

Global Center of Excellence for Education, Research and Development of Strategy on Disaster Mitigation of Cultural Heritage and Historic Cities

# **Newsletter No.14**

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### The Overall Fieldwork of Buddhist and Shrine Buildings Constructed before the Middle of 20th Century in Kyoto

#### Takumi Nakamura, Minsuk Kim and Kanefusa Masuda

Among various Cultural Heritage sites in Kyoto, which are great reminders of the long history there, Buddhist and shrine buildings are especially essential for cultural inheritance. Since the buildings which were constructed by highest-quality of the architectural technique, material, art and craft at that time present us an extended history throughout from 13th to 20th.

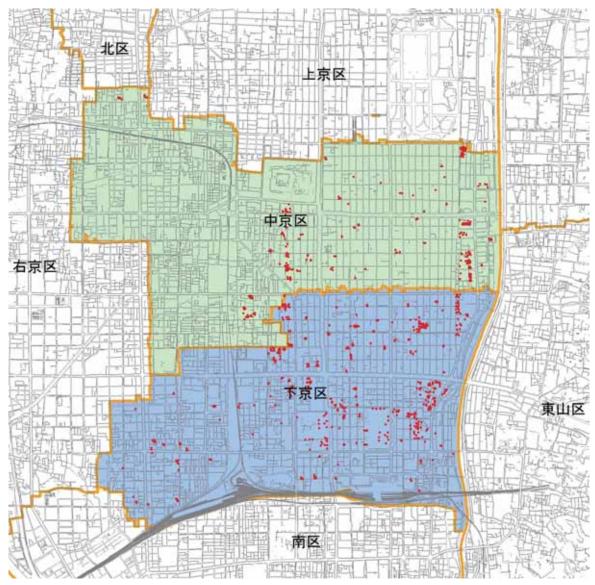
Do you know which buildings should be protected or what amount of building is to be protected in Kyoto? In order to lead correct answer to these questioners concerning the value and vulnerability of Cultural Heritage sites, the implementation of Buddhist and shrine buildings database, including distribution map, architectural information and photographs, is required. Furthermore it is effective step toward to determine the disaster mitigation plan for Cultural Heritage sites in Kyoto by taking their historic value into consideration.

Distribution map in the next page is GIS (Geographic Information System) database which accumulate information gathered by the overall fieldwork of historic building of temples and shrines. The activities of "overall fieldwork" includes to visit all Buddhist temples and Shinto shrines located in Shimogyo-ku and Nakagyo-ku ("-ku" means ward), observe in the precincts to discover historic buildings constructed before 1945 and make a record of each historic buildings with architectural information and photographs. The result of the overall fieldwork reveals the existence of 798 historic buildings in 269 facilities (temples and shrines). In Shimogyo-ku, eighty-five percent of all 219 facilities have the historic buildings in the precincts. These result confirmed the Kyoto has rich collection of historic and cultural architectures apart from the sites which are designated as cultural property.

The scope of this research activity is not only to implement the database but also to focus the development of urban landscape to enhance the value of historic city, Kyoto and the strategy of the disaster mitigation utilizing the location data of these temples and shrines. The distribution map shows some distribution characteristic features. One of them is an appearance of belt-shaped distribution density zone of Buddhist and shrine buildings which start from Nishi Honganji temple and Higashi Honganji temple and form rough circle around the center of Kyoto city. These Buddhist and shrine buildings located in the density area like this zone, still retain the cultural value for historic resource of urban context even if the individual building has not the remarkable value for cultural property.

The value of historic city, Kyoto and historic buildings which compose it should be determined by various survey and research, not by single point perspective, in order to protect and sustain their characteristics. This research is one of these to be effective to bring diverse value evaluation.

Besides the current scope of this research which targeted to existing buildings in Kyoto to survey, the future aim of the research activity is to develop a general evaluation method, which comprises fieldwork, database implementation and value evaluation, to be applicable for various fields.



Distribution Map of existing Buddhist and shrine buildings constructed before the middle of 20th century in Nakagyo-ku (green shaded area) and Shimogyo-ku (blue shaded area) , Kyoto. ( based on the research result of the fieldwork during year 2008 and 2009)



**Architectural Sculpture** 



Historic landscape of the precincts



Colored bracket complex

## **UNESCO Chair Program on the International Training Course** on Disaster Risk Management of Cultural Heritage 2009 and The Activities of the International Cooperation committee in Ritsumeikan University's Global COE Program

UNESCO Chair Program on International Training Course on Disaster Risk Management of Cultural Heritage (ITC) is organized continually by Ritsumeikan University as a follow-up to the recommendations adopted at the Special Thematic Session on 'Risk Management for Cultural Heritage-UNESCO/ICCROM/ Agency for Cultural Affairs of Japan' held at UN-WCDR (United Nations World Conference on Disaster Reduction) in January 2005 in Kobe, Japan.

In this year, which was the fourth year for training course, it was held in Kyoto, Japan, and Kathmandu, Nepal, from 30 August to 12 September 2009. It was attended by four teams of two participants each, from China, Nepal, Jamaica and Moldova.

The Kyoto International Expert Meeting on 'Sustainable Protection of World Cultural Heritage in Earthquake Zones' was held on the first day of the training course (30 August 2009). Experts from UNESCO, ICCROM and ICOMOS were invited to participate in this meeting, and they discussed the needs for a disaster risk management plan for World Cultural Heritage Sites.

#### Kyoto part of the training course

- · Site visits to fire prevention faculties at the Kiyomizu-dera temple, Sannei-zaka important district for the historic buildings and their surrounding area, and at the Ninna-ji temple
- · Lectures on the meaning of cultural heritage, the importance of disaster risk management, seismic performance evaluation for traditional wooden structure in Japan, experience of the great Hanshin-Awaji earthquake, etc.
- · Workshops on building risk management scenario, disaster risk analysis, and prioritization for recovery

These showed the participants risk management measures taken in Japan and various advanced methods for the disaster risk management of wooden cultural heritage.



Participants of Kyoto International Expert Meeting



ITC 2009 (Kyoto Part)

#### [Kathmandu part of the training course]

- · Site visits to historic city of Patan and World Heritage Sites in Kathmandu Valley
- · Lectures on structural analysis, seismic risk mitigation and integrated management plan with disaster risk management for Cultural Heritage sites in Kathmandu Valley, urban planning and management framework in Kathmandu Valley.
- · Workshops on structural vulnerability assessment of traditional buildings and risk assessment for heritage sites, emergency simulation exercise at Patan Museum etc.

On the basis of these practical methods, the participants of the training course developed outlines of disaster risk management plans for case study sites from their home countries.

On the final day (12 September 2009), a Kathmandu forum titled 'Bridging Conservation and Development for Sustainable Disaster Risk Management of Cultural Heritage' was held in cooperation with several organizations such as UNESCO Kathmandu office, embassy of Japan in Nepal, and Tribhuvan University. At this forum, the 'Kyoto-Kathmandu Recommendation on Sustainable Protection of World Cultural Heritage in Earthquake Zones' was adopted.

The entire training course was organized with the support of qualified Japanese and international resource persons as well as lecturers from UNESCO WHC, ICCROM, ICOMOS, Agency for Cultural Affairs of Japan, Kyoto Prefecture, Kyoto City, Hyogo Prefecture, Cultural Heritage Administration of Korea, Tribhuvan University, Patan City, Patan Museum and among others. The participants were selected in consultation with ICCROM and we also tried to cooperate with international institutes. Ritsumeikan University provided various professional capacities buildings for this course.

The activities of the International Cooperation Committee in Ritsumeikan University's Global COE Program centered around were organized by the UNESCO Chair Program on the International Training Course on Disaster Risk Management for Cultural Heritage include organizing the experts meetings on related theme conference participation and presentations which were organized by UN organization such as UNESCO and ICCROM. These activities aim to contribute to research on cultural heritage and the practical development of disaster risk management plan of cultural heritage on a global scale.



ITC 2009 (Kathmandu Part)



Kathmandu forum 'Bridging Conservation and Development for Sustainable Disaster Risk Management of Cultural Heritage'

### A Report of the Practical Exercise in 2009 for Educational Program on Disaster Mitigation of Cultural Heritage and **Historic Cities**

Global COE has set up a educational program for disaster mitigation of cultural heritage and historic cities, and this program has been implemented since 2009. This program put a "completion certification system", and all students (not for only students at Ritsumeikan University) can be certificated by several requirements. There are some requirements such as taking prescribed credits of classes, taking the practical exercise over 30 hours, etc.

This is a report of a practical exercise of survey research on historical district, from August 1 to August 2 in 2009 that was conducted as a part of the educational program. Participants of the exercise visited Sasayama in Hyogo Prefecture. They inspected Sasayama castle town in Sasayama city which was designated for Preservation Districts for Groups of Historic Buildings. And also in Sasayama city, they did field survey which was focused on the following two districts. One is Fukuzumi district, a post town near the ancient road. The other is Okumo district, the farming village. Participants could learn research methods of the field work for preparation disaster prevention plan to historical districts, and also a basic technique of the management method for a workshop with citizen participation.

The field work consists of following lists;

- 1. Inspecting a present condition of a shelter's circumstances
- 2. An assumption of the accommodated number of refugees on a shelter
- 3. Inspecting an evacuation route
- 4. Confirmation vulnerable areas; slopes that are danger for landslides, mountain collapse and assumable flooding area
- 5. Confirmation water resources for disaster mitigation; watercourses and fireproofing water storages
- 6. Hearing survey to residence about their own experiences of disaster histories

In the field work, participants made a survey about disaster vulnerability regarding six points above. They inspected regional risks and considered detail for the disaster mitigation measures by using the DIG (Disaster Imagination Game) method, which is a style of workshop for discussion with citizen participation by using regional map.



Field Survey in Sasayama



Workshop using DIG

### Report of the JICA Program

We coordinated one of the International Professional Training Programs which Japan International Cooperation Agency (JICA) Osaka provides every year. The theme of our training course is "Conservation and Risk Management of Historic Towns for Cultural Tourism". Prof. Yamasaki took place of coordinator.

The course started on Aug. 10 and ended on Sept. 4. 2009. The participants were 9 persons from 7 counties. They were from Cambodia (two participants both from Ministry of Tourism), Viet Nam (from a local center for management of monuments and landscape), Egypt (from Council of Archaeology), Turkey (two participants, from University, Faculty of Architecture Restoration), Yemen (Manager of Tourism Public Relations), Macedonia (from Ministry of Culture) and Ethiopia (from Bureau of Works and Urban Development). To make cooperation between conservation of cultural properties section, tourism section



Participants observing fire extinguish facilities at Takayama

and urban planning section in each participant's country is the basic purpose of this training course. For next year we plan to invite persons of different professions from the participants of this

As for the theme of Risk Management, Prof. Okubo made lectures for Disaster Mitigation of Historic Towns, and participants observed and learned the systems and facilities for protection of Preservation Districts of Historic Towns against fire in Takayama City and Shirakawago Village on the excursion travel. Most of the participants showed deep interests in the theme of risk management for historic towns and cultural proprieties.

### Report on 2nd UNESCO World Heritage workshop on "Disaster Risk Reduction to Cultural heritage"

The workshop was organized by UNESCO World Heritage Centre, at a World Heritage city, Acre, Israel, from 14th to 19th November, 2009. Prof. Masuda and Prof. Rohit Jigyasu were invited to participate it as the only one representative from Japan, because Ritsumeikan G-COE has been contributing the issue through the UNESCO Chair International Training Program on Cultural heritage Risk Management.



Venue of UNESCO World Heritage workshop

The meeting was the 2nd one, as the 1st was held in Olympia, Greece, in November 2008. Some 30 experts gathered from all the world including developing countries in Asia and Middle South America region, and Prof. Masuda made his presentation there on the importance of risk management plan for World Cultural Heritage especially located in earthquake zones. The most interesting discussion was that all new nominations of World Heritage should prepare hereafter the disaster risk management plan. The outcome of the meeting is to be edited by the Centre and be conveyed to the World Heritage Committee in 2010.

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