

January 2016

Public Libraries Worked in the Tohoku Mega-disaster

Andreas Vårheim

University of Tromsø The Arctic University of Norway, andreas.varheim@uit.no

Please take a moment to share how this work helps you [through this survey](#). Your feedback will be important as we plan further development of our repository.

Follow this and additional works at: <http://ideaexchange.uakron.edu/docam>

 Part of the [Library and Information Science Commons](#)

Recommended Citation

Vårheim, Andreas (2015) "Public Libraries Worked in the Tohoku Mega-disaster," *Proceedings from the Document Academy*: Vol. 2 : Iss. 1 , Article 10.

Available at: <http://ideaexchange.uakron.edu/docam/vol2/iss1/10>

This Conference Proceeding is brought to you for free and open access by University of Akron Press Managed at IdeaExchange@UAkron, the institutional repository of The University of Akron in Akron, Ohio, USA. It has been accepted for inclusion in Proceedings from the Document Academy by an authorized administrator of IdeaExchange@UAkron. For more information, please contact mjon@uakron.edu, uapress@uakron.edu.

Abstract

Public libraries play important roles during disaster recovery, even when other government actors fail. Libraries are centers of local information and have local knowledge. Patrons, as well as government agencies and NGOs, benefit from public libraries' local grounding.

Along with their local communities, many public libraries in the Tohoku region of Japan were completely destroyed or severely damaged in the earthquake and tsunami of 3.11.2011. The nuclear accident in Fukushima following the tsunami meant that libraries in the evacuated zone were abandoned.

Disaster recovery is difficult to handle and few success stories are found. Studies show that where other public services have failed, public libraries have been successful in disaster recovery. The literature on the role of libraries in disaster recovery is scant and only a few cases have been studied, all in the USA. This three-case study shows that libraries worked, that is, library services were offered and were helpful in areas where libraries had been completely demolished in the Japanese prefectures of Iwate and Miyagi.

Introduction

With their local communities, many public libraries in the Tohoku region of Japan were severely damaged in the earthquake and tsunami of 3.11.2011. The nuclear accident in Fukushima following the tsunami meant that libraries in the evacuated zone were abandoned.

Disaster recovery is difficult to handle and few success stories are found. Where other public services have failed, studies show that public libraries have been successful in disaster recovery. The literature on the role of libraries in disaster recovery is scant and only a few cases have been studied, all in the USA. Are there similar success stories in other kinds of disaster and in other countries?

This short paper outlines the impact of the Tohoku disaster on public libraries, and the process of disaster recovery involving the rebuilding of library services and libraries. In particular, the public libraries and library services have been studied in three local communities that faced destruction of great magnitude including the destruction of local libraries.

The question of the contribution of library services in disaster recovery is discussed in the context of the disaster recovery literature, emphasizing local community resilience and community social capital as the keys to minimizing negative outcomes. Underscoring the importance of a strong community social infrastructure, libraries play a pivotal role in disaster recovery when they remain relevant local community institutions. Studies, mainly in a U.S. context, clearly reveal that public libraries play central parts as community hubs in major disasters caused by hurricanes and tornados.

First, the Tohoku disaster and its consequences for the region's libraries are presented in brief. Next, disaster recovery research stressing the social mechanisms important for recovery success is summarized. Third, specific findings from studies on the role of public libraries in disasters are presented. Fourth, the recovery of library services and its community impact in the three Tohoku towns of Rikuzentakata, Minamisanriku, and Otsuchi, are described and discussed.

The Tohoku Disaster and Tohoku Libraries

The Great East Japan Earthquake and Tsunami of 3.11.11 hit the northeastern part of the main island of Honshu. The 9.0-magnitude earthquake occurred in the Pacific Ocean outside the Miyagi area of the Sanriku Coast (WHO, 2011); 15,983 people were killed, 2,572 were missing, and 6,152 were injured (NPA, 2015). Of the buildings, 124,685 were destroyed, while 224,193 were partly damaged. About 160,000 inhabitants were evacuated from the area around the nuclear power station in Fukushima (Samet & Chanson, 2015, p. 19).

Ten library employees were killed, eight of them in two of the three libraries studied in this paper. Of the library buildings, 251 were damaged (National Diet Library, 2012, p. 328), eight destroyed completely (National Diet Library, 2012, pp. 330, 332). All of the eight libraries were located in the prefectures of Iwate and Miyagi. Six libraries were abandoned in the Fukushima evacuated zone (National Diet Library, 2012, p. 353). There are no records of how many library users were killed. However, the earthquake struck during library opening hours, at 2.46 pm on a Friday. A considerable number of patrons must have died. The three libraries in the towns of Rikuzentakata, Otsuchi, and Minamisanriku were totally destroyed, and no structures of the Minamisanriku library remained (National Diet Library, 2012, p. 345).

Social Capital in Disaster Recovery

After natural disasters, recovery in local communities varies greatly. The resilience of communities in responding to disaster depends upon the local community's social capital level: 'I argue that higher levels of social capital—more than such factors as greater economic resources, assistance from the government or outside agencies, and low levels of damage—facilitate recovery and help survivors coordinate for more effective reconstruction' (Aldrich, 2012, l. 175). Social capital is defined as 'features of social organization, such as trust, norms, and networks that can improve the efficiency of society by facilitating coordinated action' (Putnam, 1993, p. 167). Communities with high levels of social capital act proactively in times of disaster compared to lower social capital neighborhoods.

Several studies show results similar to this: '[n]etworks and institutions that promote resilience to present-day hazards also buffer against future risks, such as those associated with climate change' (Adger, Hughes, Folke, Carpenter, & Rockström, 2005, p. 1039). Case studies comparing communities have come up with striking findings. Communities marked by civic engagement and social ties act in an organized and resolute manner when faced with disasters, while communities showing less social cohesion and having weaker networks act in a passive capacity (Aldrich, 2015, p. 25). Kage (2011) showed how Japanese prefectures with a flourishing associational life before WW2 reconstructed fastest after the war.

Thus, one way of increasing disaster preparedness is to build communities that are high in social capital. Another related strategy is building community institutions that work during disaster response and recovery, that is, resilient community institutions. Public libraries are community institutions working in both capacities. Libraries operate during disaster; they even work where many other disaster-specific agencies and organizations fail (Jaeger, Langa, McClure, & Bertot, 2006, p. 20; Veil & Bishop, 2014) and they contribute to community building.

Public Libraries are Trusted Community Institutions

Public libraries are among the most highly trusted public institutions (Vårheim, 2014b). In Sweden, a survey found that Swedes trusted libraries more than the police (Höglund & Wahlström, 2009, p. 19); only health services were trusted more than public libraries. In two Norwegian surveys, from 2007 and 2011, public libraries were the most trusted of public institutions, ahead of the police.¹ Studies of both Australian and U.S. library users found that libraries were considered very safe places, also safe for children (Cox, Swinbourne, Pip, & Laing, 2000; Miller, Zickuhr, Rainie, & Purcell, 2013; Solop, Hagen, & Bowie, 2007).

Public libraries provide local community meeting places, facilitating contact among most local social groups (Aabø, Audunson, & Vårheim, 2010). There are indications that library users' trust in libraries over time spills over into generalized trust, that is, trust in most people, creating social capital and stronger local communities (Vårheim, 2014a, 2014b; Vårheim, Steinmo, & Ide, 2008). Not only does libraries being highly trusted community institutions, make them resilient community anchors in the face of disaster, but their trust building capacity also makes them creators of more resilient communities, better equipped to confront the unknown and suddenly harsher environments.

Libraries Work!

“Libraries are, after all, one of the few arms of government that really work” (Fialkoff, 2005). This strong statement in the wake of Hurricane Katrina by an editor in the library press, is supported in research literature on the roles of libraries during disaster recovery. Hurricane Katrina caused severe destruction and claimed 1,500 lives in the American states of Louisiana, Mississippi, and Florida in 2005.

Jaeger, Langa, McClure, and Bertot found that ‘No other form of government, however, had the public access computers, the Internet access, and the dedicated professionals to turn information into a vital tool for finding the lost, searching for help, requesting aid, and beginning to recover’ (2006, p. 212). Public libraries already were located in the affected communities and many had generators providing electricity for electronic devices and lighting, providing basic services for the population and aid organizations, federal or NGO. In addition to delivering information infrastructure and information expertise, public libraries had several other vital roles: providing emergency information; giving shelter; providing physical aid; caring for community members in need; working with relief organizations; and cleaning up the damage after the storms (Jaeger et al., 2006, pp. 202–203).

The other main paper on public libraries in disaster recovery, studies the role of public libraries in the aftermath of tornados hitting communities in the states of Alabama, Missouri, Kentucky, and Indiana in 2011 and 2012, killing hundreds, injuring thousands, and destroying thousands of homes (Veil & Bishop, 2014). Findings from interviews with patrons and library personnel provided a basis for suggesting ways libraries could improve community resilience. First and foremost, libraries provided access to information technology (Veil & Bishop, 2014, pp. 727–730). This was extremely important when cell phone reception was bad and landlines were out of order. Second, libraries provided space for ‘everyone’, for home offices, businesses, and for government organizations. Third, public libraries were community meeting spaces and places, setting up meetings rooms and community living rooms. Fourth, libraries served as the last redundant communication channel, and were repositories (hubs) for local information, especially important in the absence of most news media, mostly because electricity was lacking for days, if not weeks. Fifth, disaster narratives were not only for history, but also for learning and future disaster preparedness. People told and wrote down their accounts binding the community together. In short, libraries contributed by using their knowledge of the local community in adapting pre-disaster services to new circumstances.

From the two studies, it is evident that libraries made a significant effort during the disasters. What is even more noteworthy, is that public libraries seemed to be one of the very few government organizations working during the

Hurricane Katrina disaster: is what appears to be strong library resilience exclusive to the U.S. context? Answering this question might lead us closer to understanding libraries' resilience and its origins.

Three Libraries in the Tohoku Disaster

This section gives a short version of the disaster recovery story of three completely damaged public libraries in three almost totally destroyed local communities and towns in the Tohoku region of eastern Japan. Japanese colleagues and the author interviewed library directors, librarians and library workers in the three libraries, officials in one prefectural social education division, in two prefectural libraries, and in the Ministry of Education, Culture, Sports, Science and Technology (MEXT), and the Japan Library Association, in the fall of 2012. All in all, 16 individuals were interviewed. Interviews were taped, translated, and transcribed into English. The following is based on these interviews.

The simple questions were: how did libraries and library services work during disaster when the local libraries physically had disappeared; how did library services contribute to the recovery process, and what questions characterized the process of library rebuilding? How were library services provided in the immediate disaster recovery process and 18 months later?

A Note on Methodology

One way of generalizing from case studies is to choose the case or cases studied as the least likely cases where the research propositions can be true (Emigh, 1997; George & Bennett, 2005; Yin, 1989). In this case, the three communities where the public libraries buildings and most other infrastructure were obliterated are the least likely places where libraries/library services can function in disaster recovery. The logic is that if library services are working, helpful, and important for people during such extraordinary circumstances, this indicates a vital role for libraries in disaster recovery across disasters and communities.

Three Libraries and Three Communities

The three public libraries were in the towns of Rikuzentakata and Otsuchi in Iwate prefecture, and in Minamisanriku in the prefecture of Miyagi. Altogether, the tsunami completely destroyed eight libraries in the prefectures of Iwate and Miyagi (National Diet Library, 2012).

Otsuchi

The library was completely destroyed. Otsuchi town had 15,000 inhabitants before the disaster. Eighteen months later the population was 12,000 (November 2012); 1,000 people were killed, 2,000 had migrated after the tragedy, and in

November 2012 6,000 were living in temporary homes. People could expect to live in shelters for several years: “At least residents will live in it for 3-5 years;” “It [Shelters] is small, but residents feel fine”. (Interview, Library director, Otsuchi town library, 26 October, 2012; (National Diet Library, 2012).

Minamisanriku

The library was completely destroyed. The tsunami left no trace. One of the four library workers was killed. Before the disaster, Miniamisanriku had 18,000 inhabitants, and 15,000 afterwards (November 2012); 820 people died and 2,000 migrated. People living in temporary buildings numbered 3,300 (Interview, Library director, Minamisanriku town library, 24 October, 2012; National Diet Library, 2012).

Rikuzentakata

The library was completely destroyed. All seven library workers were killed. Rikuzentakata had 24,000 inhabitants before the disaster, and 20,000 afterwards (November 2012); 1,800 people died and 2,200 migrated; 2,168 temporary houses were built (Interview, Library director, Rikuzentakata town library, 26 October, 2012; National Diet Library, 2012).

Library Services After 3.11

In all three towns, it took several months before the local libraries could offer any services (Interview, Library director, Minamisanriku town library, 24 October, 2012; Interview, Library director, Otsuchi town library, 25 October, 2012; Interview, Library director, Rikuzentakata town library, 26 October, 2012). Immediately after the disaster, bookmobiles started driving from other library districts and from NGOs. NGOs, neighboring libraries, prefectural libraries, and libraries from all over Japan donated book and offered services. NGOs also donated bookmobiles to local libraries and set up local libraries they ran themselves. However, understandably, it took a little longer before these local book mobiles were operative, e.g: “Mobile bus library was started August 2011” (Interview, Library director, Otsuchi town library, 26 October, 2012)

After about from six months (Minamisanriku), 12 months (Rikuzentakata) and 14 months (Otsuchi), the local libraries offered services from temporary buildings. By October 2012 the Miniamisanriku library already had stayed in three different temporary buildings. These were partly financed by donations from domestic sources and from abroad (e.g., a temporary library building from the People of Hokkaido; and two new bookmobiles, one from an Italian NGO and the other from Shiga Prefecture (Interview, Library director, Rikuzentakata town library, 26 October, 2012); a new permanent library building from an Australian

bank (Interview, Library director, Minamisanriku town library, 24 October, 2012).

After the local libraries re-opened in temporary buildings (the first opened six months post-disaster), information needs after the disaster were still markedly different from pre-disaster. Post-disaster information needs were for daily necessities, finding missing family members, looking for work, and there was a big demand for local news and newspapers, maps, and official documents:

When people lived in temporary shelter, they wanted information related to their lives, directory such as where and when they can get food or where are the people so much that what library provides was different from it used to be. The number of people comes to library to read newspaper increased after temporary library erected as residents feel more ease than right after the disaster. Information for jobs prevailed after September when most temporary shelters are erected. Right after tsunami it was too difficult for people to find information and as too many people read newspaper it became hard read (Interview with Library director and two library assistants, Minamisanriku town library, 24 October, 2012).

Problems Rebuilding

Strings attached to central government financing delayed the rebuilding process. Cultural institutions (e.g., libraries and museums) had normally been a prefectural or local government responsibility. Central government ordinarily only paid for replacement of old buildings in the original location (Interview with MEXT-official, Tokyo, 1 November 2012). Now, new buildings were needed in new locations. Another difficulty for cultural institutions was that local governments' top priority was rebuilding other physical infrastructures as roads, houses and schools: "New houses are the top priority and hospitals and fire stations are next" (Interview, Library director, Rikuzentakata town library, 26 October, 2012). Within the education sector schools were placed before libraries (Interview with Social Education officials, Iwate prefecture, Morioka, 25 October, 2012)

Deaths and migration from disaster areas meant erosion of the local government tax base. This added further uncertainty to planning decisions, especially for sectors particularly dependent on local government financing.: "It will be in about 2020 that [the new] library can be started" (Interview, Library director, Rikuzentakata town library, 26 October, 2012)

Location politics takes on different dimensions in disaster recovery. Safety concerns come into play; should new buildings be built on higher ground? What to do when no realistic high level options exist? How high should walls along the sea be built? (Interview, Library director, Otsuchi town library, 26 October,

2012). Another concern for rebuilding was the shrinking population (Interview, Library director, Rikuzentakata town library, 26 October, 2012).

Japanese Libraries in Distress

The library profession in Japan is weak and it is weakening (Vårheim, Ide, & Iju, 2013). This is not helpful when libraries need new infrastructure. Especially from late 1990s, the number of temporal employees has increased vastly more than the number of permanent employees. Most library workers in Japan are workers without any library qualification, and their share of the library workforce has been steadily increasing. This is the case even when the qualification needed to become a certified librarian is only an intensive summer course added to a bachelor's degree, or three years of library work experience (Kishida, 2011). Moreover, Japan has the fewest library service points per capita of any OECD country (Parker, 2006). Even in Tokyo, most service points are surprisingly low tech, yet they are full of patrons.

The weakness of the library profession and of the public library sector, makes their efforts during disaster recovery even more noteworthy, and further strengthens the argument that libraries are crucial institutions during disaster recovery.

Libraries Work in Japan During Disaster

Considering the grim situation for public libraries in Japan, the great local and national efforts from libraries and friends of libraries evident in Tohoku seem remarkable. Japanese libraries worked despite extremely difficult circumstances.

Libraries are among the most trusted, if not the most trusted, of public institutions. This is probably also the case in Japan. Government and political leaders reached record lows of trust after 3.11 (Samuels, 2013), and after hurricane Katrina (Nicholls & Picou, 2013). Trusted institutions, on the other hand, are perceived as stable entities that treat citizens fairly, and they are not corrupt. Public libraries' position as local community hubs makes them institutions of resiliency. They know the local community, and they can help. This institutional resiliency of libraries is built on trust in libraries, and the ways libraries operate also during disaster recovery builds further trust in libraries, thereby increasing community resilience another notch.

References

- Aabø, S., Audunson, R. A., & Vårheim, A. (2010). How do public libraries function as meeting places? *Library & Information Science Research*, 32(1), 16–26. <http://doi.org/10.1016/j.lisr.2009.07.008>

- Adger, W. N., Hughes, T. P., Folke, C., Carpenter, S. R., & Rockström, J. (2005). Social-Ecological Resilience to Coastal Disasters. *Science*, 309(5737), 1036–1039. <http://doi.org/10.1126/science>.
- Aldrich, D. P. (2012). *Building Resilience: Social Capital in Post-Disaster Recovery*. Chicago: University of Chicago Press.
- Aldrich, D. P. (2015). Social Capital in Post Disaster Recovery: Strong Networks and Communities Create a Resilient East Asian Community. In D. P. Aldrich, S. Oum, & Y. Sawada (Eds.), *Resilience and Recovery in Asian Disasters* (pp. 19–34). Springer Japan. Retrieved from http://link.springer.com/chapter/10.1007/978-4-431-55022-8_2
- Cox, E., Swinbourne, K., Pip, C., & Laing, S. (2000). *A safe place to go: Libraries and social capital* (p. 53). Sydney: University of Technology, Sydney, and the State Library of New South Wales. Retrieved from http://www.sl.nsw.gov.au/services/public_libraries/docs/safe_place.pdf
- Emigh, R. J. (1997). The power of negative thinking: The use of negative case methodology in the development of sociological theory. *Theory and Society*, 26(5), 649–684.
- Fialkoff, F. (2005). Government That Works: A defining moment for public libraries. *Library Journal*, 130(16), 8.
- George, A. L., & Bennett, A. (2005). *Case studies and theory development in the social sciences*. Cambridge, Mass.: MIT Press.
- Höglund, L., & Wahlström, E. (2009). *Användningen och attityderna. En rapport om allmänhetens användning av och syn på folkbibliotek baserad på SOM-undersökningen [2007]*. [Use and attitudes: a report on the public use and views on public libraries based on the 2007 SOM-survey]. Svensk Biblioteksförning. Retrieved from <http://bada.hb.se/handle/2320/5948>
- Jaeger, P. T., Langa, L. A., McClure, C. R., & Bertot, J. C. (2006). The 2004 and 2005 Gulf Coast Hurricanes: Evolving Roles and Lessons Learned for Public Libraries in Disaster Preparedness and Community Services. *Public Library Quarterly*, 25(3-4), 199–214. http://doi.org/10.1300/J118v25n03_17
- Kage, R. (2011). *Civic Engagement in Postwar Japan: The Revival of a Defeated Society*. Cambridge: Cambridge University Press. Retrieved from <http://ebooks.cambridge.org/ebook.jsf?bid=CBO9780511761409>
- Kishida, K. (2011). History and Recent Trends in Library and Information Science Education in Japan. Presented at the International Symposium on Library and Information Science Education: Trends and Visions, Taipei: Department of Library and Information Science, National Taiwan University. Retrieved from <http://www.lis.ntu.edu.tw/50symposium/submissions/IP003.pdf>

- Miller, C., Zickuhr, K., Rainie, H., & Purcell, K. (2013). *Parents, children, libraries, and reading*. Washington, D.C.: Pew Research Center's Internet & American Life Project.
- National Diet Library. (2012). *The Great East Japan Earthquake and Libraries* (No. 13). Tokyo: National Diet Library.
- Nicholls, K., & Picou, J. S. (2013). The Impact of Hurricane Katrina on Trust in Government. *Social Science Quarterly*, 94(2), 344–361. <http://doi.org/10.1111/j.1540-6237.2012.00932.x>
- NPA. (2015). Damage Situation and Police Counter measures associated with 2011 Tohoku district-off the Pacific Ocean Earthquake. 10 September 2015. National Police Agency of Japan Emergency Disaster Counter Measures Headquarters. Retrieved October 8, 2015, from http://www.npa.go.jp/archive/keibi/biki/higaijokyo_e.pdf
- Parker, S. (2006). The performance measurement of public libraries in Japan and the UK. *Performance Measurement and Metrics*, 7(1), 29–36.
- Putnam, R. D. (1993). *Making democracy work: Civic traditions in modern Italy*. Princeton, N.J.: Princeton University Press.
- Samet, J. M., & Chanson, D. (2015). *Fukushima Daiichi Power Plant Disaster: How many people were affected? 2015 Report*. Retrieved from http://www.greencross.ch/uploads/media/2015_fukushima_report.pdf
- Samuels, R. J. (2013). *3.11: disaster and change in Japan*. Ithaca: Cornell University Press.
- Solop, F. I., Hagen, K. K., & Bowie, J. I. (2007). *Survey of Arizonans' attitudes about public libraries: fall 2006*. Flagstaff, AZ: Northern Arizona University, Social Research Laboratory.
- Vårheim, A. (2014a). Trust and the role of the public library in the integration of refugees: The case of a Northern Norwegian city. *Journal of Librarianship and Information Science*, 46(1), 62–69. <http://doi.org/10.1177/0961000614523636>
- Vårheim, A. (2014b). Trust in Libraries and Trust in Most People: Social Capital Creation in the Public Library. *The Library Quarterly*, 84(3), 258–277. <http://doi.org/10.1086/676487>
- Vårheim, A., Ide, E., & Iju, M. (2013). The library profession under pressure in Japan: Change in the construction state. *Journal of Librarianship and Information Science*, 45(3), 248–253. <http://doi.org/10.1177/0961000612456866>
- Vårheim, A., Steinmo, S., & Ide, E. (2008). Do libraries matter? Public libraries and the creation of social capital. *Journal of Documentation*, 64(6), 877–892. <http://doi.org/10.1108/00220410810912433>

- Veil, S. R., & Bishop, B. W. (2014). Opportunities and Challenges for Public Libraries to Enhance Community Resilience. *Risk Analysis*, 34(4), 721–734. <http://doi.org/10.1111/risa.12130>
- WHO. (2011). *The great east Japan earthquake: a story of a devastating natural disaster, a tale of human compassion*. Manila, Philippines: World Health Organization, Western Pacific Region.
- Yin, R. K. (1989). *Case Study Research: Design and Methods*. Newbury Park, CA: Sage.

Notes

¹ The general population in three Oslo wards was surveyed. The surveys were conducted by Public Libraries as Arenas for Citizenship (PLACE), a research project by Oslo University College, the University of Tromsø, and Oslo School of Architecture and Design, in which the author was a member of the research group.