What an Australian-based civil society group is learning with Fukushima children amid nuclear growth in Asia

At a time when the construction and use of nuclear power plants are resurging in Asia, a civil society group based in Cairns, Australia, is connecting with children and youth in Fukushima, Japan, to explore a future that will not include another nuclear accident.

The Fukushima nuclear disaster on 11 March, 2011 was one of the worst in the world. It occurred after the Fukushima Daiichi Nuclear Power Plant was damaged by a tsunami triggered by an earthquake. Declared a 'manmade' disaster, the nuclear accident was caused by regulatory capture, in which the Japanese government agencies and the nuclear regulatory agencies served the interests of the nuclear power industry rather than prioritising the safety of the public. Over 400,000 people were evacuated as a result of the nuclear accident and 30,000 people remain displaced. The cost of decommissioning the stricken power plant and compensating the victims of the disaster was estimated to be US$186 billion.

More than a decade later, the use of nuclear power is resurging in China, Japan, South Korea, India and Pakistan and there's been renewed debate in Australia as the global race to a carbon-free future and soaring energy prices worldwide overshadow safety concerns and the lasting social, economic and ecological damage of nuclear disasters. Nuclear energy in Asia is growing rapidly. One-fourth of operational nuclear units and two-thirds of reactors under construction worldwide are in Asia. There are proposals for further 220 nuclear reactors in Asia—far more than the 51 planned in Europe, 25 in North America, 25 in the Middle East and Africa, and nine in Central and South America. In addition, Asia produces more than half of the world's uranium from mines, largely from Kazakhstan and Australia.

Although nuclear power has been banned in Australia by federal law since 1998, there have recently been three state-based inquiries reconsidering nuclear opportunities—the 2016 Nuclear Fuel Cycle Royal Commission in South Australia, the 2019 Uranium Mining and Nuclear Facilities (Prohibitions) Repeal Bill in New

South Wales and the 2020 Inquiry into Nuclear Prohibition by a Victoria parliamentary committee. These nuclear debates have mainly reflected state and market interests foregrounding national economy, international security and energy security issues.

The views of those with nuclear displacement experiences have been missing from the mainstream discussions, especially the voices of emerging generations who will bear the consequences of any future nuclear disasters. Civil society, as a space distinct from the state and the market, provides important opportunities for voluntary associations to be formed, grassroots voices to be heard and alternative futures to be explored.

Smile with Kids (SWK) is a charity that creates opportunities for Fukushima children and Cairns community to connect, learn and explore what can be done to create a future where children can flourish following the Fukushima nuclear accident. SWK is led by a small group of Japanese women residing in Cairns and is supported by the local community including the Japanese migrant community, local businesses, schools, sports clubs and social groups in Cairns.

Established in 2014, this volunteer-run initiative began by organising 'refresh camps' that provided junior high school students living in Fukushima with seven to twelve days of outdoor activities in Australia. When SWK founder Maki McCarthy learned that children in Fukushima were restricted from playing outdoors to avoid radiation exposure and communities were divided over risk perceptions after the nuclear fallout, she and her SWK team developed the program so Fukushima children could enjoy playing in nature and connect with families and community in Cairns.

This kind of activity reflected a wider civil society-driven movement called 'recuperation' practice (*hoyō katsudō*). Mainly taking the form of outdoor recreational activities on weekends and holidays, recuperation practice aimed to refresh the bodies and minds of children who live in areas with radiation concerns in Japan. Inspired by the state-run recuperation activities in Belarus and Ukraine after the 1986 Chernobyl nuclear accident, Japanese civil society groups noticed the absence of such opportunities and organised similar activities. It was reported in 2016 that in Japan, more than 10,000 people participated yearly in recuperation activities organised by more than 200 groups. Recuperation activities also took place outside Japan in approximately 20 countries, including Australia. SWK's camp ran annually from 2015 to 2019 and included home stays, local school visits, overnight

farm stays, and trips to the Great Barrier Reef's Frankland Islands, Kuranda rainforest and Paronella Park.

More than a place of refreshment, SWK's camps also incorporated activities intended to broaden the perspectives of Fukushima students and the Cairns community. These included speeches by Fukushima students in English, which communicated their experiences of the 2011 Great East Japan Earthquake that triggered the Fukushima accident, their everyday lives in Fukushima and their dreams and hopes for the future. There were also sessions that facilitated learning and reflection about the Japan-Australia uranium link and the history of war between Japan and Australia.

Although the camps were postponed from 2020 onwards due to the COVID-19 pandemic, SWK kept in touch with Fukushima students by holding online meetings on a monthly basis. These discussions led to collaborative video projects in 2021 and 2022, which brought together messages from students in Fukushima and Cairns about their reflections on the last decade and their hopes for the future. The videos were then released on YouTube on the tenth and the eleventh anniversaries of the 2011 Great East Japan Earthquake respectively.

Against the backdrop of fading memories of nuclear accident and renewed interest in nuclear power in Asia, I highlight several significant insights that can be gained from what this Cairns-based civil society group is learning with Fukushima students.

The Fukushima nuclear accident is not over

Firstly, contrary to the mainstream debates that discuss the 2011 nuclear accident as a thing of the past, SWK's interaction with the Fukushima students reveals that the consequences of it are far from over.

The messages from Fukushima students in the SWK's videos include their reflections on the current situation in Fukushima. Many students commented that although reconstruction has progressed significantly, there are still areas where people cannot return to live due to high radiation levels. Even in towns where students and their families still reside, there are reminders in their everyday landscape that the nuclear accident is ongoing. In the 2021 video, Maya (not her real name)* stands in front of a hill in one of her neighbourhoods. Pointing to black bags of radioactive soil piled up behind her, she says:

‘Our town was decontaminated and at first glance everything seems back to normal again. However, we have contaminated soil which has nowhere to go.’

As part of the decontamination process, radioactive soils and debris were dug up, bagged and stored in temporary sites across Fukushima prefecture. As of August 2022, more than 13 million cubic metres of topsoil were removed from 52 out of 59 municipalities in Fukushima prefecture. The toxic soils are transported to a temporary storage facility near the stricken power plant and planned to be contained there until 2045 before being transferred to a permanent site outside Fukushima —a location yet to be decided.

Bags of radioactive waste. Fukushima, Feb 2021. Source: SWK Japan Day of Hope video 2021.

In the 2022 video produced by SWK, Sota (not his real name)* sent in slides with photos, which suggest that the disaster-induced radiation issues are still present and increasingly integrated into their everyday life. The photos showed the weather forecast section in the local newspaper reporting daily radiation levels; portable radiation detectors used to measure radiation levels in everyday environments; a radiation monitoring post located in town; and a brochure for thyroid checks.

Thyroid checks have been regularly conducted on Fukushima children due to the association between radiation exposure and paediatric thyroid cancer —a highly

contentious matter for which it has been difficult to prove and seek justice. For the Fukushima students, these health examinations continue throughout their childhoods and into their adult life. In the 2022 video, Shiori (not her real name)* explains:

'It is said it's unlikely people will have any health issues from radiation exposure. But children are getting thyroid checks. This will continue until we turn 30 years old as there were actual cases [of thyroid cancer] found among children.'

The ongoing nuclear accident is being experienced by the children not as acute and catastrophic event but as part of everyday life that drags on with no clear end in sight. Scholars have used terms such as 'chronic crisis' and 'slow emergency' to draw attention to the gradual and long-term nature of nuclear disasters. The line between normality and a state of exception becomes blurred. Life with disaster-induced radioactivity might be becoming the new normal in the sense of the reality of everyday life. But it should not become normal in the sense of how things ought to be.

In disaster-prone Japan, these experiences are punctuated by recurring earthquakes, which raise concerns about the safety of nuclear power plants for at least the next 30 years while the decommissioning process is expected to continue. In the 2022 video, Rui (not her real name)* says:

'Every time earthquakes happen…, I get worried. Will the nuclear power plant explode again? Will the fish be okay when the radioactive water leaks into the ocean?'

By providing a space where students can talk about the situations in Fukushima from the perspectives of their everyday lives, this civil society practice is bringing visibility to the nuanced and lasting aspects of nuclear accident that are often forgotten or dismissed.

Nuclear displacement is experienced across national borders and generations

Secondly, while in mainstream discussions the experiences of nuclear displacement tend to be limited to the experiences of people in the immediate vicinities of the nuclear fallout, SWK's discussions with the Fukushima students highlight that

nuclear displacement experiences are shared across national borders and generations.

With SWK, Fukushima students have been learning about the experiences of Australian Indigenous peoples, especially the Mirarr people, and their response to the Fukushima nuclear accident. The Mirarr people's lands are located in the Kakadu region, which includes the Ranger uranium mine that is undergoing rehabilitation after its closure in 2021. A month after the Fukushima nuclear power plant exploded, Yvonne Margarula, a Senior Traditional Owner of the Mirarr people, wrote a letter on behalf of her people to the UN Secretary-General expressing her sorrow for the people of Fukushima and her grief that the uranium derived from their traditional lands may have contributed to the radiation problems in Fukushima. It was later confirmed by the Australian Safeguards and Non-Proliferation Office that the uranium mined from Ranger mine and Olympic Dam in South Australia was present in each of the reactors that exploded.

Watching the video of Yvonne Margarula's messages, SWK and the Fukushima students have learned about the struggles the Mirarr people have faced since the 1970s in protecting their lands from uranium mining and the sense of responsibility they feel towards what happened in Fukushima. A decade later, the Mirarr people continue to express concern about the impact of the uranium mined from their lands.

Learning about the Japan-Australia uranium connection raises awareness that experiences of displacement and alteration of homelands are not limited to the people of Fukushima but are also shared by communities across national borders including Australian Indigenous peoples. In SWK's online meeting in October 2021, Sana (not her real name)* commented:

'I realized that Fukushima and Australia have something in common.'

SWK has provided safe space for Fukushima students to consider the unbounded and connected aspects of the environment. In SWK's online meeting in April 2021, Fukushima students had an opportunity to discuss the impacts of the oceanic release of contaminated water as part of decommissioning the damaged nuclear power plant.

In 2021, to address the problem of a lack of nuclear wastewater storage, Japan passed a bill to allow the discharge of more than one million tonnes of treated radioactive water from the Fukushima nuclear power plant into the Pacific Ocean

over 40 years, beginning in 2023. This decision was criticised by the local community in Fukushima, neighbouring countries such as China and South Korea as well as Pacific Islands where the impacts of nuclear testing from 1946 to 1996 continue to affect their islands and people.

Fukushima students expressed their concern about animals and plants in the sea and the Fukushima fishing industry that had been battling the problem of harmful rumor (*fūhyō higai*), or the problem of economic harm caused by baseless information, and considered how people might persuade authorities to consider options other than discharging treated water into the ocean. They also discussed the ways that countries are connected by the ocean and their view that the international community needs to be consulted. In the online meeting, Koharu (not her real name)* commented:

'The sea, the fish in the sea, the fishing industry, the people who consume the fish, the other countries sharing the same ocean… It's all connected. It's important to consider that.'

Scholars have suggested that historically, the nuclear industry has promoted and benefited from the idea that the people, flora, fauna and radionuclides can be contained, observed and managed as isolated and bounded system. This approach to the environment is a highly racialised process driven by a settler-colonial mindset, contributing to gentrification of remote places that are perceived as 'empty', disruptions of people's relations with the land and sea, and multigenerational experiences of displacement.

Nuclear displacement can be experienced not only at the onset of nuclear meltdown by the populations living nearby but also throughout the processes of nuclear production, operation, waste management and decommissioning. These uncontained and unbounded processes have disproportionately affected the Australian Indigenous peoples, Pacific Islanders and other communities across national borders.

By creating opportunities to consider the interconnected nature of the Fukushima nuclear accident with Fukushima students, this civil society practice offers an important reminder that the nuclear debates in Asia require a transnational perspective and must take seriously the needs and interests of those with nuclear displacement experiences.

Protecting the option to choose an alternative future

Thirdly, when nuclear energy is increasingly debated as the only option to ecologically sustainable and economically efficient future, SWK's exchanges with the Fukushima students demonstrate the importance of asking what other options are possible and what can be done to create better future for and with children.

Since the inaugural camp in 2015, SWK has been creating opportunities for Fukushima students to talk about their aspirations and hopes for their futures. Over the years, many students have expressed their desire to repay the kindness they received from many people who supported them by pursuing their interests and working towards their dreams. For example, Nozomi (not her real name)*, a 2015 camp participant, went on to study international relations in Germany. Chiaki (not her real name)*, a 2016 camp participant, decided to study the Arabic language in Tokyo and contribute to international peace building. Daichi (not his real name)*, a 2017 camp participant, and Kazuki (not his real name)*, a 2018 camp participant, both majored in engineering to pursue their interests in renewable energy.

SWK founder Maki McCarthy explained that while each student has different interests, there has been common hope shared by them all:

'What I can say is that since the start [of SWK], everyone I met expressed their wish that [a] nuclear accident will never happen again.'

In the 2022 video, Yuma (not his real name)*, a prospective camp participant, said: 'I hope to see Japan free of nuclear power plants.' Another prospective camp participant, Nagisa (not her real name)*, reflected on 11 years since the nuclear accident and similarly asserted: 'I hope for a society that is free from nuclear energy.' Explaining that the nuclear decommissioning process is expected to take until 2051 at the earliest, she commented that she does not want a future where a single mishap can cause decades of social, economic and ecological damage. She expressed her hope towards building a future that is both zero-carbon and nuclear-free.

In my view, what this civil society practice emphasises is an active involvement of children in the making of their futures. Scholars suggest that one of the significant challenges of a 'slow emergency' such as a nuclear accident is protecting not only

the capacity to act but also the *possibility* to explore alternative futures. It is crucial that the children and the emerging generations of Fukushima are not robbed of the possibility to explore such future.

By valuing the concerns and hopes expressed by the Fukushima children, I believe this civil society practice urges mainstream nuclear debates to listen to their voices and keep open the option to explore a hopeful future.

SWK camp participants, Cairns, 2017. Source: SWK Facebook.

This article builds on the author's PhD research, which examined civil society and resilience-building in disaster recovery politics. The author participated in SWK as a volunteer from 2017 to 2022 to explore how civil society practice created a place where children can live free from radiation concerns.

**All names are pseudonyms except for Maki McCarthy.*

The author would like to thank Maki McCarthy for her valuable feedback on SWK.

Main image: Landscape of Cairns taken during fieldwork, March 2017. Credit: Author.