

Energy Matters

[Nuclear Poison in the Land: A Farm Family from Fukushima Loses it All](#)

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By Roger Witherspoon

Killing the chickens was the worst.

For a 53-year-old organic farmer like Sachiko Sato, killing a chicken was not a novel event. “We kill chickens for food. We sell chickens. We raise chickens to eat,” she said. “But this was different. This was too much.”

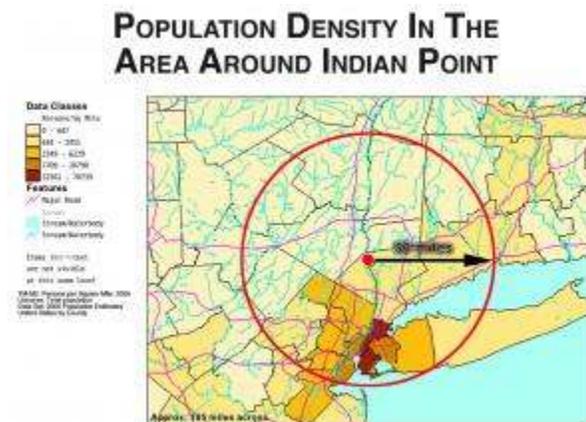
She was sitting in the sparse conference room in the Ossining, NY headquarters of the environmental group Riverkeeper, having lunch and recalling the life-changing events of the past year in her hometown, Fukushima, Japan, as her 13-year-old daughter, Mina, slept in a chair nearby. She is part of a small delegation of Japanese farmers and the country’s best known anti-nuclear activist, Aileen Mioko Smith, who came to the US to talk to anti-nuclear groups and government officials and present a petition to the United Nations High commission on Human Rights to recognize the danger posed by radiation to children.

Earlier in the week Ed Lyman, of the Union of Concerned Scientists (www.UCSUSA.org), hosted a meeting between the group and officials at the Nuclear Regulatory Commission. Beyond Nuclear (www.beyondnuclear.org), the American anti-nuclear group, guided the

group around New York and teamed with the Indian Point Safe Energy Coalition (www.Indianpointinfo.org and www.ShutDownIndianPointNow.org) to bring them to suburban Westchester County Friday to see the area around the Indian Point nuclear power complex and talk with local farmers about the danger such plants posed to their livelihoods. They stopped at Riverkeeper, which has waged a legal fight to close the plant for nearly a decade, to rest before taking the train back into Manhattan for a meeting at the UN.

“When we met with the US officials,” said Mrs. Sato, “they said they would learn from the lessons of Fukushima. “They talked about the evacuation of Americans within 50 miles of Fukushima. But now that I have been here, I realize that there is no possible evacuation plan for people 50 miles around Indian Point.”

Such an evacuation would affect 21 million people, including all of northern New Jersey as far as Newark, west past the Delaware Water Gap into Pennsylvania, east to Hartford, Conn., and south encompassing all of New York City. The NRC requires evacuation plans for only 10 miles around the nation’s 104 nuclear power plants.



The massive, March 11 earthquake and resulting tsunami ravaged the coastline of Japan and killed thousands of people, and destroyed safety systems and power at the huge nuclear complex. It had done little damage to the Sato’s small organic farm, about 60 miles from the coast. But the meltdowns at the Fukushima Daiichi nuclear power plant were another matter. Two of the six plants in the complex were closed for refueling, but the remaining four were out of control and melted down, giving off hydrogen gas from the reactors and spent fuel pools which exploded and blew their containment buildings apart.

These were modern plants, the same make and vintage of boiling water reactors as the Hope Creek and Oyster Creek plants in New Jersey whose licenses were recently extended for 20 more years. The continuing, uncontrolled release of radiation from their Japanese counterparts threatens to overtake Chernobyl as the world’s worst commercial nuclear

power accident.

“March 11 changed everything,” Mrs. Sato said. “The nuclear accident was particularly difficult to accept because we could not see it.”

She had never paid much attention to her city’s nuclear complex. After the Chernobyl accident in 1985, she said, “I talked to a friend in Yamagata, about 100 kilometers away. I had decided if an accident were to ever occur at the Fukushima nuclear power plant, I would send my children to Yamagata. But that was in 1985.”

That accident in the Ukraine made her rethink the role of technology in daily living, and “I decided to learn from the wisdom and skills of the past, so that we could continue life into the next generation even if there were no imports of fossil fuels or nuclear power. That is the way people used to live, greatly valuing the connection between each other and having awe and respect for nature.”

She and her husband and their five children converted the homestead into a “natural farm,” growing rice, vegetables and grains, raising and tending some 200 chickens and coking their meals over firewood. They did not use plows or heavy machinery, but worked by hand, the way their ancestors had. Their organic farm became the nucleus of a cooperative organic farming community.

“It wasn’t until three years ago that I actually saw Fukushima Daiichi,” she said. “I was at a meeting near the coast, and we had decided that if the weather was nice we would swim in the sea. The weather was rough and the sea was choppy so we did not go for the swim, but that’s when I saw the power plant.



“I had never seen anything like it. I wondered how you can live with this power plant. The discharge from the plant was hot water that was harming the fish.”

The once-through cooling system used by many nuclear plants sucks in billions of gallons of

water daily, runs it through heat exchangers, and dumps the heated water back into the waterway. In the process, the New Jersey Department of Environmental Protection estimates that some 9 billion juvenile and mature fish are killed by the Salem and Oyster Creek power plants, and the New York Department of Environmental Conservation puts the figure for Indian Point on the Hudson River at about 2 billion juvenile and mature fish. The process is far more devastating, however, to the newly hatched fish, which are under a half inch in diameter and are captives of the smallest currents. According to the National marine Fisheries Service, Indian point alone kills some 300 billion of these baby fish and “the numbers for Salem and Oyster Creek are similar.”

But fishing wasn't Mrs. Sato's issue. Raising her kids and managing the family farm were full time jobs. Besides, she had a safety out if a real accident ever occurred. Until March 11, she said she never gave the nuclear power plant another thought.

The reactors at Fukushima Daiichi began melting down within hours of the earthquake. The ensuing explosions from reactors 1 through 4 blew off both the roofs of the buildings and the years of assurances that Chernobyl-type meltdowns were impossible. The Japanese government was continually reassuring the public that they were safe and there was little danger from radiation but, simultaneously, it raised the maximum amount of permissible radioactive contamination in water, food and air. The government's guidelines made no distinction between what was safe for infants, children, and adults.

She called her friend in Yamagata and said, simply, “The fateful day has arrived.”

It was hard on the kids. “My father built our house 20 years ago,” said Mina. “I had never had my own room. The house was being renovated from February, and my room was in the middle of being built. I had to leave our home before the room was completed.

“I was looking forward to it.”

As she put her children on the train, she said “brace yourselves against the fact that you won't be able to go back to Fukushima for quite some time.”

Sending them away was not a difficult decision, she said: protecting your children is what a parent is supposed to do.

“I took soil samples and on March 31 sent them to a French company for an analysis,” she said. “I got the results back two weeks later. The government was saying that the limit of allowable cesium in soil was 5,000 Becquerels per kilogram. But the analysis showed it was over 6,000 Becquerels and I decided not to grow anything this year. My land was poisoned.”

She warned her neighbors, but many were reluctant to accept that their livelihoods had been upended. “Many were growing food and taking it to the market,” she said. “Since the government kept raising the limit, they said they were legally allowed to sell it. “There is a standard for imported food which the government put into place after Chernobyl of 370 Becquerels,” she said. “But the provincial government set the standard for food in Fukushima at 500 on the assumption that only a tenth of the radiation in the ground could go into the food. They had no scientific basis for that. They just decided it.

“People around me are selling it and feeding it to their children. Almost nobody is taking measurements. But I wouldn’t do that.”

She decided to take measurements of the soil at the schools attended by her 13-year-old daughter, Mina, and her 17-year-old son, Yuuki and found that the soil around the schools was heavily contaminated as well. She and other parents petitioned the local government to measure the soil around all the region’s schools, “and then the national government issued new standards April 19 raising the limit for exposure to 20 times what it had been before. The Japanese government has not protected the lives of our children.”

Back home, she and her husband systematically began dismantling the crops and petitioning the government for help in decontaminating the soil. Watching her farm go to waste was a pragmatic decision: painful, but necessary. Just like sending the children away.

“It is an issue that has divided our community,” she said. “Some do not want to believe everything has changed. They want to go on as before. It has torn our hearts. There is a rift in the human relationships between those who chose to believe it is not safe and we must evacuate the children and those who chose to believe it is safe and to stay. There are still 300,000 children in Fukushima.

“We were one community, but now we are torn apart.”

The chickens were different. They couldn’t be bulldozed away, or left to grow wild like free range rice. They had to be killed. She and her husband walked into the hen house, carrying the wire garrotes to quickly, efficiently, strangle them.

“They weren’t pets,” she said, softly. “I had gone in there many times to single one out and kill it for food. This was different.”

They were there, some cackling, some walking, and some sitting on their eggs as her husband began methodically killing them, one by one.

“I watched him,” she said, “and then I couldn’t bear it any more. I left, and he finished it

alone.”