



MODULE FOUR:

REFLECTION ON THEORY AND PRACTICE

Module 4 comprised of two days of reflection on the theory and practice gained during the workshop. Participants were divided into interdisciplinary working groups to identify the key issues for disasters and resilience, reflecting on both natural and cultural values of the places visited during the field trip (See Box). Finally, each of the groups gave a presentation. Additionally, it was requested that each participant complete an individual reflection on what lessons were learned from the workshop and from the Japanese experience, that they can bring back to their home countries and, especially, to their sites.

WORKING GROUPS ASSIGNMENT

Group reflection

1. Mapping values and the interrelations of nature-culture within the sites
2. Assessment of the sites: proposals/lessons learned and recommendations

Individual reflection

3. Lesson that can be applied to your country or site

Presentation

- 20 minutes group reflection
- + 3 minutes for individual reflections

Below, the outcomes of the exercise are reported by the students of the University of Tsukuba that joined the workshop and formed part of the working groups. Excerpts of their written reports, where they explained their working groups process of analysis and results, are reproduced. In the case of Group 2, two reports are included as two students formed part of this group. In addition, individual reflections of each of the group members are summarized as general lessons learned for each group.

Group 1¹

Members: Xavier Benedict (India), Sazzad Hossain (Bangladesh), Hongtao Liu (China), Yllah Okin (DR Congo), Irina Pavlova (Russia), Ryan Yamane (Hawaii-US)

Points of discussion/Questions

After discussing theoretical notions and sharing experience about nature-culture linkages in disasters and resilience, we had an experience in the field which consisted of meeting quite a large number of people that were affected by the 2011 Tsunami in Shizugawa region, in the North-East part of Japan. The results of both lectures and field practice were summarized into group work. My group work discussion points are concerned with mapping values and the interrelations of nature-culture in the visited sites of the Shizugawa region, assess the sites by bringing out some proposals, lessons learned, and recommendations. We had to see how the people we consulted with in the affected communities could be resilient after the Tsunami by relying on nature-culture linkages, how effective this was, what we can learn from their experience, and what we think should be the correct choice or attitude in facing the same issues.

¹ Report by Yllah Okin, Master Student of Life and Environmental Sciences, University of Tsukuba

Focus of analysis

My group and I focused on analyzing and mapping the values of some sites and people we met, seeing the role of those sites and people in terms of nature-culture linkages and resilience to disasters.

For sites analysis, we pointed out the Chusonji temple, the Kaminoya Hachimagu shrine, the Togura shrine and Matsushima, place of scenic beauty. For people met (that we categorized as intangible heritages) we highlighted the strengths, weaknesses, and challenges they faced through building up disaster resilience and strengthening their communities. The three people we focused on were: Ms. Mayumi Kudo, a priestess of the Kaminoya Hachimagu shrine, Mr. Kenichi Muraoka, a fisherman who played an important role in psychological, financial, and social recovery of his community after the 2011 Tsunami, and Ms. Sakiko Miura, a lady who owned a restaurant that was strongly destroyed by the same Tsunami.

Analysis

From the shock of ideas comes out the light. Our group was such a diverse one, according to people's backgrounds and experiences, but we could figure out how to combine our points of views and learn from one another. Analyzing step by step, we learned that:

- The Chusonji temple was in a high landscape that kept it unaffected by the Tsunami;
- The Kaminoyama Hachimangu shrine was not affected by the 2011 Tsunami;
- The Togura shrine survived 3 consecutive Tsunamis and only the lower part was affected by the 2011 one. It was a secure place for people in previous events and they left instructions and messages on stones;
- Matsushima, place of scenic beauty, is exposed to many natural hazards though it is among the most beautiful landscapes in Japan and known for tourism, agriculture, and fishing. It has a natural protection to natural hazards due to the topography and orographic effect and it contains a cohesive community with a considerable level of preparedness to natural hazards;
- The priestess, Ms. Mayumi Kudo, as a spiritual leader could use old and new relationships within her community to communicate and make up strategies to build back her community after the 2011 Tsunami. She could use nature and culture to share her ideas and help her people to psychologically recover, though she had time and resource limitations sometimes;
- The brave fisherman, Mr. Kenichi Muraoka, was a councilman and respected by his community. Using that, he believed and shared his vision with his community. Moreover, he used traditional dance and songs to help his people recover from and remember the 2011 Tsunami. He also able to incorporate the younger generation into the recovery process.
- Ms. Sakiko Miura, the owner of the restaurant that was destroyed by the 2011 Tsunami, had the courage to build it back in the same place. She wanted a sad moment to go away by building a new life. Luckily, a piece of her restaurant on what its name was written, was brought back to her from Alaska and she used it as a symbol of resilience to 2011 Tsunami.

Outcomes

There are so many lessons to learn from those experiences. We summarized the most of them as followed:

- Resilience is not taken for granted, it is learned, enhanced, strengthened, and refreshed in everyday life;
- Traditional knowledge is a key part of disaster resilience, people should not neglect their culture and identity because they play a golden role. The example of the Jomon ancient people, in Matsushima bay, is proof that, in general, ancient people knew better about the issues we are currently facing and knew how to mitigate and prevent them;
- The use of nature-based solutions regarding natural hazards and cultural sites protection is effective, but much more effective when it is combined with cultural aspects. This to say that nature-culture linkages are effective to increase disaster resilience (as in the example of the priestess and the fisherman mentioned above);
- Community cohesiveness is a key element in disaster resilience. It is difficult to act individually but easier when all voices and all stakeholders are considered;
- Overconfidence to push back nature boundaries may be dangerous and decrease disaster resilience;
- Sometimes policymakers consider safety before social aspects. For instance, in the case of wall construction along the beach in Matsushima bay, it did not please the community and affected their relationship with the ocean. We did think the wall construction was not a good decision.

We recommended to ourselves that we should encourage the transmission of traditional knowledge in our communities by storytelling and organizing cultural activities. This would increase disaster resilience and contribute to protecting cultural sites. We should reinforce Eco-DRR approaches in ecosystem restorations. And most importantly, we should stay open-minded when it comes to decision making, community participation, disaster resilience, nature-culture linkages, and not see things only by our background, but more widely.

At the beginning of the workshop, it was personally heterogenous to link nature-culture with disaster resilience. Theoretical lectures, field practice, and group work made everything clear to me. I see a bright future in connections between cultural heritage and nature conservation institutions, especially in increasing people's disaster resilience around the world and I am glad to notice that I can think more holistically when addressing natural hazards and disasters' issues.



Irina Pavlova (Russia), Yllah Okin (DR Congo), Sazzad Hossain (Bangladesh), Hongtao Liu (China), Ryan Yamane (Hawaii) and Xavier Benedict (India) preparing their presentation during the working groups session

Summary of lessons learned:

- There is no real divide between nature and culture when observing the field experience.
- Education and schools need to bring nature-culture-people together to reinforce community values and to support the maintenance of linkages.
- There is a need of linking policies with different ecologies and developing local frameworks that are context-specific.
- There is a need of integrating cultural values into the natural sciences work.
- Nature-culture linkages can help in decreasing vulnerability to hazards by connecting communities to their memory, their identity, their relationship to nature, and their traditional knowledge.
- People can use their cultural and natural heritage for rebuilding processes by promoting cultural practices that support community cohesiveness and by using nature-based solutions to protect communities from hazards while restoring nature.
- Community leaders can be vehicles for using nature-culture linkages in post-disaster recovery and conserving natural and cultural heritage as they are important voices of the community and can convey the messages to larger audiences and provoke change at the local level.
- There is a need to listening to local communities', their experience, and local knowledge in order to learn from resilience.
- Traditional knowledge is very important for the regeneration processes as it collects memories from previous experiences and historical understandings of the local environment, as well as it conveys the cyclical nature of hazards.
- Quick responses to disasters are not necessarily a sustainable solution when they do not incorporate

reflections on nature-culture linkages and the relationship between people, communities, and their environment (e.g. the large concrete walls constructed to protect people from tsunamis along the Tohoku coast).

Group 2²

Members: Rohayah Che Amat (Malaysia), Jefferson Chua (Philippines), Thao Le Ngoc (Vietnam), Ola Mamoun (Sudan), Andrea Margotta (Chile), Lance Syme (Australia), Alula Tesfay (Ethiopia)

REPORT 1.

To come up with the analysis and reflection on the sites we visited in Tohoku area, we first listed out the question we needed to answer as a group. The questions were as follows:

1. Which sites should we focus on?
2. What are the attributes of each site?
3. To whom are the values important?
4. Who the decision-makers are/ who manages those values?
5. How does this relate to resilience?
6. What are the recommendations from our observation?

Later, we listed out the main sites and projects on our visit and the main clusters were Hiraizumi, Minami-Sanriku Resilience Landscape (name assigned by the group), and Sanriku Fukko Reconstruction National Park. These sites were split into three subgroups and the ideas were brainstormed. The outcomes were later added together again in the following table:

	Culture	Nature	Resilience
Hiraizumi	<ol style="list-style-type: none"> 1. Sacred places on the top of mountain Mount Kinkeisan which represent Buddhism theology; 2. Emphasis on purification and aesthetics; 3. Physical and spiritual elements in the garden 	<ol style="list-style-type: none"> 1. Surrounded by a natural Japanese setting and landscape; 2. Harmony with nature derived from Shinto beliefs; 3. Scenic beauty represented in the garden 	Religious and spiritual values of Shintoism and Pure Land Buddhism
Minami-Sanriku Resilience Landscape (Ramsar site, Town, Shrine)	<ol style="list-style-type: none"> 1. Social capital as a Shinto priestess; 2. Traditional fishing culture and practices; 3. Maintenance and transmission of the community's collective memories through generations 	<ol style="list-style-type: none"> 1. Shinto beliefs and traditions; 2. Environmental diversity; 3. Natural hazards 	Memorialization and trauma recovery through oral traditions increases the capacity for resilience
Sanriku Fukko Reconstruction National Park	<ol style="list-style-type: none"> 1. Traditional settlement in line with rich cultural folks, cuisine, and architecture; 2. Intangible heritage of the community 	<ol style="list-style-type: none"> 1. Scenic beauty of the greater landscape; 2. Nature as inspiration; 3. Wildlife diversity 	Integration of traditional and contemporary community participation models

² Report 1 by Alula Tesfay, Doctoral student of World Heritage Studies, University of Tsukuba; and Report 2 by Ola Mamoun, Master Student of Life and Environmental Sciences, University of Tsukuba

Our recommendations for each site were as follows:

1. Hiraizumi: More comprehensive interpretative facilities demonstrating the links between natural and cultural heritage;
2. Minami-Sanriku Resilience Landscape:
 - (1) to integrate nature-based solutions to hard infrastructure, similar to the priestess' efforts;
 - (2) further dialogue on issues of intercultural exchange;
 - (3) for the Ramsar site: bird-watching and other ecotourism facilities, protection of the spawning and nursery area for fish and other animal species by integrating these into the management plan;
3. Sanriku Fukko Reconstruction National Park:
 - (1) Carrying capacity evaluation;
 - (2) Create a platform for different sectors to meet, discuss, and share different kinds of knowledge (traditional fishery knowledge, scientific knowledge, community responses, and government plan);
 - (3) Create avenues of co-management of the natural resources (water, biodiversity and the culture for building the linkage of natural and culture).

REPORT 2.

The main outcomes were focused on how the natural-culture linkages are reflected in the resilience as a contributor to strengthen the different listed sites.

For Hiraizumi, the group saw the cultural values represented in the sacred places on the top of Mount Kinkeisan (Buddhism theology), surrounded by the natural Japanese setting and landscape in harmonic existence of all the elements derived from Shinto beliefs. In addition, the scenic beauty represented in the garden and the emphasis on purification and aesthetics and the physical and spiritual elements in the garden. Therefore, the group agreed that the religious and spiritual values of Shintoism and Pure Land Buddhism are the core of the Hiraizumi site.

The group used the same way to analyze what we called the Minami-Sanriku Resilience Landscape (which included the Shizugawa bay, proposed as Ramsar site, the Minami-Sanriku Town, and the Kaminoyama Hachimangu Shrine) finding out that the memorialization and recovery from trauma through oral traditions increases the capacity for resilience.

Sanriku Fukko Reconstruction National Park represented a clear integration of traditional and contemporary community participation models as a successful story and an adaptive model for resilience.

The group recommendations focused on building and strengthen the existing resilience based on nature-culture linkages that each site has by addressing questions, issues, or concerns about the different properties and practices.

For Hiraizumi, the group saw that the development of more comprehensive interpretation facilities to demonstrate the links between natural and cultural heritage will enhance the existing recovery capacity. While Minami-Sanriku needed more focus on integrating nature-based solutions instead of hard infrastructure, similar to the priestess' efforts; moreover, further dialogue on issues of intercultural exchange were needed; and bird-watching and other ecotourism facilities for the Ramsar site could be developed, as well as protection of the spawning and nursery area for fish and other animal species by integrating these into the management plan. Sanriku Fukko Reconstruction National Park analysis showed the need for carrying capacity evaluation, creating a platform for different sectors to meet, discuss, and share different kinds of knowledge (traditional fishery knowledge, scientific knowledge, community responses, and government plan) and creating avenues of natural resources co-management (water, biodiversity and the culture for building on linkages between nature and culture).

Summary of lessons learned:

- There is a need for a holistic approach to landscape and resilience analysis.

- Under time pressure, such as in the case of disasters, it is important to work together and collaborate among different sectors, stakeholders and disciplines.
- Nature-based solutions can be used in other countries of Asia and the Pacific, and beyond.
- Cultural sites are linked to the landscape they are embedded in and its natural elements.
- The nature-culture and people-centered approaches are more difficult to apply in urban spaces.
- There is a need to invest in resilience, in knowledge, and in raising-awareness.
- Importance to work in interdisciplinary teams with members of different age and different types and level of experience.
- Nature-culture linkages are needed in the thinking and approaches of the government and its institutions.
- Ecosystem approach is fundamental for reducing disasters because it is necessary to think beyond elements but about relationships, especially, relationships to nature and natural hazards.
- Traditional knowledge has a fundamental role during recovery processes (e.g. Japanese communities use of their traditions)
- Experts, planners, managers have to involve people from communities in preparedness and recovery processes.
- There is a need to learning to communicate from the side of heritage professionals for developing a mutual understanding with communities and with the government.
- There is a need of using comprehensive approaches in risk preparedness plans.
- Holistic and people-centered approaches go together and need to be applied when thinking about landscapes, heritage and resilience to disasters.
- There is a need of integrating nature-culture linkages at policy level.
- There is a need to reinforce local-based management.

Group 3³

Members: Kou Huaiyun (China), Radhika Kothari (India), Petrayuna Omega (Indonesia), Delmaria Richards (Jamaica), Hoseah Mwangi Wanderi (Kenya), Bohingamuwa Wijerathne (Sri Lanka)

Points of discussion and focus of analysis

The objective of Group 3 sessions was to discuss and try to gain a complete understanding of nature-culture linkages from the sites visited. The examination of the sites and sessions with relevant stakeholders enhanced our practical experiences for better heritage management conservation. The group was able to fully understand vulnerabilities in Japan and, in particular, the sites within the region studied. We understood that post-tsunami disaster rebuilding and resilience response is a difficult but necessary undertaking. When natural hazards occur, it is important to act quickly and carefully considering people, property, plus natural and cultural heritage. Community members as well as practitioners within nature-culture arenas should utilize the nature-culture linkage in both pre and post disaster times as a response mechanism to strengthen communities.

Analysis

The sites visited included: Hiraizumi World Heritage Site (Chusonji – Buddhist temple and Motsuji-Buddhist temple and garden), Sanriku Fukko Reconstruction National Park (Kamiyama Hachimangu Shrine, Marine Visitors Center and Togura Shrine) and Mastushima, place of scenic beauty (Historical Museum of Jomon Village in Oku-Matsushima). All sites were examined separately on the basis of their natural and cultural values then specific issues as well as treats to each site were examined. Lessons learned were discussed then recorded, finally some recommendations were made for group inference.

In consideration of the natural aspects close attention was placed on aesthetic values, biodiversity, ecosystems services, and geological processes. For cultural evaluation historical, cultural, spiritual, religious, and social values were underscored. The group noted all sites involved are susceptible to natural hazards because of their location. Japan sits on top of four tectonic plates. Additionally, developmental, social, cultural, and climatic changes added to their vulnerability.

³ Report by Delmaria Richards, Master Student of Life and Environmental Sciences, University of Tsukuba

Hiraizumi World Heritage Site has strong cultural values and meanings reflective in its history, spiritual setting and natural landscape. The Buddhist cosmology of pure land incorporated with Shintoism is seen in the design of garden and temple. It was evident that the archeological and historical information provided understanding to create a beautiful cultural landscape aimed at reinforcing traditional values and meanings in nature. It provides a venue for sustainable conservation of heritage.

Sanriku Fukko Reconstruction National Park was established in 2013. The inclusion of the Sun Shopping Street and Kaminoyama Hachimangu Shrine provide bases for people to find meanings in nature through the use of mythologies. It acts as an interface between the local community and the government during the recovery and reconstruction processes. The structures provide spaces for the community members to connect. These spaces are also seen as memorial sites. Also, the Moai statue (a present from Easter Island, Chile) provides spiritual inspiration during the town's recuperation. The use of intangible cultural heritage in post-disaster healing is reinforced by the use of ^{Kirikō} art, local belief systems were strengthened, increasing the town's resilience.

Mastushima is widely known as a place of scenic beauty and historical value. The unique woody islands represent continuation of Jomon culture since pre-historic times. We saw how people used traditional knowledge to co-exist with nature. The Jomon people knew locating settlements on higher grounds were safer. It was noted that use of archeological data to understand earthquake and tsunami history was essential for relocation of settlements. The involvement of younger generations in redesigning the town was applauded.

Conclusion

People find meaning in their environment and create values based on these meanings, so both natural and cultural systems must be considered for the forging of strong communities. The strength of societies is reinforced through the use of traditional knowledge, which are valuable in times of disasters. They are often used to aid development of long-term sustainable strategies. Finally, collective memory is necessary to build awareness among citizens and to transfer natural and cultural heritage.

Summary of lessons learned:

- The workshop widened the disciplinary perspective.
- Importance of situating cultural heritage in its natural context.
- There is a need of integrating nature-culture-people perspective into university studies.
- Nature conservation needs to learn from the culture sector.
- Importance of people-centered approaches for the conservation of heritage, for disaster risk management, and building resilience.
- There is a need to learning from local people and involve them in processes of post-disaster recovery.
- Resilience is in the capacity of people and institutions.
- Importance of community knowledge and experience in building resilience.
- Value of historical knowledge for building resilience.
- Japanese values and society are resilient to cope with disasters.
- Particularity of rural values system that incorporate nature-culture linkages and understandings of resilience.



Radhika Kothari (India), Wijerathne Bohingamuwa (Sri Lanka), Petra Omega (Indonesia), Huaiyun Kou (China), Hoseah Wanderi (Kenya) and Delmaria Richards (Jamaica) discussing ideas for the group presentation.



Group photo of participants and resource persons after they received their Certificate of Completion of the Workshop.

