Garden area); the conserving contents are the layout of waterways and blocks and cultural relics, and promotion of intangible heritage. The Suzhou City Master Plan (1986) paved a good conservation foundation for the preservation of old city of Suzhou. The old city’s texture has got well preserved. The local government conducted a general survey of cultural relics, gardens and ancient buildings in 1982, a total of 122 large and small gardens and 105 courtyards were investigated. Less than 100 gardens and courtyards were existed and most of them were in bad conditions. The second restoration projects then launched. From 1980s to the early years of 1990s, following the principle of protection-oriented, rescue...
first and repair the old as it is, over 20 gardens were restored, laid a solid foundation for the group conservation of Suzhou classical gardens.

Laws and regulations are the safeguard of the conservation of historic city. Since 1990s, a series of local regulations on protecting cultural relics and the ancient city were issued, establishing a special regulatory system for the protection of Suzhou ancient city. Regulations on urban planning protected the city history environment and measures on cultural relics provided legal basis for conserving all those movable and unmovable old things such as gardens, rivers, ancient buildings, ancient trees etc...

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<tr>
<th>Year</th>
<th>Name of Regulations</th>
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<tr>
<td>1995</td>
<td>Suzhou City Planning Regulations</td>
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<td>1996</td>
<td>Suzhou Garden Protection and Management Regulations</td>
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<td>2001</td>
<td>Regulations on the Protection of Ancient and Famous Trees in Suzhou</td>
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<td>2002</td>
<td>Regulations on Suzhou Ancient Building Protection</td>
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<td>2003</td>
<td>Measures for the Protection of Famous Historical and Cultural Cities in Suzhou</td>
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<td>2003</td>
<td>Suzhou City Purple Line Management Measures</td>
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<td>2003</td>
<td>Implementation Rules for the Repair and Protection of Ancient Buildings in Suzhou</td>
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<td>2004</td>
<td>Measures for the Protection and Renovation of Fire Protection in Suzhou Historical and Cultural Protection Area</td>
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<td>2005</td>
<td>Suzhou River Regulations</td>
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<td>2005</td>
<td>Suzhou Cultural Relics Protection Unit and Control and Protection Building Integrity Measurement and Evaluation Method (Trial)</td>
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<td>2009</td>
<td>Suzhou Scenic Area Regulations</td>
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<td>2013</td>
<td>Regulations on Certain Compulsory Contents of Suzhou Urban and Rural Planning</td>
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TABLE 1. Main regulations on management and preservation of Suzhou City

The city master plan, regulatory system and the special law for Gardens together helped the well conservation of Suzhou gardens. Under the overall framework of comprehensive protection of the ancient city, the historical famous and the middle to large sized Suzhou gardens were well protected. In 1997 and 2000, the 9 Suzhou Classical Gardens including the Humble Administrative Garden, the Lingering Garden, the Master-of-Nets Garden, the Mountain Villa with Embracing Beauty, the Lion Forest Garden, the Canglang Pavilion, the Couple Gardens Retreat, the Garden of Cultivation and the Reflection and Retreat Garden as typical examples of Suzhou classical gardens were inscribed on the world heritage list. Since then, Conservation of Suzhou gardens has gained more and more attention from the government and the society. Entering the 21st century, guided by the 9 world heritage gardens, the protection and management of Suzhou Gardens are under the requirements of world heritage conservation. The latest preservation theories and the dynamic monitoring system were applied in the garden conservation.

III. Suzhou Garden Group Conservation Project “Paradise-like Suzhou City of Gardens”

Though the Suzhou garden conservation work never stopped since 1950s, the census data in recent years showed that the overall number of the city gardens is decreasing year by year. To inherit traditional culture and promote the sustainable development of the historic city of Suzhou, in 2013, the local government proposed the program of “Paradise-like Suzhou City of Gardens”, aiming to promote the garden conservation and inheritance by the government and the social force.

The government plans to include gardens that meet the characteristics of Suzhou classical garden or have high historical, cultural and artistic value in the “Suzhou Garden List” through the continuous compilation and publication of the “Suzhou Garden List”. After that following the principle of “authenticity, integrity, continuity” and the method of “repairing the old as it is”, carry forward the restoration projects to promote the protection and restoration of the typical classical gardens year by year, and realize the comprehensive conservation of Suzhou classical gardens.

The project adopts self-declaration system, and the gardens scattered in the private and public sectors are declared by themselves, and after being evaluated by experts, they are listed in the “Suzhou Garden List”. The gardens inscribed on the “List” will be awarded the protection labels and be put in the “Suzhou Garden Supervision Information Platform”. Professional guidance will be offered to the owners so that to regulate protection management. At the same time, according to the status of garden protection, these gardens are guided to implement the public opening in different forms, so as to achieve the purpose of Suzhou classical garden protection and inheritance. At present, 108 gardens have been included in the “List”, including classical gardens and contemporary gardens in Suzhou.
IV. Community Cooperation and engagement in the Management of Project “Paradise-like Suzhou City of Gardens”

Garden is the soul of Suzhou and it is an ideal home of Suzhou people. Local people have a passion for gardens. To meet people’s needs for garden visiting, in 1980s and 1990s, the local Suzhou residents have chances to visit gardens for free of charge every month by offering tickets through communities. Since 2000, the local people can visit gardens by buying Suzhou garden card, a welfare card offered by the local government. Therefore, the “paradise-like Suzhou City of Gardens” is trying to build a cooperation platform between people and the government.

i. Self-Declaration of “Suzhou Garden List”

Released by mass media, the Suzhou Garden Management Department encourages the society to participate in the protection project. The “Suzhou Garden List” application forms are distributed to relevant units and communities. The reporting work is carried out under the joint organization of the community and the government. Since the implementation of the project, it has received a good social response. The property rights managers and private garden owners of historical gardens actively participate in the declaration and are willing to implement professional protection through government protection projects. From 2014 to 2018, over 250 application forms were received from relevant units and private owners.

ii. Participation of the “Suzhou Garden List” Publish Meeting

In the course of project promotion, after been field studied and expert reviewed, a publish meeting will be held for gardens to be inscribed on the List. The owners of private gardens and the representatives of the property managed by units will be invited to participate in the announcing meeting. They are awarded the certificates and make speeches facing the media. Also, they are encouraged to propose management suggestions. The 108 Suzhou Classical Gardens included in the Suzhou Garden List were announced by the local government by 4 batches from 2015 to 2018. All the gardens were attended by representatives and private owners.

iii. Participation of the “Suzhou Garden List” Protection Training

In view of most of the gardens included in the List are out of the management of professional preservation, technical training is necessary. From 2015 to 2018, the property owners of the “Suzhou Garden List” units were asked to participate in the garden protection management training course. The contents of training course include basic theory to protection practice, relevant garden protection regulations explanation, gardening art and craftsmanship. Cultural heritage conservation experts are invited to the training course to strengthen the theoretical and practical guidance of protection. The training courses are welcomed by the garden owners. The attendance of the courses is high as they can communicate with the expert’s face to face, helping them to improve the management of gardens.

iv. Cooperation from Suzhou Garden Protection Volunteers

Suzhou gardens are rooted in the hearts of the local Suzhou people. They are the pursuit of their ideal home. In Suzhou, there are many garden lovers. For this reason, in cooperation with the Suzhou Volunteers Association, the Suzhou garden volunteer protection team is set up to assist in the protection and management of Suzhou gardens. So far 70 volunteers with certificate work for garden conservation. They work as garden guides, play a role in garden inspection, monitoring, brochures dispatching and garden publicity.

v. Cooperation with the Protective Use of Gardens

Among the 108 gardens, in addition to 15 gardens managed by the Suzhou Garden Management Department, other gardens are mainly distributed in schools, hospitals, libraries and other private individuals. In order to have the public to appreciate these gardens, encourage qualified gardens to implement various forms of openness. With the encouragement of the government, the social forces actively cooperated and the current open rate reached 70%. For example, Chaiyuan Garden is used as an educational museum for free to the public, and Changyuan Garden, Daoxin Xiaozhu Garden are free to open by application via garden information platform.

vi. Special Columns in Local Newspapers

In the Suzhou Daily, the Suzhou Evening, all year around have special columns for Suzhou gardens. The public are encouraged to send articles, telling the story related to the history, culture and protection of Suzhou gardens and collecting the old pictures of the gardens. It’s a good channel to have people understand gardens, love gardens, volunteer to maintain and participate in garden protection. Because of the active participation of the society, the "Old Landscapes of Suzhou Gardens" and the "Record of the Past Garden" were published books, which provide valuable materials for the cultural study of Suzhou gardens.

vii. Holding Various Forms of Cultural Activities in the Gardens

In order to enhance the public understanding of Suzhou gardens, cultural experiencing activities such as flower arrangement, painting, calligraphy, embroidery, Pingtan, Kunqu performances, book festivals, and traditional Chinese weddings are held in cooperation with communities, schools and families. At the same time, encourage social capital to participate in the activation and utilization of garden resources, promote the integration of “culture + tourism”, making the garden culture readable, visible and sensible. These cultural activities are soft driving force for the promotion of Suzhou gardens management.

V. The Challenges facing the Project “Paradise-like Suzhou City of Gardens”

The Project “Paradise-like Suzhou City of Gardens” is the continue of the group protection of Suzhou gardens, which is an important part of the ancient city protection of Suzhou. At present, we have over 100 classical gardens included in the Suzhou Garden List. Next, more gardens will join in the List and
the number will grow. Comparing to the past conservation, the management of these gardens are more challenging.

**Firstly**, the effective management is facing difficulties. These gardens are scattered around the city, owned by different sectors and persons, though we have policies in coordinating these gardens, it’s still not easy for managing all these gardens well by the Suzhou garden management departments. A monitoring system is going to set up to help supervise the protection status, however, monitoring work needs cooperation from the all sectors and persons, so more incentive policies are needed to activate the social power for the cooperation in managing of these gardens. Also, more implementing regulations on community participation in the cultural heritage need to be issued so as to help the community to participate in the protection easily.

**Secondly**, the building of the garden city needs participation of young people. The construction of new cities around the ancient city has developed rapidly and now we have industrial park, high-tech zone and two other new developing districts. On the one hand, it provides space for the relief of the ancient city and on the other hand it challenging the old city’s sustainable development. Due to the need of conservation, the infrastructure of the old city is comparatively lower and the job opportunities are less. Nowadays more and more young residents with higher incomes in the ancient city migrated to the new cities. As an alive organism, the old city needs to maintain the vitality. The old city is the big history environment of the classical gardens, now measures to shorten the gap between the old city and the new cities in terms of incomes and living facilities are in serious need.

The management of the big number of Suzhou Gardens is a long-term city strategy. Through this protection project, it is expected that the Suzhou garden group protection management model of “government-led, social participation, and people benefit” will be gradually formed, and a series of effective measures such as policy support, financial subsidies, public opinion guidance, and service promotion will be implemented to make Suzhou gardens more scientific and sustainable, exploring an effective model of historical garden management.
Brief History and Overview

Over recent years Navala village has become the focus of visitations from researchers, students, tourists as well local visitors. This was attributed to the uniqueness of the village of Navala in that it was a village that preserved and practiced their traditional building techniques. Their houses are the traditional centre poled houses which were common in the central highlands of Viti Levu.

Navala’s uniqueness is in the traditional layout as well the architecture and construction of the buildings. The concept of the Fijian traditional house in Navala demonstrates the connection of the people to the land in the resources that were grown and harvested from the forests that surround the village. The relationship of the human body in its connection to the earth through the organic materials used and the earthen floor that they sleep on every day. This is further articulated in the communal act of working together in the collection harvesting and construction which in turn strengthens their community life.

The unique layout of the village with the village green (open space) forming a cross with the first Chief’s house located on the lowest part of the village. This demonstrated the vision of the original chief to be at the lower end of the village and have his people on higher grounds, thus elevating his people’s needs above his own. In addition to this the church and school were placed at the head of the cross like formation again demonstrating the elevation of faith and education to be the focus of the people of Navala.

The construction of the houses was a community effort and everyone participates in the activities. With teams of 7-10 men for a house lead by a senior builder. The structural timber for the construction are harvested from areas around the village as well as the bamboo and the reed thatching that is used to thatching the roof of the houses. The joints are tied together with vines from the forest and the compacted earthen floor is lined with grass before the mats go on top. The raised platform and foundations are lined with river and mountain stones. All these materials are harvested and collected from the areas around Navala village which demonstrates that the houses really belong to the landscape of Navala. (Figure 1,2)

The Initial settlement of the village of Navala in the early 1950s saw the agreement of the people of Navala to build only traditional houses within the village boundary to maintain the tradition look and preserve their traditional construction techniques and systems and materials. Over the last few years this has changed and more modern houses are being built within the village boundary now as the village has progressed and the younger generation have opted for the more modern materials of concrete and corrugation iron roofing.

Ongoing Activities in Navala Village

Currently, Navala hosts and entertains frequent visits from tourists, students, as well as researchers from different parts of the world and local visitors who visit the village to experience the atmosphere and nostalgia of being in one of the traditional houses. Various activities are:

- Tourist tours and accommodation
- Cultural mapping exercises and ongoing visits from the iTaukei or Indigenous Affairs Ministry
- Local and foreign academics and researchers
- Local and foreign tertiary students
- Workshops and training programs by non-governmental organisations and government departments
- Infrastructure development to the village has continued – Electricity has now reached Navala village.
- Communal facilities such as bathrooms and toilets have been built for visitors.

These are just a few activities that have taken place in Navala village over the last few years.

My involvement with Navala village began in April 2016 when I accompanied Dr Masuda of UNESCO and Mr Minowa to conduct...
damage assessments after Tropical Cyclone Winston. At the same time, I conducted interviews with village elders on their construction techniques and processes. In 2017 we facilitated with Mr Simi Tuimalega of the Indigenous Affairs Ministry a joint visit with students of the Fiji National University and indigenous students of the University of Canberra and University of Western Australia. This was a cultural exchange visit between the indigenous Australian students and the villages of Navala. (Figure 3-8)
**FIGURE 6.** Blue coded houses – Houses that were partially destroyed and needed to be built.

**FIGURE 7.** Black coded houses – Houses that had minor damage and require very little repair.

**FIGURE 8.** Green coded houses – Houses that had no damage.
Over the last few years Navala has lost some of its traditional houses as younger generations have opted for modern materials and modern living facilities. Modern houses built of concrete, steel and corrugated iron have increased in number over the years and continue to grow in number. According to the village elders, the younger generation have opted to build modern houses for various reasons:

- Modern materials are easily accessed from the hardware suppliers in town
- Maintenance of the traditional buildings means going back into the forest to harvest and collect building materials for repair of the traditional houses.
- Villages have to travel further now to get the traditional materials as the native hard wood forests have not been replanted over the years.
- With the increase in distance to the building materials comes the difficulty in harvesting and logistics.
- There has been no assistance to the village on modern tools and transportation to assist them in continuing their traditional buildings so less people are willing to continue with the traditional systems of building houses.

There may be other reasons that contribute to the increase of modern houses in the village but these seem to be the ones that stand out in talking to village elders. This increase is quite evident when one observes the aerial images over the years on Google earth. As the traditional houses deteriorate or suffer damages from cyclones or hurricanes it seems that the repair effort is not as robust and widespread as they may have been previously handled. The next lot of images shows the increase of corrugated iron roofing within the village boundary in 2016. This was after Tropical Cyclone Winston devastated many areas in Fiji including the highlands of Ba. From the 2017 image it is evident that in addition to the new modern houses, the houses that were completely damaged by Tropical Cyclone Winston had not been rebuilt and the change in the village landscape is quite visible. (Figure 9, 10, 11)

Community Cooperation and Engagement

Despite the difficulty faced in the maintenance of the traditional housing construction and the damages the Navala villagers experienced after Tropical Cyclone Winston the community continues to engage and cooperate with visitors and the like. They continue to:

- Share their knowledge on their techniques processes and also the issues they continue to face in their efforts to maintain the traditional look of the village over the years.
- They actively participate in the hosting of visitors that come to the village. This is usually done communally where visitors are allocated to different host families if they are staying overnight or for a few days.
- In the cultural exchange program in 2017 with the indigenous Australian students the villagers were very accommodating and welcoming as well as forthcoming in their sharing of information and engaging with the students.
- The villagers are eager to share as well as learn from visitors with every group that visits Navala and the different backgrounds they bring.
- They participate in training and workshops that are organised by different organisations that come to them. (Figure 12)

Projects Overview (Figure 13)

Before Tropical Cyclone Winston

- The increase in modern housing numbers increased considerably around 2010 onwards
Before 2010 it seemed to be under some form of control
Pre 2009 saw the village maintain their traditional architectural look
The pre 2009 was also the period when the imagery of Navala village was used a lot in publications such as tourism posters and other marketing

Minimal work has been done in terms of the repairs to the traditional buildings after Tropical Cyclone Winston.

Conclusion:
There needs to be a concerted effort by all relevant authorities concerned with the community in the lead to come up with a master plan of the rebuilding of damaged houses, and an overall preservation program for the traditional houses. There are endless possibilities for the village of Navala in the tourism and education sector if their village is preserved and maintained.

References:
- Matsuda 2016, Damage assessment Data
- Google Earth Imagery
- Ministry of iTaukei Affairs information
- Fiji Museum information
Lao People’s Democratic Republic is located in Southeast Asia shares its borders with China on the North, Vietnam on the East, Cambodia on the South, Thailand and Myanmar on the West. Lao has an area of 238,800 square kilometers, population of 7,012,995 inhabitants, and consists of 49 ethnic minorities who live together in peace.

Luang Prabang Province is one of 18 provinces in Lao PDR, situated in the North from Vientiane Capital about 400 kilometers to the South. The land area is 16,097 square kilometers, consisting primarily of mountainous and forests covering 85% of the total area. There are 11 districts and 1 city, 431,900 inhabitants and 13 ethnic minorities. Luang Prabang City was established and developed for more than 1,200 years. Luang Prabang has a wealth of ancient objects, famous of Buddhist locations housing many fine arts, highly skilled handicraft, highly creative studious maintain ancestral heritage preserving Lao traditions for the next generations.

As we have known, Luang Prabang City was established as World Heritage City as of December 9, 1995. This status is because of many unique characteristics of Lao Culture: lush mountain forests, numerous streams, rivers and unique biodiversity. The unique location and layout of the town of Luang Prabang makes it suitable to the preservation of traditional culture. Examples of the many festivals held in Luang Prabang are: Lao New Year, boat racing festival, Buddhist lent day, traditional ethnic festival, arms giving and others festivals. Additionally, there is the ascetically beautiful Lao monastery, historic houses and buildings that are preserved within the city.

For the intention of protecting and preserve the precious heritage Luang Prabang was established as a World Heritage site. The governing authority of Luang Prabang Province concerns for the different sectors of Luang Prabang town created regulations and laws to administer such as: regulation and protection of town structures, protection natural resources and ethnic culture, laws regulating town architecture and national heritage. Our government released an agreement of national and local heritage committee, committee of management building and repairing and sharing function to the concern sectors. We have an outreach program for the community to disseminate the regulations of historically valuable areas of the heritage 30 villages. There is a program to broadcast by national and local radio and television. Information is available to assist villagers about how to request a permit for the maintenance and building their houses maintaining continuity. A program has been established to assist in maintaining the adherence to the perimeters established regarding architecture construction.

In recent years, for the implementation of protection of Luang Prabang heritage, we have received the support from international organizations for several projects such as: Project of Luang Prabang allocation, Project of preserved zone allocation, Project of heritage media database, Project of Xiang Thong and Visoun Temples Preservation which were built in 16th century, these supported by US Ambassador Fund for Culture Preservation 655,000 US$. In the near future, we will receive a grant from International Centre for Cultural Studies, India to restore mural at Siphoutthabath temple and many projects have already done.

The management and preservation of Luang Prabang heritage is governed by a provincial strategy that aims to build Luang Prabang as a tourism center for culture, architecture, nature, and service center gateway to other provinces, assisting health and education in the Northern part of Lao. This assists Luang Prabang development and creating consistency. People understand and are aware of government policy, laws, and the regulation of heritage protection perimeters.

It is of great importance to involve citizens in the protection of traditional culture. This is done by the promotion of tourism, which makes Luang Prabang famous and has made it possible for the community to receive golden awards for several years running. Luang Prabang has been noted for tourism in the top ten by wanderlust magazine from Britain. This encourages many tourists to visit every year. In 2017, there are 655,412 Tourists to visit Luang Prabang. Additionally, we also promote the development of tourist sites and services. Tourism is a very important to the economic security of the community and allows for the preservation and restoration of historical monuments and improves the lives of the local residents.

Even though we have been successful in management the heritage, problems still exists which need to be addressed: controlling litter, orderliness, establishing community environmental features: tables and chairs, sell things not in order, not follow the traffic regulations, House extend, repair and build have been done out of regulations, do what they want and not keep Lao traditional house style, which make problems to the official staff and the committee of administration to do their duties. There are some tourists not care about Lao culture. Maybe because of not understand such as: wearing too short cloths in public, which is not so good for the teenagers, it results not good for basic life living for people of Lao.

To solve these problems, we need to work hard on educating about government policy, laws, regulation of heritage protection and other regulations to make people know and clearly
Understand, that they will be strongly involved in and strictly perform including allocation, orderliness and cleanliness to follow the regulations step by step.

Attention to educate people in all levels such as: ethnic minorities, monks, novices, students and teenagers to understand Lao traditional culture the value of heritage that our ancestors made, together protection and continued keep forever. To propagate the regulations for Lao and foreigners’ investors to follow regulation of town structure and relate to preservation and keep the value of natural view around the city, protection of environment and beautiful nature preservation. The aim is that to manage the value of heritage forever, together with tourism to make local strong and build richness and happy for the ethnic minority people, becoming the significant pole for the government policy and reach the goal leading the country out of under developed country in the near future.

On this occasion, I would like to thank the director of Cultural Heritage Protection Cooperation Office, Asia-Pacific Cultural Centre for UNESCO (ACCU Nara) for giving me as a representative of The Department of Information Culture and Tourism and of the Lao people, this opportunity to attend this workshop.

On behalf of the Department of Culture of Luang Prabang and the people of Lao, I extend my Heart felt best wishes in all areas of your lives.

RESTORATION PROJECT
Newly Completed Restoration Projects

U.S. Ambassador Commemorates Completion of Wat Visoun (Wat Wisunalat) Restoration
2015-2017 (Phase I & Phase II)

(KPL) U.S. Ambassador to the Lao PDR Rena Bitter commemorated the completion of the restoration of Wat Visoun in Luang Prabang during a trip to the region. The historic temple was restored with U.S. government funding of US$ 257,000 under the Ambassador’s Fund for Cultural Preservation. Built in the 16th century during the reign of King Wisunarat, Wat Visoun is the oldest temple in Luang Prabang and has been a centre of Buddhist study and worship for more than 500 years. The temple is known for its Stupa of the Great Lotus, or more popularly called “Watermelon Stupa” which is said to have been designed by the king’s wife.

“The United States and the American people recognize and value the contributions of Lao culture to the world,” said Ambassador Bitter. “This programme has served as a symbol of friendship between the United States and the Government and people of the Lao PDR for over a decade. “Since 2001, the U.S. government has dedicated more than US$ 1 million dollars to preserving cultural heritage in the Lao PDR using the Ambassador’s Fund for Cultural Preservation. Funding has supported 19 projects total, ranging from restoration of sacred temples, to preservation of archaeological sites and artefacts, to documentation of cultural traditions and museum conservation. The largest project to date was the restoration of Wat Xieng Thong in Luang Prabang, conducted over three years with more than US$ 650,000 in assistance. “A country’s cultural heritage is both precious and irreplaceable,” said Ambassador Bitter. “We want to honour Laos’ rich cultural heritage, by helping this spectacular temple endure for another 500 years.” In 2017, the fund is supporting the Traditional Arts and Ethnology Centre in Luang Prabang to preserve for posterity the traditional music of Laos’ many ethnic groups.

Current Restoration Project
Restoration of That Pathum Makmo Stupa
Singhalese style That Makmo stupa
That Pathum (Makmo Stupa) is a key feature of the Wat Visoun (Wat Wisunalat) Restoration complex located in the World Heritage site of Luang Prabang, Lao PDR.

The That Pathum, or Stupa of the Great Lotus was built in the early 16th century. The 35-meter-high stupa is in Singhalese style, the only one of its kind in Laos. The stupa is also known as That Makmo, which translates to “watermelon stupa”, because of the dome at the top that resembles a watermelon. The stupa sits on top of a square platform. On each of its four corners is a lotus pedestal.

The That Pathum stupa was largely destroyed during the Black Flag Army invasion of 1887. At that time, it contained a large number of ancient Buddha images. Many were stolen or destroyed by the Chinese invaders. Some of the remaining images are now kept in the Royal Palace Museum, others are housed in the temple’s sim.

When the stupa was hit by lightning and collapsed in 1914, a number of golds, bronze, crystal and wooden Buddha images from the 15th and 16th centuries were discovered, which are now on display in the National Museum. The stupa was rebuilt in 1932. Restoration work is in progress at the time of this document and is estimated to be completed by April, 2019.

Previously Completed Historical Restoration Projects
2011: Restoration of Wat Xieng Thong (Phase I)
Located at the confluence of the Mekong and Nam Khan rivers in the city of Luang Prabang, Wat Xieng Thong is one of the...
most important and best-known temples in Laos. It was built in 1560 and has served as the traditional coronation site for Lao kings, as well as the centre of numerous annual festivals honouring the Buddha and various folk spirits. This project enabled the Luang Prabang Department of World Heritage to restore the roof and renovate the temple’s many traditional murals and other decorative features. Award: $115,450.

2012: Restoration of Wat Xieng Thong (Phase II)
This award supported the continuation of work begun under a previous Ambassadors Fund grant to restore the 16th-century Wat Xieng Thong monastery in the World Heritage city of Luang Prabang. The coronation temple of generations of Lao kings from the mid-16th century until the dissolution of the monarchy in the 1970s, Wat Xieng Thong required immediate conservation attention to reverse the destructive effects of decades of neglect and increased visitation and use. The project involved the conservation of architectural surfaces of the main temple and the preservation of supporting structures within the complex. Award: $205,000.

2013: Restoration of Wat Xieng Thong (Phase III)
In this final phase of the Wat Xieng Thong project, the World Heritage Office in Luang Prabang will restore the remainder of the buildings on the complex, including three ornate chapels, several stupas, monks’ quarters, the drum house, and the funerary carriage house. Built in 1962, the carriage house contains the relics of King Sisavang Vong and the carriage and coffin that carried his remains to a field near Wat That Luang for his cremation. Award: $ 325,000.

2009: Preservation and Conservation of Lao National Museum Collection, Luang Prabang (Phase I)
Housed in the former royal palace, the Luang Prabang National Museum presents Laos’s finest collection of art and cultural artefacts. This project enabled staff to undertake an inventory of the museum’s artefacts, provided training in modern conservation techniques, and facilitated needed building repairs and the installation of a security camera system to help protect this valuable collection. Award: $11,600.
1. Introduction
Conservation of cultural heritage has a very long history; even in Nepal we have history since 3rd century BC with inscriptive evidence; possibly long before that period, however not available those evidences in written form. Tradition of such conservation work has been continuing through either the verbal instruction or the practically involvement with the older generations. When we go through the history of conservation of cultural heritage in Nepal, the first activity we find is the renovation of a stupa in Gostiwa, by Emperor Ashoka during his visit in the Lumbini region, when the stupa was collapsed. The inscription was also put there which says that the stupa was renovated as it was previously in architectural design but doubled in size. It shows the concept of conservation of cultural heritage that was based on the practical needs in the context. There is a long gap of evidences and materials on the development and the situations after 3rd century BC regarding conservation of cultural heritage however; there are enough written evidences since 5th century AD, from when the written history of Nepal is considered as a beginning or ancient time, known as Lichchhivi period. Lichchhivi period is known was fruitful period that the beautiful Nepalese arts, crafts, architecture and many of the tangible and intangible culture were flourished; which was continued and further developed during Malla period until 18th century AD that was also continued in the later period with their efforts.

In this way, creation and the protection of cultural heritage was started since 3rd century BC in Nepalese context which have been continued yet. But the still there is lack of evidence that mention about the conservation of buildings used as a private building or buildings by the ancient or medieval period people. Therefore, this kind of modern concept has developed as we have some unique either architectural or other design, art or some features and representing a certain period or community.

2. Building Architecture of Historical Settlements
Settlements were developed as a big group of people or societies and size of the settlements depended on the size of households or communities. Especially during the development phases of the civilization human beings as per their needs and requirements within the surrounding natural environment, they developed their own shedding, which gradually transformed into some certain and unique designs and shapes from the historical period. When the concept of preservation, conservation and management of those groups of shedding or residences of people developed, some principles were also developed that guides sometimes in a wrong way however, it should be prepared as per the traditional concept as well as to the transformed concept of that specific community that they can reflect their knowledge and skills learnt during the transformation as well as through experiences within the surrounding nature.

Building architecture mostly designed as per the natural environment and geographical situation of the context. In Nepalese context, there are several architectural designs in the historical settlements due to the caste and religious system and different geographical situations with different natural climates however; dominant and significant historical settlements were developed by Newars in different parts of Nepal, especially in the Kathmandu Valley. They developed a unique architectural design of their dwellings with using system of their own and also developed other systematic components of infrastructure within the settlement. Therefore, their architectural design has been known as Newar or Newari architecture in general.

Except this architecture, there are several architectural designs in different parts of Nepal, but Newar settlements are the most ancient and systematically developed as an urban settlement since the time from when we have written and physical evidences and still remained continue as living historical settlements. Due to this developmental reason, most of this architectural design of historical settlements are found in and around Kathmandu Valley. The specific character of these buildings or architecture are:

**Roof:** two-way roofs with certain slope and of *jhingati* (local kind of tile)

**Windows:** windows mostly are carved wooden in unique design naming as *tiki jhya*, *biman jhya*, *pasuka jhya* and many other which actually are typical and types of windows are also innumerable; they are different in the different context of the buildings as well.

**Doors:** doors are also mostly very decorative and carved with artistic socio-cultural symbols including numerous god and goddess on wooden element.

**Floors:** floors are limited into three with their names and functions of each separately; in which the ground floor usually used as cattle sheds and some storing places, which named as *chheli or mutan*; first floor used as living rooms, bed rooms and guest rooms, named *chota* and the third floor for kitchen, dining and worship/prayer rooms, named *buiga or baiga*.
3. Concept of Protection as a Group of Buildings or Monuments

Heritage as defined, all kinds of structures were the creation of ancestors of present human communities, which they created either for their necessity during their life time or for the enjoyment to spent their leisure. Our ancestors never created these heritages to show us (future generation) or for preservation of their creation, skills and socio-cultural prosperity; but they all have been continuing even today as our tradition with some socio-cultural activities. During the development of more advanced civilization, this generation of human society felt to preserve this kind of ancestral identity, then the protection and management of cultural heritage was came out and developed several principles and theories in the world. The result of this is the several national and international conventions, treaties, recommendations, principles, declarations, guidelines, procedures and many more.

In this context, World Heritage Convention 1972 is the major principle theory to preserve cultural heritage by the world community as the states parties should follow this convention. There is most important another tool for this convention and that is the baseline to implement the convention – The Operational Guidelines for Implementation of World Heritage Convention. This defines the cultural as a group or groups of buildings, which also indicate or cover the settlement/s of the general human beings in the historical periods and more.

3.1 The Concept within the National Legislation

Ancient Monument Preservation Act, 1956 is the major legislation for preservation, conservation and management of cultural heritage in Nepal, which has a provision for the preservation of historical buildings, which are of at least more than hundred years with representation of art, architecture or any other themes of certain period of history or used by the historically important personalities or represent historical event/s (GoN/DoA, 2065). Any house owner must get approval to intervene their house either maintenance or renovate this kind of house, from the Government of Nepal/Department of Archaeology as the department is the sole government authority responsible for all kind of tangible cultural heritage in Nepal.

There is also a very important provision in the act, which provides the declaration of the Protected Monument Zone. According to article no. 3 of the act, Government of Nepal can declare any of the area within its territory demarking with certain boundary as a Protected Monument Zone as of its cultural, historical and archaeological or other values. Within the declared boundary, if there is any privately-owned house or houses, the house owner must get approval from the Department of Archaeology to intervene their house either maintenance or renovation and also must get approval from the department to carry out any activities within the boundary of protected monument zone; i.e. develop or extension of pipelines for sewerage or drinking water etc. The provisions of act does not allow to carry out any activities either for the conservation (maintenance), renovation or reconstruction; even to construct building on the empty land without approval from the department/government. It is also provisioned that Department should prepare and implement a proper bylaw for the buildings within the protected monument zone, for which municipalities must send all the drawings on its process before they approve and give permission for house construction or repair to the owner and Department of Archaeology recommends as per its process, procedures and bylaws for the entire protected monument zone.

This is only the process and system to preserve the historical settlements in Nepal, but only within the protected monument zones however, there are several provisions not only within Ancient Protected Monument Zone, but also in several acts and regulations, which protect the historical settlements / buildings in Nepal.

Local Government Regulation Act, 2017 also provisioned for the protection of ancient or historical buildings and settlements. Now, the local government or bodies (Municipalities) can declare any of their territory as a cultural town or cultural village and preserve as well as manage it.

Similarly, they should coordinate and preserve or manage the heritage sites as per the rules and regulations implemented by the federal government. Therefore, world heritage properties, national heritage and the historical settlements as declared should be preserved and managed with close cooperation and coordination among federal government, local government and local communities including related all stakeholders.

This act focuses also on the preservation and management of historical settlements, groups of monuments as well as of the traditional and historical building/s including landscapes and cultural environment.

In this context, concept of the preservation and management of historical settlement was clearly developed through the definition by Ancient Monument Preservation Act, 2013 (1956), only from the 4th amendment, since when Nepal ratified the world heritage convention in 1978 and the concept was derived from the same convention however, these are protected by the concept of Protected Monument Zone, provisioned in the act.

3.2 Concept Through International Legislation

Nepal ratified the Convention Concerning Protection of World Cultural and Natural Heritage, 1972 in 1978. It is a responsibility of Nepal to follow all the provisions of convention and legal tools prepared and implemented under this convention as a state party of it. Two of the cultural heritage of Nepal are on the world heritage list as per the criteria of this convention.

One significant concept from the convention to preserve the cultural and historical heritage derived in Nepalese legislation was the protection or preservation of groups of monuments for which government can declare the group of monuments as a
Panauti is one among them and it was already declared as a protected monument zone due to its unique socio-cultural values and importance; but not nominated into the UNESCO's World Heritage List yet.

4. Conservation and Management: World Heritage Property and Historical Settlements
As a state party of World Heritage Convention, Nepal already has two cultural properties in the list of world heritage in 1979. As per the system and provisions to protect the world heritage properties, Nepal also declared the properties as the protected monument zones, which is the best and high-level protection of the properties in national level. There are several historical buildings and settlements within Kathmandu Valley World Heritage Property consisted seven protected monument zones. The Ancient Monument Preservation Act, 2013 (1956) is the most powerful and major legislation for the protection and management of cultural heritage in Nepal. The Ancient Monument Preservation Rules 2046 (1990); Ancient Monument Conservation and Renovation Procedure 2064 (2007); Bylaws for the Conservation, Renovation and Construction of Private Buildings within the Protected Monument Zone (which are 7 for each separated PMZ); Integrated Management Framework for Kathmandu Valley World Heritage Property, 2007; Integrated Management Manuals for Site Managers of Kathmandu Valley World Heritage Property, 2007 (7 separate manuals for each PMZ) are the major tools for the conservation and management of world heritage properties in Nepal, based on which all the historical settlements within world heritage properties have also been protected and managed by the Government of Nepal in close coordination with local communities; local governments and related other authorities.

5. Case Study: Historical Settlement of Panauti (one of the Protected Monument Zone)
Panauti is one of the most typical medieval urban historic settlement in the Kathmandu Valley, which is located about 32 kilometres southeast of Kathmandu. The main core city was declared as a protected monument zone by the Government of Nepal and also in the UNESCO’s World Heritage Tentative List.

Panauti, the medieval town has still been surviving with its very important medieval features of settlement, which was the separate kingdom before the unification of Nepal in 1763. There are many courtyards, platforms (dabu) and elongated open spaces (nani) within the settlement, which are historically and socio-culturally much valuable and important as they are still used as the open spaces for the residents.

Due to the historical and socio-cultural value of the existing several popular temples, i.e. Indreshwor Mahadev, Bramhayan, Bhrasha Gopal, Dhananjaya Basuki, Kedarnath, Unmatta Bhairav, Badri Nath, Gorakhnath, Maneshwor, Katham Ganesh, Vishweshwor Mahadev, Rana Mukteshwar Mahadev, Ram Mandir, Mahalaxmi, Ashita Matrika, Tola Narayan, Gupteshwor Mahadev, Ajima and Aaju Temple, Chaitya, Patis (rest houses for travellers or pilgrims), Dhunge Dharas (stone spouts) and many other traditional structures. Panauti is surviving with its living tradition and it is also popularly known as a reflection of medieval townscape; where the people have been celebrating almost all of their medieval festivals with their traditional feasts.

Panauti is one of the protected monument zones among ten in Nepal and there are special rules and regulation for carrying out any activities within its boundary either into the public land and structure of privately owned.

As per the article 3(5), it is mandatory to take approval from DoA before carrying out the activities related to telephone or electricity connectivity, digging for drinking water pipelines or sewerage lines, maintenance or construction of roads, construction of parking area, organizing festive, shooting of movies/films or keep hoarding boards or posters within the boundary of PMZs.

Similarly, it is also mandatory that related municipalities or local authorities must send the drawing to DoA for its recommendation before granting permission to the privately-owned house owners; applied for maintenance, construction or reconstruction, in which DoA can recommend with or without any amendment or not allowed to do anything on it.

As per article 3(6), DoA prepared and implemented an especial bylaw for the protection of the zones and conservation, construction and reconstruction of privately-owned houses within this monument zone that must be followed by each house owner.

As per the Local Government Regulation Act, the local governments or authorities especially the related municipalities and rural municipalities are final decision makers for granting permission regarding construction, reconstruction or conservation of houses; but still due to the provision in Ancient Monument Preservation Act, there is a mandatory provision to follow before granting permission in this regard. Therefore, the following process and procedures are in practice for the protection of historical settlements within Panauti Protected Monument Zone:
5.1 Application submission by the House Owner
As per the provision of act, house owner applies for the permission for the maintenance or construction or the reconstruction of their house in Panauti Municipality office at House Permit Section in a municipality recommended format of the application including existing and proposed drawings.

5.2 Cross Checking in Panauti Municipality and Send to DoA for Recommendation
In the House Permit Section, responsible engineers and architects check the drawings and also the location of the house either it is located within the boundary of monument zone or not, then recommend to send to DoA for the further recommendation as per the provisions in the act, if the house is located within the boundary, otherwise it processes within the rules and regulation of municipality.

5.3 Approval for Recommendation within DoA
When DoA receives such applications, as per the calendar schedule, calls on site meeting of the Ancient Monument Preservation Assistance Committee, which is also established as per the provisions of act and Rules. There are separate committees for each PMZs; which consists Archaeological Officers and Engineer/Architect from DoA; related Engineers from Municipality; head of the site office of DoA; representatives from District Administrative Office, Area Police Office, Guthi Corporation and other invitee members. The committee coordinates by DoA nominated officer, who must be working as a site manager of the related site.

As a coordinator of the committee, DoA responsible officer; World Heritage Conservation Section, invites or call a meeting on site, where all of the committee members visit and observe the site and take decision as a recommendation for further recommendation from DoA for approval process. The committee can recommend the submitted drawing with or without any amendment and corrections or special recommendation, as per the bylaws prevailed for the entire site / PMZ.

After having decision from the committee, the coordinator of the committee, archaeological officer in the department proceeds the file for recommendation decision again. It is an internal process of approval, where decision would be taken as per the provisions in bylaws and the socio-cultural context and landscape as per the Ancient Monument Preservation Act as well as recommendations by the committee, Archaeological Officer and Architect. Therefore, DoA also can recommend the drawing with or without any amendment on the submitted drawing, however, most of the house owner's drawings have already had amendment in between committee recommendation and proceed by Archaeological Officer and Architect.

Then, the drawing sends back to Panauti Municipality with recommendation for further or final approval by municipality. When municipality gets back the drawing with recommendation from DoA, through internal process, the house-owner finally receives the final approval or permission from municipality and they can start the construction work.

During the construction work, it is mandatory to supervise on regular basis as per the norm of municipality and DoA coordinate to the municipality for it and also supervise on site if necessary or on request by the municipality; otherwise, municipality keep reporting to DoA until the completion of house construction.

In this way, the historic settlement of Panauti, as a Protected Monument Zone has been preserved jointly by local community (house-owners), local government (municipality) and the Department of Archaeology as per the national legislation.

6. Conclusion
Nepal is very rich in cultural and natural heritage since time memorable; which is still continuously coming down and also it is the responsibility of the present generation to continue it. The concept of preservation of private houses was developed a much later in Nepal, even now, it's not mandatory obligation of any institution except the house owner. There are several historic settlements in Nepal, which are still waiting for preservation for the next generation. As per the major national legal tool – Ancient Monument Preservation Act, only the historic settlements within the declared protected monument zones are preserved as per the rules and regulations implemented for the entire site. Rests of the historic settlements are not being preserved properly however, the local governments are very strong in current context and some of them have already promulgated and implemented the rules and regulations which are also in favour of preserving heritage and historic settlements as well.

In present, however, it's only within the PMZ, local community as an individual must get involve in preservation of the historic settlement as they are the house owners, but there are not any institutional or community-initiated activities to preserve historical settlement in Nepal.

There is one historical settlement of Bandipur, which was actually initiated by local people who almost all abandoned their houses and latterly after a long time, they revived their houses, but none of the house owners are living but reused their houses as the accommodation for tourists and now the village is one of the destination for tourist and almost all of the houses are turned into the hotels, guesthouses, restaurants and shops.

7. Bibliography
7. DoA/GoN, *Brochures on Panauti*. Kathmandu: DoA

Some Photographs in relation to the Article:

- A traditional preserved house: after renovation
- Drawing for traditional building as per Bylaws
- Drawing of over all architecture of traditional building
- Historical settlement of Panauti (Photo: Google search)
Taal town is a third-class municipality in the province of Batangas, Philippines. It is a small town with an area of 29.76 square kilometres. In a 2018 census, Taal has a population of 39,745 people. Taal is one of the few towns in the Philippines with a large concentration of old houses and heritage structures. Through the years, the government has enacted laws for the preservation of the town’s old charm and setting.

The National Historical Commission of the Philippines (then the National Historical Institute) approved Resolution No. 2, s. 1987, declaring a portion of the town of Taal, Batangas a national historical landmark for reasons among which are:

• The 200-year-old Church of Taal is considered the biggest Catholic Church in Asia, and was declared a national historical landmark by virtue of Presidential Decree No. 375 signed in 1974;
• There are two heritage houses which have been donated to the government and are now being administered by the National Historical Institute as museums;
• Taal is the hometown of prominent historical personages who have contributed to the enrichment of Philippine cultural, political, social and historical legacy;
• Taal has retained its colonial ambience composed of old houses and churches still well-preserved after centuries of existence;
• Aside from being historically significant, the town of Taal also reflects architectural importance, depicting local aesthetic values of their builders and owners;
• In the promotion of Filipino culture and history, including tourism, these existing colonial structures need to be safeguarded and preserved;
• Taal, because of its uniqueness in physical, historical, and cultural attributes, is outstanding among typical Philippine towns.

The declaration identified the central part of the town or “población” with its boundary streets, as a protected historical site. The NHI likewise approved a set of Rules and Regulations Implementing Resolution No. 2. Listed in the declaration are the various heritage structures that includes the Taal Basilica, the Escuela Pía (secular school) building, Taal Municipal Building, Taal Park, Taal Central School, and many houses. Also included in the list are the Church of Caysasay located at the lower part of the town, its stone steps, and the nearby Santa Lucia Wells. We identified about 106 structures in the town which were considered an integral part of the history of Taal.

MUSEUM OF MARCELA AND FELIPE AGONCILLO
The National Historical Commission of the Philippines maintains two ancestral houses in Taal as history museums. These are the Museum of Marcela and Felipe Agoncillo and the Museum of Leon and Galicano Apacible. The Museum of Marcela and Felipe Agoncillo is the ancestral house of Marcela Agoncillo, who sewed the first Philippine flag, which was unfurled at the proclamation of Philippine Independence on June 12, 1898. Marcela is married to Felipe Agoncillo, considered the country’s first diplomat.

MUSEUM OF LEON AND GALICANO APACIBLE
The Museum of Leon and Galicano Apacible tells the story of two Filipino nationalists. Brothers Leon and Galicano figured prominently also during the Philippine Revolution and Philippine American War. The original house was built in mid-nineteenth century and was renovated in 1870 and 1940.

UPGRADING OF NHCP MUSEUMS
Before 2016, the Agoncillo and Apacible museums had simple displays, mostly photographs and the historical background of the houses and the heroes they enshrined.

In 2016, the NHCP renovated the two museums and opened them to the public. Both museums now feature new displays...
stories and have more interactive modules to spark the interest of visitors, and especially to the younger generation to make them more interested in history.

In our two museums, we coordinate all our activities with the local groups and the local government unit (LGU), especially the tourism officer. Likewise, the LGU coordinates with the curators for special visits of visitors to our museums. Public programs are conducted in the museums with the local community in mind, be it lectures, seminars, workshops or training modules.

**BASILICA OF TAAL**

Early historians record Taal primarily because of the volcano which sits on a lake within a lake within a lake. It is still an active volcano and its past eruptions have been well documented.

The town of Taal was established in 1575 by a Spanish priest, Fr. Diego de Espinar in the old site called Lumang Taal (Old Taal), which is in another town at present.¹

In 1754, Taal Volcano erupted with violence and destroyed the towns of Taal, Lipa and Tanauan which were all located around Lake Bonbon. In 1755, Taal settled on the hill slope far from the volcano, a safer ground where the people rebuilt their community.²

In 1858, Fr. Marcos Anton started the construction of the church, under the direction of Don Luciano Oliver. As in most churches built by the Spaniards in the nineteenth century, Taal church was situated in the highest portion of the town, overlooking the plaza (central square), the municipal hall, the market, the school, and the houses of the citizens. The church was completed in 1878 and has stood majestically up to the present time.

The museums are open to the public Tuesdays to Sundays without any admission fee.

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However, in April last year, an earthquake struck the province, and Taal Church was one of the heavily damaged heritage structures. The 5.5 magnitude earthquake struck about 9 pm. Stone blocks at the façade fell to the ground, and the church grounds had to be cordoned off from curious bystanders.

The NHCP sent a technical team which recommended the immediate placement of supports and shoring of the walls. The local community submitted a detailed engineering study which they sponsored. The Commission is currently planning out the program of work for the preservation of the church and the long-term maintenance of the structure and its setting.

The local residents have also been vocal about their concern for the church. For example, they protested the project of the then parish priest to construct an adjacent building to the church. The NHCP did not give permission to the construction because the church is a declared structure, and the building encroached on the open space of the church. We deemed that during emergency cases, the open space would be a place for people to gather in safety. Moreover, the Heritage Law allows five meters buffer from a heritage structure. A Taal resident led a case against the priest for this breach, and the case is still pending in court.

ESCUELA PIA
One of Taal’s heritage structures is the escuela pia or religious school. This was a parish school for underprivileged children during the Spanish period. According to old records, an escuela pia existed in Taal in 1839 under the Agustinian friar curates. In 1852, a severe earthquake destroyed the big buildings in Taal, the escuela pia included. The following year, it was reconstructed west of the church patio. While the Church of Taal was being built, masses were held at the escuela pia.

In 1992, the Taal Heritage Commission (under the Taal Arts and Culture Foundation, Inc.) initiated the restoration of the Taal escuela pia, which was coursed to the NHCP. The Commission undertook the restoration project and turned it over to the municipal government. The escuela pia is now the Taal Cultural Centre, which has become a venue for lectures, seminars, workshops, social functions, and other activities of the local government. It is quite popular as a venue for wedding receptions, the structure being very close to the church.

(MFigure 8, 9)

MUNICIPAL HALL
The original municipal hall was built in 1845 and was renovated during the American period. The Jose Rizal Monument in front of the building was erected in 1923. The municipal hall faces a plaza traversed by a road and the majestic church on top of the hill. (Figure 10)

OTHER STRUCTURES
Realizing the tourism potential of the town because of its high concentration of heritage houses, the owners of the other houses endeavoured to restore their own houses. Some looked into the economic benefits of such efforts by turning them into small hotels or bed and breakfast inns. Others are cafes and commercial spaces, while some have retained their original settings and opened them up to the public as lifestyle museums.

The Goco Ancestral House was built by Juan Cabrera Goco and Lorenza Deomampo in 1876. Juan Goco was a landowner known for his modesty and trustworthiness. He served as the treasurer of the revolutionary forces in Batangas. The house was open to the public for bed and breakfast. Because it is a well-preserved house with period furniture, it is often the venue for shooting movies and soap operas. The grandson, Pio Goco, holds walking
tours of Taal, which starts with a buffet lunch at the house and ends at sunset at the Taal Basilica. The tour package is P1,500 per head for seven persons or less, and P1,350 for 8 or more persons. (Figure 11)

Casa Villavicencio was the original house of the couple, Eulalio Villavicencio, a ship captain, and Gliceria Marella, who was referred to as the “godmother of the Revolutionary forces” for supporting the revolution against Spain by financing the distribution of Jose Rizal’s novels and lending their ship to ferry firearms. Because of Gliceria Marella’s significant role in the Revolution, the National Historical Institute installed a marker for her in 1985. The house is open to the public with an admission fee of P100. (Figure 12,13)

The Villavicencio Wedding Gift House adjoins Casa Villavicencio with a connecting bridge. This house was built in 1870 as a gift to Eulalio and Gliceria Villavicencio’s daughter on her wedding. The house is a lifestyle museum as well as a bed-and-breakfast facility. Entrance fee for the museum is P80. (Figure 14,15)

This was the house of Gregorio Agoncillo, brother of Maria Agoncillo, who became the second wife of Gen. Emilio Aguinaldo, the first president of the Philippine Republic. Gregorio was married to Mariquita Villavicencio, the daughter of Gliceria Marella Villavicencio and the recipient of the Villavicencio wedding gift house. The Gregorio Agoncillo House is now a lifestyle museum open to the public. (Figure 16)

The De la Rosa-Ylagan House was originally owned by Julian Ylagan. The house was restored in 1996 and was declared a heritage house by the NHI in 1998. This is not open to the public. (Figure 17)

**TOURISM POTENTIAL**

The Philippines has relatively few towns which have been well-preserved because most were destroyed or burned during World War II. Taal is indeed quite fortunate the many houses in the town have survived and are still in good condition.

One Philippine town which had been listed in UNESCO’s World Heritage List is Vigan in Ilocos Sur. This town in the northern reach of the island of Luzon is approximately 10 hours away from Manila. Because of its UNESCO inscription and the vigorous provincial promotion, tourists gravitate to Vigan, stay overnight and visit other tourist spots in the province.
The local government of Taal has well realized the economic potential of tourism of the municipality and are doing their effort to promote Taal as a destination. Realizing that many tourists prefer a day tour coming from Manila, tour agencies have been packaging Taal as a heritage destination. The bed and breakfast facilities, though, entice visitors to stay a night or two and experience the lifestyle of the well-to-do in a heritage house.

The need of regulate building construction in the town to conform with the colonial atmosphere was initiated. To complement the draft Rules and Regulations Implementing Resolution No. 2 of the NHI, the Sangguniang Bayan (local government) passed Resolution No. 89 s. 2009, “a resolution embodying Municipal Ordinance No. 3, s. 2009, approving and adopting the heritage conservation, preservation, and restoration code of 2009 of the Municipality of Taal, Batangas. The code was drafted by the technical working group of the Taal Active Alliance Legion (TAAL), a group of professionals with roots in Taal or are based in Taal. The group believed that if there is an active community participation and if all the people in Taal worked toward achieving their advocacy for the conservation and restoration of the heritage structures of Taal, they can channel their efforts towards sustainable development. An offshoot or an objective of their efforts is tourism, which can fuel local economy and uplift the lives of the townspeople.

The NHI considered this enactment a significant move of the local government to ensure the preservation and protection of the declared historic centre of Taal. To date, this local ordinance guides all building construction in the town centre of Taal. The portion covered by the code of bounded by Calle Gliceria Marella, Calle Tomas Cabrera, and Calle Dr Hermenegildo del Castillo on the north; Calle Vicente Noble, Calle Marcela Agoncillo, and Calle Justice Ramon Diokno on the west; Calle Jose P. Rizal on the south; and Calle San Martil on the east.

For example, old houses which have been converted into stores abide by the code’s signages and height requirements. (Figure 18,19)

The tourism potential has been attributed to many other factors, not just the extant structures. Of course, the citizens who have contributed their legacy to the nation are endowed with historical markers by the National Historical Commission. Taal, likewise has many products which entice the visitors to buy them. The local craftsmen of Taal are well known for making barong embroidery of native fibres, pina and jusi, and forging balisong (fan knife). (Figure 20,21)

Delicacies include panutsa (peanut brittle), suman (rice cake), and tablea (chocolate balls). Taal butchers make delicious longanisa (pork sausage) and tapa (marinated pork or beef).

Visitors will definitely have something to bring home from their visit to Taal.

**CHALLENGES**

There are many challenges in managing the historic centre of Taal.

1. Overdevelopment

Since the local government initiates projects to entice tourists to come to the town, some projects can be downright tacky for a heritage village. One such project of the Mayor is putting up lights at the plaza right in front of the Church steps. The church vista from this angle is totally marred. Anyone taking photographs at this area will be dismayed by the array of lights obstructing the church view. To top it all, the Mayor installed a standee of himself right beside the lights. (Figure 22,23)
2. Street Infrastructure and Mobility
Most heritage towns encourage walking through the streets. This can be done in Taal; unfortunately, it can only be done by able-bodied persons. Even then, able persons will still have difficulty considering the following:

- The sidewalks are too narrow to accommodate more than two persons at one time.
- There are many vehicles passing through the streets that crossing takes time.
- There are no trees or canopies to shade the pedestrians.
- The pavements are uneven.
- There are many unfinished portions with no warning signs or barriers.
- Although jeepneys and buses are prohibited to pass through the main street, there are too many vehicles, especially tricycles, which contribute to air and noise pollution.
- Too many wires mar the view of the heritage houses.
- Too few access to persons with disabilities.

When the town was declared a national historical landmark in 1987, there was a move to make the main street off-limits to vehicles. The NHI then initiated the request because the fragile exhibit items in our museums were in constant vibration and danger of toppling. At most, the local government banned the buses from plying the main street. But then, the volume of vehicles is just too large that it hampers mobility and is quite destructive to the exhibits in the museums.

Another annoying element in the streetscape is the presence of overhead electrical wires and cables. These are quite distracting and mar the otherwise pleasant view of the heritage structures.

Access by persons with disabilities are very limited. Street levels have changed through the years and entrances to houses have altered making it difficult for disabled persons to get inside. Another factor hampering accessibility to museums is that these are really residences which have been converted into museums, so elevators have not really been factored in their conversion.

3. Diaspora
There are houses in the town which have nobody living in them except perhaps caretakers. Their owners have passed away, and the children moved to Metro Manila or elsewhere, or chose to live abroad. Some houses have been bought by local people but some were bought by people who have no roots at all in Taal, but see the economic potential of the heritage structure as a bed-and-breakfast facility, a coffee shop or convenience store because of the increasing number of tourists through the years. When this happens, the history of the house, or the story of the original owners will somehow get lost and be forgotten in the long run.

4. Products
Local products are plentiful in Taal. The issue here is the displays for the barong cloth. These are made of pina or jusi or banana fibre which are then embroidered for making the barong Tagalog for men or the Filipina dress for women. In the market, there are many stores selling these products. Two decades ago, the local fibres were highlighted. Recently, however, there has been a proliferation of products from China passing off as local fibres. The local government should be aware of this situation and remedy it immediately. The government should encourage local artisans to weave native fabrics with indigenous designs which Taal can be proud of.

5. Stakeholders Meetings
It is important that both the private and the public sectors meet regularly to monitor activities in the community. Regulations and ordinances should be reviewed periodically to look into the best solutions for problems. In the long run, Taal is still a town lived by people with occupations to sustain their lives.

CONCLUSION
Taal has so much potential as a heritage village and a tourist destination. There should, however, be a holistic approach to tourism development, management, and monitoring. This can only come when both the government efforts and those of the community are synchronized and in harmony for the common goal in sustaining their town as a heritage village. A former Secretary of the Department of Tourism said, “It is of utmost importance that every Taaleno participate in the formulation of their cultural tourism policy and implementation of projects with stakeholders in the local, national, and global levels. Such empowerment will ensure the increase of benefits and welfare opportunities for themselves as the host communities.”
Buddhist heritage in Sri Lanka

With the introduction of Buddhism Sri Lanka in 3rd century B.C. Buddhism became the state religion to the end of Sinhalese rule in 19th century B.C. The ancient literature in Ceylon provides ample information to prove that. The ancient chronicle Mahawansa describes how it became the state religion. It mentions that the king Devanapiyatissa requested Mahainda the great theran to establish the city boundaries so as to live the king with Buddha’s command “…I will abide under the Buddha’s command…”. Only a Buddhist had legitimate right to be a king of the country. Therefore, Buddhism was spread in the country and the country became the Buddha’s country.

The Pujawaliya written in 13th century B.C. cited this idea in precise way. “The Island of Lanka belongs to Buddha himself; it is like a treasury filled with three gems. Therefore, residence of wrong believers in this island will never be permanent, just as the residence of the Yakasas of old was not permanent. Even if a non-Buddhist ruled Ceylon by for a while, it is a particular power of Buddha that his line will not be established.” Therefore, as Lanka is suitable only for Buddhist kings, it is certain that their lines, too will be established.” After the arrival of Arahat Mahinda, the second holy incident was the arrival Great nun Sangamitta with the great Bodhi tree and the festival of Bodhi tree became one of the important Buddhist ritual in the country. Great chronicle explained the plantation of the great Bodhi tree in Sri Lanka with the patronage of the king., So that the king should not give up the Buddhism and embrace another religion.

Growth of rituals

As a result of rituals and worship we were inherited to a rich physical heritage which is known as Buddhist heritage. Fa Hien recorded in his reports on Travels of Buddhist Pilgrims about the rituals held in Anuradhapura. He precisely described existence of an organized ceremony held annually to honour the relics. It provides much information about the rituals account shows how the rituals had become as a part of the religion at the end of the fourth century A.D.

There is a great belief among Buddhist that the existence of the relic of Buddha equivalent to the existence of the Buddha himself and worship of the relic and Buddha’s memorials is equivalent to the worship of Buddha. Buddhism was nourished and developed in the country with the patronage of Bhikkhus and the kings as well. In this way religion entered into the everyday life of the people of Ceylon and it resulted the change in economic pattern, social life, life style, culture, rituals, built environment, art etc. It is worthy to mention that the growth of art and architecture in the country was happened simultaneously with the development of Buddhism. Therefore, the beliefs, forms of worship had a gradual growth in Ceylon. With growth of Buddhist rituals and the construction of religious buildings leads Sri Lanka to a country enriched with a huge Buddhist heritage. As a sum of all Sri Lanka has a rich Buddhist heritage.

Buddhist perspectives and practices on conservation and management of heritage in Sri Lanka

Buddhist Heritage in Sri Lanka is continued as a result of continues care of the society who is devoted for it. It resulted the continuity of Buddhist heritage throughout a history of more than 2000 years. Since the time of the birth and the enlightenment of the Lord Buddha in sixth century BC, his teachings and the order (dhamma and sangha) and also the associated heritage have continued to live until the present. Buddha’s teachings, Buddhist literature provides numerous guidelines for the
planning and conservation of Buddhist monastic architecture. The numerous inscriptions dating back to the 3rd century BC, chronicles like Mahavamsa written in 5th century AD and Chulawamsa, are good sources of information to study the inspiration of monastic architecture and its restorations in Sri Lanka. (Figure 2)

Buddhist Philosophy as the base for all, has formed and shaped concept conservation from its beginning. Buddhist literature itself which contain teachings of Buddha provides numerous guidelines for the planning and conservation of Buddhist monastic architecture. Buddha’s teachings on Monasteries is guidelines for the planning and conservation of Buddhist monastic in itself which contain teachings of Buddha provides numerous guidelines for the planning and conservation of Buddhist monastic architecture. Buddha’s teachings on Monasteries is described in Vinaya, the code of disciplines which were made for monks. It provides guidelines on constructing Monastic Buildings. It describes that dilapidated buildings are not suitable for the meditative life of monks and it allows monks to involve in repair works of monasteries. This brings the idea of restoration and its application for monastic buildings.

Apart from the Buddhist literature, there are many other ancient books written on conservation. Manjusri Vastuvidyasasasthra which was written in 5th Century AD has a chapter for conservation. It first identifies causes of deteriorations and the remedies that can be implemented in preservation.

They have introduced cultural supernatural beliefs into that conservation process. That is how the spirit of the place was maintained. It is not the material it is more than the material. Mayamata (6 century AD an Indian literature) contains a chapter on restoration. This specific chapter titled “temple Renovation” in Mayamata about the rules in renovation. It also describes general rule in renovation.

The ancient chronicles contain information about the traditional ways on caring of heritage. Mahavamsa written in 5th century AD, are good sources of information to study the inspiration of monastic architecture and its restorations. The Mahavamsa (Great Chronicle) says about more than 100 incidents of repairing, restoration and renewal of monastic buildings. The first stupa in Sri Lanka (The Thuparama) Built in 3rd century BC, has renovated more than 16 times. It was a foremost duty of a newly crowned king to repair or renew a monastic building. Mahawamsa and Chulawamsa describes the renovation works, plaster work festival of stupa during the king Bhatikabhaya. Chulawamsa describes the ancient practice or renovation of religious buildings.

The numerous inscriptions dating back to the 3rd century BC, 9th century inscription Jetavana Sanskrit inscription. Precisely describes the traditional conservation practice in Sri Lanka. The inscriptions on the stone canoe within the citadel, Anuradhapura is good source of information about the attitude of them towards the renovation works of religious buildings. The restoration of religious buildings was regarded as being so meritorious. Mihintala slab inscription of Mahinda IV is good source of information to observe the way of looks after and take care about the religious buildings and their premises in ancient time. There are two slabs inscriptions which are identified as first part (A) and part B. Contents of these inscriptions provide a good image of a properly constituted Buddhist monastery in eleventh century A.D. This description illustrates how the country grew with Buddhism and how it continues during the reigns of different kings of the history. The continuity of practice became life of the shrine. They renovated white washed restored them as their sacred duty.

Current issues in Conservation and management of Buddhist heritage

Considering the heritage, the issues should be addressed and handled by the professional since the interest are far differs from each user. For this specific study, it aims to discuss the current issues in conservation and management of Buddhist heritage. Heritage values and religious values has to be balanced or should be introduced a reconciliation between these aspects. Because many issues concerning the conservation and management were identified as follows.

1. Practicing of modern conservation principles
2. Overcrowding during seasons
3. Practicing of rituals
4. Vandalism
5. Treasure Hunting
6. Carrying capacity
7. Lack of resources to conserve and manage the huge number of monuments
8. Lack of trained conservators
9. Lack trained senior conservators or professionals to train the younger generations
10. Lack of finance to train the local conservators by foreign experts

As all most all monuments and historic cities in Sri Lanka they became living monuments or historic cities consisted with monuments. The world heritage site Anuradhapura inscribed as the sacred city which is still practicing Buddhist rituals. As such Anuradhapura was chosen as a case study to discuss the current issues in conservation and management and the first three main issues will be discussed. (Figure 3)
Issue one - practicing of modern conservation principles

Many of the Buddhist heritage sites have been inscribed as World Heritages. Sri Lanka has six cultural heritages and two natural heritages:

- Sacred City of Anuradhapura (Inscribed in 1982)
- Ancient City of Sigiriya (Inscribed in 1982)
- Ancient City of Polonnaruwa (Inscribed in 1982)
- Sacred City of Kandy (Inscribed in 1988)
- Old Town of Galle and its Fortifications (Inscribed in 1988)
- Golden Temple of Dambulla (Inscribed in 1991)

The five out of six cultural sites are Buddhist heritage sites. As such these sites are assigned with Buddhist rituals and various Buddhist religious practices since they are living monuments. The sacred city of Anuradhapura is Buddhist heritage site with a great importance among Buddhist all over the country. Anuradhapura was the capital of the Kingdom of Anuradhapura which was declared as a World Heritage Site by the UNESCO. Anuradhapura was a well-planned city which was centred upon a fortified citadel surrounded by four great monasteries named Abhayagiri, Mahavihara, Jetavana and Mirisaweti and gridded by a series of manmade colossal irrigation lakes. Abhayagiri was the largest monastic establishment which was established in 1st century B.C. and monastic university that flourished in Anuradhapura. The monastery is centred upon the great stupa which is known as Abhayagiri stupa the dominant structure of the monastery.

Issues regarding the conservation (Figure 4, 5, 6)

The conservation and management of living monuments are far different from conservation and management of other secular sites. In Sri Lanka the ownership of the Buddhist monuments are always with monks who resides at the site. Head priest of the Temple plays a major role in management. But the conservation is done by the conservation professionals who are formed and shaped with modern conservation principles.

FIGURE 4. Practicing of Buddhist rituals by the monk in the World Heritage site of Anuradhapura

FIGURE 5. The great stupa – a monument restored by the secular people in 1950s

FIGURE 6. The rituals are practiced by the pilgrims
Figure 7 (Jetawana stupa) and Figure 8 (Abhegiri stupa) are the examples that illustrates the contradiction between those two kinds of conservations i.e. Professional and the secular people.

The conservation ethos does not encourage the rituals and worshipping since it remains as a pile of bricks springs out from earth. This has become the major issue in the conservation and management. Head priest and living community never accept the half built unplaster stupa. The issue act in two-fold ways Religious community won’t go for heritage tourism and they have the liturgical need of the stupa as it was discussed to worship it as Buddha. But half built stupa does not make a sense and they reject the professional conservations and tend to go for white washed stupa to practice the rituals.

The management of the temple was done by the head priest basically with the offerings and donations of devotees. When the monument conserved physically regardless of practicing the religion, people reject to worship them as living Buddha and the offerings and donations totally depend on the worship, rituals and practicing of various religious events(pujas). Therefore, the temple faces a big financial issue where the temple authority unable to manage the temple. Therefore, the temple authorities including head priest demand for the completeness rather than the professional conservation which not restore beyond the available evidence.

Issue two – Overcrowding during seasons
Management problems of the heritage site

Sri Lankan people are of a tradition of pilgrimage where they aim to worship the shrines as a paying homage to the Lord Buddha. It was a great tradition from ancient periods. Social response to heritage values. The religious values and archaeological values cater different kind of users. The heritage lovers and pilgrims. In some seasons the number of pilgrims is highly increased and badly affects the site where it uncontrollable and difficult to manage. Figures 9 and 10 will elaborately express the above issue.

Specially the world heritage site of Anuradhapura facing a big problem in management during the full moon day of Month June. It is believed that Arahat Mahinda came to Anuradhapura (Sri Lanka) and introduced Buddhism on a full day of June. It is a great and the most important custom in Sri Lanka to hold a festival known as festival to commemorate this significant event. Devotees from all over the country visited Anuradhapura as pilgrimages to worship sacred places and it results the overcrowding in the sites. (Figure 11,12)

The carrying capacity of sites are not able to cater the pilgrims and tourists. The monuments get damage due to movements of pilgrims and their different activities also it is very difficult event to manage where as difficult to manage visitors and Rituals
during these seasonal events. Carrying capacity of heritage site is not sufficient to cater the devotees and tourists at the physical context of the site.

**Issue three - Practicing of rituals**

Buddhists believe that the worshiping of Buddha is one of the meritorious acts which lead to attain a happy life after death. Veneration of stupas and Bodhi trees were significant events in the Buddhism in Ceylon and veneration of images became later. These worships are the respects shown to memory of Buddha and the relics of his body. Cetiya were built depositing relics of Buddha and Beliefs led to the making of chetiya- worship. It was an important religious activity among both monk and the laity. Beliefs led to worship and the Worship of Buddha developed as rituals. Therefore, the beliefs and forms of worship is the strong intangible heritage behind the tangible heritage of Buddhist. (Figure 13,14)

The world heritage site of Anuradhapura is most venerated site in Sri Lanka and the ritual practicing of the sites is in a highest value. It became a threat for the conserved monuments. Lighting of oil lamps, incants, praying with fragrant or scented smokes and many other offerings on the monuments create vandalism and minor destruction. They never think that it is an offence for the monument. (Figure 15,16) As a respect for the religious value of the monument heritage managers are unable to control rituals which are practiced by the devotees.

**Conclusion**

After identifying those issues, some concluding remarks can be made as a sum of the discussion. Following points are:

1. To review the Conventional Approach in conservation and its applicability to social and cultural conditions of Sri Lankan Buddhist heritage and to identify the reconciliation of those two aspects.
2. To understand the religious value as a living aspect in Buddhist heritage and Focus on people: both past and present and their cultural products and practices, both tangible and intangible and to identify their expectations and the goals of conservation professional.
3. To study the conservation principles with special reference to Venice charter and identify the reviewing of effectiveness of them and need for their adaptations to Living heritage. (As a sum of all expressions resulting from the interaction between people and nature.)
4. To identify the living community, Living aspects of heritage (continuity) and heritage in a living environment
5. To manage the visitors – Proper management system should be introduced while respecting the pilgrims and tourist
6. To control the ritual practicing whereas the monuments get disturb – Proper system and proper space should be introduced in the heritage site to practice the rituals.
7. To train the conservators and heritage managers so as to face the above said issues and other management issues associated with living monuments.

**References**

Vanuatu

Management of Historic Cities and Community Cooperation
“Present Situation and Challenges Regarding Preservation of Historic Cities”

Richard Shing, Director
Vanuatu Cultural Centre

Introduction

The Preamble of the ICOMOS Charter for the Conservation of Historic Towns and Urban Areas (Washington Charter 1987) states in its opening address that “All urban communities, whether they have developed gradually over time or have been created deliberately, are an expression of the diversity of societies throughout history”. As I proceed with my presentation of the historic town of Port Vila, please take into account the above statement to comprehend the importance of the preservation of towns like Port Vila, and many others around our region that face similar challenges in the safeguarding of their historic cities.

The first part of my presentation will be on an example of a historic town in Vanuatu, taking into account the development and changes that occurred over time, and their influences on the people today. The second part will discuss the present situation of the history of our urban centres and what the Vanuatu Cultural Centre has done in the preservation of the history of its urban centre, and the presentation will conclude with some challenges Vanuatu and the Vanuatu Cultural Centre are currently facing in safeguarding historic buildings.

Port Vila – a historic town.

Vanuatu has two main urban centres, Luganville on the island of Santo and Port Vila on Efate (show map). Port Vila, being the capital and the town with the greater degree of transformation, will be the primary example for this presentation. This report will focus on the architecture and people that make up Port Vila, since it is the people that define the architecture and culture of a town or city.

Vanuatu was discovered by the European Ferdinand de Quiros in 1606, but it was not until the late 1800’s that missionaries, traders and plantation owners, of mainly French and English origins, began establishing themselves in the islands. Port Vila was quite attractive to the early European settlers since it had a large natural harbour, with deep water close to land and provided good shelter against southeasterly trade winds, there was an adequate water source and fertile land suitable for developing plantations nearby, and the locals were less hostile than in the north (show old photos of Port villa harbour).

Port Vila grew out of a cluster of French plantations within the Port Vila Harbour area and in 1880, 37 settlers declared their establishment the town of Franceville. At that time, most of the buildings were constructed out of wood with corrugated iron roofs. Horse and cart were the mode of transportation. The names of some of these old plantation owners are still used as area names in Port Vila, such as Colladeau and Olen (show photos of wooden buildings and cart).

In 1906, France and Britain agreed to jointly colonise the New Hebrides (as it was known then) and their base of administration was in Port Vila. This brought small changes to the town. More houses had to be constructed to accommodate the government officials. One such building was the house that eventually became the Joint Court House and Court House after Independence (show pictures of Joint Court House). Initially it was built in 1912 to house the Spanish judge, who was the first President of the Joint Court, but court proceedings also took place in the building. During the Second World War, it served as headquarters for the American forces and after the war, it retained its function as the Joint Court House. After Vanuatu gained Independence in 1980, the building continued its function to house the Supreme Court, but in 1987 it suffered much damage during Cyclone Uma. It was repaired, but in 2007 it was deliberately burnt to the ground. This building used to be an important historical landmark, and though there are plans to rebuild it, is questionable whether they will be rebuilding it to the previous style and specifications or build a new one altogether.

The arrival of Americans in 1941 also saw an increase in infrastructure. The main army base was in Luganville, but headquarters of their operations were in Port Vila. In Port Vila they extended roads, built bridges and the Bauerfield Airport.

Parts of Port Vila still have names used by the Americans, such as Number Two and Number Three, names of different bases they established (show map of road changes over time).

In 1950, there was a severe cyclone, and many houses were damaged. The Colonial administration realised that wooden house was not strong enough, and after this cyclone, most of the houses built were built with cement (1950 cyclone).

Other historical buildings from the colonial period still exist such as the Ex-British Residency Office (now the Ministry of Internal Affairs), the Ex-French Residency Office (now the Prime Minister’s Office), etc. (show pictures of other old houses).

People from many different ethnic backgrounds make up Port Vila’s diverse community today. French Plantation owners started Port Vila and there were English speaking settlers in the area before the Condominium Government was established in 1906. Some 5000 Vietnamese were brought in by 1925 by the French, to labour in the plantations (show pics of Tonkin and monument), and around 200 Chinese and Japanese artisans and
farmers had settled in Port Vila by the 1930’s. There were a sprinkle of other Europeans. Tahitians, Fijians and natives from Wallis and Futuna were brought in by the French after the Second World War to work in the Manganese mine and still maintain small communities around Port Vila. An area in Port Vila is named “Number Two Wallis”, after the migrants that settled there.

Present Situation and Work done regarding the Preservation of Port Vila
There is much rich history about Port Vila, but as it continues to expand and grow, more and more of the colonial infrastructures are being taken down to be replaced by new high-rise buildings. The current friendly relationship Vanuatu shares with China has led to an influx of investment from mainland Asia resulting in the growth of new buildings in town replacing old wooden colonial structures. The need to preserve much of these historical buildings has been negated by the need for economic expansion, and more are more historical buildings are being demolished to make way for new infrastructure built to expand the economy. The arguments behind this are:

1. In most cases is that there are no funds to renovate these historical buildings and most of them have fallen to disrepair.
2. Investors offer of large amounts of cash for properties.
3. Most indigenous Ni-Vanuatu do not associate themselves with historic infrastructure since they reminded them of the treatment indigenous populations coped with under British and French rule.

In 1991, the Vanuatu Cultural and Historical Sites Survey Program under the Vanuatu Cultural Centre, began the systematic recording of cultural sites, of which a few historical sites were recorded around Vanuatu. In 1995, Margaret Rodman, an anthropologist, with the assistance of the Vanuatu Cultural Centre, did a survey of historical buildings around Vanuatu, and compiled a list of 80 historical buildings and sites in Port Vila and compiled as much information that she could gather on these buildings and sites. To date, we only have a list of historical buildings and short descriptions of them.

After this initial survey, the Vanuatu Cultural Centre continued into the early 2000’s in attempts to advise the owners of buildings of historical significance to continue the preservation of their property, but the major obstacle we faced was the lack of finances to maintain these infrastructure. Thus, historical buildings kept getting demolished.

The Vanuatu Cultural Centre realises that there is still much work to be done to appropriately safeguard historical buildings and sites in Vanuatu, since they are a visible reminder of our cultural heritage. The biggest threat to our historical buildings and sites, is commercial development. Port Vila is currently going through a growth spurt population, due to rural urban drift and an increase in overseas investors. More than half of the historical buildings listed have already been demolished to make way for high-rise commercial blocks.

Challenges
The major challenges Vanuatu faces are (i) Lack of Expertise, (ii) Lack of indigenous ownership, and (iii) Lack of Funds.

The Vanuatu Cultural Centre lack the expertise in making proper assessments regarding historical buildings. The Vanuatu National Heritage Register has only 2 staff in charge of all the cultural, historical and archaeological sites in Vanuatu, and their work focuses a lot on cultural and archaeological sites. In addition, there is currently no program aimed at the safeguarding of historical infrastructure.

Both archaeological and traditional sites represent the physical remnants of Indigenous communities, whereas historical buildings and sites mostly represent the physical remnants of our European colonisers, and it is mainly for this reason that there is a lack of indigenous empathy and ownership with regards to historical buildings.

There is lack of funding to conduct assessments, repair and maintain historical buildings. For that reason, many of these historical buildings have been abandoned, left to ruins, and pulled down to make space for larger buildings.

Conclusion
The town of Port Vila is a classic example of an urban community that reflects its diverse historical past, but faced with the challenges of development and modernisation, the architecture that reflects our rich history, are gradually being demolished.

There is an urgency need to prevent our historical building from vanishing. There is a need to invest in the development of a strategy to safeguard Vanuatu’s historical infrastructure and to promote the importance of these infrastructure in the history of the Town.
1. Overview of urban heritage sites in Viet Nam

Charter for the Conservation of Historic Towns and Urban Areas (Washington Charter - 1987) adopted in October 1987 adopted by ICOMOS General Assembly 21 years ago in October 1987 officially originated a part or overall of world-wide recognition of historic urban areas "embody the values of traditional urban cultures". Nowadays, urban heritage sites are often referred to an urban complex which are mentioned more than an entire city. However, regardless of any scales, these particular heritage sites must be highly symbolized for history and culture.

Quoted from architect Hoang Dao Kinh, the prestigious architect in the field of preservation of cultural heritage in Viet Nam: "The urban heritage is a complex of matter - architecture - society, formed in the process of evolution of each city, shaped in terms of architecture - landscape, relating to urban culture, it has historical - cultural - architectural values and material - technical values which should be maintained as supportive points - origin and source of genes in continuously successive development of the city."

1.1. Historical establishment

Several issues of Vietnamese urban history

Viet Nam is a trading gateway located in the middle of two major civilizations, India and China. Since the 14th century, the maritime route to the Indian Ocean was set up and became the main trading route, it began to form "trading cities", oriented towards sea commerce and trade with foreign countries. These cities are usually located at river gates to the seas.

In Viet Nam, the city used to be a combination between political space, protected by the city’s walls (thành), and marketplace (thi) lied on or adjacent to the city, which provided and served for the needs of the city citizens, thus it was always bustling and having many resident houses. The cities had administrative and military characteristics, together with the development of handicraft activities then they also had economic elements. Beginning in the second half of the 17th century, a new trend was emerged. Many people left the village and settled in the cities, got jobs, built families, and did not return to their old village thanks to the Lord Trịnh’s policy of free trading development and loosened control. Gradually, they separated from their villages. In the city, it began to appear the urban bourgeoisie class. The worship started to be different from the past, the villagers began to worship gods or ancestors of their careers related to the history of the city, or concerned to their daily business activities (ancestors of silver curving, cloth weaving, paper printing, etc.). Copies of the old villages step by step became independent, reduced the countryside characteristics and transformed to wards in the city. Normally, the villages gathered together, build communal houses and pagodas which were general religious institutions.

To the French colonial period, the 19th and 20th centuries, it had formed a network of small urban areas, then by the 1930s of the 20th century, a number of towns completely separated from the countryside, and became predecessors of big cities of Viet Nam at present such as Ha Noi, Hai Phong, Nam Dinh, Sai Gon ...

1.2. Characteristics of urban heritage sites

The urban heritage sites have been classic and imperial - urban administration combined with markets outside. This trend has not changed, which has helped the urban structure of the style of mandarin’s edifice being kept intact since the 19th century to create the abundant and unique of the Vietnamese urban network.

Due to its establishment, the ancient urban areas of Viet Nam have been characterized by two social-architecture institutions, they are both village and street. The village is an organic product of the natural ecological area, wet-rice agriculture and especially feudalism. The street is an institution created by farmers, partly or wholly escaping from agriculture and turning to the "economy" of trading, processing and collecting goods. The small and fragmented economy, on the way of completed professionalism, gradually formed a lifestyle, folds, and behaviours which are different from the countryside. So far, after decades of intense urbanization, there has still been the presence of the villages’ image on the streets. The street, perhaps a long transition, from village to city. This is the specialty of Vietnamese urban areas at the same time to prevent from cities’ integration. In the history, the transition from village to street then city has made special marks, the ancient cities of Viet Nam.

1.3. The system of urban heritage sites in Viet Nam

a / Some typical cities and towns have been recognized and assessed at national and international levels

The urban areas are boldly urbanized, formed and developed in association with Vietnamese feudal dynasties. In these areas, the nucleus centres which are usually "old towns" have a long history.

(1) Hue Imperia Citadel - World Cultural Heritage Site

The Complex of Hue Monument is located in Hue city, including districts: Huong Tra, Huong Thuy, Phu Vang, and Phu Loc of Thua Thien Hue Province. This was the citadel of Kings and Lords under Nguyen Dynasty (1802-1945).
(2) Hoi An Ancient Town - World Cultural Heritage
Hoi An Ancient Town is located in the lower reach of Thu Bon River, in Quang Nam Province, 30 km south-east of Da Nang City. Hoi An is one of the ancient towns that has still retained almost intact. This place was once known as Faifoo, where traders from Japan, China, Portugal, Italy knew this name from the 16th to 17th century. At that time, the prosperous commercial port of Hoi An was a major trading centre of the Southeast Asia.

On December 1, 1999, at the 23rd Session of the World Heritage Committee in Marrakesh (Morocco), Hoi An Ancient Town was recognized at the World Heritage List under Criterion (iii): Outstanding material manifestation of the fusion of cultures over time in an international commercial port and Criterion (v): Being an exceptionally well-preserved example of a traditional Asian trading port.

(3) Central Sector of Imperial Citadel of Thang Long - Hanoi - World Cultural Heritage
The central sector of Imperial Citadel of Thang Long - Hanoi, has a core area of 18,395 ha (including Ha Noi Ancient Citadel Complex and No.18 Hoang Dieu Archaeological Site) and a buffer zone is 108 ha. The two core areas of the heritage zone are the unite system in the Thang Long Royal Citadel and they are also the centre of Thang Long Imperial Citadel. The central sector of Thang Long - Hanoi was the most important part of Thang Long Imperial Citadel - the capital of whole Dai Viet nation from the 11th to the 18th century.

On July 31st, 2010, at the 34th Session of the World Heritage Committee in Brazil, the Central Sector of Imperial Citadel of Thang Long - Hanoi was rank into the World Heritage Site under Criterion (ii): Bearing witness to the meeting of influences coming mainly from China in the north and the Kingdom of Champa in the south, Criterion (iii): Bearing witness to the long cultural tradition of the Viet populations established in the Red River Delta, it was a continuous seat of power from the 7th century through to the present day and Criterion (vi): being directly associated with numerous and important cultural and historical events.

(4) Pho Hien / Hien Street - Historical and special national art architecture relic site
Pho Hien relic site is a complex of urban relic and large trading port, which was flourished from 16th to 18th centuries in the ancient Pho Hien (Hung Yen city). From 17th to 18th century, Pho Hien was a famous port in the Dang Ngoai (Outer Area in the North of Viet Nam), equivalent to Hoi An in the Dang Trong (Inner Area in the Centre of Viet Nam) under Nguyen Dynasty. This site had power of public authority organizations, on behalf of the Royal Court taking responsibility as an outpost, port, stronghold to guard and protect the citadel. There were also many wards and chambers of commerce and production with a great number of traditional handicraft careers. The major economic activity of Pho Hien in the second half of 17th century was trading with many foreign countries, mainly with the Japanese, implemented by Dutch and Chinese merchants.

Besides, this site also welcomed boat trips to Pho Hien from provinces of South China, Siam, Indonesia and India, then transferring products from here to the distant European countries.

(5) Hanoi Old Quarter
Hanoi Old Quarter is the usual name of a long-standing metropolitan area of Ha Noi located outside Thang Long Imperial Citadel. This urban area focuses on small-scale industrial and commercial activities, which forms streets of special careers of the city and the capital, and has unique traditional characteristics of capital’s inhalants. This busy living residential population and trading area has been set up since the Ly dynasty (11th – 13th centuries), situated from the East of Thang Long Citadel to the Red River. Craftsmen from villages around ancient Thang Long gathered here, concentrated on each area of their professional villages. The merchant ships could be in the middle of the old quarter for buying and selling, making the streets more and more flourish. And products themselves which were selling on the streets created their street names, with the word "hang" (goods) in front, each street specializing in trading that kind of product.

(6) Dong Van ancient town
Dong Van ancient town is placed in the centre of Dong Van district, the northernmost land of Viet Nam. In 1887, French colonialists occupied Ha Giang province, with its key location, Dong Van was chosen to build headquarters and booths to authorize this land. The construction of these headquarters and booths was completed in 1925. In Dong Van ancient town, there is an interference between traditional culture of indigenous people and the culture of the Hoa Nam inhabitants (South China) including Yumun, Guanxi and Guangdong, each family in this ancient town has a cross-cultural interaction.

b/ Alternate urban heritage sites
According to the process of historical development, extensive cities under the French colonial period such as Ha Noi, Sai Gon - Gia Dinh, Hai Phong, Nam Dinh have structured quite complete system of architectural constructions, built on great framework and artistic qualities, applied Western urban design theory, and created urban heritage areas interspersed with modern cities. These alternate urban heritage sites are often referred to as "old towns" dating back to the near-modern era (18th – 20th centuries) and are largely planned and constructed by the French.
Considering the relationship between the community and urban heritage, the content of this article will focus on the **old towns** where the residents in the community are the main subject and they have a strong influence on the complexion of the urban sites.

2. **Communities and old town heritage sites**
   In Vietnamese history, community engagement is strongly expressed in the “unit” in villages. There, sharing and mutual understanding among villagers is raised, developed, maintained and become the basic principle for building a self-governing village with higher internal power than the central government “custom rules the law”. Historically, connective community has played an extremely important role in combating natural disasters, wars and building synergy. This feature has been maintained strongly in the old towns.

The subject of the old town is its community. The culture of the community manifests a multifaceted way in the life of residents of the old town: production, business, religion, belief,..., which is the decisive factor of internal structure’s formation and the outside presence of the old town as well.

It is possible to see that the handicraft production and business space intertwined under the same roof with living space, that is suitable with the inhabitants’ custom: accommodation + production + small business. The houses close to each other have narrow facades facing the street, the entire structure of the houses are square to the streets and up to several dozen meters depth to create a special form of housing commonly known as “tube house” due to the contrast between the depth and the façade’s area of houses. The type of this house is usually divided into two different functional components: the outside is a store including the place of production, storage and selling products; the inside is a dwelling house which consists of rooms, a subdivision and a courtyard. The pipe house is a product of spontaneous urban construction and it has only happened once in the history of urban development in Viet Nam, a product of the intelligence and ingenuity of the masons who changed the way of construction from traditional village to urban model of Viet Nam.

The structure of the house with many blocks of space and many houses next to each other make the neighbourhood that expresses close linking community among generations in a family and among many homes together. The fairly unity of house and street structures also reflects a part of the sustainability of the community. However, the diversity in the unity is also a characteristic of the old town within the general architecture of the houses’ formula, each house has its own characteristic which is very different from each other, then creating a lively picture in the whole.

3. **Challenges of urban heritage sites must be facing**

   a/ **Challenges to urban heritage areas in general**
   In fact, at present, there are still many challenges, especially the conflict between development needs and requirements of preserving the old town space. Major challenges to urban heritage conservation include:

   - Practical traditional culture, urban cultural heritage spaces and opportunity to connect the traditional community connection with the heritage sites are dully sinking in oblivion, even competed with new cultures;
   - Strong demand for urban development has split up much of the urban space (village) before;
   - The access of villages to urban areas is almost unplanned with no connection to the infrastructure of the city, so there is a lot of pressure on the living activities of the local community as well as cultural movement space linked with the community before;
   - The cultural works which are currently being exploited focus on specialized functions more than create community engagement spaces (for example theatres, cinemas and museums without spaces for community);
   - The community space is not paid much attention in development, even encroached and occupied. Hanoi Old Quarter is the place that is most recorded the encroachment of residents on the heritage space and public ones.
   - The renovation and amendments of heritage sites are taken place at a rapid pace, because the business objectives, commercial activities, and needs of modern life caused by the redecoration, rehabilitation and use of houses – heritage sites have many infringements on principles of conservation, historical and original violations.

   b/ **Challenges from the community**
   - The gradual replacement of traditional economic relations relied on traditional trades, turned into new financial state interconnection (after State Renovation) based on market economy products, has gradually disrupted former communities;
   - Emigration, immigration and relocation flows regularly in the city, among urban sites and from city neighbourhoods and adjacent areas has created a disturbance in the population and the residents’ essence of urban sites. Newcomers (immigrants) are more likely to be interested in livelihood opportunities and self-development more than their close linking awareness in the area. They also have difficulty in exposing and forming long-term relationships with indigenous peoples;
   - Emigration and immigration flow also bring new elements of foreign cultures. Besides the connective traditional community, new forms of community attachment has appeared (community of tourists, community of new businessmen class...).
International Workshop
of the UNESCO of
According to Ms. Katherine Muller-Marin, Chief Representative
important factors in ensuring the sustainability of the heritage.
methods, the community is considered as one of extremely
well as giving and developing new policies, within these
for the implementation of the World Heritage Convention as
community to the heritage through many actions and guidelines
During past years, UNESCO has promoted the role of the
Community and urban heritage issues in the legal document
¿
11 specified that important areas should be concentrated all
resources on preserving and upholding the cultural values
including urban heritage areas, and stipulated the list of typical
ancient towns, ancient villages, trade villages, old villas and the
other constructions that were built before 1954.
Implementing the provisions of Law on the Capital, on October
24th, 2013, Ha Noi People's Committee promulgated the
Regulation on management of planning - architecture of Hanoi
Ancient Quarter and on August 13th, 2015, Ha Noi People's
Committee publicized the Regulation on management of
planning and architecture of Hanoi Old Quarter. Thus, in Ha Noi
capital, the area of city heritages "Ancient Quarter", "Old
Quarter” has been protected by law.
At present, Viet Nam National Assembly is considering and
soliciting comments on Law on Architecture. In the draft of Law
on Architecture, it has mentioned the concept of "old town". This
draft also provides regulations on management of old towns and
the role of the community as well.
To the world's cultural and natural heritages in Viet Nam, Decree
No. 109/2017/ ND-CP has just been promulgated which also
defined on highlighting the role and responsibility of the
community expressed in World Heritage Overall Planning,
Master Plan of World Heritage Management, Regulation on
World Heritage Protection, and Organizations in Responsibility
of World Heritage Management and Operation (Articles 6, 7, 8,
9 and 10).

4. Directions and solutions
4.1. Perception
a / To the authorities
Community and urban heritage issues in the legal document
system in Viet Nam.

During past years, UNESCO has promoted the role of the
community to the heritage through many actions and guidelines
for the implementation of the World Heritage Convention as
well as giving and developing new policies, within these
methods, the community is considered as one of extremely
important factors in ensuring the sustainability of the heritage.
According to Ms. Katherine Muller-Marin, Chief Representative
of the UNESCO office in Ha Noi, "Sustainable development can
only be achieved when there is a balance of interests among
stakeholders, in particular the local community must get benefits
from economical and cultural aspects of the heritage." The
participation of people in the management, protection, promotion
and exploitation of the heritage is not only a route, a direction,
but it has also been institutionalized in state management
documents. Since the Law on Cultural Heritage was promulgated
(2001), the role of the community has been mentioned from
central to the local documents.

The Constitution of the Socialist Republic of Viet Nam in 2013,
for the first time, assigned cultural rights for Vietnamese people,
including the right to approach and access to cultural values in
Article 41: "Everyone has the right to enjoy and access cultural
values, participate in cultural life, and make use of cultural
bases." In addition, the Law on Cultural Heritage in 2001
(amended and supplemented in 2009) regulated activities to
protect and promote cultural heritage values; defined the rights
and obligations of organizations and individuals for cultural
heritages.

On November 21, 2012, at the 4th session of the 13th National
Assembly, Law on the Capital was adopted. In particular, Article
b / The role of the community in the preservation of urban
heritage sites
Community - social resources and investment to protect urban
architectural heritage. Nowadays, national resources for heritage
preservation are quite limited, and the major source contributing
to heritage preservation starts from the local community. The
community not only preserves the heritage recognized by the
State (through heritage certificates and regulations defined in
Law), but also protect heritages which have neither been
recognized yet nor admitted by the authorities. Resource
mobilization from the community is the future’s trend of
preserving the heritages because of following reasons: Local
community is persons who are close with the heritage, they
themselves are users and the beneficiaries (material or spiritual
benefits), the community and the heritage have relationship that
have been affirmed and shaped in the past, it is related to social
relationships, economic relations, traditional production, and
self-awareness in the society is still influenced by village
correspondences. Especially, spiritual heritages have a certain
influence on the community, traditions and social prejudices.

4.2. Solutions should be addressed in preserving urban
heritage sites and community in Viet Nam
a / Raising people’s awareness
Community awareness education aims to change the awareness
of the inhabitants about the role and the value of the cultural
heritages, thereby together preserving the heritage.

Prof. Dr Dang Van Bai, Vice President of Viet Nam Cultural Heritage Association proposed: "In the management of cultural heritage, we should strive to favour conditions for the community to recognize true value of cultural heritage, access and enjoy spiritual and material benefits through the preservation of cultural heritage." According to Mr. Hiroyuki Toyoki, Technical Director, Cultural Heritage Board, Agency for Cultural Affairs of Japan: "Before inhabitants participate in activities for preserving and promoting the heritage of ancient villages and old towns to do tourism business, the first thing to do is to let the people there know the value of the ancient village, the relic in which they are living. This is a prerequisite for achieving the conservation goal." Understanding the value of the heritage, making the community attach more to the heritage, considering inhabitants themselves being the owners of heritage and having more responsible for the heritage are favourable conditions to protect the heritages.

b / Preserving community culture

In order to preserve the urban heritage sites, core elements of the heritage must first be preserved.

Recognition of the old town value is not only tangible cultural heritages (architectural works), but also intangible cultural values – they are villages and streets of handicraft careers, religion – festival activities, cuisine, lifestyle ... Since then, we could keep and promote the value of community culture activities which create the identity of the neighbourhood. The "intangible" value of the heritage is transformed into the "sustainable economic" benefit of the community. It is necessary to prove cultural characteristics in communes and wards, promoting the economic service sector - tourism developed equitably.

c / Preserving cohesion in the community

Beneficial issue and common interest decide enduring in the community. The role of individual is increasingly confirmed and quite independent on the community. Therefore, the sustainability of the community is mainly dependent on the ability to establish a balance among individuals, social groups and social interests of the community. When this balance is set up, it will maintain high consensus in the community.

d / Responding to nature

Nature is the living habitat of human being. All people’s behaviours towards nature will determine the existence and all cultural values that humans create in this environment. Thus, the first step in preserving the heritage is to raise awareness of the community in dealing with natural environment.

There is no rational management model without being based on experience and local knowledge, by the community itself, in the process of living and interacting with the natural environment, they feel the fullness of what nature offering. It is necessary to pay attention to study different types of culture that people have accumulated in the process of interacting with nature, so that they can be multiplied and transmitted to the descendants in protecting natural resources, at the same time, they can be exploited to become unique tourism products.
Practical training on conservation science: cleaning metal objects

Cultural Heritage Protection in the Asia Pacific Region
- Conservation Science for Museum Objects
- Investigation, Preservation and Management of Archaeological Sites
- Documentation of Cultural Properties
- Community-centred Approaches to the Preservation of Historic Towns and Villages