

Designing activities for building community resilience - Case studies of “Kamado Project” and “back to japan” -

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ABSTRACT

Resilience is a particularly important factor of strength in communities especially after the 3.11 earthquake in Japan. The author is working on two resilience-building projects; “Kamado Project” and “back to japan.”

Kamado is a traditional Japanese oven primarily for cooking rice. The intent is to gather around the oven, cook and eat together, gaining awareness of disaster preparedness and building the sense of community. The back to japan project, “japan” stands for Urushi lacquer, and the project is intended to bring Urushi-Ware in the outdoor setting, be sensitive to local and natural materials and method.

Participating in Disaster Relief Trials, a fun-focused disaster recovery drill started in Portland, Oregon, made the author and team realize that the fun is the critical factor for the sustainable citizen-led resilience building activities. Seriousness was dominant when both projects started but slowly evolved into the fun and inclusive activities. Next step is to develop the metrics and checklist to establish a method of designing activities for community resilience.

1. INTRODUCTION

The Creative Reconstruction Project (CR Projects) by the University of Tsukuba started in April 2012, a year after the Great East Japan Earthquake. The aim of this project is to contribute to relief work in the disaster area through art and design-based projects, serving both disaster relief and human development for participated students. Educational goal is to improve abilities of networking, problem-solving abilities, and information transmission capabilities. The problems of these affected areas had been prominent before the earthquake, but the disaster quickened the problems to be present. In 2016, after four years of CR Project, the project evolved into Local Design project.

The author had been working on the “Kamado Project”, aiming to build community resilience, since the CR Project started. Also, the author and the students in my research group are involved in a project “back to japan” in Aizu, Fukushima, to revitalize traditional craft in the area. In this paper, the author aims to point out the detail to make the resilience-building project sustainable.

2. METHOD

The research is conducted through two on-going projects with complex problems. The hypothesis is that these projects simulate resilience building for the local level.

2.1 Kamado Project / Rice Cookers

The Kamado Project is a Creative Reconstruction Project of the University of Tsukuba. The activities in the Hojo area of Tsukuba city, which has affected from two disasters – the

Great East Japan earthquake and the tornado on May 6, 2012. We focused on Kamado, left unused in a house built in 1920s. A Kamado is a traditional Japanese oven for cooking rice and so forth, using firewood. Cooking rice using the Kamado helps people: (1) disaster preparedness (2) Community building (3) Gain awareness of the local resources. The project is active today.

We started the project with an empathetic understanding of the area. The team discovered from the research that the most respected local resource was the Hojo Rice. The team found a broken Kamado at an old house, and fixed it as a symbol of revitalization. The Kamado makes tasty rice, delicious rice makes people happy, and bring people together. Using Kamado use open fire, thus it is a good lesson of disaster preparedness.

The team started to build Kamado after we were confident in using it. First, we used bricks, but bricks are bulky and expensive, so soil dug at the yard, dried straw and water are used instead. The first generation clay Kamado ovens were with a plywood mold, second: flexible container bag, then just a cardboard box with polypropylene band tied around. The construction got simpler and less expensive.

One student who has experienced the 3.11 earthquake, brought up that bicycle was the most useful mobility during the gasoline outage. Naturally, the idea of moving the Kamado with a cargo bike evolved, cooking rice anywhere. We called it Ricycle, rice + bicycle. The effect of the Ricycle was vivid. People would talk to us. Older people feel nostalgic, but new for children. Kamado connect grandparents and grandchild generations.



Figure 1: Gathering around Kamado, traditional oven

2.2 back to japan

The project "back to japan" was initiated as an art project Yume Art Project, at the Kitakata city, Fukushima Prefecture from 2014 through 2016. We worked with Urushi lacquer artist, Tatsuo SATO. Urushi is one of the most respected traditional crafts in Japan. A typical application of Urushi is tableware such as bowls and plates. Aizu-Shikki, the Urushi-ware in the Aizu area in Fukushima prefecture, is considered one of the highest quality. Urushi-ware uses 100% organic materials, Urushi lacquer extracted as sap from Urushi tree (*Toxicodendron vernicifluum*), and body of vessels use natural wood.

First, we learned the process of Urushi Lacquerware making by visiting Tatsuo's studio. We also conducted an interview and workshop with local Urushi artisans, a museum

curator, and Urushi-ware users. We also experienced Urushi lacquer sap collection, and we have discovered that it is such a hard work to collect Urushi, and high skill is needed to collect good quality Urushi sap. Through the interview and workshop, we have discovered that there exist two main problems: (1) less demand for younger generations (2) Lack of enough successors. Thus, the goal of this project was set to appeal to the world of Urushi-ware to younger generations. Also during the workshop, a renowned alpinist Yuichiro MIURA takes Urushi bowl to the base camp of the high-altitude mountain like the Himalayas. Outdoor/street use Urushi vessel was one of the ideas derived from the brainstorming after the discovery workshop. As the result of the workshop, we developed Urushi-ware cup made out of tree barks, using the technique of bark-slip.



Figure 2: back to japan workshop, using Urushi-ware in the snow.

3. RESULTS AND DISCUSSION

In October 2016, several students from Kamado team participated in a bicycle race “Disaster Relief Trials (DRT)” as Rice Cookers, because there were certain similarities and overlapping concept with the Kamado project. The race is established in Portland, OR in 2012. DRT is a fun-focused disaster recovery drill in the form of a cargo bike competition simulating a supply-run of a disastrous earthquake. Mike Cobb, the DRT organizer, stated that bicycles are both toy and tool, reciting that fun disaster drill is needed to build community resilience at the municipal level incorporating cargo bikes. (1)



Figure 3: Disaster Relief Trials, October 22, 2016 (2)

Before the fun event like the DRT, there was aggressive bicycle advocacy activism like Critical Mass, and thousands of cyclists participated. At around 2007 in Portland, Critical

Mass event is declining. Instead, fun bicycle events like Pedalpalooza and Sunday Parkways are gaining popularity. Fun is the key to the success of these events. (2)

4. CONCLUSIONS

With more than five years of continuous experience of these two projects, the following things are the key to creating resilient/sustainable activity. (1) The activities must be independent and autonomous; team building is always a severe issue. Fun attracts people and brings people together, work both internally and externally. (2) Fun involves certain The human being needs rewilding in order to be sustainable. (3) Rewilding is a factor to be fun, and fun involves some hassle, like cooking rice with fire or climbing a mountain. However, continuous hassle causes burnout of team. Subdivision of hassle is needed, so creating a framework that everyone can be creative and participate. (4) A reward is always an essential factor, and fun is the best reward. Playing provides fun.

Next step is to clarify the metrics fun resilience building. One example of the outcome is that graduates from both Kamado project and back to japan are voluntarily forming a team, PLAY RESILIENCE Lab., trying to define checklists for future resilient building projects, which may help community-level resilience building.

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NOTES

- 1) Disaster Relief Trials, <https://disasterrelieftrials.com> (accessed August 20, 2018)
- 2) Bicycle activism is aiming to build bicycle-friendly environment. Started in 1992 in San Francisco, and spread around the world. Thousands of cyclists rally through city streets, thus sometimes creates strong tensions between cyclists and drivers/police.

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