

How the Cleanup of the Fukushima Nuclear Accident Got So Expensive

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Abstract: Drawing on Japanese press and TV reports, the authors explain the extraordinary costs of the decade long cleanup of the 3.11 earthquake, tsunami, and nuclear meltdown, with no end to the process in sight.

Many of the Japanese print and broadcast features related to the 10th anniversary of the 2011 earthquake and tsunami addressed the current circumstances of the people affected, with a recurring theme of how difficult it has been to move on, especially for those who lost loved ones. Among these stories was one that stood out like a rusty nail, since it covered a less sympathetic response to the crisis: greed.

A three-part series in the Asahi Shimbun focused on the city of Tamura in Fukushima prefecture, in particular a highland district called Utsushi-chiku with about 1,850 residents, mainly tobacco farmers. After a hydrogen explosion occurred at the Fukushima Daiichi nuclear plant on March 12, 2011, some fled, though they weren't ordered to since Utsushi-chiku was outside the mandatory 20-kilometer evacuation zone. However, the government restricted the distribution of crops grown in the area, so agriculture was halted and the residents became worried about their livelihoods.

Then in the autumn the government allocated about ¥4 trillion to some 100 local governments to clean up the radiation that contaminated much of the area. As part of this work, residents of Utsushi-chiku were recruited to

remove contaminated topsoil and clean exteriors of buildings in non-exclusion areas. Many were eager to sign up since no skills or experience were needed. About 450 residents, average age about 60, formed a special project team, supervised by local construction companies, that started doing cleanup work in November 2012. Each worker received a daily wage of ¥9,500, which the residents considered good pay. One woman in her 40s who described herself as a homemaker said there were few part-time jobs for women like herself in the area, so she hired on and worked between 2 and 5 days a week, 7-and-a-half hours a day, receiving around ¥150,000 a month. There was no work quota and, she reports, everyone enjoyed the neighborly camaraderie of toiling together.

The job officially ended in September 2014. The woman said she had made ¥3 million altogether, but there was more. The cleanup funds for her area that had come from the central government amounted to about ¥2.65 billion, of which ¥1.3 billion was left unspent, so all the workers received a kind of bonus. In the end, each made on average about ¥35,000 a day for all the work they did. The woman ended up getting an extra ¥7 million, which allowed her to send her son to a private university and buy a new car. Some workers received more than ¥10 million in additional pay. As the deputy team leader put it, "It was like money falling from the sky."

According to a documentary special that aired on public broadcaster NHK in February, ¥5.6 trillion has so far been spent on decontaminating the areas surrounding the

Fukushima Daiichi nuclear power plant, but not all of this money has been spent directly on cleanup activities, the goal of which was to bring the affected area back to "normal" as soon as possible so that evacuees could return to their homes. But ten years later that hasn't happened, or, at least, not to the degree originally envisioned. After 90% of the work was finished, an estimated 60% of the radiation had been reduced, and the cleanup had become a self-generating public works project with its own profit motives for contractors and subcontractors.



Cleanup in progress. But where will radiated water and soil be disposed?

The central problem was the way the work was allocated. Ideally, the trade or education ministry should have been in charge, since both have experience in the nuclear energy field; or the construction ministry, which has extensive experience in large public works projects. However, the government chose the environment ministry, which has never carried out any large-scale public works. The other ministries, apparently, were loath to take on a job involving "waste."

Usually, when a government entity orders work to be done, they set up a bidding process. In this case, there were multiple distinct areas targeted for cleanup, as well as various stages in the cleanup process. Under such circumstances, general contractors try to get all the work in a given area in order to maximize profits, and ideally, they will have no competition for bids, which means they can essentially charge whatever they want. When NHK examined the bid documents for the areas targeted for cleanup and related work, they found that 68 percent of the work orders only had one bidder. These sorts of public works normally generate a profit margin of 5%, but in this case, it was about 10%. As one environment ministry official admitted to NHK, they had no real idea about the competitive situation and didn't know how to oversee the work.

As a result, there was a lot of misuse of funds. NHK looked at one subcontractor headquartered in the city of Iwaki, Fukushima Prefecture, that was investigated by the tax authorities. The company's president was described by others as being a big-hearted individual who had once worked at the nuclear power station himself and wanted to help his neighbors move back into the area. That's why he started the company, with the intention of reconstructing the area. The company grew quickly. After only two years, its profits exceeded ¥10 billion, at which point, according to one employee, "the original motivation" for starting the company "disappeared." The company was freely padding receipts and spending money to entertain contractors who controlled work orders so that they could get even more lucrative jobs. The president started giving away new cars to valued employees. After six years, one of the contractors discovered that the Iwaki subcontractor had bribed several of its employees and dropped the subcontractor. Subsequently, the subcontractor started laying off people as profits decreased sharply, and they weren't the

only ones. Two employees of another large general contractor were arrested for fraud for having reported fake costs and pocketing the difference. As one subcontractor explained, it was easy to do. The manager of a particular job asks the subcontractor to forge receipts saying that twice as many people worked on the job or asks a company that supplies lodging for workers to inflate the room charge on the receipts. At least 15 employees of one general contractor were accused of fraud or failure to report income. The total amount of money swindled in these cases was about ¥4 billion.

One contractor told NHK that he knew the environment ministry was understaffed so he didn't worry about getting audited. The ministry asked for more personnel and the government always refused, saying the cleanup was only a short-term project. As initially planned, it would be finished in three years and cost a little over ¥1 trillion, but after 10 years it's still not finished and actual costs have soared past ¥3 trillion, not counting the money spent for processing waste and constructing storage facilities. The ministry planned to build only two incinerators for waste disposal, but the local governments said they would only allow waste collected within their borders to be burned, so the ministry ended up building 16 incinerators in Fukushima Prefecture alone. And while they were built to last 20 years, half of them have since been demolished in order to alleviate local anxieties, so in many areas the work was not completed, though the cost of waste incineration ended up being more 5 times the original estimate.

Public funds paid for all of this, but direct tax money was used mainly for mid-term storage of irradiated materials. Everything else related to the cleanup is supposed to be paid for by capital gains made from the government selling Tokyo Electric Power Co. (Tepco) stock. NHK says that the government bought ¥1 trillion worth of Tepco stock at ¥300 per share and estimates that in order to pay off the cleanup

costs they would need to sell that stock at ¥1,500 per share. Unfortunately, the stock hasn't gone up in price since the government bought it. As of February 20, it was about one-fourth what it needed to be, so they have simply put off sale of the shares. One expert NHK talked to, a scholar who has done extensive research into nuclear accidents, said that if the stock doesn't go up in price, then the government will end up using tax money anyway to pay for the cleanup; either that, or Tepco is going to have to cover more of the cost, which means utility bills will go up again. So, the public—more specifically, future generations—pays for it either way.

This pay structure was built into the law quite recently. Originally, Tepco was legally responsible for cleaning up any situations caused by an accident at their facilities, and thus were expected to pay for the Fukushima disaster, but since the job was so huge the government borrowed money and paid for the operations on behalf of Tepco. In turn, all of Japan's electric power companies were supposed to reimburse the government. But in March 2013, Tepco talked the government into changing the pay structure, convincing it to shoulder more of the burden by saying that making utilities pay for everything is unfair to their shareholders, since nuclear power is a "national policy." A letter that NHK uncovered from Tepco to the trade ministry said that Tepco would not be able to "revive" itself if the government didn't take more responsibility for the cleanup. Nine months later, the Cabinet decided on the capital gains strategy. According to various officials interviewed by NHK, the government knew that the capital gains plan wouldn't be able to cover the costs of the cleanup, even before it ballooned out of proportion, but that they had to come up with something quickly "on paper." As one trade ministry official said, the plan puts the government in a double bind, since in order for the stock to go up appreciably, it has to guarantee not only Tepco's survival, but its

success as a private corporation in the short run. And that, presumably, means getting nuclear power plants back online as soon as possible, a task that has run up against a wall of public opposition in the wake of the Fukushima disaster.

In the summer of 2019, at a meeting to dissolve the Utsushi-chiku-based project team, the deputy team leader confessed that he had received millions in yen in extra payments. As it turned out, a total of ¥26 million had been paid to three officials of the team unbeknownst to the team members, and when they found out they were angry. The officials defended the payments, saying that it was "compensation for calculating accounts and working on tax documents," and that it was perfectly legal. One returned a substantial portion of the money he had received, but the residents were unmoved. The three officials were eventually "expelled" from the team and are now pariahs in the town. Since all the money for the cleanup had to come through the city, the Asahi Shimbun reporter asked a city official about the matter. He said it was an "internal problem" for the team. The city had nothing to do with it.

However, when Asahi talked to rank-and-file members of the team, they discovered that many already knew, or at least suspected, that

it was easy to make a lot of money. Since work orders were paid on unit bases — a certain amount per cubic meter of soil collected or per structure cleaned — and no one was checking, it was easy to inflate unit costs. One worker explained how expensive the black bags were for storing contaminated soil and vegetation. The retail price was ¥10,600 per bag, so they bought the bags wholesale for ¥4,200 each and kept the difference. Using such a system, they could make hundreds of thousands of yen extra just on bags for one cleanup job.

An elderly farmer from the area told Asahi that before the cleanup, some residents received large compensation payouts from the government because of their relative proximity to the accident while others received much less, even if they were neighbors, thus giving rise to resentments. Once the cleanup started, however, everybody had the same chance to make money and nobody complained. The work, in fact, made it possible for them to endure and eventually return to farming. But what does that mean when, as a result, their sense of community had been destroyed?

This is an expanded version of an article that appeared in [The Japan Times](#).

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