

[Travelogue]

## Revisiting Kesennuma: Development and Resilience, A Follow-Up Study on 3.11 Resilience

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**Abstract:** Scholars debate whether established cultures persist after a disaster or whether such events create opportunities for new cultural developments during recovery. This travelogue explores the recovery of Kesennuma from 2017 to 2023 following the Great East Japan Earthquake of 2011. Through the author's observations and analysis of official government records and documents, this paper discusses the impact of "destructive creation" and the coexistence of old and new cultures in Kesennuma thirteen years after the disaster. The pre-existed aging, depopulation, and limited tourism remain after the disaster, while new housing resettlement policies, tourism strategies, and an influx of urban-rural migrants represent a newly emerging post-disaster culture.

**Keywords:** disaster resilience, housing resettlement, urban-rural migration, tourism, elderly

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## Introduction

It has been seven years since my first visit to Kesennuma in 2017 and thirteen years since the Great East Japan Earthquake. While conducting research for my postgraduate studies, I encountered diverse perspectives and gained a deeper understanding of disaster resilience. In December 2023, I returned to the area, reflecting on how the city might have changed since my first visit. Known as "3.11," the Great East Japan Earthquake remains Japan's largest recorded earthquake, with a magnitude of 9.0, followed by a massive tsunami and damage to the Fukushima nuclear plant operated by Tokyo Electric Power Company. The disaster resulted in 19,747 casualties and 122,005 destroyed buildings.<sup>1</sup> The earthquake itself was not solely responsible for the damage; the tsunami, regarded as a second-degree disaster, was the primary cause of destruction. With the Fukushima nuclear plant damage further intensifying the crisis, 3.11 was claimed to be the most serious triple disaster with the most widespread damage in modern Japan.

I was in Hong Kong when the Great East Japan Earthquake devastated the Tohoku area. The local news repeatedly showed a video of the tsunami flooding the coastline, pulling fishing ships into the port, and crashing them into buildings along the shore. It was the first time I had seen such a powerful and destructive scene—one that I could never forget and that keeps coming to my mind sometimes even after all these years.

In March 2017, a memorial event for 3.11 reminded me of the shocking footage of the tsunami hitting Kesennuma. Later, in December, I decided to visit Kesennuma as I was wondering how the city was like after all these years since 3.11. I came across a travel guidebook, *Teku Teku Aruki*, with a section titled, "Remembering it deep in your heart, becoming a power in helping the locals—Come to visit the disaster area." The message moved me, and I thought that maybe I could gain an extraordinary experience by witnessing Kesennuma's recovery progress six years after the disaster.

How should we define the recovery from disaster? Recovery can be evaluated from various perspectives, such as community, economy, or infrastructure. As Daniel P. Aldrich suggested, disaster recovery might be simply defined as "the community or city restores itself to its pre-disaster condition," yet this is unlikely to happen.<sup>2</sup> For a city like Kesennuma, already facing depopulation and aging issues before 3.11, returning to pre-disaster conditions seems especially improbable.

Resilience has a broader definition, which Norris describes as the "capacity for successful adaptation in the face of disturbance, stress, or diversity."<sup>3</sup> In the later section of this travelogue, my observation and discussion will be based on Norris's concept of resilience. I interpret resilience as the capacity to adapt successfully to displacement generated by disaster and build resistance to future disruptions.

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<sup>1</sup> Reconstruction Agency of Japan, *Status of Reconstruction and Reconstruction Efforts*, February 2022, [https://www.reconstruction.go.jp/english/topics/Progress\\_to\\_date/pdf/February\\_2022\\_10maigami\\_genjoutorikumi.pdf](https://www.reconstruction.go.jp/english/topics/Progress_to_date/pdf/February_2022_10maigami_genjoutorikumi.pdf).

<sup>2</sup> Daniel P. Aldrich, *Building Resilience: Social Capital in Post-Disaster Recovery* (Chicago: The University of Chicago Press, 2012), 5.

<sup>3</sup> Fran H. Norris et al., "Community Resilience as a Metaphor, Theory, Set of Capacities, and Strategy for Disaster Readiness," in *American Journal of Community Psychology*, Vol. 41, No. 1–2 (2008): 129, <https://doi.org/10.1007/s10464-007-9156-6>.

Thirteen years have passed since 3.11, and current literature on disaster resilience related to the Great East Japan Earthquake covers a wide range of aspects, including the physical reconstruction process,<sup>4</sup> survivors' post-disaster experiences,<sup>5</sup> human security issues,<sup>6</sup> urban–rural migration to the disaster area,<sup>7</sup> and the lives of elderly survivors.<sup>8</sup> How do disasters create long-term impacts on the localities in terms of social-economical change and structural change? Based on Joseph Schumpeter's concept of "creative destruction,"<sup>9</sup> scholars debate whether catastrophic events offer opportunities for economic growth through rebuilding projects.<sup>10</sup> Susanna Hoffman has reconstructed Schumpeter's concept into a boarder definition. She argues that survivors claimed the aftermaths of catastrophe brought "good" impact on their lives by having a "new change". Survivors tried to clothe the unacceptable impact of disaster by claiming it as a new hope and further glamorized it as a "preservative boon" in preventing and preparing for any upcoming disaster.<sup>11</sup>

It is difficult to determine whether survivors genuinely embrace this new hope to overcome calamity or if it merely serves as a way to cope with their pain without comprehensive, in-depth interviews. I interpret "creative destruction" as a process that fosters positive social-economic and environmental changes during recovery and rebuilding, creating long-term impacts and potentially strengthening resilience against future catastrophes.

Did the disaster create lasting changes in Kesennuma? Did the rebuilding and recovery bring new and positive developments to the area? Is "creative destruction" still occurring thirteen years after the disaster in Kesennuma? This travelogue will try to explore Kesennuma's recovery process from 2017 to 2023,

<sup>4</sup> Yasutaka Ueda and Rajib Shaw, "Community Recovery in Tsunami-Affected Area: Lessons from Minami-Kesennuma," in *Tohoku Recovery: Challenges, Potentials and Future*, ed. Rajib Shaw, Disaster Risk Reduction (Tokyo: Springer Japan, 2015); Yiwen Shao, Osamu Soda, and Jiang Xu, "Capital Building for Urban Resilience: The Case of Reconstruction Planning of Kesennuma City, Miyagi Prefecture, Japan," *Procedia Environmental Sciences* 36 (2016/01/01/ 2016), <https://doi.org/https://doi.org/10.1016/j.proenv.2016.09.022>, <https://www.sciencedirect.com/science/article/pii/S1878029616302249>.

<sup>5</sup> Tom Gill, Brigitte Steger, and David H. Slater, *Japan copes with calamity: Ethnographies of the Earthquake, Tsunami and Nuclear Disasters of March 2011* (Bern: Peter Lang, 2013).

<sup>6</sup> Paul Bacon and Christopher Hobson, *Human Security and Japan's Triple Disaster: Responding to the 2011 Earthquake, Tsunami and Fukushima Nuclear Crisis*, Routledge Humanitarian Studies Series, (Abingdon, Oxon Routledge, 2014).

<sup>7</sup> Susanne Klien, *Urban Migrants in Rural Japan: Between Agency and Anomie in a Post-Growth Society* (Albany: State University of New York Press, 2020).

<sup>8</sup> Ōtani Junko, "Ageing Society, Health Issues and Disaster: Assessing 3/11," in *Natural Disaster and Nuclear Crisis in Japan: Response and Recovery after Japan's 3/11*, ed. Jeff Kingston (London: Routledge, 2012), 237–254; Isaac Gagne, "Dislocation, Social Isolation, and the Politics of Recovery in Post-Disaster Japan," in *Transcultural Psychiatry*, Vol. 57, No. 5 (2020), <https://doi.org/10.1177/1363461520920348>.

<sup>9</sup> Ricardo J. Caballero, "Creative destruction," in *Economic Growth*, ed. Steven N. Durlauf and Lawrence E. Blume (London: Palgrave Macmillan UK, 2010), 24. Creative destruction refers to the continuous mechanism of product and process innovation mechanism through which new production units replace outdated ones. Coined by Joseph Schumpeter in 1942, he regarded it as "the essential fact about capitalism."

<sup>10</sup> Aldrich, *Building Resilience*, 3.

<sup>11</sup> Susanna Hoffman and Anthony Oliver-Smith, *Catastrophe & Culture: The Anthropology of Disaster* (Santa Fe, NM: School of American Research Press, 2002), 139.

focusing on housing resettlement, tourism, local business, volunteer and urban--rural migration. Based on my observations, I argue that 3.11 has driven "creative destruction" in Kesennuma. Although the pre-disaster existing structure remains, new developments have emerged to address long-standing issues such as depopulation, domestically-focused tourism, and an aging population.

Firstly, I will discuss how housing resettlement has prioritized elderly residents, potentially leading to a concentration of elderly citizens in Public Reconstruction Housing (PRH), similar to what occurred after the Great Hanshin Earthquake. In contrast, the people-centered reconstruction project in Kesennuma has fostered new bonds among residents. Secondly, I will discuss Kesennuma's tourism, which has traditionally focused on domestic visitors. The limited number of foreign tourists may hinder the development and sustainability of local businesses. Although a new tourism strategy aims to attract international and domestic travel is currently in place, the results remain uncertain. Finally, I will address Kesennuma's aging and depopulation issues, which existed before the disaster and have intensified in its aftermath. Volunteers and the urban-rural migrants who have stayed in Kesennuma since the catastrophe have established a new community that may help facilitate the city's development.

In the upcoming section, I will further examine the literature on disasters. This discussion will clarify some fundamental concepts of disaster, providing a foundation for my observations on the recovery process.

### **Perception of disaster as an outsider**

Objectivity is crucial for researchers and outsiders who have never experienced a major disaster firsthand. Viewing and generalizing a catastrophe from an outsider's perspective can lead to an incomplete understanding of its complexity and the actual conditions on the ground. My initial knowledge of Kesennuma's post-disaster situation came primarily from Hong Kong media and, at times, foreign media before my first visit in 2017. Based on this coverage, I perceived that recovery was progressing steadily, albeit slowly, and that there was a strong sense of bonding and hope among survivors. With aid coming from other parts of Japan and around the world, my perception of disaster recovery was generally positive. However, I soon realized that the reality was more complex.

My perception has excluded the complexity of the post-disaster situation. While preparing my research papers on post-disaster areas during my postgraduate studies in 2022, I learned from various studies that the recovery process faced numerous challenges.<sup>12</sup> These included gaps in disaster recovery planning, difficulties encountered by survivors in evacuation centers and temporary housing,<sup>13</sup> and discrepancies between survivors' needs and government policies.<sup>14</sup> I came to understand that my initial perception, shaped largely by media, had overlooked these complexities.

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<sup>12</sup> Ueda and Shaw, "Community Recovery in Tsunami-Affected Area."

<sup>13</sup> Gagne, "Dislocation, Social Isolation, and the Politics of Recovery in Post-Disaster Japan"; Ōtani, "Ageing Society, Health Issues and Disaster."

<sup>14</sup> Ueda and Shaw, "Community Recovery in Tsunami-Affected Area"; Susanne Klien, "Reinventing Ishinomaki, Reinventing Japan?"

Ōtani Junko's research on the Great Hanshin Earthquake illustrates this gap, highlighting differences between media coverage and her fieldwork data from PRH. Media coverage did not always reflect the actual experiences of elderly residents in PRH, and it sometimes misrepresented their views along with those of PRH staff. The media also emphasized the elderly as a vulnerable group needing the most support while often overlooking other survivors in their fifties who, being excluded from the job market, struggled to access government and volunteer assistance.

As a foreign outsider, I also relied heavily on non-local media, which often faced limitations imposed by government media policies and restricted access to disaster areas.<sup>15</sup> David McNeill described these structural constraints in reporting the emergency situation at the Fukushima No. 1 nuclear plant. Foreign reporters dispatched to Japan after 3.11 were often unfamiliar with Japan's disaster landscape and lacked access to top government officials for interviews. Many foreign media outlets relied on NHK as a primary source for 3.11 news, yet NHK's reports were largely based on government and corporate sources.<sup>16</sup> Consequently, selective media perspectives and policy limitations contributed to a narrow and sometimes distorted perception of the disaster for outsiders.

## Disaster perceptions and vulnerability of survivors

The perception of disaster as a survivor is subject to individual interpretation of disaster. In other words, disaster is a combination of nature and human response. Robert Bolin and Stanford Lois define disaster as a transformation of environmental hazards when people lack the capacity to mitigate physical risks.<sup>17</sup> Hazard as a destructive natural event combined with human reactions to the physical impact of the natural hazard constitutes to the formation of disaster. These human reactions include managing and adapting to severe conditions after a catastrophe and interpreting the impact of the hazard on oneself. Susanna Hoffman and Anthony Oliver-Smith argue that disaster is a sociocultural construct that exists only when people perceive either a threat or impact imposed by the hazard exists. Social and cultural characteristics thus contribute to diverse interpretations of the threat or impact of the disaster.<sup>18</sup>

Arthur Kleinman's concept of suffering further explains individual differences in interpreting disaster. According to Kleinman, subjectivity of the individual is an important element in having reciprocal influence

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Creative Networks, Alternative Lifestyles and the Search for Quality of Life in Post-growth Japan," in *Japanese Studies*, Vol. 36, No. 1 (2016), <https://doi.org/10.1080/10371397.2016.1148555>.

<sup>15</sup> Ōtani Junko, *Older people in natural disasters : the great Hanshin earthquake of 1995* (Kyoto: Kyoto University Press, 2010).

<sup>16</sup> David McNeill, "Them versus Us: Japanese and International Reporting of the Fukushima Nuclear Crisis," in *Japan Copes with Calamity: Ethnographies of the Earthquake, Tsunami and Nuclear Disasters of March 2011*, ed. Tom Gill, Brigitte Steger, and David H. Slater (Bern: Peter Lang, 2013).

<sup>17</sup> Robert Bolin and Lois Stanford, "Constructing Vulnerability in the First World: The Northridge Earthquake in Southern California, 1994," in *The Angry Earth: Disaster in Anthropological Perspective*, ed. Anthony Oliver-Smith and Susannah M. Hoffman (New York: Routledge, 1999), 90.

<sup>18</sup> Hoffman and Oliver-Smith, *Catastrophe & Culture*, 37–38.

with social experience and cultural representation on the transformation of "experience."<sup>19</sup> In other words, individual subjectivity plays an important role in shaping the idea of suffering. When subjectivity motivates the formation in defining suffering, the definition of suffering varies among individual based on their own interpretation. An example from Kroll-Smith's interview with a nineteen-year-old man exposed to a methane plume at his living area may further illustrate the mechanism. The young man described how each of his family members interpreted the event as disaster. While his father viewed the situation as a disaster due to financial loss and a lack of government support, his mother interpreted it as a life threatening event, and the young man himself saw it as a possibility for his fiancée to move away from him because of the methane plume.<sup>20</sup> This example highlights that disaster experiences are not universal—even within the same family, which shares a similar background and cultural experiences. Therefore, disaster experience remains unique based on individual subjectivities and interpretations.

Bolin defines vulnerability as "people's capacity to avoid, cope with, and recover from disasters," focusing on "living conditions, social and economic resources, livelihood patterns and social power."<sup>21</sup> However, actual vulnerability of survivors may be more complex, shaped by intersecting factors. Survivors' unique perceptions and experiences of disaster influence their post-disaster conditions and coping ability. For instance, survivors from the same pre-disaster area may face different challenges: some might have lost their homes, while others whose houses could be preserved from the catastrophe may have lost their family members. However, under the post-disaster condition, government aid distribution often depends on survivors' physical conditions and levels of suffering, with categories like age, gender, family status, health condition, and housing damage shaping the allocation of support and aid. As a result, vulnerability has been generalized in terms of living conditions, social and economic resources by government disaster recovery policy. The primary aim of this travelogue is to explore Kesennuma's recovery process rather than provide an in-depth discussion of disaster vulnerability. Where applicable, I will reference government data and documents. To maintain clarity, survivor vulnerability in this discussion will be generally defined by living conditions, social and economic resources, livelihood patterns, and social power—aligning with government policy definitions to avoid confusion.

## The destroyed city: Kesennuma

Kesennuma is a coastal city along the Pacific Ocean in the northeast part of Miyagi Prefecture in Japan's Tohoku region. Before the Great East Japan Earthquake, the city primarily relied on the fishing industry and tourism. The disaster inflicted severe damage: One-third of the population was affected, with 1,434 people

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<sup>19</sup> Arthur Kleinman, "Everything That Really Matters': Social Suffering, Subjectivity, and the Remaking of Human Experience in a Disordering World," in *The Harvard Theological Review*, Vol. 90, No. 3 (1997): 322, <https://doi.org/10.1017/S0017816000006374>.

<sup>20</sup> Hoffman and Oliver-Smith, *Catastrophe & Culture*, 37–38.

<sup>21</sup> Bolin and Stanford, "Constructing Vulnerability in the First World," 90.

dead or missing, 15,815 residential buildings damaged, and more than 9,500 households impacted.<sup>22</sup> In addition to the widespread destruction caused by the tsunami, a massive fire—triggered by an oil tank at the bay entrance—devastated many seafood processing companies.<sup>23</sup>

Before the disaster, three-generation households were more common in Tohoku than in cities like Tokyo. This trend is linked to the traditional fishing and farming economies, which often operate as family businesses requiring substantial human resources for daily operations. In Miyagi Prefecture, 13.48% of households consisted of three generations, exceeding the national average of 8.64% in 2010, the year before the disaster.<sup>24</sup> Tohoku was already facing depopulation and aging issues, which worsened after 3.11. In Miyagi, 28.9% of the population was over age 65 in 2022, a figure projected to reach 40.3% by 2045.<sup>25</sup>

These challenges intensified in the post-disaster period, with 53,562 out-migrants from Miyagi reported within the first six months after the disaster.<sup>26</sup> Many younger people left the affected area seeking education and job opportunities, with parents especially concerned about the potential effects of radiation on their children. In contrast, the elderly, deeply connected to the region, were reluctant to leave.<sup>27</sup> This led to a high proportion of elderly survivors remaining in the disaster area.

## Visiting Kesennuma

I had a two-day visit in Kesennuma and stayed in a hotel and a guesthouse in Kesennuma in December 2017 and again in December 2023 respectively. In 2017, the city was still gradually recovering from the disaster, with infrastructure and housing construction incomplete and limited English tourist information available. When I returned in 2023, most of the infrastructure recovery projects had been completed, and English tourist information had become more accessible and comprehensive.

To understand the current state of Kesennuma and the progress of its recovery, I spoke with locals I encountered. My observations in 2023, supported by discussions with locals (I use "locals" to refer to people living in Kesennuma during my visit—they are either "*jimoto*" born and living at Kesennuma before 3.11 or migrated to the area after the disaster), form the primary basis of this section. Quantitative data published by the local government will provide additional support to ensure objectivity. My experience from 2017

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<sup>22</sup> "Higai no Jōkyō 被害の状況," Kesennuma Shiyakusho 気仙沼市役所, accessed June 5, 2024, <https://www.kesennuma.miyagi.jp/sec/s009/020/020/020/1300452011135.html>

<sup>23</sup> Ueda and Shaw, "Community Recovery in Tsunami-Affected Area," 217–218.

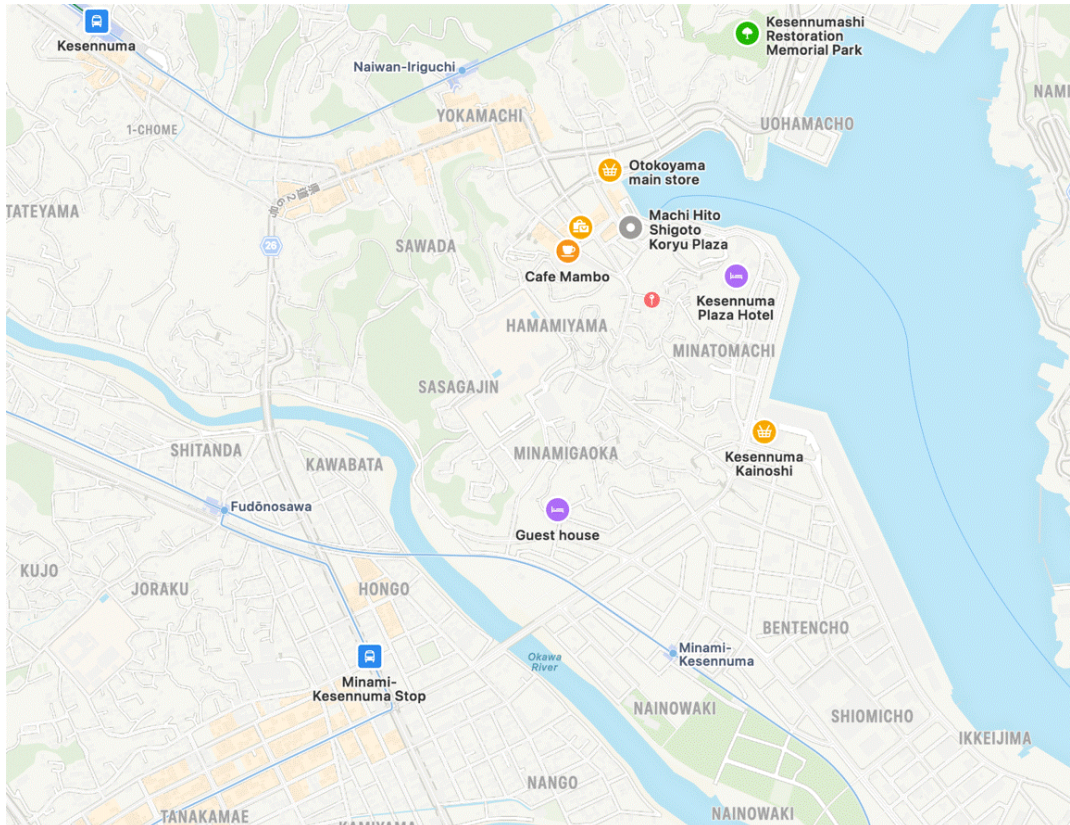
<sup>24</sup> Ōtani, "Ageing Society, Health Issues and Disaster: Assessing 3/11," 242.

<sup>25</sup> Reiwa 4 nen ban kōrei shakai hakusho 令和4年版高齢社会白書 Ageing Society White Paper 2023, 11 (Cabinet Office, Government of Japan, 2023).

<sup>26</sup> Higashinippon daishinsai no hassei to fukkyū fukkō 東日本大震災の発生と復旧・復興, 59 (Cabinet Office, Government of Japan).

<sup>27</sup> Ōtani Junko, "Ageing society, health issues and disaster: Assessing 3/11," in *Natural disaster and nuclear crisis in Japan : response and recovery after Japan's 3/11*, ed. Jeff Kingston (London: Routledge, 2012), 242.

serves as a reference for comparing the latest developments in Kesennuma. This examination of the recovery process relies on a comparison of my two-day visits in 2017 and 2023.



**Figure 1:** Map of Kesennuma.

## Housing resettlement

The post-disaster housing resettlement policy in Kesennuma prioritized elderly residents for PRH. Given the high proportion of elderly residents, this approach may result in similar outcomes to those following the Great Hanshin Earthquake, where many elderly residents reported having a lonely life in PRH. Conversely, a people-centered reconstruction project in Kesennuma has been introduced to foster new social bonds among residents. In this section, I will discuss how the newly developed people-centred reconstruction project plays an important role in disaster resilience.



Housing resettlement is a vital, long-term focus in disaster recovery. Post-disaster recovery for housing resettlement can be divided into three stages: evacuation centers,<sup>28</sup> Temporary Shelter Housing (TSH),<sup>29</sup> and Public Reconstruction Housing (PRH).<sup>30</sup> After the evacuation center and temporary housing, PRH (災害公営住宅) provides permanent housing for survivors who lost their homes in the disaster. All PRH projects in Kesennuma, including the Bay Area and Minami-Kesennuma, were completed by 2019.<sup>31</sup>

In 2023, I stayed in a guesthouse near Minami-Kesennuma station, where several PRHs were located. Over my two-day visit, I passed by multiple PRHs at different times but saw no residents interacting with each other, whether in the morning, at noon, or in the evening. This reminded me of the issue of isolated death, or *kodokushi*, among the elderly after the Great Hanshin Earthquake. Elderly regarded as more vulnerable survivors were given priority in moving into PRH since the Great Hanshin Earthquake.

In Ōtani's study on the Kobe Earthquake, PRH was described as "a place where hundreds of people were lonely together."<sup>32</sup> She concluded that this resulted from the lack of a close and familiar community. When elderly survivors were allocated to different PRHs, connections they had formed with neighbors over the years in TSH were disrupted. Some elderly people preferred their lives in TSH, where they could stay connected with other residents in the common areas, chatting with each other and joining activities organized by volunteers.

Even the PRHs Ōtani visited during her fieldwork provided better physical living conditions than TSH; one PRH resident described her life as, "Once you close the door, there is no human contact with the outside."<sup>33</sup> This underscores the importance of social connection for elderly survivors in their post-disaster lives. Indeed, elderly residents in Kesennuma PRH may experience a similar situation, with limited social connections.

The experiences of some PRH elderly residents in Kesennuma mirrored Ōtani's findings. Due to the aging and depopulating population in Tohoku, elderly individuals made up the majority of survivors. Prioritizing their relocation into PRH led to a concentration of elderly residents, similar to the post-disaster

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<sup>28</sup> "Natural Disasters-About Evacuation Center," accessed 20 Oct, 2024, <https://tabunka.tokyo-tsunagari.or.jp/english/disaster/howto/shelter.html>. Evacuation centers offer a place for people who cannot stay in their homes after a disaster; they are usually located in public schools or other public facilities.

<sup>29</sup> Yasutaka Ueda and Rajib Shaw, "Issues and Challenges in Temporary Housing in Post-3.11 Kesennuma," *Disaster Risk Reduction* (Tokyo: Springer Japan, 2013), 210; Ueda and Shaw, "Issues and Challenges in Temporary Housing in Post-3.11 Kesennuma." Temporary housing is defined as "housing to be constructed rapidly in order for evacuees to stay safe, to promote residents' quick transfer to their permanent house, and to be terminated by the time of their transfer"; the living period is up to two years.

<sup>30</sup> "Miyagi ken saigai kōei jūtaku seibi shishin 〈gaidorain〉 宮城県災害公営住宅整備指針 〈ガイドライン〉 (Miyagi Perfecture). Provided to disaster survivors whose homes were partially or completely destroyed, with a ten-year special subsidy on monthly rent.

<sup>31</sup> "Fukkyū fukkō ni kakaru jigyō kōteihyō kesennuma chiku 復旧・復興に係る事業工程表 気仙沼地区," Kesennuma City, accessed June 5, 2024, [https://www.kesennuma.miyagi.jp/sec/s090/010/010/010/020/01\\_koutei\\_kesennuma.pdf](https://www.kesennuma.miyagi.jp/sec/s090/010/010/010/020/01_koutei_kesennuma.pdf).

<sup>32</sup> Ōtani, *Older people in natural disasters : the great Hanshin earthquake of 1995*.

<sup>33</sup> Ōtani, *Older People in Natural Disasters*, 155–159.

situation following the Great Hanshin Earthquake. According to an NHK interview,<sup>34</sup> some PRH elderly residents isolated themselves at home, sometimes not going out for several days.

One interviewee, Mrs. Satō, who moved to the PRH in Minami-Kesennuma with her husband as part of the first group of residents, described this isolation. Residents came from different parts of the city and generally knew no one. Mrs. Satō initially joined community activities to stay connected with her neighbors, but she eventually withdrew to focus on caring for her husband, who was suffering from cancer. After his death, along with that of her best friend, she began to feel increasingly insecure living alone. Cases of *kodokushi* have been reported in the same PRH, with some elderly residents' deaths only discovered days afterward.

*Kodokushi* has drawn media attention since the Great Hanshin Earthquake. Ōtani notes that it is important to examine the factors that may put elderly who were living alone at risk, yet it is not a necessary experience of PRH elderly residents.<sup>35</sup> *Kodokushi* is, however, one consequence of the aging population. In 2023, this issue remained evident and seemed unavoidable in Kesennuma. Yet, at the same time, the housing resettlement process has fostered new resilience in addressing the post-disaster situation.

The housing resettlement construction in Minami-Kesennuma began in 2017 and was completed by 2019. In 2017, 8.9% of survivors were still living in temporary housing (with all temporary residents relocated by 2020),<sup>36</sup> and there was minimal residential settlement around the Bay Area and Minami-Kesennuma. The area was dominated by construction work to raise the land elevation above sea level. There were no proper sidewalks, and detours were everywhere.

During my visit in 2017, most of the time my sister and I often had to walk along the roadside, and we were separated from passing cars only by temporary road barriers. At night, there were just a few streetlights. The whole area was so dark at around 6 p.m. that we felt like it was already midnight. We could only recognize the direction by the headlights of passing cars and the flashing lights on the construction barriers as we walked to a seafood restaurant about five minutes from our hotel. Yet, we both felt that it had taken us up to 20 minutes; we kept asking each other where we were going and reconfirming every minute that we were on the right way.

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<sup>34</sup> Arisa Fujiie 藤家亜里紗 and Ayaka Sakai 境彩花, "Koritsu fusegu ni wa saigai kōei jūtaku no genjō 孤立防ぐには 災害公営住宅の現状," *NHK*, March 11, 2024, *Shit toku tōhoku to wa* 知っトク東北とは, <https://www.nhk.or.jp/sendai-blog/social/492341.html>.

<sup>35</sup> Ōtani, *Older People in Natural Disasters*, 178.

<sup>36</sup> "Dēta de miru fukkō no jōkyō データで見る復興の状況," *Kesennuma City* 気仙沼市, accessed June 5, 2024, <https://www.kesennuma.miyagi.jp/sec/s019/010/030/010/2024229detademiruhukkounojoukyou.pdf>.



**Figure 2.** Bay Area at 6 p.m. in 2017.



**Figure 3.** Bay Area at 5 p.m. in 2023.



**Figure 4.** Construction site in the Bay Area in 2017.

During my visit in 2023, while staying in Minami-Kesennuma, I noticed that the leveled area did not seem to show a significant change in elevation while I was living in Minami-Kesennuma. I could barely feel the difference when travelling between the Bay Area and Minami-Kesennuma. Leveling zone is one of the post-disaster measures intended to increase the resistance of residential areas against the damage of tsunami.

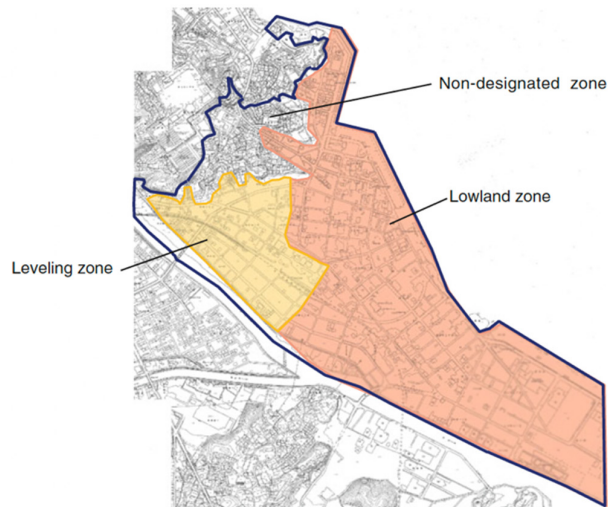
This approach is further explained in Ueda and Shaw's 2012 study about the post-disaster planning progress in 2012 of Kesennuma government.<sup>37</sup> The post-disaster recovery zone planning in Minami-Kesennuma aimed to reduce human risk from potential future tsunamis through housing resettlement (Figure 5). Three zones were established based on tsunami risk levels:

- (1) Leveling zone: designated for residential or commercial use after completion of land leveling. (i.e. Minami-Kesennuma)
- (2) Lowland zone: designated for green parks and the marine industry. (i.e. part of the Bay Area: Center for Community Exchange and Minamimachi Murasaki Jinja Mae Shotengai)
- (3) Non-designated zone: areas deemed to be at comparatively lower tsunami risk (i.e. part of the Bay Area: Kesennuma Uminoichi).<sup>38</sup>

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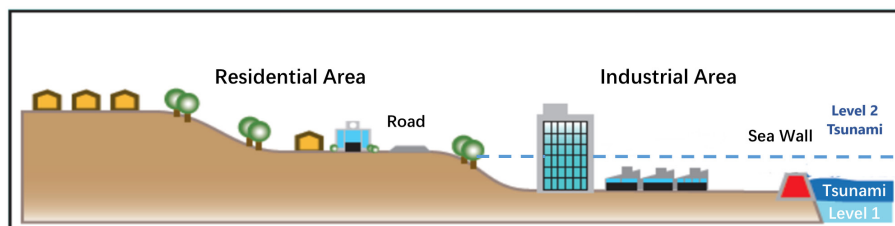
<sup>37</sup> Ueda and Shaw, "Community Recovery in Tsunami-Affected Area: Lessons from Minami-Kesennuma."

<sup>38</sup> Ueda and Shaw, "Community Recovery in Tsunami-Affected Area: Lessons from Minami-Kesennuma."



**Figure 5.** Zone planning for Minami-Kesennuma recovery.<sup>39</sup>

The housing resettlement followed the 2012 zone planning, with PRHs situated in the leveling zone of Minami-Kesennuma. During the 3.11 disaster, the tsunami reached heights of 5–7 meters, and the area experienced a 70 cm land subsidence afterward.<sup>40</sup> To minimize damage and casualties from potential future tsunamis, the residential area was elevated to a higher altitude above sea level. The seawall constructed along the coast should hold any future tsunami of similar scale and intensity to 3.11 (Level 1). In the event of a more severe tsunami (Level 2), the residential area will be protected by leveled-up location (Figure 6).



**Figure 6.** Leveling zone for a residential area in Kesennuma.<sup>41</sup>

With the protection of the seawall and elevated land, Minami-Kesennuma, as a residential area, consists of both privately owned and public housing in different scales. There were three PRHs within 20 minutes walkable distance from my guesthouse (Figure 7). At around 8:30 p.m., I went to the 24-hour Sukiya, which

<sup>39</sup> Ueda and Shaw, "Community Recovery in Tsunami-Affected Area."

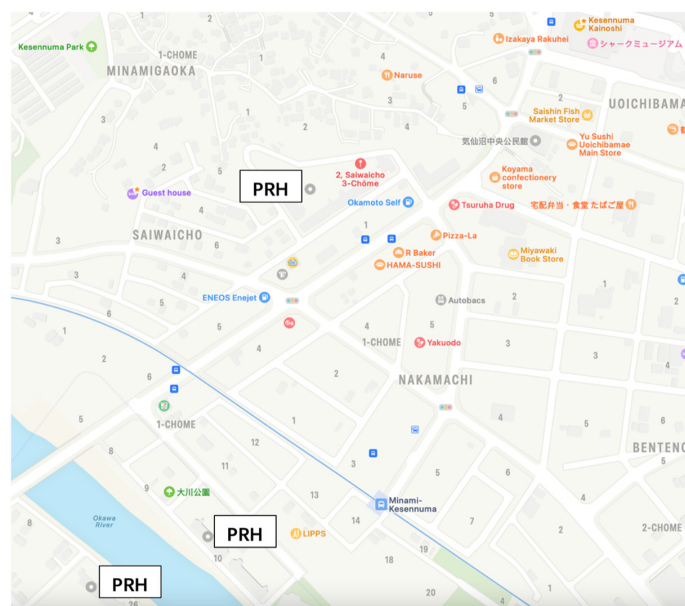
<sup>40</sup> Bōsai gen wazawai no kihon teki kangaekata to chiku kōsō 防災・減災の基本的考え方と地区構想, 43 (Kesennuma City).

<sup>41</sup> Miyagi ken no fukkō no genjō — higashinippon daishinsai kara ichi ni nen — 宮城県の復興の現状—東日本大震災から12年—, (復興庁 Reconstruction Agency).

is just a 5-minute walk from my guesthouse, to buy a takeaway dinner. To my surprise, the area was now well-developed, resembling any other part of Japan. I could hardly believe this was the same area I visited in 2017, which had been devastated by the tsunami 12 years ago.

Daily necessities were easily accessible within walking distance, including stores like Hamasushi, a bookstore, an autobike shop, a drugstore, a bakery, a coffee shop, and a convenience store. Some stores and restaurants remained open until late at night. In addition, a large department store was located just a 15-minute walk away.

The PRHs were located near the Bay Area, which features shops for tourists and restaurants, offering job opportunities for the younger generation. Some of the shop and restaurant owners were the young generation at the age of 20-30. As Kesennuma is a fishing port, many residents work in the fishing industry along the Bay Area, making access to the coastline area essential for their livelihoods. The location of public reconstruction housing is especially critical for those employed in the fishing industry.



**Figure 7.** Map of Minami-Kesennuma and location of PRH.

*Machi-zukuri* has been a focal point in the PRH guidelines of Miyagi Prefecture.<sup>42</sup> *Machi-zukuri*, or Japanese style community planning, is a word made up with the word *machi*, which literally means cities and towns, and the word *zukuri*, which literally means the process of hand-made creation. It is a process that exerts much social and human capital. This supplementation is important in the Japanese culture because it has a connotation of residents planning their own environment with traditional urban form that reflects

<sup>42</sup> Miyagi ken saigai kōei jūtaku seibi shishin 〈gaidorain〉 宮城県災害公営住宅整備指針 〈ガイドライン〉 (Miyagi Prefecture).

their own values and lifestyles, contrasting with a modern interventionist approach that formal urban planning system inserts *toshi-keikaku*.<sup>43</sup>

A people-centered recovery addresses residents' needs not only for their immediate housing and living environment but also for their community, social, and economic well-being. Such a recovery approach must thus integrate the interactions between the design of the physical environment and the social and economic dimensions of residents' lives.<sup>44</sup>

During my visit in 2023, I discovered that housing resettlement planning had effectively implemented the concepts of *machi-zukuri* and people-centered recovery. My observations align with the findings of Shao, Soda, and Xu<sup>45</sup>: The human-centered *machi-zukuri* projects in Kesennuma addressed residents' daily living needs while also involves various stakeholders to foster local bonding and community cohesion. The Bay Area and Minami-Kesennuma have been rebuilt with facilities that encourage interaction among residents to strengthen local connections.

One example is the Center for Community Exchange at the Pier in the Bay Area, known in Japanese as Machi Hito Shigoto Kōryū Plaza (気仙沼まち・ひと・しごと交流プラザ) (Figure 8), meaning "town, people, and work communication plaza." Reconstructed from a center selling local products and a youth welfare facility destroyed in the disaster, this multifunction plaza now includes facilities such as a sports center, music studio, lecture room, and common areas—all available to residents at a low cost. Additionally, the plaza features an urban-migrant support center and tourist amenities, serving as a vital meeting point for locals, tourists, and new migrants and creating opportunities for further communication and interaction.



Figure 8. Floor guide for the Center for Community Exchange.

<sup>43</sup> The term has gained popularity during the citizen environmental movement in 1960s and 1970s, and further development in the post-Hanshin earthquake reconstruction process. *Machi-zukuri* has supplemented the planning of physical and social environment through a bottom-up grassroots approach. Shao, Soda, and Xu, "Capital Building for Urban Resilience," 124.

<sup>44</sup> Elizabeth Maly, "Towards a People-Centered Housing Recovery after the Triple Disaster," in *Human Security and Japan's Triple Disaster: Responding to the 2011 Earthquake, Tsunami and Fukushima Nuclear Crisis*, ed. Paul Bacon and Christopher Hobson (London: Routledge, 2014), 111.

<sup>45</sup> Shao, Soda, and Xu, "Capital Building for Urban Resilience."

The aging issue in Kesennuma remains inevitable, both before and after the disaster, as the area's demographic structure continues to influence the city. "Creative destruction" occurs through the new housing resettlement established as part of the disaster resilience project, enabling new connections and opportunities. The housing resettlement following 3.11 has contributed to greater resilience against future hazards by enhancing preparedness for unpredictable situations. In addition, the people-centered recovery project has created a supportive environment that meets survivors' needs and desires, aiding in their life recovery.<sup>46</sup>

### Local business and tourism

Inbound tourists have been essential in supporting Kesennuma's tourism since the pre-disaster period. However, the proportion of foreign tourists has remained low even in the post-disaster era, which may hinder the development and sustainability of local businesses. A new tourism strategy aimed at broadening the inbound tourist base has been developed, but its impact on supporting local businesses has yet to be realized.

Compared to Tokyo, Kyoto, Okinawa, and Hokkaido, Sendai, the largest city in Tohoku, is less well-known among international travelers. In 2017, I learned from staff at the tourist information center at Kesennuma station that most tourists in Kesennuma were Japanese. Among foreign tourists, the majority came from Western countries in Europe and America, with only a few from Hong Kong each year. A survey conducted by the Kesennuma City Office between 2010 and 2018 indicated that only about 1% of overnight tourists in Kesennuma were from outside Japan.<sup>47</sup> The guesthouse manager mentioned that their customers are primarily Japanese, with occasional visitors from Europe or Asia. This situation may result from the inconvenience and low frequency of public transport to and within Kesennuma. Aside from car rentals, tourists can only travel by bus rapid transit<sup>48</sup> and local city buses within the city.

During my visit in 2023, which coincided with New Year's Eve, many Japanese people had returned to their hometowns to celebrate the holiday. The most crowded area was the Kesennuma Uminoichi (海の市) in the Bay Area, a vibrant hub filled with local shops, products, and restaurants. It was bustling with people purchasing souvenirs and local product. Some well-known products, such as locally brewed sake from Otokoyama Honten, sold out within half an hour.

The local businesses in the Kesennuma Bay area primarily cater to tourists, offering American-style clothing, locally crafted handmade bags, and Kesennuma-themed souvenirs. Even in convenience stores, some tourist-related souvenirs were marked as "available in Kesennuma only."

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<sup>46</sup> Maly, "Towards a People-Centered Housing Recovery After the Triple Disaster," 125.

<sup>47</sup> "Kesennuma shi no gaikokujin shukuhaku kyakusū no sui 気仙沼市の外国人宿泊客数の推移," Kesennuma City, <https://www.kesennuma.miyagi.jp/sec/s084/foreignguests.pdf>.

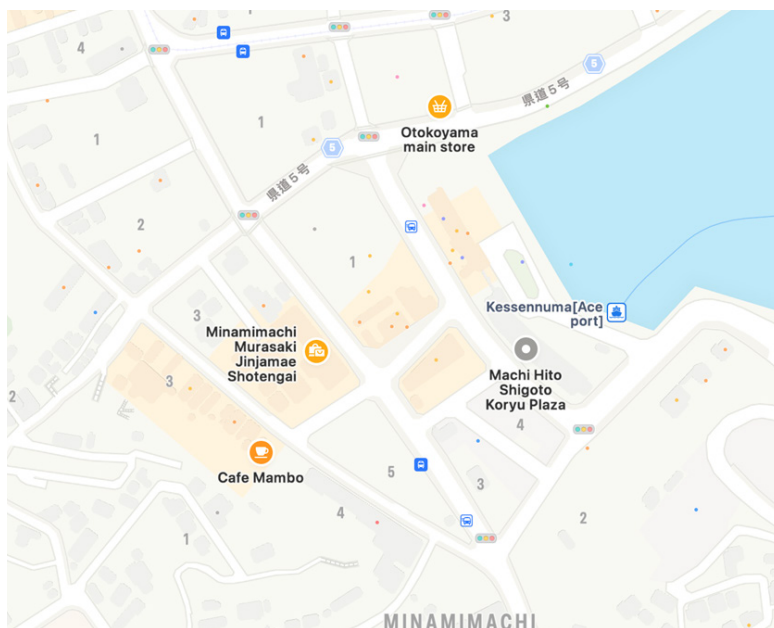
<sup>48</sup> Due to the severe destruction of the railway infrastructure caused by 3.11, the railway company decided to replace train services with buses instead of making significant investments to repair the damaged infrastructure.



I revisited the “Minamimachi Murasaki Jinja Mae Shotengai shopping street (南町紫神社前商店街) in 2023. This two-story complex, which opened in November 2017, has around ten shops and restaurants. However, I found that only two shops had managed to survive since 2017. I visited the handmade bag shop I had been to in 2017 and had a quick chat with the owner. When I told him that I found Kesennuma has changed a lot since my last visit in 2017, he agreed there had been several new developments. I noticed from his facial expression, he looked worried and saying that shop opened and closed here and there in this Shotengai. He even wore a slightly sad smile when I asked if he was busy with local and online orders from across Japan. I wonder if I have asked the wrong question that the business is actually not doing well.

Throughout our conversation, the owner did not sound particularly enthusiastic about the prospects of the new developments in Kesennuma, especially around the Bay Area. At around 2:30 p.m., there were no other customers in the shops. The main shop of the local sake brand, Otokoyama Honten, was also located in the Bay Area. Comparing to the shop in Uminoichi which crowded with customer, there were no other customer at the main shop. I was impressed by the great contradiction in the number of customers between Uminoichi and Minamachi Murasaki Jinja Mae Shotengai during the same afternoon.

This disparity might be attributed to the fact that tourists primarily visit Kesennuma to see family and relatives during the New Year, resulting in their departure from the Bay Area to reunite with loved ones. Based on the the response and the facial expression of the handmade bag shop owner, I perceived that the new developments may not significantly benefit his business. Although his products are appealing to tourists, allowing his shop to remain open since 2017, many other shops have closed and been replaced by new ones.



**Figure 9.**  
Map of the Bay Area.

Kesennuma tourism did not prioritize foreign tourists in 2017. During my visit that December, staff at the tourism office informed me that a simple English website had just been created three months ago before my visit in December 2017. The website included only basic information about Kesennuma, there was not much about sightseeing spots, restaurants, or accommodation recommendations. Consequently, I sought direct assistance from the tourism office via email to inquire about places to stay and things to do in Kesennuma.

In 2021, a morning drama produced by NHK was filmed in Kesennuma, which significantly increased the area's exposure as the drama aired every morning for six months. The shooting locations from the drama have since become popular sightseeing spots in Kesennuma. By 2023, the English tourist website "Visit Kesennuma" had been launched, targeting foreign visitors and providing comprehensive information to help them plan their trips. In addition to sightseeing recommendations, the website features an AI route planner to assist tourists in organizing their stays.

Kesennuma's tourism strategy has shifted toward a more foreign-tourist-friendly approach. However, based on my observations and conversation with the shop owner, the impact of these changes appears limited, benefiting only some local businesses. The existing structures within the tourist segment remain, and the efforts to expand the tourist base are still in progress.

## Volunteer and urban-rural migration

The aging and depopulation problem in Kesennuma was identified before the disaster and further intensified during the post-disaster period. Volunteers who remained in Kesennuma, along with urban-rural migrants who moved in after the disaster, are establishing a new community that may facilitate a new development of the City.

The diminishing community in rural areas like Kesennuma, exacerbated by aging and depopulation, has been further impacted by the aftermath of the disaster and the anxiety of survivors coping with post-disaster conditions. In 2012, immediately after 3.11, 2,857 people moved out of Kesennuma. The number of births has decreased yearly, and the steady increase in the elderly population has led to a decline in the total population of Kesennuma since 2011 (Table 1).<sup>49</sup> Moving to urban areas could be a solution for meeting living necessities and alleviating anxiety about living in a disaster-prone region.

Tom Gill has discussed the correlation between urbanization and the breakdown of connections with *furusato*, which refers to one's hometown. He believes that the events of 3.11 posed an intellectual and practical challenge to the *furusato* ideology, which serves as an anchor for the hearts of people living in

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<sup>49</sup> "Kesennuma shi no jinkō sūi 気仙沼市の人口推移," Kesennuma machizukuri shien sentā 気仙沼まちづくり支援センター, accessed June 5, 2024, <https://kesennuma-machicen.com/guide02/>.

disaster areas. For survivors evacuating from their hometowns, their connection to *furusato* has been abruptly severed.<sup>50</sup> In a documentary about evacuees from Fukushima after 3.11,<sup>51</sup> each evacuee has their reasons for leaving their hometown, indicating a breaking or weakening of their ties to *furusato*. While the physical link to their *furusato* appears to be diminishing, it has not been abandoned by the evacuees. Instead, the evacuees have maintained their social connections and ties through dedicated legal actions against the Japanese government's handling of the disaster. At the same time, new linkages and connections are being established in their new hometowns.

**Kesennuma City population trends (2011 to end of February 2022)**

Year	Total population	Year-on-year change	Earthquake victims	Births	Year-on-year change	Elderly Percentage
2011	74,247			409		30.0%
2012	69,986	▼4,261	1,404 (※1)	358	▼51	30.5%
2013	69,089	▼897		373	15	31.9%
2014	68,260	▼829		387	29	33.1%
2015	67,561	▼699		326	▼61	34.2%
2016	66,604	▼957		356	30	35.2%
2017	65,762	▼842		330	▼26	35.8%
2018	64,685	▼1,077		297	▼33	36.7%
2019	63,716	▼969		260	▼37	37.4%
2020	62,386	▼1,330		248	▼12	38.1%
2021	61,282	▼1,104		213	▼35	38.7%
2022	59,962	▼1,320				

**Table 1. Aging and depopulation in Kesennuma (2011–2022).<sup>52</sup>**

<sup>50</sup> Tom Gill, "The Spoiled Soil: Place, People and Community in an Irradiated Village in Fukushima Prefecture," in *Japan Copes with Calamity: Ethnographies of the Earthquake, Tsunami and Nuclear Disasters of March 2011*, ed. Tom Gill, Brigitte Steger, and David H. Slater (Bern: Peter Lang, 2013), 202.

<sup>51</sup> Abiko wataru 安孫子亘, "Ketsudan unmei o kaeta 3.11 boshi hinan 決断 運命を変えた3.11母子避難" (Japan: ミルフィルム, April 12, 2024).

<sup>52</sup> "Kesennuma shi no jinkō sū 気仙沼市の人口推移," Kesennuma machizukuri shien sentā 気仙沼まちづくり支援センター,

Volunteer and urban–rural migrants have built connections with Kesennuma since the disaster. Volunteers play an essential role in post-disaster resilience, not only during the immediate aftermath of the tragedy but also fuel up the post-disaster area even thirteen years after the disaster. After providing urgent assistance to survivors and the disaster area, volunteers continued contributing to Kesennuma in their own ways.

In addition to volunteers, new migrants from urban areas have also made long-term contributions to the community. These newcomers have taken on local positions, started new businesses, and initiated community projects in Kesennuma. Some have married local residents, started families, and given birth in the disaster area.<sup>53</sup> These newcomers represent a critical source of resilience, providing new human capital to the aging and depopulating communities in Tohoku.

The owner of the guesthouse where I stayed was a volunteer during 3.11, and he moved to Kesennuma after completing his volunteer work. He has founded and operated various community-building projects in Kesennuma, such as memorial events, a co-working space, a guesthouse, and empty house rental projects. He hopes that the guesthouse can provide a place for people who want to take a break from their lives, whether from school, work, or any stage of life where they feel anxious and need time and space to contemplate a new direction. I could feel the warm and welcoming atmosphere at the guesthouse, while joining a discussion among a group of guests and the guesthouse manager at dinner time. They talked about their interest, shared their “men’s 5-minute recipe tuna salad,” and also introduced their hometowns. When we spoke about Kesennuma, one of the guests introduced the term Pen.turn Jyoshi<sup>54</sup> (ペンターン女子), referring to the young women who have migrated to the Karakura Peninsula in Kesennuma. These women came from diverse backgrounds and regions; some had previously volunteered during 3.11, while others visited Kesennuma for travel, internships, or school programs. Some sought connections with locals, some looked for a new way of life, and others wanted a simpler, more natural environment compared to city life.

Klien studied urban–rural migrants in Ishinomaki<sup>55</sup> and found that newcomers regarded Ishinomaki as their “second hometown” while seeking alternatives apart from the lifetime employment system, questioning Japan’s postwar path of economic growth and capitalism as a whole.<sup>56</sup> According to the profile of Pen.turn Jyoshi on the website,<sup>57</sup> I found that the new migrants in Kesennuma are also seeking a different way of life rather than following the “normal” stages of life: graduating from university, being employed by a reputable

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accessed 5 June, 2024, <https://kesennuma-machicen.com/guide02/>.

<sup>53</sup> “Karakuwa maru no hantō ijū joshi niyoru “Pen . turn ” ~ pen tăn joshi no kyūjitsu ~からくわ丸の半島移住女子による “Pen. turn” ~ペンターン女子の休日~,” <http://pen-turn.com/profile/>.

<sup>54</sup> Pen.turn 【名】 : ペンターン。“Peninsula turn” の略。「半島移住 (Iターン) 」の造語。

<sup>55</sup> Ishinomaki is located on Miyagi Prefecture, 50 km from Sendai. The city is one of the disaster-affected cities with the greatest number of casualties. The city was also experiencing depopulation before 3.11, similar to most rural areas in the Tohoku region.

<sup>56</sup> Klien, “Reinventing Ishinomaki, Reinventing Japan?” 48.

<sup>57</sup> “Karakuwa maru no hantō ijū joshi niyoru “Pen.turn” ~ pen tăn joshi no kyūjitsu ~からくわ丸の半島移住女子による “Pen. turn” ~ペンターン女子の休日~,” <http://pen-turn.com/profile/>.

company, and entering the lifetime employment system. Many took a break from university to explore what they wanted to achieve in their lives. Some see Kesennuma as their second home, while others have found a different way of life from their previous urban experiences.

The manager of the guesthouse first came to Kesennuma while cycling around Japan. The owner had helped him by providing a place for him to stay at a time when he felt anxious about life and was taking a break from university. After some in-depth discussions with the owner, he decided to remain in Kesennuma and assist with the setup and operation of the guesthouse. We had a chat in the morning while he was serving the guests with breakfast and coffee, he told me that most urban–rural migrants come from areas outside Sendai or Tohoku. Many were volunteers who came to Kesennuma from all over Japan for post-disaster recovery in 2011. These volunteers regarded Kesennuma as their second home and chose to migrate to the area in their twenties.

I believe that bonds and connections have been established with the disaster area in the hearts of many young people who lack information on how they could help. Some of the Pen.turn Jyoshi were in high school during 3.11, and the disaster left a lasting emotional impact on them. One of my Japanese friends expressed a strong desire to help, saying, "But I am just a high school student; there isn't much I could do. I just tried to save energy during the emergency period and support the local economy of the disaster area." Although these young people were absent during the immediate post-disaster response, they are contributing to disaster resilience in their own way and in the long run.

All the newcomers mentioned above—the guesthouse owner, the manager, and the Pen.turn Jyoshi—have brought new energy and mindsets to Tohoku, an area long affected by aging and depopulation. These newcomers and the trend of urban–rural migration may help revitalize the aging area with a new labor force. Businesses and organizations are tackling challenges and building a new culture in the disaster area. Some of the Pen.turn Jyoshi and a friend of the guesthouse manager are working in local government departments or organizations that promote Kesennuma tourism. These newcomers not only serve as a new source of human capital for the depopulating and aging Kesennuma but also create synergy within their community, establishing new bonds aimed at building a better Kesennuma.

## Conclusion

As a victim of disaster and an anthropologist, Hoffman notes that "most of the organizations and groupings that emerge are fleeting and tenuous. In due time, much of the old design of the web returns. Indeed, along with passé and archaic customs, that is old deep culture."<sup>58</sup> I argue that while the old culture established before the disaster may have been deeply ingrained in the disaster area, the influence and changes brought about by newcomers and their practices should not be overlooked. According to the cyclical concept of disaster,

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<sup>58</sup> Susanna M. Hoffman, "The question of culture continuity and change after disaster: Further thoughts," *Annals of Anthropological Practice* 40, no. 1 (2016): 43, <https://doi.org/10.1111/napa.12086>.

disaster resilience does not come to an end; instead, it continues as a cycle.<sup>59</sup> The events of 3.11, as a natural hazard, accelerated the decline of Tohoku's culture through aging and depopulation. Simultaneously, 3.11 fostered the creation of new cultures through people-centered housing resettlement and the communities established by volunteers and urban-rural migrants. Communities and individuals learn to cope with the post-disaster situation, formulating stronger resistance to future disasters. Aldrich argued that "recovery is not a static point or a single moment in time: it is an extended process."<sup>60</sup> Resilience in Kesenuma yields long-term positive impacts through closer community ties and improved hazard prevention systems. However, sustainable local businesses have yet to be fully developed.

From my observations, creative destruction has manifested in Kesenuma, leading to positive changes during the recovery and rebuilding process in terms of social and environmental change between 2017 and 2023. Nonetheless, we must acknowledge the negative influences that persist during Kesenuma's resilience, which this paper has not addressed. The limited data collected during my two-day visits in 2017 and 2023 may not provide a comprehensive perspective on survivors' views of resilience in Kesenuma. Additionally, in-depth interviews may be essential for understanding the latest changes in the lives of newcomers and urban-rural migrants. Follow-up studies on the lives of 3.11 volunteers and Pen.turn Jyoshi in Kesenuma could further examine the new cultures and communities established after the disaster.

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<sup>59</sup> Hoffman and Oliver-Smith, *Catastrophe & Culture*, 123.

<sup>60</sup> Aldrich, *Building Resilience*, 5.

## Competing Interests

The author has no competing interests to declare.

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## References

- Aldrich, Daniel P. *Building Resilience: Social Capital in Post-Disaster Recovery*. Chicago: The University of Chicago Press, 2012.
- Bacon, Paul, and Christopher Hobson. *Human Security and Japan's Triple Disaster: Responding to the 2011 Earthquake, Tsunami and Fukushima Nuclear Crisis*. Routledge Humanitarian Studies Series. Abingdon, Oxon: Routledge, 2014.
- Bolin, Robert, and Stanford, Lois. "Constructing Vulnerability in the First World: The Northridge Earthquake in Southern California, 1994." In *The Angry Earth: Disaster in Anthropological Perspective*, edited by Anthony Oliver-Smith and Susannah M. Hoffman. New York: Routledge, 1999.
- Bōsai Gen Wazawai No Kihon Teki Kangaekata to Chiku Kōsō* 防災・減災の基本的考え方と地区構想. Kesenuma City.
- Caballero, Ricardo J. "Creative Destruction." In *Economic Growth*, edited by Steven N. Durlauf and Lawrence E. Blume, 24–29. London: Palgrave Macmillan UK, 2010.
- "Dēta De Miru Fukkō No Jōkyō データで見る復興の状況." Kesenuma City 気仙沼市. Accessed June 5, 2024. <https://www.kesenuma.miyagi.jp/sec/s019/010/030/010/2024229detademiruhukkouno-jyoukyou.pdf>.
- "Fukkyū Fukkō Ni Kakaru Jigyō Kōteihyō Kesenuma Chiku 復旧・復興に係る事業工程表 気仙沼地区." Kesenuma City. Accessed June 5, 2024. [https://www.kesenuma.miyagi.jp/sec/s090/010/010/010/020/01\\_koutei\\_kesenuma.pdf](https://www.kesenuma.miyagi.jp/sec/s090/010/010/010/020/01_koutei_kesenuma.pdf).
- Gagne, Isaac. "Dislocation, Social Isolation, and the Politics of Recovery in Post-Disaster Japan." In *Transcultural Psychiatry*, Vol. 57, No. 5 (2020): 710–723. <https://doi.org/10.1177/1363461520920348>.
- Gill, Tom. "The Spoiled Soil: Place, People and Community in an Irradiated Village in Fukushima Prefecture." In *Japan Copes with Calamity: Ethnographies of the Earthquake, Tsunami and Nuclear Disasters of March 2011*, edited by Tom Gill, Brigitte Steger and David H. Slater, 201–235. Bern: Peter Lang, 2013.
- Gill, Tom, Brigitte Steger, and David H. Slater. *Japan Copes with Calamity: Ethnographies of the Earthquake, Tsunami and Nuclear Disasters of March 2011*. Bern: Peter Lang, 2013.
- "Higai No Jōkyō 被害の状況." Kesenuma Shiyakusho 気仙沼市役所. Accessed June 5, 2024. <https://www.kesenuma.miyagi.jp/sec/s009/020/020/020/1300452011135.html>
- Higashinippon Daishinsai No Hassei to Fukkyū Fukkō* 東日本大震災の発生と復旧・復興. Cabinet Office, Government of Japan.
- Hoffman, Susanna, and Anthony Oliver-Smith. *Catastrophe & Culture: The Anthropology of Disaster*. Santa Fe, NM: School of American Research Press, 2002.
- Hoffman, Susanna M. "The Question of Culture Continuity and Change after Disaster: Further Thoughts." In *Annals of Anthropological Practice*, Vol. 40, No. 1 (2016): 39–51. <https://doi.org/10.1111/napa.12086>.
- "Karakuwa Maru No Hantō Ijū Joshi Niyoru 'Pen.Turn' ~ Pen Tān Joshi No Kyūjitsu ~ からくわ丸の半島移住女子による 'Pen.Turn' ~ペンターン女子の休日~." <http://pen-turn.com/profile/>.
- "Kesenuma Shi No Gaikokujin Shukuhaku Kyakusū No Suī 気仙沼市の外国人宿泊客数の推移." Kesenuma City, <https://www.kesenuma.miyagi.jp/sec/s084/foreignguests.pdf>.
- "Kesenuma Shi No Jinkō Suī 気仙沼市の人口推移." Kesenuma machizukuri shien sentā 気仙沼まち

- づくり支援センター . Accessed June 5, 2024. <https://kesennuma-machicen.com/guide02/>.
- Kleinman, Arthur. "Everything That Really Matters': Social Suffering, Subjectivity, and the Remaking of Human Experience in a Disordering World." In *The Harvard Theological Review*, Vol. 90, No. 3 (1997): 315–336. <https://doi.org/10.1017/S0017816000006374>.
- Klien, Susanne. "Reinventing Ishinomaki, Reinventing Japan? Creative Networks, Alternative Lifestyles and the Search for Quality of Life in Post-Growth Japan." In *Japanese Studies*, Vol. 36, No. 1 (2016): 39–60. <https://doi.org/10.1080/10371397.2016.1148555>.
- Klien, Susanne. *Urban Migrants in Rural Japan: Between Agency and Anomie in a Post-Growth Society*. Albany: State University of New York Press, 2020.
- Maly, Elizabeth. "Towards a People-Centered Housing Recovery After the Triple Disaster." In *Human Security and Japan's Triple Disaster: Responding to the 2011 Earthquake, Tsunami and Fukushima Nuclear Crisis*, edited by Paul Bacon and Christopher Hobson, 108–126. London: Routledge, 2014.
- McNeill, David. "Them Versus Us: Japanese and International Reporting of the Fukushima Nuclear Crisis." In *Japan Copes with Calamity: Ethnographies of the Earthquake, Tsunami and Nuclear Disasters of March 2011*, edited by Tom Gill, Brigitte Steger and David H. Slater, 127–150. Bern: Peter Lang, 2013.
- Miyagi Ken Saigai Kōei Jūtaku Seibi Shishin* (Gaidorain) 宮城県災害公営住宅整備指針 (ガイドライン) Miyagi Prefecture.
- Miyagi Ken No Fukkō No Genjō — Higashinippon Daishinsai Kara Ichi Ni Nen — 宮城県の復興の現状 — 東日本大震災から 1 2 年 — 復興庁 Reconstruction Agency.*
- "Natural Disasters-About Evacuation Center." accessed 20 Oct, 2024, <https://tabunka.tokyo-tsunagari.or.jp/english/disaster/howto/shelter.html>.
- Norris, Fran H., Susan P. Stevens, Betty Pfefferbaum, Karen F. Wyche, and Rose L. Pfefferbaum. "Community Resilience as a Metaphor, Theory, Set of Capacities, and Strategy for Disaster Readiness." In *American Journal of Community Psychology*, Vol. 41, No. 1–2 (2008): 127–150. <https://doi.org/10.1007/s10464-007-9156-6>.
- Ōtani Junko. "Ageing Society, Health Issues and Disaster: Assessing 3/11." In *Natural Disaster and Nuclear Crisis in Japan: Response and Recovery After Japan's 3/11*, edited by Jeff Kingston, 237–254. London: Routledge, 2012.
- . *Older People in Natural Disasters: The Great Hanshin Earthquake of 1995*. Kyoto: Kyoto University Press, 2010.
- Reconstruction Agency of Japan. *Status of Reconstruction and Reconstruction Efforts*. February 2022. [https://www.reconstruction.go.jp/english/topics/Progress\\_to\\_date/pdf/February\\_2022\\_10maigami\\_genjoutotorikumi.pdf](https://www.reconstruction.go.jp/english/topics/Progress_to_date/pdf/February_2022_10maigami_genjoutotorikumi.pdf)
- Reiwa 4 Nen Ban Kōrei Shakai Hakusho* 令和 4 年版高齢社会白書 *Ageing Society White Paper 2023*. Cabinet Office, Government of Japan, 2023.
- Shao Yiwen, Osamu Soda, and Jiang Xu. "Capital Building for Urban Resilience: The Case of Reconstruction Planning of Kesennuma City, Miyagi Prefecture, Japan." In *Procedia Environmental Sciences*, Vol. 36 (2016): 122–129. <https://doi.org/10.1016/j.proenv.2016.09.022>. <https://www.sciencedirect.com/science/article/pii/S1878029616302249>.
- Tokyo Intercultural Portal Site. "Natural Disasters: About Evacuation Center." Accessed Oct 20, 2024. <https://tabunka.tokyo-tsunagari.or.jp/english/disaster/howto/shelter.html>.
- Ueda Yasutaka, and Rajib Shaw. "Community Recovery in Tsunami-Affected Area: Lessons from Minami-Kesennuma." In *Tohoku Recovery: Challenges, Potentials and Future*, edited by Rajib Shaw, 131–146. Tokyo: Springer Japan, 2015.
- . "Issues and Challenges in Temporary Housing in Post-3.11 Kesennuma." *Disaster Risk Reduc-*



tion, 209-26. Tokyo: Springer Japan, 2013.

Abiko Wataru 安孫子亘. "Ketsudan Unmei O Kaeta 3. 11 Boshi Hinan 決断 運命を変えた 3.11 母子避難," 89 mins. Japan: ミルフィルム, April 12, 2024.

Fujiie Arisa 藤家亜里紗 and Sakai Ayaka 境彩花. "Koritsu Fusegu Ni Wa Saigai Kōei Jūtaku No Genjō 孤立防ぐには 災害公営住宅の現状." *NHK*, March 11, 2024, *Shit toku tōhoku to wa* 知っトク東北とは. <https://www.nhk.or.jp/sendai-blog/social/492341.html>.