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U.S.-Japan Grassroots Exchange Program: Citizen Participation in Community Building Post-Disaster

BY PENN IUR

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2015 Summary Report – Year 1
U.S.-Japan Grassroots Exchange Program
Citizen Participation in Community Building Post-Disaster

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Introduction to the Program

The U.S.-Japan Grassroots Exchange Program, "Citizen Participation in Community Building Post-Disaster," is a three-year program that examines how four cities in the United States and Japan have engaged their local citizens in the long-term recovery and rebuilding of their cities in the aftermath of natural disasters. Throughout the program, a total of 20 U.S. and Japanese participants from New Orleans, Louisiana; Galveston, Texas; Miyako, Iwate Prefecture; and Kobe, Hyogo Prefecture, will have many opportunities to share experiences, ideas, strategies, and visions for rebuilding their communities. In exchange visits to each city, the participants will take part in small group meetings, social gatherings, and other activities where they will discuss challenges, successes, and lessons learned from their efforts to address a wide range of recovery and rebuilding issues including housing, economic development, land use, safety and hazard mitigation, environment, health, and social and physical infrastructure needs of poor and aging populations. The program is funded by the Japan Foundation Center for Global Partnership and the East-West Center.

U.S. and Japanese participants gather together at the Takatori Community Center in Kobe, Japan.

Background

Natural disasters are hugely impactful not only at the individual level, but also at the neighborhood, city, and regional level, offering residents the opportunity to consider the significance of local community and the ways they can have a strong voice in rebuilding and creating more livable, sustainable, and inclusive environments. The crucial roles that civil society organizations play in the immediate aftermath of a disaster are widely acknowledged and understood. However, the roles that grassroots and local nonprofit organizations play in the long-term rebuilding of communities in the aftermath of a disaster have not been widely studied or discussed until relatively recently. A large body

of cross-national, comparative research now exists on post-disaster recovery and community planning practice, including detailed case studies that point to the importance of active civil society involvement in the restoration and re-invigoration of a community's physical and social infrastructure, particularly in building community capacity to sustain success in the long run. The research emphasizes that communities with informal but active civil engagement networks and organized grassroots organizations have been able to recover and rebuild more quickly by mobilizing citizens to cooperatively participate in the rebuilding process. Without citizen engagement, programs that focus solely on physical infrastructure in no way guarantee resilience or effective recovery.

Civil society organizations in Japan and the United States can learn much from one another regarding strategies for enhancing citizen engagement, especially in long-term rebuilding efforts following a major disaster.

Community leaders from the New Orleans Committee for a Better New Orleans; Takatori Community Center in Kobe; Tarochan Cooperative Association, Taro District, Miyako City; and Galveston Regional Chamber of Commerce.

Deeply embedded in the national identities of both countries is a collective and generous response, especially at the grassroots level, to fellow citizens in crisis. Both societies also have a long tradition of collaboration in addressing issues of common concern. Many well-respected, successful grassroots and local nonprofit organizations operating in post-disaster cities in the United States and Japan today began as direct responses to the immediate needs of citizens in the aftermath of disasters. These organizations learned from experience that to effectively undertake coordinated community problem-solving and advocate for citizen participation, they had to overcome many challenges to secure a legitimate and sustainable place in society and have a valued voice in addressing the community's critical and changing social and infrastructure needs. The most critical challenge was to find the skilled leadership to guide them in their efforts. These grassroots and nonprofit organizations have benefited greatly from their experiences and have successfully utilized new knowledge to strengthen, expand, and sustain their organizations and the value they bring to the communities they continue to serve.

Program Objectives

In Kobe, Mano-Machizukuri District Council members talk to a New Orleans community organizer about community planning.

1. Share information, lessons learned, and best practices that encourage and promote ***meaningful citizen engagement in rebuilding efforts.***

    - How do local government, local business, and grassroots/nonprofit/community organizations use citizen participation to address recovery issues?
    - What are these organizations' visions for the future of their communities?
    - What are their roles and responsibilities in long-term planning and development?
    - What strategies do they use to inspire local residents to actively participate in policy and decision-making?
    - Have their experiences in post-disaster recovery been used to address other important issues facing their communities?

Sharing lessons learned from past disasters with the leader of Aneyoshi Village, Omoe District in Miyako.

2. Share information, lessons learned, and best practices that ***encourage and promote meaningful collaboration*** among government, business, and community groups in rebuilding efforts.

    - How do these three sectors of society work together to address the physical and social needs of citizens?
    - How have collaborative relationships been formed?
    - What are the strategies used to maintain such relationships in the long term (beyond reconstruction)?
    - Are such relationships important to creating more livable and sustainable communities in the future?

3. Share information, lessons learned, and best practices that **encourage and promote *"next generation" leaders*** in the local government, business, and community who can inspire citizens to participate in shaping development policies and activities.

U.S. participants spend time with Miyako's next generation during a visit to Omoe Junior High School.

What is Community-Based Planning?

Community-based planning can mean many things but, fundamentally, refers to face-to-face groups within communities addressing the needs of their own communities by thinking about and identifying goods and services needed, developing initiatives and plans to address such needs, and taking steps to execute such plans.[1] Community-based planning has been a popular topic of discussion in planning literature for many years now and has taken on many different definitions as the concept as evolved. Community-based planning arose in response to the top-down planning approaches that may not accurately take into account the true needs of a community and that can ultimately alienate certain populations and increase disparities. Unlike top-down planning, community-based planning is not a single, hierarchical planning structure. Rather, it involves many simultaneous planning activities incorporating the expertise of diverse existing agencies, nongovernmental organizations, private firms, and individuals, and recognizes their relationships and interactions with others.[2]

Director of Tachiagaru zo! Miyako-shi Taro NPO (Stand Up Taro!) discusses plans to rebuild the seawall with officials from the Urban Community Research Center for Asia and the New Orleans Chamber of Commerce.

Mano-Machizukuri District Council monthly meeting.

[1] G. Kent, "Community Based Planning: A Better Approach to Development?" *National Development* 22, no. 5 (1981): 74-86.
[2] Robert B. Olshansky, "Planning after Hurricane Katrina," *Journal of the American Planning Association* 72, no. 2 (2006): 147-153.

Community-based planning demands the input of community organizations and individuals, and encourages involvement and investment in one's neighborhood, boosting social capital and economic vitality.[3] Such a planning approach encourages volunteerism[4] and facilitates the execution of initiatives and projects through civic groups and local charter organizations. Through community-based planning, these existing organizations, which already have a positive influence on a community, can gain further access to resources to funnel into the community through various projects, such as community gardens, housing development, and outreach services. Community-based planning can be seen as a direct means of development—not for a developed *product*, but for a development *process.*[5]

Community-Based Planning in Natural Disaster Recovery

Brainstorming new ideas for neighborhood development in Mano.

Community-based planning can play a critical role in expediting the recovery process and contributing to resiliency. In the context of post-disaster rebuilding, many communities feel that the recovery plans created continue to ignore disparities in services and infrastructure that existed before the natural disaster event occurred, and saw such an event as an opportunity to reform and rebuild in a way that can resolve such issues. Because community members can identify the specific needs and priorities of their neighbors better than government officials, their input is invaluable in developing recovery plans. More importantly, the successful implementation of a recovery plan requires the support of community members. If a government entity creates a recovery plan that does not adequately address the community's goals, then it will face resistance and gridlock, slowing the recovery process. New Orleans faced such an issue after Hurricane Katrina and consequently developed and discarded multiple recovery plans.

Sharing ideas with members of the Mano District

The creation of a recovery plan outlines the needs of a city, prioritizes reconstruction projects, identifies sources of funding, and establishes trust and credibility with a community.[6] This recovery plan should be created by a neutral party, rather than a government entity, and should incorporate the needs of the community. Housing recovery should be first and foremost in the redevelopment process,[7] as businesses and schools cannot return to a city until residents do. During and after natural disasters, many families relocate to nearby, unaffected cities or

[3] Paul Selman, "Social Capital, Sustainability and Environmental Planning," *Planning Theory & Practice* 2, no. 1 (2001): 13-30.
[4] Edward J. Blakely, *Managing Urban Disaster Recovery: Policy, Planning, Concepts and Cases.* Berkshire, UK: Crisis Response Publications, 2011.
[5] Kent, "Community Based Planning."
[6] Blakely, *Managing Urban Disaster Recovery.*
[7] Blakely, *Managing Urban Disaster Recovery*

move to live with other family members (this happened especially in the case of Hurricane Katrina). If these displaced persons do not have a home to return to quickly, they may not return at all.

Year 1 Exchange Visit to Japan

At a tea gathering at the community center of Greenpia Sanriku Miyako temporary housing facility, Taro District residents share their disaster recovery experiences with US participants.

From June 22 through July 1, 2015 ten U.S. delegates from New Orleans and Galveston, accompanied by seven program partners from the United States, Japan, and Canada, traveled to Japan to meet residents and local leaders in Miyako and Kobe. The delegates brought with them a unique and diverse array of experiences with two major U.S. natural disasters: the 2005 Hurricane Katrina and the 2008 Hurricane Ike. They were eager to learn from their Japanese counterparts who experienced major disasters in their own cities: the 2011 Great East Japan Earthquake and Tsunami and the 1995 Great Hanshin-Awaji Earthquake. All delegates from both countries hold a variety of important positions in the community, in business, and in city government. Each delegate experienced disaster differently, and each faced an individualized recovery process. Each city is currently in a different stage of recovery (the disaster events having occurred 20, 10, seven, and four years ago). Such unique experiences with the long-term recovery process allowed for all 20 delegates from New Orleans, Galveston, Kobe, and Miyako to share their current successes and failures and to brainstorm together how community-based groups can help support the recovery process at the grassroots level.

The disasters that occurred in the United States and Japan were vastly different. Japan faced two earthquakes and one subsequent tsunami. Such events occur quickly, with relatively little warning, and allow minimal time for evacuation. The 1995 earthquake sparked fires that spread throughout the city of Kobe in just a few hours but, because the earthquake devastated city infrastructure and services, first responders had insufficient water to extinguish them. The 2011 earthquake was the largest magnitude earthquake to-date in Japan. The damages were enormous, far greater than predicted, and far more extensive geographically. Warnings, despite thoroughly communicating evacuation information, did not protect residents from the tsunami because it was far larger than expected. Additionally, the tsunami impacted an aging rural population who had additional barriers to evacuation, which compounded the event's devastation.

In contrast, both Hurricane Katrina and Hurricane Ike were relatively slow-moving and long-lasting disasters. Media broadcasted Hurricane Katrina evacuation warnings for days leading up to the event. The event itself brought severe rain and winds for days and caused the levees to break, flooding the city for weeks. Standing water remained in many parts of New Orleans for more than a month. Many residents who were unable to, or chose not to, evacuate were stranded inside the city for weeks, without aid or relief, due to overburdened rescue services. Those who did evacuate were not allowed to return to the city for over a month. Similarly, Hurricane Ike was spotted by weather services days before it reached the Gulf Coast. Residents had days to evacuate to nearby cities. When the Hurricane hit Galveston, the city was inundated with rain and winds for more than 24 hours. Though high winds damaged the city, the seawall (built in 1902) protected the island from initial storm surges. The majority of damages occurred when the hurricane continued inland and caused heavy rains to flood nearby Galveston Bay. This water flushed back into the ocean, making Galveston vulnerable to flash flooding that left standing water for over a week.

Levee failure, lower 9th Ward of New Orleans (Craig Morris) and destroyed homes along the Galveston shoreline (US Air Force).

Each city responded differently to disaster. The Japanese government system vastly differs from that in the United States. In response to both the 1995 and 2011 disasters, the Japanese government provided significant financial aid. Structurally, the central government is very strong. The municipal governments (which equate to state governments in the United States) are responsible for executing the national government's programs and requests, essentially acting as project managers for public services. In 1995 and 2011, they mandated relocation to higher ground for temporary and public housing, purchased land from citizens seeking to relocate, temporarily subsidized health care costs, created and paid for temporary housing for all citizens, paid for unemployment aid directly after the disaster, and paid companies to hire people who lost their jobs. In contrast to the United States' Hurricane Katrina experience, where Gulf Coast residents evacuated and remained displaced in other cities and states, the majority of Japanese citizens remained in the same towns or general area after both the 1995 Kobe Earthquake and the 2011 Great East Japan Earthquake and Tsunami. Due to a variety of economic and social reasons, including financial constraints and large localized familial support networks, the majority of residents in both Kobe and Miyako remained in the area to rebuild their lives. The temporary housing was built within the city, but on higher ground, so families were not forced to relocate outside their hometowns while the rebuilding process took place, though nearly all relocated within the region – either voluntarily or by government mandate. Most vulnerable families (elderly, disabled, impoverished,

etc.) relied on government-provided temporary and public housing, so they had little choice in where they moved. During the 2011 earthquake and tsunami, Japanese followed "tsunami *tendenko*" which translates as "evacuate to high ground without the concern of others." According to a member of the Taro Fisheries Cooperative Association in Miyako, "without concern" doesn't mean selfishly or inconsiderately; rather, it implies a mutual trust that each person will have prepared and will be self-reliant. With this understanding in common, people are freed from worry about distant family members and the chance of survival for all is increased. The concept is well known in areas of Japan that experience frequent natural disasters.

Miyako

Background

Miyako, located in Iwate Prefecture, is a moderately sized fishing town, with a current population of approximately 56,000 people. Prior to the 2011 earthquake and tsunami, the city's economy consisted primarily of tourism and commercial fishing. Like much of Japan, the city suffers from an overall decline in population but also an increase in the percentage of elderly.

Miyako is no stranger to natural disasters. Neighboring towns of Miyako and Kuwagasaski were devastated by an 8.5 magnitude earthquake and subsequent 80-foot (24.38 meters) tsunami in 1859, which killed thousands of people. Later, these two devastated towns merged to make one city (Miyako), which soon after was hit by the 1933 Sanriku Earthquake and Tsunami, which killed hundreds of residents and destroyed 98 percent of the city's infrastructure. Since then, Mikayo has rebuilt and has absorbed other devastated towns in the vicinity, including Taro, Niisato, and Kawai.

2011 Great East Japan Earthquake and Tsunami in Iwate Prefecture

Before and after photos of Miyako City (left); A wave from the Great East Japan Tsunami crashing over a sea wall (right). Source: www.news.com.au.

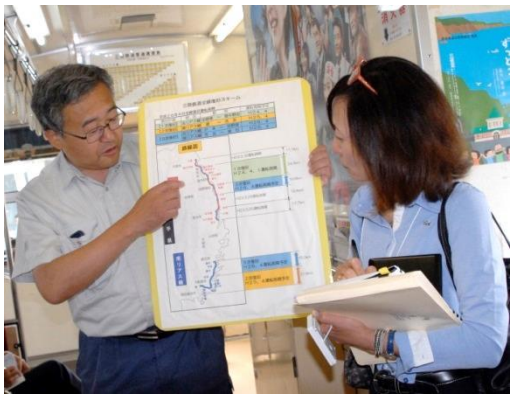
Miyako suffered tremendous damage in 2011 due primarily to its proximity to the ocean and the tidal surge. The 9.0 magnitude earthquake was the largest measured earthquake in Japan's history and the fourth largest globally. The tsunami wave it caused reached a record-breaking 128 feet (39 meters).

Miyako was one of the first cities on the Tohoku Coast to be hit and experienced the full height and strength of the tidal wave.

Unlike during Hurricane Katrina, the Japanese national government swiftly took legislative action under the Basic Act on Reconstruction and immediately established the Reconstruction Agency, creating special zones for reconstruction and allowing the issuance of reconstruction bonds and other measures to finance reconstruction projects. Cities in Iwate Prefecture experienced a significant amount of civic participation in the early stages of the recovery process that helped to catalyze rebuilding efforts. Much like in the recovery of the 1995 Kobe Earthquake, citizens of Northern Japan were able to facilitate a faster recovery through their culture of "*machizukuri*" (community-based town planning).

Recovery

In the Tohoku Region, public transportation provides critical mobility to the residents of Iwate Prefecture. Many people rely on the coastal train line to access their work, family members, and services. The 2011 earthquake and tsunami each exacted damages to the Tohoku Rail Line, leaving miles of tracks washed away, bridges destroyed, and stations inaccessible. Because the earthquake damaged many roadways as well, restoring the rail line was necessary in order for people to find family members, to return home after evacuation, to provide relief services, and to return to work. The Sanriku Railway Company recognized this need and restored partial service to the rail line within five days of the disaster, according to the president of the railroad's Passenger Services. Immediately after the disaster, the Sanriku Rail Line suspended regulations about what could be brought onto the train in order to allow transportation of recovered items to evacuation centers and temporary housing units. Families transported any items they could rescue from their destroyed homes and businesses, including motor scooters, bicycles, furniture, and other personal items that previously were not permitted on the train. Full service was restored to the rail line in April of 2014, an unprecedented recovery time.



Back on track after the tsunami: A Sanriku Railway official shows full restoration of the Tohoku Coast rail line.

The Taro Kanko Hotel, severely damaged by the tsunami, will become a memorial and a disaster learning facility.

When the tsunami hit Miyako, waves reached up to 57 feet (17.4 meters). The sea wall protecting the city only stood at 32.8 feet (10 meters) high; it had been constructed to meet the height of the previous tsunami in 1933. The unprecedented height and force of the 2011 earthquake and tsunami damaged much of the sea wall and completely flooded many areas previously designated as evacuation points, causing hundreds of preventable

deaths. The owner of the Taro-An Hotel, who could not evacuate in time, survived by fleeing the rapidly rising waters to the top of his six-floor hotel. Because of the sea wall's damage, water rose to the fifth floor. In 2012, the municipal government bought the building and agreed to keep the damaged facade visible as a reminder to residents of the devastating effects of the disaster. The top floor will become a natural disaster education center. The hotel owner rebuilt his hotel on higher ground, celebrating the grand opening in May of 2015.

Controversy still surrounds the rebuilding of the Taro sea wall that was damaged by the tsunami, through construction is already underway in part of the port. Many residents of the area felt it necessary to rebuild the wall higher than before to protect the homes still located near the port. While the vice director of the Tarochan Cooperative Association supports rebuilding the sea wall, he is concerned about the negative impact of the higher sea walls on the local fishery. Not only does the higher sea wall separate the people of Miyako from the sea, it also gives residents a heightened sense of security. He expressed the need to focus on creating more evacuation routes; training community members in successful evacuation procedures, especially for the increasing elderly and disabled populations; and encouraging proactive, personal evacuation plans. "It is important to think critically about what to pass onto the next generation since we won't be about to rebuild to the same previous standards," he emphasized. Another important physical component of Miyako's sea wall rebuilding was the creation of slopes on either side of the wall so anyone located in the port area can easily evacuate by car. Prior to the 2011 earthquake and tsunami, the sea wall only had one gate that was opened and closed by a member of the fire brigade in the case of a storm. If the gate closed before the fishermen or other business men around the port could evacuate, they would have few, if any, safe evacuation alternatives. During the reconstruction of the sea wall in the years following the tsunami, planners ensured safe evacuation routes for multi-modal transportation by building slopes that vehicles could go over if the sea wall door had already been closed.

Standing on the Taro seawall.

Due to the history of disaster in Japan, and particularly in the aftermath of the 1995 Kobe Earthquake, people expect community involvement in recovery and rebuilding. Because of this expectation, the post-disaster planning process in Miyako involved community members and key stakeholders from the beginning. Systemic social issues exacerbated by the disaster also received special attention in the aftermath of the earthquake and tsunami. To combat the exodus of young people after the disaster, a group of local citizens created a nonprofit organization (NPO) called Youth Miyakkobase to encourage the city's young people (primarily high school students) to come up with new ideas to help facilitate disaster recovery within their own communities. One young woman described her ideas as dots that needed to be connected into a line and explained that Youth Miyakkobase has given her the space and resources to plan and implement community rebuilding activities. The members emphasized that the disaster created an opportunity to motivate youth to learn and improve on the past as a way to honor those who suffered and were lost.

Another systemic issue plaguing Miyako is the dwindling of its fishing industry. The industry's decline long preceded the earthquake and tsunami, as the few remaining youth lacked interest in becoming fishermen like generations past. But the region's greatest source of revenue still came from fishing, and the 2011 disaster caused a major collapse in the region's economy. The area lost 100 fishermen—48 lost their lives and 52 left the region—as well as 200 million yen (approximately $1.7 million U.S. dollars at today's exchange rate) in future economic gains due to the loss of 90% of the region's 1,000 fishing boats, as well as buildings and other equipment. Miyako's fishing cooperatives brought together the region's remaining fisherman, sharing the 100 remaining boats and splitting the catches to help support individuals and the community's economy simultaneously.

A Miyako high school student and member of Youth Miyakkobase NPO shares her ideas for community recovery and rebuilding.

Miyako Meetings & Site Visits

In Miyako, the U.S. delegates from New Orleans and Galveston engaged in discussions with a diverse array of local citizens and leaders. Their exchanges, coupled with site visits, gave them a deep understanding of not only the devastating impacts of the 2011 Great East Japan Earthquake and Tsunami, but also of the abilities of the community members to recover and thrive.

The community coordinator of New Orleans Public Education Network talks with students from Omoe Junior High School about sustainable and resilient communities of the future.

Community Meetings

- ***Mr. Washichi Tanaka***, President, Taro District Revival Urban Development Initiative Committee; Vice Director, Tarochan Cooperative Association
- **Mr. Masato Sasaki**, Manager, Oceans Miyako International Club and Director, Iwate International Association
- **Mr. Shuichi Daibo**, Board Chairman and Chief Director, Tachiagaru zo! Miyako-shi Taro (Stand Up Taro!) NPO
- **Mr. Hisao Hashimoto**, Founder and Director, Miyako Disaster FM (now called Miyako International Community Radio Station)
- **Mr. Akira Hayakawa**, President, Youth Miyakkobase NPO (and six high school student members)
- **Mr. Tomoki Kimura**, Youth Mentor, Tomodachi Hawaii Rainbow for Japan Kids
- **Mr. Koujiro Kajiyama**, Director, Tenky wo Oyogu Sakezukuri (Association for Salmon Flying in the Sky)
- **Mr. Tsutomu Obata**, Owner, Torimoto Yakitori Restaurant
- **Mr. Atsushi Tomite**, President, Passenger Service, Sanriku Railway Company
- **Mr. Yuki Matsumoto**, Owner, Taro-An Hotel; former owner, Taro Kanko Hotel

- **Mr. Shouei Kobayashi**, Representative Director and President, Taro Fisheries Cooperative Association
- **Mr. Kouki Maeda**, Secretary, Taro Fisheries Cooperative Association
- **Mr. Masahiko Hatakeyama**, Director, Taro Fisheries Cooperative Association
- **Mr. Hideo Hakoishi**, Board Chairman, Tarochan Cooperative Association
- **Ms. Mariko Itabashi**, Corporate Japanese Language Instructor, lifelong resident of Miyako
- **Ms. Junko Urakawa**, Support Staff, Kanan Junior High School, Miyako City
- **Mr. Tamishige Kimura**, Community Leader, Aneyoshi Village and Director, Omoe Fisheries Cooperative
- **Mr. Hiroshi Kuzu**, Secretary-General, Miyako City Council of Social Welfare
- **Ms. Reiko Watanabe**, Section Leader, Regional Welfare Division and Manager, Recovery Support Center, Miyako City Council of Social Welfare
- **Mr. Tetsuo Saito**, Managing Director (President), Hisiya Syuzou Company
- **Mr. Kazushi Hashikami**, Head, Passenger Service, Sanriku Railway Company and Station Master, Miyako Sanriku Railway Station
- **Mr. Toshigaru Kawaguchi**, Employee, Miyako Shinyo Kinko (Credit Union, Miyako Station Branch); Head Coach, Miyako Boys Baseball League; and Baseball Player, Sanriku Tetsudo Kit Dreams Amateur Baseball Team
- **Mr. Hiroshi Yoshida, Motorman**, Sanriku Railway Company and second baseman, Sanriku Tetsudo Kit Dreams Amateur Baseball Team

Rebuilding the Taro community on higher ground.

Site Visits

- Sanriku Railway Miyako and Shimanokoshi Stations
- Taro District Sea wall
- Taro Kanko Hotel
- Taro Residential Community Relocation Site (Sanno Taro)
- Tarochan House—Temporary Shopping Arcade
- Greenpia Sanriku Miyako (Taro) Temporary Housing
- Miyako Fish and Produce Cooperative (Gyosai Ichiba)
- Aneyoshi Village, Omoe District

- Omoe Junior High School
- Miyako City Council of Social Welfare
- Hisiya Syuzou Company

A resident sifts through the burned debris of her former home, Nagata Ward (EERI).

Kobe

Background

Kobe, located in Hyogo Prefecture, is currently the sixth largest city in Japan, with a population of approximately 1.5 million people. The densely built city lies in a valley between several mountains and Osaka Bay. Known as "the International City," Kobe has long hosted international residents and visitors due to its prominence as a thriving import/export center, having opened its doors to trade with the west in the mid-1800s. Today, the city's vibrant economy primarily consists of manufacturing, including value goods, shipbuilding, steel, and communication equipment, tourism and hospitality, and fishing. As one of the first Japanese cities to promote western culture, Kobe has become a fashion mecca in Japan and nearby countries.

The 1995 Great Hansin-Awaji Earthquake

The 1995 Great Hansin-Awaji Earthquake struck only 12 miles (20 kilometers) from Kobe, the city closest to the epicenter. Subsequently, many fires broke out and spread rapidly through the dense urban fabric. The fires burned intermittently for three days because rescue agencies lacked resources and access, as roads were severely damaged. The earthquake and fires caused widespread destruction throughout Hyogo Prefecture, destroying 110,000 buildings, leaving 320,000 people homeless, and causing nearly $64 billion (approximately 8 trillion yen at today's exchange rate) in damages to the city of Kobe.[8] At the time, the reconstruction effort was larger than any experienced since World War II industrialized society at the time, with over $58 billion dollars (approximately 7 trillion yen) needed to fund basic infrastructure in the first three years.[9] In addition to the availability of capital for reconstruction projects, the social ties in the city of Kobe created a highly influential network of support that facilitated the reconstruction planning in the city.[10] Though reconstruction efforts focused principally on public facilities and housing, citizens found many community-level opportunities to improve other important resources, including parks, roadways, and public safety.[11] Local nonprofit organizations appeared after the earthquake to facilitate recovery and long-term planning within the neighborhoods of Kobe.

[8] G. Horwich, "Economic Lessons of the Kobe Earthquake," *Economic Development and Cultural Change* 48 (2000): 521-42.
[9] Olshansky, "Planning after Hurricane Katrina."
[10] John J. Beggs, Valerie Haines, and Jeanne S. Hurlbert, "The Effects of Personal Network and Local Community Contexts on the Receipt of Formal Aid During Disaster Recovery," *International Journal of Mass Emergencies and Disasters* 14, no. 1 (1996): 57-78.
[11] Olshansky, "Planning after Hurricane Katrina."

Recovery

The urban development advisor to Mano-Machizukuri District Council leads a tour of the Mano neighborhood in Kobe.

Because the 1995 Kobe Earthquake devastated so many roadways, the city was left in isolation for days after the first shock. It took many weeks for emergency services from outside the area to successfully infiltrate the city. During that time citizens came to the rescue of their neighbors and set the tone for community-based recovery for the country. Many communities continued to propel their recovery process internally in the medium- and long-term recovery planning as well. The Mano district, an industrial community in Kobe, created the first community-based organization in Japan the 1970s called "machizukuri" (community-based town planning group). A Mano-Machizukuri District Council was formally institutionalized in 1980 and became an integral part of the Mano community when the mayor approved its first planning proposal for redevelopment of vacant lots in the community. Under this plan, the Mano community leaders established city-run apartments, renovated old housing, and built new and improved roads throughout the district. During the earthquake recovery, the same sense of community empowerment drove Mano to rebuild their public housing units in just two years. The neighborhood conducted a house-by-house survey of needs to establish a rebuilding plan, invited special planning experts versus relying on government support, and enlisted student volunteers to pass out emergency supplies in the days following the earthquake and fires. Additionally, the homes in Mano burned for less time overall than other areas thanks to community efforts to extinguish the fires. According to the urban development planner and advisor for the Mano-Machizukuri District Council, the Japanese define such a grassroots mentality as "*fureai*," which means making a community as one, or creating an environment where everyone feels a sense of belonging and feels needed.

This concept of *fureai* helped residents of the Nagata Ward in Kobe during the recovery process as well. Nagata, an immigrant community of predominantly Korean, Vietnamese, and Peruvian populations, faced unique challenges in the immediate aftermath of the earthquake due to language barriers. Such challenges inspired local community members to collaborate with surrounding communities and establish a multi-lingual radio station providing critical information after the earthquake. This emergency communication tool also served as an exclusive opportunity to dispel rumors about immigrant populations. During the 1923 Kanto Earthquake, locals who believed groundless rumors about acts of theft and other crimes killed more than 6,000 Korean residents. Determined not to let this racism and violence recur, the Nagata community created news and talk shows that involved local immigrants, disseminated daily news, and responded directly to questions about specific community activities. Now called FMYY Radio, the station still operates "independent from politics and commercialism," providing programming in 11 languages, run by local residents for the whole city of Kobe. Under the umbrella of a nonprofit organization Machi-Communication, FMYY Radio has continually helped neighborhoods rebuild, including the Mikura neighborhood, which was 70

percent burned in the week after the earthquake. The community took over 10 years to rebuild. It has actively promoted disaster education programs for school students, disaster managers, government officials, and individuals nationally and internationally in order to enlighten groups worldwide about its struggles. The extreme devastation the community suffered in the wake of the 1995 earthquake brought together the small district of 700 people to become a shining star in local, national, and international disaster recovery and preparedness.

A concrete wall of a Mikura neighborhood community center in Kobe memorializes the collaborative efforts of residents to rebuild the structure after the earthquake.

Machi-Communication proves to be just one of many successful community-based organizations created in response to the 1995 earthquake in Kobe's Nagata Ward. The Takatori Community Center, located in a Catholic church that was rebuilt by the community after it burned to the ground during the 1995 earthquake, houses 10 such NPOs, including FMYY Radio. In the months following the earthquake, the church site was filled with tents and served as a rescue base for the neighborhood. Those tents acted as shelter for many families for up to 10 years. The community formally rebuilt the site into the Takatori Community Center in 2005. The NPOs that operate out of the community center address a wide array of community needs and range from a multi-language center offering affordable translation services to an empowerment program for women in small businesses to the memorialization of the 1995 earthquake through youth development and education programs undertaken by an organization called Let There Be Light for Kobe in Nagata. This NPS holds memorial festivals, enlists youth to make 10,000 candles, and teaches first aid and disaster preparedness in elementary and middle schools.

The chief of the Kobe ni Akari wo in Nagata NPO (Let there be Light for Kobe in Nagata) reminds the next generation to be prepared for disasters by working together to build

Though Kobe just celebrated the 20th anniversary of the 1995 earthquake, older community leaders in Kobe all vividly remember the earthquake and the devastation they suffered. Many young residents of Kobe, however, did not experience the event or were too young to remember. In order to "keep the memory fresh," various communities hold memorial

celebrations and festivals every five years pass on a culture and mindset of disaster preparation. These communities also run disaster preparedness training sessions that specifically target young people. The executive director of the Noda North Community Planning Council and the Northern Noda Hometown Network explained that, in Japan, NPOs sometimes do not get along but, in the Nagata Ward, the organizations recognize that the communities are transient, like living organisms, and this awareness fosters collaboration and cooperation, which is essential for communities to thrive.

Kobe Meetings & Site Visits

In Kobe, the U.S. delegates met with local leaders, town planners, and activist citizens in a series of vibrant exchanges, coupled with walking tours of neighborhoods and NPOs. These interactions gave delegates a wide array of knowledge about the various phases of recovery that Kobe underwent since 1995 to become the thriving, resilient city it is today.

Discussing the roles of local government, the business community, and residents in the recovery and reconstruction of Kobe after the earthquake.

Community Meetings

- **Mr. Koyo Fukagawa**, Community Planning Advisor, Mano-Machizukuri District Council
- **Mr. Yuji Miyanishi**, Urban Development Planner and Advisor, Mano-Machizukuri District Council
- **Mr. Mitsuhisa Shimizu**, Vice Chairman, Mano-Machizukuri District Council and Secretary, Mano Fureaino Machizukuri Council (Mano Town Planning with Interaction Council)
- **Mr. Hisanori Nakayama**, Professor, Kobe Gakuin University, Department of Contemporary Social Studies of Disaster Management; former Director-General, Urban Redevelopment Department, Kobe City Government; and former president, Kobe-Machizukuri (Town Planning) Center
- **Mr. Masayuki Shishida**, President and CEO, Shin-Nagata Town Planning Company and former General Manager, West Kobe Branch, Kobe Chamber of Commerce and Industry
- **Ms. Junko Nakamura**, President, Community Support Center Kobe
- **Dr. Shizuyo Yoshitomi**, Managing Director, Takatori Community Center NPO
- **Mr. Junichi Hibino**, Senior Managing Director, Takatori Community Center and Representative, FMYY Community Radio Station
- **Mr. Kanji Wada**, Chief, Executive Committee, Kobe ni Akari wo in Nagata (Let there be light for Kobe in Nagata) NPO and Chief, Committee for Community Vision Kobe
- **Ms. Kazumi Moriki**, Founder and Director, Asian Women's Empowerment Project
- **Ms. Yoomi Lee**, Executive Director, NPO Multilanguage Center FACIL

- **Ms. Emi Nogami**, Co-Chair, Vietnam Yeu Men Kobe and Executive Board Member, Takatori Community Center
- **Ms. Chikage Hashimoto**, Co-Founder, Leaf Green NPO
- **Ms. Roxana Ajipe Oshiro**, Representative, Hyogo Latin Community
- **Mr. Setsuji Kawai**, Executive Director, Noda North Community Planning Council and Noda North Hometown Network
- **Dr. Akira Miyasada**, Director In-Chief, Machi-Communication
- **Mr. Yasuzo Tanaka**, Director, Machi-Communication and Chairman, Board of Directors, Hyogo Shoukai Co. Ltd.
- **Ms. Mayumi Toda**, Director, Machi-Communication

Tetsujin 28 symbolizes the reconstruction of Kobe after the earthquake and commemorates the city's reawakening.

Site Visits

- Chiiki Fukushi Community Center
- Mano Elementary School
- Mano Community Walking Tour
- Kobe Gakuin University
- Community Support Center Kobe
- Takatori Community Center
- Machi-Communication
- Mikura Community Walking Tour
- Shin Nagata Tetsujin 28 Monument

Gulf Coast Interfaith and Saint Vincent's House officials from Galveston share a light moment with the director of Machi-Communication NPO in Kobe.

Summary/Conclusions

Miyako and Kobe cities demonstrated a diverse array of important lessons for disaster recovery and resilience at the grassroots level that apply universally. From an infrastructure perspective, the reinstallation of basic services, like water, electricity, and transportation, proves fundamental to the rehabilitation of communities and business. Cooperation among different sectors—government, business, religious—also catalyzes the recovery process. Though complicated and often situational, addressing housing needs must be foremost in recovery plans. Expediting the shift from temporary to permanent housing can most easily restore a sense of community and stimulate economic activity. Until residents can be removed from a transitory state, they cannot move on from their disaster experience. Socially, grassroots organizations play a fundamental role in the mental and emotional rehabilitation of residents. They provide communication tools, physical supplies, emotional support, and a sense of empowerment that comes from commiseration. Such organizations often focus on youth invigoration and education, passing down lessons and experiences, while fostering innovation and continued

community investment. Disaster education and awareness must be emphasized on many levels, but local leaders have the best opportunity to impress upon residents a culture of preparedness.

Ultimately, disasters highlight pre-existing systemic issues within communities. For Japan, problems of an aging population and a declining economy were brought to light by the 1995 Great Hansin-Awaji Earthquake and again by the 2011 Great East Japan Earthquake and Tsunami. Communities in both Miyako and Kobe acknowledged that a natural disaster serves as a wakeup call, demanding attention and confrontation. Awareness of pre-existing local issues, coupled with a culture of preparedness, can mitigate the impacts of disaster and build resilience. One of the most important insights that the U.S. delegates gained from the exchange experience in Japan is "despite being a half a world away, there are great similarities in our communities and how we responded to disaster. It is evident that local leadership matters. It's the most critical piece of the puzzle."

City Delegations

Miyako

Mr. Shuichi Daibo, Board Chairman and Chief Director, Tachiagaru zo! Miyako-shi Taro (Stand Up Taro!)
Mr. Washichi Tanaka, President, Taro District Revival Urban Development Investigative Committee and Vice Director, Tarochan Cooperative Association
Mr. Hisao Hashimoto, Miyako City Councilman and Chair, Education and Welfare Standing Committee; Editor-in-Chief, Miyako Wagamachi (Miyako My Home Town); Founder and Director, Miyako International Community Radio Station
Mr. Masato Sasaki, Manager, Oceans Miyako International Club and Director, Iwate International Association
Mr. Toshiharu Kawaguchi, Employee, Shinyo Kinko Credit Union, Miyako Station Branch; Head Coach, Miyako Boys Baseball League; and Baseball Player, Sanriku Tetsudo Kit Dreams Amateur Baseball Team

Kobe

Mr. Koyo Fukagawa, Community Planning Advisor, Mano-Machizukuri District Council
Mr. Hisanori Nakayama, Professor, Kobe Gakuin University Contemporary Social Studies of Disaster Management and former Director-General, Urban Redevelopment Department, Kobe City Government
Dr. Akira Miyasada, Director-in-Chief, Machi-Communication
Dr. Shizuyo Yoshitomi, Management Director, Takatori Community Center
Ms. Junko Nakamura, President, Community Support Center Kobe

New Orleans

Mr. Paul Cramer, Planning Administrator, New Orleans City Planning Commission
Ms. Sandra Lindquist, Vice President, Operations and Business Development, New Orleans Chamber of Commerce
Ms. Andreanecia Morris, Chair, Board of Governors, Greater New Orleans Housing Alliance and Vice President for Homeownership and Community Development, Providence Community Housing

Ms. Saundra Reed, Community Coordinator, Orleans Public Education Network
Mr. Keith Twitchell, President, Committee for a Better New Orleans

Galveston

Reverend Fred Marie Brown, Executive Director, St. Vincent's House
Mr. Joe Compian, Community Organizer/Leader/Board Member, Gulf Coast Interfaith
Mr. Dustin Henry, Project Manager, Industrial Development Corporation, City of Galveston
Ms. Betty Massey, President, Board of Directors, Artist Boat and former Chair, Galveston Long-Term Recovery Committee
Ms. Gina Spagnola, President, Galveston Regional Chamber of Commerce

Program Partners

Ms. Meril Fujiki, Seminars Development Coordinator, East-West Seminars Program, East-West Center
Dr. Makiko Ueno, Founder and Director, Urban Community Research Center for Asia
Dr. Etsuko Yasui, Assistant Professor and Chair, Applied Disaster and Emergency Studies Program, Brandon University
Dr. Eugénie Birch, Co-Director, Penn Institute for Urban Research; Nussdorf Professor of Urban Research, Department of City and Regional Planning, School of Design, University of Pennsylvania
Ms. Amy Montgomery, Managing Director, Penn Institute for Urban Research, University of Pennsylvania
Ms. Laura Barron, Program Coordinator, Penn Institute for Urban Research, University of Pennsylvania
Ms. Sayaka Sakuma, PhD Student, Geography Department, University of Hawaii at Manoa
Mr. Ray Tabata, Education Specialist (retired), University of Hawaii Medical Education Program for East Asia, John A. Burns School of Medicine

U.S. and Japanese participants after a community dinner at the Jodogahama Park Hotel in Miyako.

Bibliography

Blakely, Edward J. *Managing Urban Disaster Recovery: Policy, Planning, Concepts and Cases.* Berkshire, UK: Crisis Response Publications, 2011.

Beggs, John J., Valerie Haines and Jeanne S. Hurlbert. "The Effects of Personal Network and Local Community Contexts on the Receipt of Formal Aid During Disaster Recovery." *International Journal of Mass Emergencies and Disasters* 14, no. 1 (1996): 57-78.

Coatham, Veronica, and Lisa Martinali. "The Role of Community-based Organisations in Sustaining Community Regeneration: An Evaluation of the Development and Contribution of Castle Vale Community Regeneration Services (CVCRS)." *International Journal of Sociology and Social Policy* 30, nos. 1/2, (2010): 84-101.

Comfort, Louise K., et al. "Retrospectives and Prospectives on Hurricane Katrina: Five Years and Counting." *Public Administration Review* 70, no. 5 (2010): 669-678.

Cutter, Susan L., et al. "A Place-based Model for Understanding Community Resilience to Natural Disasters." *Global Environmental Change* 18, no. 4 (2008): 598-606.

Ganapati, N. Emel, and Sukumar Ganapati. "Enabling Participatory Planning after Disasters: A Case Study of the World Bank's Housing Reconstruction in Turkey." *Journal of the American Planning Association* 75, no. 1 (2008): 41-59.

Gutmann, Amy. Foreword to *On Risk and Disaster: Lessons from Hurricane Katrina*, edited by Ronald J. Daniels, Donald F. Kettl, and Howard Kunreuther. Philadelphia: University of Pennsylvania Press, 2011.

Horwich, G. "Economic Lessons of the Kobe Earthquake." *Economic Development and Cultural Change* 48 (2000): 521-42.

Kent, G. "Community Based Planning: A Better Approach to Development?" *National Development* 22, no. 5 (1981): 74-86.

Manzo, Lynne C., and Douglas D. Perkins. "Finding Common Ground: The Importance of Place Attachment to Community Participation and Planning." *Journal of Planning Literature* 20, no. 4 (2006): 335-350.

Mitchell, Christine M., Ann-Margaret Esnard, and Alka Sapat. "Hurricane Events, Population Displacement, and Sheltering Provision in the United States." *Natural Hazards Review* 13, no. 2 (2011): 150-161.

O'Brien, Geoff, et al. "Approaching Disaster Management through Social Learning." *Disaster Prevention and Management* 19, no. 4 (2010): 498-508.

Olshansky, Robert B. "Planning after Hurricane Katrina." *Journal of the American Planning Association* 72, no. 2 (2006): 147-153.

Olwig, Mette F. "Multi-sited Resilience: The Mutual Construction of 'Local' and 'Global' Understandings and Practices of Adaptation and Innovation." *Applied Geography* 33 (2012): 112-118.

Paton, Douglas, and David Johnston. "Disasters and Communities: Vulnerability, Resilience and Preparedness." *Disaster Prevention and Management* 10, no. 4 (2001): 270-277.

Rubin, Claire B., Martin D. Saperstein, and Daniel G. Barbee. "Community Recovery from a Major Natural Disaster." (1985). *FMHI Publications.* Paper 87.

Schneider, Robert O. "Hazard Mitigation and Sustainable Community Development." *Disaster Prevention and Management* 11, no. 2 (2002): 141-147.

Selman, Paul. "Social Capital, Sustainability and Environmental Planning." *Planning Theory & Practice* 2, no. 1 (2001): 13-30.

Shaw, Rajib, and Katsuihciro Goda. "From Disaster to Sustainable Civil Society: The Kobe Experience." *Disasters* 28, no. 1 (2004): 16-40.

Siebeneck, Laura K., et al. "Evacuees' Reentry Concerns and Experiences in the Aftermath of Hurricane Ike." *Natural Hazards* 65, no. 3 (2013): 2267-2286.

Simpson, David M. "Risk and Disaster: Arguments for a Community-based Planning Approach." *Berkeley Planning Journal* 7, no. 1 (1992).

Wiek, Arnim, et al. "Challenges of Sustainable Recovery Processes in Tsunami Affected Communities." *Disaster Prevention and Management* 19, no. 4 (2010): 423-437.

Zhang, Yang, and Walter Gillis Peacock. "Planning for Housing Recovery? Lessons Learned from Hurricane Andrew." *Journal of the American Planning Association* 76, no. 1 (2009): 5-24.