

ICOA1673: CONNECTING DEVELOPING COUNTRIES AND INTERNATIONAL EXPERTS FOR MORE RESILIENT CULTURAL HERITAGE IN DEVELOPMENT PROJECTS: LESSONS FROM A WORLD BANK TECHNICAL DEEP DIVE

Subtheme 01: Integrating Heritage and Sustainable Urban Development by engaging diverse Communities for Heritage Management

Session 2: Management, Documentation

Location: Stein Auditorium, India Habitat Centre

Time: December 13, 2017, 14:00 – 14:15

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Abstract: The management and safeguarding of cultural heritage requires coordinated efforts from multiple levels of government and private stakeholders, particularly as prioritized sites and assets are at risk from natural hazards, including the growing threats posed by climate change. Key practices and concepts from disaster risk management (DRM) have proven useful in addressing these challenges, and Japan has emerged as a world leader in applying DRM to cultural heritage and tourism (CHT).

An initiative by the World Bank's Disaster Risk Management Hub in Tokyo, in collaboration with the Tokyo Development Learning Centre (TDLC) and the Government of Japan, brought together key stakeholders, both from World Bank client countries and from the international community to Japan, to develop a technical deep dive (TDD) on Resilient Cultural Heritage. During the one-week program, multidisciplinary teams from nine countries and several organizations shared experiences and learnt from experts about how to protect their cultural heritage in the face of disasters and create resilience in their sites. As a result, each team diagnosed key challenges in their country and developed an action plan to engage lessons and expertise identified during the TDD to their current investment projects supported by the World Bank.

Japan's extensive experience in this field offers unique opportunities for learning, not only for developing countries but also for international organizations. Developed in collaboration with UNESCO, the Institute of Disaster Mitigation for Urban Cultural Heritage at Ritsumeikan University, and other partners, this initiative captured Japanese and global experience and expertise around six main themes: i) Fundamentals of Disaster Risk Management for Cultural Heritage; ii) Management of cultural sites: from Preparedness to Post-Disaster Reconstruction and Recovery; iii) Earthquakes and secondary hazards over traditional buildings; iv) Storms and secondary hazards: Climate Change adaptation; v) Community involvement to preserve cultural heritage; vi) Tourism and Culture: promotion and protection of heritage.

This paper presents the experiences and lessons learned from this TDD delivered in Tokyo and Kyoto in April 2017. In addition to the technical learning, this initiative promoted knowledge exchange and interdisciplinary collaboration, aiming to strengthen the international network of practitioners in Disaster Risk Management of Cultural Heritage.

Key words: *stakeholders, participation, sustainability, development*

Introduction – Why Japan?

Japan's long and rich history has left it an extensive and important cultural heritage, which includes its famed temples, shrines, castles, and many other notable monuments, as well as intangible heritage. At the same time, it is a very hazard-prone country, threatened by earthquakes, tsunamis, typhoons, floods, and fire. These conditions have motivated actors across Japanese society to develop an extensive experience in Disaster Risk Management (DRM) for Cultural Heritage. Devastating events, such as the Great East Japan Earthquake and Tsunami in 2011, have been the seeds for a tradition of continuous improvement, which has proven an insightful model for other countries.

Inspired by the mentioned event, the Japanese Ministry of Finance and the World Bank established the “Japan-World Bank Program for Mainstreaming Disaster Risk Management in Developing Countries” in 2014. It supports technical assistance, pilot projects, thematic initiatives, knowledge mobilization, and capacity building along the four pillars of the DRM framework described in the Sendai Report¹. The Program is administrated by GFDRR² through the DRM Hub in Tokyo, which taking advantage of the mentioned Japanese expertise is developing one of their Technical Assistance Projects in Resilient Cultural Heritage and Tourism.

As part of this project, in April 2017 the DRM Hub, Tokyo, in collaboration with TDLC³ and other partners such as UNESCO and the Institute of Disaster Mitigation for Urban Cultural Heritage at Ritsumeikan University (R-DMUCH), developed a Technical Deep Dive (TDD) on this topic. During the one-week learning program, multi-disciplinary teams from nine countries and several organizations shared experiences and learnt from experts, practical Japanese examples, and site visits in Kyoto, about how to protect their cultural heritage in the face of disasters, and create resilience in their sites.

The Resilient Cultural Heritage and Tourism project includes other ongoing initiatives, such as development of knowledge products and operational support to World Bank projects, aiming to serve teams currently working on the topic and at the same time mainstreaming resilient cultural heritage inside the institution.

Resilient Cultural Heritage and Tourism Technical Deep Dive (TDD)

This initiative focused on finding solutions to key concerns identified by participant countries, aiming to inform countries' investments by bringing together experts and practitioners from both DRM and cultural heritage agencies. In most countries, these two disciplines are not connected, therefore it becomes fundamental to connect professionals from different fields to collaborate in the protection of cultural sites. Indeed, strengthening the network of DRM of cultural heritage practitioners is the ambition of the R-DMUCH through its International Training Course.⁴

The nine countries participating (Albania, Bhutan, China, Myanmar, Nepal, Philippines, Saudi Arabia, Tanzania, and Uzbekistan) were represented by teams comprised of one World Bank staff and one or two

¹ Sendai Framework for Disaster Risk Reduction 2015-2030 [pdf]

² Global Facility for Disaster Reduction and Recovery [<https://www.gfdrr.org/>]

³ Tokyo Development Learning Center [<https://www.jointokyo.org/en/>]

⁴ UNESCO Chair Programme on Cultural Heritage and Risk Management, International Training Course (ITC) on Disaster Risk Management of Cultural Heritage [<http://www.r-dmuchi.jp/en/project/itc.html>]

government officials from the country. Among the professional profiles, there were urban specialists (21%), national (25%) and sub national (18%) cultural heritage officials, local government leaders (18%), and DRM specialists (18%).

The TDD was structured around six main themes, illustrated by Japan's good practices:

Fundamentals of disaster risk management for cultural heritage;
Management of cultural heritage sites: from preparedness to post-disaster recovery;
Addressing earthquakes and related secondary hazards over traditional buildings;
Addressing hydro-meteorological hazards, including storms and flooding;
Engaging Communities to preserve cultural heritage;
Connecting to Tourism: promotion and protection of heritage.

During the last day, each team presented an action plan to implement the lessons learned in their ongoing projects, which was discussed together with a panel of experts and the rest of participants.

Japan's experience

The Kobe Earthquake in 1995 and the already mentioned Great East Japan Earthquake and Tsunami in 2011 are two of the worst recent disasters from which Japan has recovered while prioritizing safeguarding its culture. These experiences are reflected in the country's regulations⁵ and their practical approach by implementing measures to reduce risks.

One of the best examples to illustrate Japan's experience is Kiyomizu-dera Temple Area in Kyoto (Fig.1), a World Heritage Site, which participants observed during the TDD. After have been rebuilt many times throughout its history due to fires, the temple counts today with an impressive fire fighting system, including integrated surveillance, lightning prevention measures, and a community-targeted water supply system for fire response. It is an example of earthquake-resistant architecture, and traditional Japanese roof retrofitting, as well as for landslide stabilization and monitoring measures. One of the most important aspects, highlighted by the participants, was the community involvement in the protection of the temple and assistance in case of emergency. Finally, the slope stabilization investments at the site protect it from landslides and have been carefully planned and completed in the site's cultural and aesthetic traditions.

⁵ For extensive information see ACA – Policy of Cultural Affairs in Japan / Preservation of Cultural Properties [http://www.bunka.go.jp/english/report/annual/pdf/2016_policy.pdf]



KIYOMIZU-DERA

Fire hydrants all around the whole complex



Roof retrofitting using traditional techniques and materials



Community involvement



Lightning protection



Fig. 1- Scheme of Kiyomizu-dera main good practices highlighted during the TDD: earthquake-resistant architecture, fire fighting system and lightning protection, landslide stabilization and monitoring, and community engagement. Some teams requested further information, such as slope stabilization measures or activities to engage the local community, to share with their project partners once back in their respective countries. (Photos: Barbara Minguez Garcia)

The TDD was designed and delivered with contributions from key specialists at the Agency for Cultural Affairs (ACA), Ministry of Education, Culture, Sports, Science and Technology (MEXT), Kyoto Prefecture (Cultural Properties Division) and Kyoto City, including the Culture and Citizen Affairs Bureau and the Fire Prevention Department, which also led a site visit to Nijo Castle, focusing on its fire fighting system.

International community

Most World Heritage properties around the world are not prepared for disasters. According to UNESCO «out of the 725 cultural properties on the World Heritage List, very few have a disaster risk component in their conservation and management plans. The 37% of the cases have not identified risks; 30% identified risks but have not developed mitigation measures; and only 10% of the cases have a proper Risk Preparedness Plan.»⁶

⁶Giovanni Boccardi, Head of the Emergency Preparedness and Response Unit, UNESCO Cultural Sector, during the Resilient Cultural Heritage TDD on April 2017.

In addition to UNESCO, the TDD included international experts from UNWTO-Regional Support Office for Asia and the Pacific⁷, ICOMOS-ICORP, and 100 Resilient Cities⁸, connecting them with country clients for potential support to their specific investment programs. Some teams are currently benefiting from experts helping to enhance the quality of their ongoing projects, and promoting the inclusion of DRM aspects in CHT investments and vice versa.

Countries study cases

The nine countries participating in the TDD together have 85 World Heritage Sites (cultural, natural, and mixed) plus 193 on the Tentative List, for over 278 world renowned sites in all, according to UNESCO World Heritage List. At the same time, they also have more than 11 million people exposed to floods each year and more than 1.5 million people subject to an earthquake of magnitude 6 or above.⁹ Just like Japan, their cultural heritage is very much subject to natural hazards.

Each TDD participant team delivered an initial presentation about the country institutional situation regarding DRM and Cultural Heritage, and the main cultural assets included in their investment projects along with the hazards threatening them (Fig.2).

Together, the projects from these teams represent more than US\$700 million in government-led investment, supported by the World Bank. Some came from the DRM sector: Improving Resilience to Seismic Risk (Bhutan), Southeast Asia Disaster Risk Management Project (Myanmar), Earthquake Housing Reconstruction Project (Nepal), Reducing Vulnerability to Natural Disasters (Philippines); while others belong to Urban Development: Zanzibar Urban Services Project (Tanzania); with a focus on Tourism: Integrated Urban and Tourism Development (Albania), Medium-Size Cities Integrated Urban and Territorial Development (Uzbekistan); or Cultural Heritage: Hubei Jingzhou Historic Town Conservation (China), Heritage-Led Urban Regeneration (Saudi Arabia).

The countries and projects were very different, but participants identified common challenges and approaches required. Excluding the lack of funding to invest in heritage, which is probably one of the first concerns for each team, the main challenges included:

- Limited technical expertise, especially regarding restoration of heritage and maintenance.
- Lack of regulatory framework and governance.
- Difficulty in engaging communities, creating awareness, and ensuring collaboration between stakeholders from different sectors.

During the discussions and final presentations of action plans by the team, some common solutions to be implemented came up:

- Promote research and data collection about heritage and hazards, and specific trainings for staff involved in protection of heritage against disasters.
- Design guidelines on protecting heritage from disaster risks, to have a solid reference to share with experts and authorities.
- Request technical assistance and capacity building, as well as promote knowledge exchange on resilient cultural heritage and tourism.
- Develop pilot projects with the support of the World Bank and international experts.

⁷<http://asiapacific.unwto.org/content/unwto-regional-support-office-asia-and-pacific-rsoap>

⁸http://www.100resilientcities.org/cities/toyama/#/_/

⁹INFORM Index (<http://www.inform-index.org/>)

Country:	Main cultural assets presented:
<i>Albania</i>	Historic Cities of Berat and Gjirokastra: coexistence of various religions and cultural traditions reflected in architecture: fortifications, Byzantine churches, mosques, vernacular; art and craft.
<i>Bhutan</i>	Traditional villages and buildings made by rammed earth and masonry; Dzongs, monasteries, stupas.
<i>China</i>	Historic City of Jingzhou: the Wall, the Jinan Town of Chu Kingdom (one of the six great heritage sites of China), the Yin Town.
<i>Myanmar</i>	Colonial City of Yangon and Bagan Archaeological area: 189 colonial buildings; over 4,000 pagodas, temples, monasteries, and ancient infrastructure; Mrauk-U, Pyu, Innwa, Amaprupura, Mandalay, Badah-lin Cave
<i>Nepal</i>	Kathmandu Valley Heritage Sites: 7 protected monumental zones; 2 natural sites; thousands of temples shrines, gumbas; thousands of private traditional houses with cultural heritage significance.
<i>Philippines</i>	Several Historic Cities: such as Vigan (World Heritage) Manila Intramuros; tangible and intangible heritage in many locations.

Fig.2- TDD participant countries' main cultural assets and hazards.

Conclusion – Challenges and Lessons Learned

The Resilient CHT TDD proves a model for helping countries to integrate DRM and CHT, by giving countries a structure to diagnose their unique and shared challenges, engage experience and expertise from Japan and beyond, and connect to development financing support and international frameworks.

The main challenge – and a lesson learned from Japan, applicable to both countries and international organizations – is the need to connect DRM with cultural heritage, by including DRM plans as part of the heritage sites management plans, and including cultural heritage components inside DRM projects, at local, national, and international level. In particular, the TDD shows the need to act and invest at the:

1. Institutional level:

All participants noted the lack of regulations and institutional capacity to protect their cultural heritage from disasters. Therefore, there is a need for strengthening the institutional organization at national and local levels, and promoting interaction between departments, plus collaboration with universities, private owners, among others.

International organizations such the World Bank can help in this regard by providing references and supporting initiatives to increase the capacity of governments to develop measures to connect DRM with their respective cultural heritage assets and sustainable tourism development.

2. Technical level:

Lack of technical skills was also highlighted. In this regard, further analysis of each case is to be developed to address the specific needs. For instance, Albania requested explicit information regarding landslide stabilization systems, while Uzbekistan demanded support to implement resilient tourism projects.

Thanks to the international network of institutions and specialists, the Resilient CHT program can help providing/connecting each team with the specific experts and solutions fitting their needs. Capacity building programs could be the solution in many cases. For instance, there can be a focus on increasing the number of heritage conservation professionals or training emergency response teams on how to act in and around cultural sites.

3. Social level:

Active engagement of local communities is another common challenge. From the Kiyomizu-dera Temple Area in Kyoto, for example, as well as several other sites observed in Japan, participants saw how local communities planned and executed DRM plans to protect heritage and build resilience, as well as how they share traditional knowledge that in many cases provides economical and appropriate solutions in the face of hazards.

Drills, trainings, and workshops have proven strong initiatives to engage local groups, and Japan has developed innovative practices such as the Disaster Imagination Game, easily replicable in other contexts. The key idea from this experience is to combine technical knowledge (locally and internationally), targeted development financial support, and improved policy and investment frameworks, to better integrate DRM and CHT.

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The Resilient Cultural Heritage and Tourism TDD Summary Report is under preparation, to be published under the DRM Hub, Tokyo:

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Fig.1– *Scheme of Kiyomizu-dera main good practices highlighted during the TDD.*

Fig.2– *TDD participant countries' main cultural assets and hazards.*

**ICOA1673: ETABLIR DES LIENS ENTRE LES PAYS EN
DÉVELOPPEMENT ET DES EXPERTS INTERNATIONAUX EN VUE DE
RENFORCER LA RÉSILIENCE DU PATRIMOINE CULTUREL DANS
LES PROJETS DE DÉVELOPPEMENT: LES ENSEIGNEMENTS TIRÉS
D'UN SÉMINAIRE TECHNIQUE APPROFONDÉ MENÉ PAR LA
BANQUE MONDIALE**

**Sous-thème 01: Intégrer le patrimoine et le développement urbain durable en engageant
Diverses communautés pour la gestion du patrimoine**

Session 2: Le management, documentation

Lieu: Stein Auditorium, India Habitat Centre

Date et heure: 13 Décembre, 2017, 14:00 – 14:15

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Barbara Minguez Garcia est consultante pour la Banque mondiale dans les domaines du patrimoine culturel et de la gestion des risques liés aux catastrophes. Elle a travaillé à l'Ambassade d'Espagne à Washington D.C. et a collaboré avec le Service des Parcs nationaux des Etats-Unis. Elle a obtenu un doctorat international en archéologie classique à l'Université Rovira i Virgili de Tarragone grâce à une thèse réalisée à Rome avec une subvention de recherche du gouvernement italien. Elle a participé au programme de la Chaire UNESCO « Patrimoine et Gestion des risques » et conduit une recherche dans ce domaine.

Résumé: La gestion et la sauvegarde du patrimoine culturel requièrent des efforts conjugués de plusieurs niveaux gouvernementaux et d'intervenants du secteur privé, en particulier lorsque des sites et biens considérés comme prioritaires sont menacés par des risques naturels, incluant les menaces croissantes que pose le changement climatique. Les pratiques et les concepts clés de la gestion des risques liés aux catastrophes (GRC) se sont révélés utiles pour relever ces défis, et le Japon est devenu un leader mondial dans l'application, au patrimoine et au tourisme culturels, de la gestion des risques liés aux catastrophes.

Une initiative du Centre de gestion des risques liés aux catastrophes de la Banque mondiale à Tokyo, en collaboration avec le Centre de formation et de perfectionnement de Tokyo et le Gouvernement japonais, a réuni au Japon des intervenants clés issus tant des pays clients de la Banque mondiale que de la communauté internationale, lors d'un séminaire technique approfondi portant sur « le patrimoine culturel et la résilience ». Pendant une semaine, des équipes multidisciplinaires de neuf pays et de plusieurs organisations ont partagé leurs expériences; ils ont appris des experts comment protéger leur patrimoine culturel des désastres et comment rendre les sites plus résistants. Ainsi, chaque équipe a diagnostiqué les principaux défis pour son pays et a élaboré un plan d'action pour mettre à profit, dans ses actuels projets d'investissement soutenus par la Banque mondiale, les enseignements et l'expertise identifiés lors de ce séminaire technique approfondi.

L'intense expérience du Japon dans ce domaine offre des possibilités uniques d'apprentissage, non seulement pour les pays en développement mais aussi pour les organisations internationales. Développée en collaboration avec l'UNESCO, l'Institut pour l'atténuation des catastrophes sur le patrimoine culturel urbain de l'Université Ritsumeikan (Kyoto, Japon) et d'autres partenaires, cette initiative a rassemblé

l'expérience et l'expertise japonaise et mondiale autour de six thèmes principaux: i) principes fondamentaux de la gestion des risques lors de catastrophes dans le domaine du patrimoine culturel; ii) gestion des sites culturels: de la préparation au rétablissement et à la reconstruction après les catastrophes; iii) tremblements de terre et risques secondaires par rapport aux bâtiments traditionnels; iv) tempêtes et risques secondaires : adaptation au changement climatique; v) participation de la communauté à la préservation du patrimoine culturel; vi) tourisme et culture: promotion et protection du patrimoine.

Cette contribution présente les expériences et les leçons tirées du séminaire technique approfondi qui a eu lieu à Tokyo et Kyoto en avril 2017. Outre l'apprentissage technique, cette initiative a favorisé l'échange de connaissances et la collaboration interdisciplinaire, visant à renforcer le réseau international de praticiens en matière de gestion des risques liés aux catastrophes encourus par le patrimoine culturel.

Mots-clés: *intervenants, participation, durabilité, développement*