Ushering in the New Normal: Viability and Informal Community Leadership in Fukushima Ten Years After 3.11

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Abstract: March 11, 2021 marked the tenth anniversary of Japan's triple disaster of 2011. Residents of Fukushima towns which endured the greatest environmental, social, and economic impact of the Fukushima Daiichi NPP accident have lived with uncertainty about the future for a full decade. Major infrastructure projects are fully or nearly complete, and decontamination efforts in reopened towns have largely concluded. Nevertheless, evacuee return rates have been low in most towns which had been placed under full evacuation orders. As a result, the current populations of many affected towns are less than 20% of their pre-disaster levels, and the majority of current residents over 65 years of age. Despite the huge challenges, the energy and know-how of the people of Fukushima are tremendous resources. Many see the possibility of new forms of long-term viability that capitalize on technology, the age of the population, and the ready availability of land and other resources. What has been achieved so far in realizing these visions has been made possible by an emergent network of informal community leaders, who display a charismatic, soft leadership style.

Keywords: Fukushima, radiation, disaster, leadership, community, citizen science, COVID-19.

Since 2011 I have been a core member of Safecast, a volunteer-based organization that began immediately following the March 11,

2011 disasters. Our initial mission was to provide easily accessible, open, crowd-sourced data on the spread of radiation in Japan, using hardware and online data systems of our own design.¹

Safecast grew into a globally influential organization with unexpected rapidity, gaining thousands of citizen participants worldwide and collecting radiation data from over 100 countries. It has been hailed as one of the most significant demonstrations of the power of citizen-science, and the group's input and assistance has been sought by the IAEA as well as by many official radiation monitoring organizations.² Members have extensively traveled around the globe to conduct workshops and speak at conferences and public events. Our most significant activity, however, has always centered on spending time with local residents of Fukushima to advise and train about radiation measurement, and to learn from their experiences. My viewpoint has been overwhelmingly shaped by my personal involvement in the lives of people in Fukushima and their efforts to build a viable future for themselves and their descendants. My "informants" in the region are friends, colleagues, students, and mentors. I share their fates and do my best to contribute and play a positive role.

For many years after the start of the disaster, when I have traveled to Fukushima from the Tokyo region, it has been with specific "missions" for Safecast in mind—to install a sensor, conduct a workshop, document radiation levels in a town. After a long COVID-imposed hiatus through most of 2020, I was

happy to be able to make several trips to Fukushima, Iitate included, in late 2020 and early 2021. These trips had objectives as well—to film a series of documentaries for German TV³ and to realize an ambitious 16-hour livestream event in commemoration of the 10th anniversary of the disaster and the founding of Safecast.⁴ But for the first time I found myself setting deadlines aside in order to just hang out with my friends and talk about the future with them.

Stone lanterns in an ancient garden belonging to a friend's 90-year-old father had toppled in a recent earthquake, so my Safecast colleague Joe Moross and I arrived unbidden to help reerect them, as neighbors should. I spent a couple of afternoons on site visits to a former Soma-clan samurai enclave in Okuma, to help appraise the condition of some once-beautiful but now long-abandoned old houses. Traditional Japanese wooden architecture is my field, not radiation or the sociology of disasters, and I found myself inspired to think about how to restore these buildings and how to make them attractive historical sites. On another day, a friend took me on a long hike in the mountains to visit a famous waterfall, to sit and enjoy the beauty of the natural surroundings, and to talk about the centuries-old equestrian culture of the region. Might tourists be interested in horseback rides along these trials? As always, I had my Safecast bGeigie mapping radiation detector with me, and it showed radiation levels in the woods noticeably above natural background. My local friends and I simply factor this reality into our excursion plans. Life with radiation detectors constantly at the ready is a fact of the new lifestyle in Fukushima.

Ten years after the disaster, it is easy to see that a new "normal" has emerged in Fukushima. From the start, the difficulties were unevenly distributed, largely because the radioactive fallout was, and consequently the post-disaster experiences of Fukushima's various sub-regions have varied widely. Western Fukushima, known as "Yamadori," which encompasses the Aizu region, escaped largely unscathed by fallout, but suffers from being part of Fukushima prefecture and so subject to the same scrutiny and doubt. Central Fukushima ("Nakadori") has the large urban centers of Fukushima City and Koriyama, which quickly rebounded, as well as Iitate Village, which hasn't. The coastal region ("Hamadori") varies widely in the degree of radiation exposure various towns experienced, but overall has failed to persuade its population to return. While residents of Fukushima City or Koriyama, where life is almost normal now, might have reason to be optimistic about the future, those in rural towns like Iitate and along the coast have been forced to face sobering realities. The people who once lived there are not coming back anytime soon. The many individuals who have decided to make a go of it are not fools, however. At the core of the highly diverse communities that have settled into new long-term relationships with their hometowns are energetic visionaries who see the possibility of new viabilities and new forms of community and commerce. They recognize that they need some support from government in order to achieve anything lasting, but without exception they've been doing the heavy lifting themselves.

I believe that the emergence of locally influential informal community leaders in Fukushima is one of the more notable post-3.11 social developments. In my earlier essay I noted several successful citizen-science groups in particular, including Fukushima Saisei-no-kai in Iitate, Todokedori in Odaka, and Tarachine in Iwaki, all of whom have charismatic and scientifically knowledgeable leadership. Most Fukushima towns have similar, if often less visible groups — less visible, as I noted in 2018, because they are focused on their own communities. People involved in this kind of activity in Fukushima generally know their counterparts in other towns, and there is some

sense of allyship, but they avoid overstepping their understood boundaries.

Overwhelmingly, these groups began in 2011 by providing trustworthy radiation measurements, but their underlying long-term purpose was to restore communities. Then, as now, the collection of radiation data plays an important role, but the main thing is to get people working together. Groups like these grow organically, as people gravitate towards the optimistic and protective atmosphere that emerges under a soft leadership style. In 2018 I was struck by the fact that of the hundreds of citizen groups that sprang up after 3.11, most had disappeared, making those that continued real survivors. Now, after ten years, it is clear that a handful have demonstrated commendable endurance. Some of them undoubtedly could accrue formal political power if they wished.

Local, prefectural, and central governments continue to collect and publish data on radiation in the environment, in food, as well as from health screening. While by and large concern about radiation exposure seems to have receded from awareness for many Fukushima residents, particularly those in the larger urban centers or in the Aizu region, many continue to pay attention. My own contacts may not be fully representative, but while they are aware of official radiation data and where to find it, when making decisions for themselves and their communities they rely primarily on their own data or that from trusted non-official sources, including Safecast. Some municipal governments are more open to calls for action, such as decontamination of parks and public places, based on data presented by citizens. But the accounts I hear from local residents suggest that even after ten years it is still a struggle to have citizen data accepted and used in planning in Fukushima.

Official acknowledgment of the efforts of local citizen groups does occur, however, sometimes

noticeably, sometimes quietly. When The Great East Japan Earthquake and Nuclear Disaster Memorial Museum opened in the town of Futaba in September 2020 (Great East Japan, 2020) I was pleasantly surprised to see a section on citizen-initiated support activity that includes both Tarachine and Todokedori. The latter is represented by a display of their radiation maps, data-collection notebooks, and radiation detectors. Tarachine merited its own descriptive wall panel. In conversation, however, leaders of Todokedori expressed annoyance at the fact that government sought to highlight their activity in this way but still often avoids acknowledging the validity of their data. Similarly, the decades-worth of careful food radiation measurements amassed and published by Tarachine are not considered in official evaluations of food contamination.

Despite, or perhaps because of, the tremendous contention among residents and leaders of Iitate Village regarding the safety of reopening, the village government teamed with Fukushima Saisei no Kai for several years to train locals to conduct their own radiation monitoring. The arrangement ultimately broke down but set a precedent. Since Iitate reopened in 2017, many farmers have successfully remediated their fields and greenhouses, and their produce, after passing all tests, is on sale on the open market. At the Iitate Town Madeikan Michi-no-Eki (Roadside Station), an architecturally striking facility in the center of Iitate Village which opened in 2019 (Madei Garden Village, 2019), many varieties of local produce are on sale. A professionally staffed radiation measurement station for food is located next to the produce display, and information about test results for everything on sale is available. The public is welcome to bring food there to be measured for a small fee.

While speaking with the measurement staff, I noticed articles from the *Tokyo Shimbun* newspaper posted on the wall containing test results for foraged foods such as wild

mushrooms and koshiabura, a wild plant often eaten as tempura, which are known to be more likely to contain high levels of radioactive cesium. Because they are usually gathered for personal use and not sold on the open market, these items are not often part of official testing. The measurements in the newspaper were part of a series done by Itō Nobuyoshi, a very knowledgeable Iitate resident and friend who has been collecting and testing foraged foods regularly since 2011.8 Itō-san has been one of the most outspoken opponents of reopening litate, and highly critical of former mayor Kanno Norio, who he believes coerced residents to return before adequate safety had been demonstrated. I thought it was interesting, to say the least, that a village-run facility would highlight the findings of an opponent who calls attention to the radiation danger in local foods. When I told the measurement staff that I recognized the data and knew Itō-san, he replied, "Yes, he uses our measurement system. He's doing important work, and we think the public should be aware of the high levels of cesium still being found in foraged foods." I would characterize this as quiet but effective official acknowledgement of citizen-gathered radiation data. I also consider it a wise accommodation on the part of local government, and recognition that official data alone is insufficient to inform the public about the risks.

Ten years after the disaster, Iitate is struggling for viability. Next to the Madeikan Michi-no-eki is a large, expensive new park with attractive play equipment and custom-made sculptural benches. Though I have visited half a dozen times since last year, I have never seen children playing there, an observation often echoed by locals. At the time of the disaster the population of Iitate was about 6000. In 2018, the official count of "returnees" stood at about 600, and as of June 1, 2021, was 1486, not quite 25% of the pre-disaster total. Firm data is difficult to obtain, but local informants estimate that children under 16 number 100 at

most. In 2020, a new mayor was elected in litate Village, replacing 74-year-old Kanno, who held the office for 24 years. The new mayor, 45-year-old Sugioka Makoto, is a Buddhist priest as well as a nuclear physicist. He has made a good initial impression and appears to be well liked. He lacks the negative baggage of his predecessor and is considered a good listener. Some locals hope that he will govern with a lighter touch than Mayor Kanno did.

Without exception, people I speak with who have returned to hard-hit parts of Fukushima, Iitate included, stress that they do not ever expect their towns and villages to return to the way they were prior to the disaster. Instead, they speak of finding a new viability that assumes smaller and older populations and leverages technology as well as local environment and culture. In 2020, local entrepreneur Wada Tomoyuki established an award-winning business incubator-cum-social center in Odaka called Odaka Pioneer Village. 12 This facility is part of a long-term project to help establish 100 small and locally viable new companies in the area in everything from IT to crafts to brewing to agriculture.

The activity of Fukushima Saisei-no-kai in Iitate has broadened, reflecting growth and new energy. An experimental system for sensordriven automated agriculture which they developed in partnership with Meiji University, has proven very successful. The first crops of spinach and cucumbers grown with this system were shipped in 2020. The group built a new community center centered around a large traditional *irori* hearth (sunken hearth), using doors, windows, and other elements salvaged from an old wooden school nearby which was recently demolished. A number of young people have relocated to litate in connection with Saisei-no-kai or are spending time there in order to participate in projects. The daughter of one of the group's founders recently graduated from architecture school in Tokyo and has formed a design collective in Iitate

called Marbling, along with other young architects and designers. This emerged from field surveys of conditions in Iitate they conducted as students, which resulted in beautiful maps and drawings. In the eyes of Marbling, Iitate has abundant resources in the form of land, buildings, and natural beauty. With no one to make use of them, these can easily be made available for experimental projects. The young designers have obtained use of a former home center near the center of town and are converting it to art spaces, indoor agriculture, and small shops for craftspeople and entrepreneurs. Planning is now underway with Kitagawa Fram, director of the Echigo-Tsumari Art Triennial, to hold an international arts festival in litate using this facility and other sites. In a recent interview, co-founder Tao Yoichi said that the young people now participating in Saisei-no-kai activities believe they can transform litate into one of the most progressive and innovative villages in the world. 13 I think it is possible: challenges are opportunities.

Many resources are abundant in Fukushima, greatest among them the people. Their experience since 3.11 has been a crucible—at once traumatic, sobering, and filled with laughter. As individuals and as communities they have learned how to cope with disaster, disruption, and dysfunctional government. As Japan and other nations struggled to deal with the coronavirus last year, and people everywhere were visibly stressed and even panicked, I found people in Fukushima to be calm and well prepared. They were in better condition mentally and emotionally than people elsewhere for dealing with the breakdown of government, contradictory information, and disruption of supply chains leading to shortages of essentials. My friends and colleagues at the Futabaya Inn in Odaka supplied journalists from Tokyo with masks and hand disinfectant, which had become impossible to obtain elsewhere. "We've kept a stock on hand for years," they explained. Their approach to dealing with misinformation, official and otherwise, has been the same during the pandemic as it was after 3.11—read up on the subject, consult experts you trust, and take everything the government says with a grain of salt. Japan has fared better than most countries so far in terms of COVID-19 infection rates, and Fukushima has been extremely fortunate in that regard. But throughout the pandemic I've found my Fukushima colleagues to be a source of calm and reassurance, in great contrast to the people I know elsewhere. Having skirted the gaping maw of hell ten years ago, one observed, "This is nothing."

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Notes

- ¹ Safecast, 2021a.
- ² Brown, 2016.
- ³ ZDF, 2021
- ⁴ Safecast, 2021b.
- ⁵ Brown. 2021.
- ⁶ Safecast Map, 2014.
- ⁷ Brown, 2021.
- ⁸ Yamakawa, 2020.
- 9 At the time my essay, "The Closely-Watched Case of Iitate Village: The Need for Global Communication of Local Problems," was written in 2018, seven years had elapsed since the



devastating triple disaster of March 2011. At the time of the publication of the volume in which it is included, Legacies of Fukushima, three more years have elapsed, marking a full decade (Brown, 2021).

- ¹⁰ Iitate Village, 2021.
- ¹¹ Suganuma, 2020.
- ¹² Odaka Pioneer Village, 2020.
- ¹³ Safecast TV, 2021.