March in Japan is the time for graduation ceremonies and end-of-year accounts. It is a time of flux, waiting for full-blown spring, with the cherry blossoms still two months away. But in the northeastern region of Tōhoku, it is also a time for horrific memories.

On March 11, 2011, a 9.0 magnitude earthquake triggered a tsunami with 40-foot waves along 300 miles of coastline. Entire towns were wiped away in minutes. And the subsequent failure at the Daiichi nuclear plant in Fukushima forced the evacuation of hundreds of thousands otherwise safe from the natural disaster. The catastrophe killed almost 20,000 and forced the relocation of half a million survivors. It was by far the costliest natural disaster in material terms in world history.

The Tōhoku region is part of Japan’s rural hinterlands, with twice the area of Kanto (home to Tokyo and Yokohama) but just one-fifth as many residents. And though Tōhoku’s population (now nine million) had been decreasing before the disaster, the erasure of coastal towns and contamination of others has sped up the process.

As expensive as the disaster has been for the Japanese government and the owner of the Daiichi plant, the Tokyo Electric Company (also known as Tepco), Tōhoku’s economy wasn’t large to begin with. It generated only about 6 percent of Japan’s total GDP in pre-tsunami days. Given the scale of the disaster, it is hard to see how restoration of the area could pay for itself in purely economic terms.

An ambitious reconstruction does, however, provide an opportunity for fiscal stimu-
lus, which has long served Japanese governments’ objectives in the countryside. Until recently, Tōhoku was a stronghold of the Liberal Democratic Party, which still claims a disproportionate share of patronage. Instead of building more bridges to nowhere to provide local jobs and profits for construction companies, post-disaster projects have been recast as “recovery highways,” and their budgets have been approved without debate.

I moved to Sendai, Tōhoku’s largest city and its economic and political capital, in June 2011 to run the tsunami recovery effort of the private nonprofit Americares. While newspapers around the world printed stories about the survivors who stood in orderly lines with blank expressions, I saw a less stoic side of the Japanese. Men in the small city of Minami-Soma sobbed when they talked about their horses that drowned. Others trembled when describing how they left their dairy cows to starve when radiation contamination prevented them from returning to their farms. Six years later, relatives and rescue teams continue to search for the remains of the nearly 3,000 people still categorized as “missing.” Suicide rates, alcoholism, domestic violence and clinical depression have risen at alarming rates since 2011.

Today, the fear of decline permeates Tōhoku. While Sendai has experienced a population boom as construction companies and administrators rushed to participate in the reconstruction, the region’s overall population has dropped by 6.7 percent. It is likely that some areas have even fewer residents than official numbers show because many have left without re-registering in their new
locations in hopes of returning later.

Some public intellectuals – such as Akemi Yamauchi of Taisho University – have exhorted locals to focus on quality-of-life issues rather than population decline, arguing that contracting markets matter less in the long run than preserving local culture and traditions. When I echoed that sentiment to Japanese friends, they responded with consternation, although they thanked me for “loving Japan.”

**VERY BIG NUMBERS**

I returned to Tôhoku earlier this year to see for myself what progress had been made in the region’s recovery. I drove from the town of Soma (in Fukushima Prefecture) north some 140 miles along the coast to Ofunato. When I first arrived in 2011, mountains of debris, partially destroyed homes and remnants of boats (some stuck on rooftops) greeted me. Now, the route is the axis of what must be the largest construction project on record. Driving through the Fukushima countryside, you see giant piles of stacked black plastic bags full of contaminated soil. These bags are on their way to “temporary” storage sites near the decommissioned plant (a permanent site has not been agreed upon).

The Japanese government has thus far spent $226 billion on recovery and reconstruction, an amount that does not include financial support paid by Tepco to those affected by radiation contamination nor the Daiichi plant’s ongoing cleanup. And these payments may in the end nearly double the total outlay. By comparison, the cost of Hurricane Katrina, which flooded New Orleans and destroyed swaths of the Gulf Coast, topped out around $110 billion.

**A TASK FOR SISYPHUS**

My road trip along the coast stayed well out of the area that absorbed the worst of the radiation blown inland by prevailing winds. I
grew accustomed to highways jammed with dump trucks moving earth from one location to the next. But I was able to ditch my car north of Sendai, thanks to the reopening of the Joban rail line that connects Sendai with Fukushima Prefecture’s northern coastal cities. The rail line is (and was) more than a matter of convenience, though, as it provides easy access to the commercial center of the region.

In spite of this “symbol of hope,” as Prime Minister Shinzo Abe described the railway at its reopening, anxiety still plagues Fukushima’s residents. A recent report showed that radiation levels deep within the destroyed reactors remain at levels that could kill a person in a minute and destroy a robot within two hours. Inevitably, then, the last phase of the cleanup will be very slow. In any case, radiation might not be the biggest threat to residents’ health. As in Chernobyl, the premature deaths from other causes (including suicide) outnumber those that were directly caused by the events of March 11.

Nonetheless, residents’ economic concerns apparently far outweigh their fears of ill health. People are conscious of the threat from radiation, but are resigned. What Fukushima residents feel more directly is the impact the catastrophe has had on the Fukushima “brand.”

Although the government is trying to repackage Fukushima as safe on television commercials and train advertisements that show popular actors eating Fukushima peaches, the radiation-spooked Japanese public largely remains unwilling to ingest Fukushima products or sightsee in the area. I heard anecdotes about farmers giving gifts of rice to relatives in Tokyo, later to find out that it had been tossed. Another variation on the theme: eligible young women from Fukushima feel they must conceal their hometown identity because their dates might think they won’t be able to bear healthy children.

The word “Fukushima” printed on a food product means that consumer demand will be nil for the foreseeable future. Hence, Japan’s postwar “rice basket” must find another use for the land. Massive amounts of former farmland have been set aside for renewable energy production. Still, it would be (yet another) monumental task to cover all the former rice paddies with solar panels.

Some effort has been made to convert local agriculture to nonfood products. One little farm near the town of Kawamata specializes in a bloom that is popular at Tokyo’s funerals. The Fukushima Organic Cotton Project sold T-shirts at Tokyo’s Mitsukoshi department store last year. And project organizers celebrated how the store advertised
them simply as “Fukushima cotton” rather than as disaster relief charity.

But the gloom persists. Several towns that had previously been designated “no entry” were scheduled to reopen in March 2017 after a $35 billion cleanup. It is unclear, though, whether the massive cleanup will be effective in eliminating the long-term risks of radiation exposure – and, equally to the point, whether people will believe that it was effective. Mountainsides, for example, could not be bulldozed, and rainfall will wash unspecified amounts of contaminated soil down to the inhabited areas.

The cleanup did create a welcome bubble of commerce. According to the owner of a roadside restaurant, the greatest change since we met years ago has been the lunchtime onslaught of construction workers, engineers, administrators and managers who came to the area to work. The crowd, whom he called the “unknown faces,” was tapering off, though – the bubble is deflating.

A young man who has opened a beauty salon in Soma, which is on the coast south of Sendai, hoped that his livelihood would not be affected by the undertow of departures. After all, his business, like that of a dentist I spoke to, catered to locals. He returned to the coast out of obligation – he knew Soma was struggling to keep its young people and wanted his children to share his upbringing.

Was he nervous about radiation? Not really. As with most of Fukushima’s residents, government funding was by far the bigger concern.

Tokyo drew a line around areas that were determined to be uninhabitable, where residents would be fully compensated. People who move back to surrounding “decontaminated” areas continue to get support. Residents of Minami-Soma, Futaba, Namie and other towns close to the Daiichi plant have received monthly allowances that include $1,000 for “mental suffering.” But residents in places like Soma, a few miles outside the forced evacuation circle, haven’t gotten cash from Tepco – and resent those who have. (“Did you see that letter from Tōhoku?

There is little incentive for young families to return to towns that are largely populated by the elderly and have no operating schools.
petitive domestic agriculture that’s part of the Trans-Pacific Partnership trade deal signed by Abe (and thereafter abandoned by President Trump). “Stop TPP!” signs dot the landscape.

One ray of high-tech hope is the idea of transforming Fukushima into a laboratory for renewable energy funded by public-private investment. In January, to take one example, Toshiba, Tōhoku Electric and the Iwatani Corporation announced a feasibility study to build the world’s largest facility for synthesizing hydrogen gas to power fuel-cell vehicles. Tōhoku’s own commitment to renewable energy (and rejection of nuclear power) is implicit in the proliferation of solar panels on rooftops throughout the region.

Traveling north from Fukushima along Miyagi Prefecture’s coast, I reflected on the changes to the landscape. Where houses, post offices, gas stations, supermarkets and schools once stood, the land is barren, with only concrete foundations marking what used to be neighborhoods. Near Yuriage, a particularly devastated area south of Sendai, I noticed that a few factories dot what had been an empty landscape. Much of Miyagi’s southern coastline has been designated as too dangerous for housing, but some areas will host industrial sections, along with sterile parkland with lonely benches and fields of solar panels.

**FINDING HOUSING FOR THOUSANDS**

Some 470,000 were evacuated to shelters scattered around the country. Four months after the disaster, 330,000 of them had moved into subsidized apartments or small, boxlike
houses hastily erected by the government. Roughly half are still there, waiting for public housing or the go-ahead to build their own.

While they wait, though, construction costs have soared – in part, because of demand created by the 2020 Tokyo Olympics. Japan’s public broadcasting company, NHK, reported the case of an 83-year-old man who had intended to rebuild his house after the land under it was elevated by some 60 feet, safely beyond the reach of the next tsunami. He now believes that it would be a waste of his limited savings to rebuild.

Scattered across the landscape are plots that are truly ready to build on. However, land deeds are often hard to find in rural Japan – or simply do not exist because the land passed on through generations without written record. The problem here is even worse since a lot of official paperwork washed away in the tsunami. Municipalities have scrambled to identify who owns what, and whether it is available for purchase. But their scramble might be too late: current population trends suggest that the demand won’t be there by the time property rights are clarified.

In the meantime, backhoes move mountains and pat, pat, pat down mounds of red earth to accommodate the diminished population. The town of Rikuzentakata built a two-mile-long conveyer belt system costing over $100 million to carry some 40,000 tons of soil and gravel a day to create a high-ground residential area for 61 apartments. In Ishinomaki, public housing has been built on top of elevated land near an area that was inundated by the tsunami. But the apartments are proving to be an especially hard sell because people don’t want to live in an area where so many drowned in the tsunami.

One consequence of the housing gridlock
was an epidemic of depression among the displaced – especially the elderly, the poor and the sick – who are stuck in temporary housing. Early on, support groups of various stripes offered both recreation and the myriad services otherwise provided by friends, family and neighbors in tight-knit rural communities. Kodokushi, dying alone from social neglect or self-neglect, was a particular concern.

Outside support groups, public and private, have largely stopped coming. But this withdrawal of psychosocial services has been partly offset by an assertion of community identity, with residents stepping in to care for their neighbors. In the same vein, local groups used the disaster to bring attention to social needs that predated the tsunami. For example, when multiple generations routinely lived under the same roof, the older women took responsibility for infant care. That piece of the social fabric has been fraying for years. But the disaster has catalyzed female leaders to organize and provide a host of services for isolated new mothers.

I used to gaze at the surf as I drove along the coast road (Route 45), thinking about how cruel the ocean had been on March 11, yet how vital it was to the region’s identity and economy. Driving the road this winter, concrete walls largely blocked the view of the sea.

Before the government started communal reconstruction, it developed a plan to build a seawall as a first defense against future inundations. The wall was to more or less run the 250 miles of coastline at greatest risk, at a cost exceeding $8 billion. For example, one portion guarding the fishing town of Kesennuma would be almost 50 feet high and 30 feet thick.

No environmental impact report was filed before construction at any point along the seawall. Although many residents voiced objections, believing that clearly defined escape routes would be sufficient in future disasters, landowners where the wall was to be built received inflated sums and allowed the project to proceed. And in a narrative familiar to Japanese citizens over the decades, construction companies gorged on government contracts even as allegations of price collusion clouded the process.

Prime Minister Abe’s wife, Akie, visited Rikuzentakata and engaged in informal discussions with evacuees about plans for the wall. These conversations prompted her to host a 2014 conference in Sendai (miles from the coastline) with the title “What Do You Think about the Monster Seawall?” According to a survey at the event, 84 percent of respondents felt that the plan had been too rushed and required further discussion. By that time, however, the protest was moot; construction was well under way.

When I rounded a familiar bend on Route 45, I saw Rikuzentakata’s seawall for the first time, the height of a four-story building. Some residents described the wall as being “prisonlike,” though the city intends to plant lines of pine trees to camouflage it. When asked about the wall, residents seem resigned: “It’s built now. There is nothing we can do about it.” Although their livelihood is most threatened by the concrete, fishermen have vowed to work around it and continue to operate their mollusk and seaweed farms.

The government is moving mountains and building concrete monuments, but economic benefits are not immediately obvious.
LETTER FROM TÔHOKU

The government is moving mountains and building concrete monuments, but economic benefits are not immediately obvious. The government reported in the summer of 2016 that 80 percent of businesses affected by the disaster (setting aside those in Fukushima’s exclusion zone) were up and walking. Directly after the tsunami, the economists Anil Kashyap and Takeo Hoshi warned against reviving “zombie” businesses that had been failing long before the disaster. But from the government’s perspective, delays to review plans before releasing funds would have appeared insensitive. Nevertheless, of the companies that received recovery subsidies, less than half are generating sales at predisaster levels.

MOVING FORWARD

Tourism was long a mainstay of the Tôhoku economy. Yet, while Japan is experiencing a foreign tourism boom, particularly from China, few visitors are venturing into the region. Major efforts are now under way to draw tourists to Tôhoku. Sendai will host the 2020 Olympics’ soccer events, and Kamaishi, a hard-hit industrial town in Iwate Prefecture, will host the 2019 Rugby World Cup. After the cheering dies down, though, the coastline’s natural beauty should be Tôhoku’s sustaining attraction. And far too much of it is now hidden behind thousands of tons of concrete.

I believe that the region’s hopes for a comeback turn less on splashy government-funded projects than on individual savvy and initiative. Consider Emi Takahashi, director of a day care center for the elderly, who (rightly) fears too many resources will be spent on facilities for aging baby boomers that will all too soon become white elephants. She has started a program to train elderly husbands who lack confidence in their household skills to care for wives suffering from dementia so they can stay home rather than be institutionalized.

A variety of grassroots organizations have also emerged with their own visions for the region’s reconstruction. Next Commons Lab is, in the words of its founder, Atsushi Hayashi, a “post-capitalist” model for cooperative business enterprise. While idealistic, the group has had some success in revitalizing small, seemingly unsustainable for-profit enterprises elsewhere in rural Japan. And with Minami-Sanriku in Miyagi Prefecture as its entry point, Next Commons Lab is expecting to begin operations this summer.

The list goes on. AP Bank, a nonprofit that funds businesses with an eye on environmental and social impact, has opened an office in Ishinomaki, the site of the largest number of tsunami casualties. The group is sponsoring an art festival this summer that will feature national and international avant-garde artists. More Trees, a group founded by the musician and activist Ryuichi Sakamoto and the architect Kengo Kuma, is also seeking opportunities to maximize the resource potential of Tôhoku. Kuma, who won the bid to design the Tokyo Olympic Stadium, has designed a shopping district in Minami-Sanriku to be filled with local stores now stuck in prefab buildings.

With the advantage of hindsight, it’s plain that the inclination to roll back the clock to the pre-tsunami era in Tôhoku is misguided. The region, like most of the rest of rural Japan, was in economic and social distress long before the waves hit. And no amount of earth moving and concrete pouring is going to fix what ails.

What Tôhoku needs most now is help in adapting to rapid economic and demographic change accelerated by the disaster, buffering the dislocation at the grass roots. And that, alas, is not an easy sell in a contemporary Japan that’s struggling with all manner of unwanted change.