PROHIBITING NUCLEAR WEAPONS

A Pacific Islands Priority
By Nic Maclellan

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Cover: The United States detonates an atomic bomb 27 metres underwater at Bikini Atoll on 25 July 1946, sinking eight of the surrounding warships, which had been positioned nearby for experimental purposes. The bomb’s explosive yield of 23 kilotonnes is slightly greater than that of the Hiroshima and Nagasaki bombs, but several hundred times smaller than that of the infamous “Bravo” test at Bikini Atoll in 1954 – the largest US nuclear explosion in history. (Note that this image has been digitally colourized.)

This page: A mushroom cloud rises above Moruroa Atoll after a French nuclear test in 1970.
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From 1946 to 1958, the UNITED STATES conducted 67 atomic and hydrogen bomb tests at Bikini and Enewetak atolls in the Marshall Islands, accounting for 32 per cent of all US atmospheric tests. In the 1960s, there were 25 further US tests at Christmas (Kiritimati) Island and nine at Johnston (Kalama) Atoll.

The UNITED KINGDOM tested nuclear weapons in Australia and its Pacific colonies in the 1950s. Starting in 1952, there were 12 atmospheric tests at the Monte Bello Islands, Maralinga and Emu Field in Australia (1952–57). There were also more than 600 “minor” trials, such as the testing of bomb components and the burning of plutonium, uranium and other nuclear materials, conducted at Maralinga.

Under “Operation Grapple”, the British government conducted another nine atomic and hydrogen bomb tests at Kiritimati and Malden islands in the central Pacific from 1957 to 1958. After conducting four atmospheric tests at Reganne (1960–61) and 13 underground tests at In Eker (1961–6) in the Sahara desert of Algeria, FRANCE established its Pacific nuclear test centre in French Polynesia. For 30 years between 1966 and 1996, France conducted 193 atmospheric and underground nuclear tests at Moruroa and Fangataufa atolls.
Introduction

At the forefront of global efforts to ban nuclear weapons

In one of its final acts of 2016, the UN General Assembly adopted a landmark resolution to begin negotiations on a treaty to prohibit nuclear weapons. All Pacific island states, with the exception of the Federated States of Micronesia, voted “yes”. Disarmament has long been a top priority for the Pacific region, which has suffered greatly from decades of nuclear testing.

In a submission to a UN disarmament working group in Geneva in May 2016, the governments of Fiji, Nauru, Palau, Samoa and Tuvalu wrote: “The lived experience of our people informs our policies on nuclear disarmament. It motivates us to contribute substantively to the work of bodies such as this.”

Pacific island states have been at the forefront of recent global efforts to build support for the complete prohibition and elimination of nuclear weapons. They participated actively in three major intergovernmental conferences in 2013 and 2014 examining the humanitarian impact of nuclear weapons. Their representatives offered personal testimonies on the harm that such weapons inflict.

“Some islanders have been permanently displaced from their homes and disconnected from their indigenous way of life. They have suffered, and continued to suffer, untold anguish, heartache and pain.”

– FIJI, NAURU, PALAU, SAMOA AND TUVALU, 2016

From 1946 to 1996, some 300 nuclear test explosions were conducted in the Pacific. Their impact on the fragile ecology of the region and the health and mental well-being of its peoples has been profound and long-lasting. Pacific islanders continue to experience epidemics of cancers, chronic diseases and congenital abnormalities as a result of the radioactive fallout that blanketed their homes and the vast Pacific Ocean, upon which they depend for their livelihoods.

Entire atolls remain unsafe for habitation, agricultural production and fishing. “Some islanders have been permanently displaced from their homes and disconnected from their indigenous way of life. They have suffered, and continue to suffer, untold anguish, heartache and pain,” Pacific island governments informed the UN working group.

“It will never be possible to restore fully our precious islands to their former pristine state, nor to undo the harm inflicted upon our people over generations. We can, however, work with other nations to ensure that nuclear weapons are never used again, whether in testing programmes or in warfare. This can be guaranteed only through their complete and irreversible elimination.”

Many Pacific island states have expressed deep concern about the continued existence of approximately 15,000 nuclear weapons in the world and the lack of any concrete plans to eliminate them. In 2014, the Republic of the Marshall Islands – where the United States conducted 67 US nuclear test explosions between 1946 and 1958 – initiated legal proceedings against all nine nuclear-armed nations with the aim of compelling them to take seriously their disarmament obligations under the Non-Proliferation Treaty and customary international law.

Pacific nations have also consistently voiced strong support for the adoption of a treaty that places nuclear weapons on the same legal footing as other weapons of mass destruction, which have long been banned. They have presented detailed proposals for the elements to be included in such a treaty.

They view the prohibition and elimination of nuclear weapons as an essential part of a broader struggle to end violence, to promote harmony and friendship among the peoples of the world, to achieve justice and respect for human rights, and to ensure a safe, clean and healthy environment for the benefit of all present and future generations.
Over the next five decades, more than 315 nuclear test explosions were conducted across the region by France, Britain and the United States. Seeking “empty” spaces, the Western powers chose to conduct cold war programmes of nuclear testing in the deserts of central Australia or the isolated atolls of the central and south Pacific. Missile testing ranges in the Pacific still provide the infrastructure for the development of the intercontinental ballistic missiles that are a key component of nuclear war preparations.

Longstanding opposition
Today many Pacific communities are living with the health and environmental impacts of this nuclear testing. Testimony from nuclear survivors in the Pacific has reinforced a deep concern over the humanitarian impacts of nuclear weapons and widespread popular support for a nuclear-free world. Since the 1950s, churches, trade unions, women’s organizations and customary leaders have campaigned for an end to nuclear testing and the abolition of nuclear weapons.

Since gaining their independence from colonial powers, Pacific governments have also expressed their support for nuclear disarmament. At the height of the US–Soviet arms race, on Hiroshima Day in 1985, members of the South Pacific Forum signed the South Pacific Nuclear Free Zone Treaty, an important regional contribution to global nuclear disarmament.

At the 1992 World Health Assembly, the health ministers of Tonga and Vanuatu were among the co-sponsors of a successful resolution first requesting an advisory opinion by the International Court of Justice (ICJ) on the legal status of the use of nuclear weapons. When the court addressed this question three years later, the Marshall Islands, Samoa and the Solomon Islands made strong submissions to the court.

In the same year, the Federated States of Micronesia, the Marshall Islands, Samoa and the Solomon Islands joined New Zealand and Australia in taking France to the ICJ over its nuclear test explosions in Polynesia.

Even since the end of nuclear testing in the region in 1996, many Pacific island governments have continued to champion international efforts for nuclear disarmament. In the First Committee of the UN General Assembly and in other diplomatic forums, they have argued passionately for the negotiation of a treaty to prohibit nuclear weapons, describing it as an urgent humanitarian imperative.

Why a global ban
Both other types of weapons of mass destruction – chemical and biological weapons – have long been prohibited under international law. The vast majority of the world’s nations believe that it is now high time for nuclear weapons, the most destructive weapons of all, to be similarly banned. The detonation of just one nuclear bomb over a large city could kill more than a million people. The use of tens or hundreds could disrupt the global climate, causing widespread agricultural collapse and famine.

The International Committee of the Red Cross and various UN agencies have warned that no adequate humanitarian response would be possible in the aftermath of a nuclear attack. Given the catastrophic effects of nuclear weapons, banning and eradicating them is the only responsible course of action. Pacific island nations, whose people have experienced first-hand the horrific impact of nuclear testing, have long worked to bring about a ban – and the international community is now poised to declare the use, production and stockpiling of nuclear weapons illegal.
Living on Rongelap Atoll in the Marshall Islands, Rinok Riklon was just 14 years old when the United States conducted a nuclear test on neighbouring Bikini Atoll. She was exposed to radioactive fallout from the “Bravo” nuclear test, which took place on 1 March 1954.

“People were playing with the fallout as it fell from the sky,” she says. “We put it in our hair as if it was soap or shampoo. But later I lost all of my hair from it.”

The test spread fallout across the northern region of the Marshall Islands. It was the largest ever conducted by the United States – estimated to be 1,000 times more powerful than the explosions at Hiroshima and Nagasaki.

Inadequate compensation
Under an agreement between the United States and the Marshall Islands, a nuclear claims tribunal was established to award compensation for damage to health and property from the US nuclear tests conducted between 1946 and 1958.

This court has made numerous rulings for people from Bikini, Enewetak, Rongelap and other atolls but has insufficient funds to pay the necessary compensation. So far, only US$150 million has been paid and the US government still owes more than US$2.3 billion to the Marshallese people. Despite an official petition to the US Congress in 2000, the US government has refused to allocate further compensation to meet rulings issued by the tribunal.

Living in exile, six decades on
Lemyo Abon was also living on Rongelap during the 1954 “Bravo” test. “Immediately our drinking water turned yellowish and the food was bitter and tasteless,” she says.

Over time, she joined other villagers who were relocated from the northern atolls to the main islands of Kwajalein and Majuro. Mrs Abon, now in her seventies, longs for the day when she can return to her home atoll. However, only one-quarter of Rongelap has been “rehabilitated” and made safe for habitation, while the rest remains contaminated with radionuclides such as caesium-137.

More than six decades after the “Bravo” test, people are still exiled from their home island. “We have been displaced from our homeland, like a coconut floating in the sea with no place to call home,” she says.

“We ask the United States for equal treatment and to compensate us for the suffering and damage caused to us, our homes, our families and our island atoll.”

Another nuclear survivor from Rongelap is Nerje Joseph, who hopes that the US will “right the wrong” it has done. “We were promised compensation and that is not enough,” she says. “The nuclear claims tribunal has made some awards but we have not received a penny. We are the few left from the generation that saw the tests and suffered as a result. The US should not deny its moral responsibility and compensate us while we are still living. We don’t want our future generations to suffer like us.”

‘Nuclear zero’ lawsuits
In a courageous move, the government of the Marshall Islands filed landmark lawsuits in April 2014 against all nine nuclear-armed nations for failing to comply with their obligations under international law to pursue negotiations for the total elimination of nuclear weapons.

More than five million people around the world signed a petition in support of this historic legal action. Much to the disappointment of test survivors, the International Court of Justice, in The Hague, dismissed the lawsuits in October 2016, ruling that there was insufficient evidence of a dispute between the Marshall Islands and the nuclear-armed nations.

Despite this ruling, the Marshall Islands continues to push for a nuclear-free world, being a leader in the UN initiative to prohibit nuclear weapons.
**Timeline of nuclear testing in the Pacific**

**1940s**

6 August 1945  The *Enola Gay* flies from Tinian Island in the Marianas Islands to drop an atomic weapon on the Japanese city of Hiroshima. Three days later, the city of Nagasaki is also destroyed with an atomic weapon.


**1950s**

October 1952  The UK begins nuclear testing in Australia at the Monte Bello islands, followed by tests on the land of the Indigenous Anangu people at Maralinga and Emu Field.

November 1952  The US tests the first hydrogen bomb, codenamed "Ivy Mike", at Enewetak Atoll in the Marshall Islands, with an explosive yield of 10 megatonnes.

1 March 1954  As part of Operation Castle, the massive “Bravo” test at Bikini Atoll spreads fallout across the northern atolls of the Marshall Islands, including Rongelap and Utirik, as well as a nearby Japanese fishing boat.

November 1957  Between 1957 and 1958, the UK conducted nine atmospheric nuclear tests over Christmas Island and Malden Island (today part of the Republic of Kiribati).

**1960s**

August 1963  The Partial Test Ban Treaty opens for signature. It prohibits nuclear testing in the atmosphere, outer space and under water.

2 July 1966  After relocating its nuclear testing centre from Algeria, France conducts a nuclear test at Moruroa Atoll in French Polynesia – the first of 193 atmospheric and underground tests over 30 years.

1 July 1968  The Non-Proliferation Treaty is signed. Non-nuclear-weapon states agree never to acquire nuclear weapons, and nuclear-weapon states give a legal undertaking to disarm.

24 August 1968  France’s first hydrogen bomb, codenamed “Canopus”, is tested at Fangataufa Atoll in French Polynesia.

Enola Gay crew members on 6 August 1945.

Iroji Kebenli suffered radiation burns to his skin in 1954 after contact with “Bikini snow” – radioactive ash from US nuclear tests.
1970s

April 1975  A nuclear-free Pacific conference is held in Suva, Fiji, supported by the Pacific Conference of Churches, Against Testing on Moruroa (ATOM), and union, community and women’s groups. This is the first of a series of regional conferences for the Nuclear Free and Independent Pacific movement that continue for the next 30 years.

1980s

6 August 1985  The South Pacific Nuclear Free Zone Treaty is opened for signature in Rarotonga, the Cook Islands. The treaty prohibits the manufacture, stationing and testing of nuclear weapons within the zone.

June 1987  New Zealand’s nuclear-free legislation prohibits visits by nuclear-armed and -powered vessels.

1990s

September 1995  After a short moratorium, France resumes nuclear testing with six tests at Moruroa and Fangataufa atolls, sparking regional and international criticism. The final French nuclear test on 27 January 1996 marks the end of testing in the Pacific islands – but not the end of health and environmental impacts.

24 September 1996  The Comprehensive Nuclear Test Ban Treaty opens for signature at the UN. China, France, the UK, Russia and the US all sign the treaty. But India says it will not join.

The bombing of the Rainbow Warrior protest ship by France in 1985. Credit: Greenpeace

The 7th Nuclear Free and Independent Pacific Conference, in Suva, Fiji, 1996.
Public opposition

Resistance to nuclear testing and the build-up of nuclear arms

From the beginning of the nuclear age, communities across the Pacific islands have protested against nuclear weapons. There were anti-nuclear protests in French Polynesia in 1950, when the Tahitian leader Pouvanaa a Oopa – a veteran of the French army in both world wars – collected signatures for the famous Stockholm Peace Appeal.

In 1954 Marshall Islanders lodged a petition with the UN Trusteeship Council requesting that “all experiments with lethal weapons in this area be immediately ceased”. They were “not only fearful of the danger to their persons from these deadly weapons”, but “also concerned for the increasing number of people removed from their land”.

In 1956, after the UK government announced that British nuclear testing would commence at Christmas Island, Western Samoa petitioned the Trusteeship Council to halt the tests. (At the time, Samoa was still a trust territory of New Zealand.) The same year, the Rarotonga Island Council submitted a report to the Cook Islands Legislative Council expressing concern and asking “that the testing area be situated at some greater distance than the Cook Islands”.

In 1957 the Fijian newspaper *Jagriti* noted: “Nations engaged in testing these bombs in the Pacific should realize the value of the lives of the people settled in this part of the world. They too are human beings, not ‘guinea pigs’.”

In 1975 the Pacific Conference of Churches joined other groups in hosting the first Nuclear Free Pacific conference, in Suva, Fiji. The cause of disarmament was linked to the right to self-determination, with the delegate from New Hebrides stating: “The main objective of this conference is to end nuclear tests in the Pacific, but the more we discuss it, it becomes obvious that the main cause is colonialism.”

By 1980 the Nuclear Free and Independent Pacific (NFIP) movement had established a secretariat in Hawai‘i – the Pacific Concerns Resource Centre. The movement campaigned against nuclear testing, the dumping of nuclear waste in the Pacific Ocean, the transport of nuclear materials through fishing grounds, and the mining of uranium on Indigenous land.

In the 1980s, churches, trade unions and community organizations lobbied successfully for the creation of a South Pacific nuclear-free zone and supported nuclear-free legislation in countries such as Vanuatu, Palau and New Zealand.

Strong public opposition today

Even after the end of French nuclear testing in 1996, citizen groups continued to campaign against nuclear weapons, and called on the nuclear powers to address the health and environmental impacts of past testing. Former military and civilian personnel who staffed the test sites in the Pacific continue to campaign for clean-up of contaminated islands and compensation for people affected by exposure to radiation.

People from affected nations have increased their campaigning in recent years: Fijian soldiers and sailors seeking compensation for the effects of nuclear tests at Christmas Island; the lobbying of Moruroa e Tatou, which links the former test site workers from Moruroa and Fangataufa, to strengthen French compensation laws; Australian veterans of the atmospheric tests at Maralinga, Emu Field and the Monte Bello Islands campaigning for pension rights from the Australian and British governments; and the Marshall Islands government lodging a “changed circumstances” petition to the US Congress, seeking to increase the level of compensation provided by the US for damage to people and property caused by US nuclear tests.

Over the past decade, a number of non-governmental organizations in the Pacific have signed up as partners in the International Campaign to Abolish Nuclear Weapons. Their representatives have participated in campaign strategy meetings around the world and spoken at intergovernmental conferences on the humanitarian impact of nuclear weapons.
Above: Nuclear Free and Independent Pacific protesters in Fiji, 1996.
Right: A T-shirt rejecting nuclear weapons and waste in the Pacific.
Generations of Pacific island women have voiced concern about the humanitarian impact of nuclear weapons: nuclear fallout in the oceans, health and genetic damage, environmental pollution, impacts on the food chain and the forced migration of peoples.

FemLINKpacific, as a member of the Global Partnership for the Prevention of Armed Conflict and ICAN, reaffirms that the catastrophic humanitarian consequences of nuclear weapons are a reality for the Pacific island region, which continues to bear the impact of the use and testing of nuclear weapons.

In the Pacific, as well as globally, unequal power relations, intolerance, lack of respect and valuing, and lack of access to and control over resources characterize the position of women relative to men. This fuels the pervasive nature of violence and the exclusion, marginalization and invisibility of women at all levels of decision-making, which is detrimental to human security. However, women are not just passive victims of violence and inequality; women have been making significant contributions to human security within families, communities and nations. Our work dates back to the early days of the Fiji Young Women’s Christian Association, which provided the nurturing ground for the Nuclear Free and Independent Pacific movement.

We are keen to see linkages within the broader efforts of conflict prevention and human security and security sector governance so that governments actively work in close cooperation with civil society in disarmament and non-proliferation machinery, including for the elimination of nuclear weapons.

Women are “waging peace”, which needs to be supported by implementation of UN Security Council resolution 1325, ratification of the Convention on the Elimination of Discrimination Against Women, and development of collaborative partnerships between local, national and regional organizations. Responding effectively to the complex and multifaceted threats and challenges to human security in the Pacific requires the participation, recognition and valuing of the experiences and role of women.

It is vital that there is support for a strong Pacific island movement against nuclear weapons. We should exert pressure for the reallocation of funds currently devoted to militaries to human security needs, implementing the Sustainable Development Goals and preparing for security threats such as climate change. When women feel secure, peace is possible. When women feel secure enough to resist war and organize for peace – expressed through theatre, community media, public demonstrations and civil disobedience – peace is on its way.

Red Cross societies from the Cook Islands, Fiji, Kiribati, the Federated States of Micronesia, New Zealand, Palau, Papua New Guinea, Samoa, Tonga and Vanuatu have joined their counterparts in other nations to call for a total ban on nuclear weapons. They have spoken out against the “continued retention of tens of thousands of nuclear warheads, the proliferation of such weapons and the constant risk that they could again be used”.

Filipe Nainoca, the director-general of Fiji Red Cross, believes that the issue of nuclear weapons is a pressing one for Pacific island nations, who have experienced their devastating effects through testing: “Though the bombs may have been detonated many years ago, their effects live on in our hearts, our minds and our homes forever.”

The autumn 2015 issue of the International Review of the Red Cross focuses on the “human cost of nuclear weapons” and includes a paper by the Australian public health physician Tilman Ruff on the radioactive contamination, displacement and transgenerational harm from Pacific nuclear testing.
Health impact

The long-term effects of nuclear testing in the Pacific

During and after US, British and French nuclear testing in the Pacific, radioactive fallout was dispersed in the Pacific region and globally, adding to global radiation risk and cancer burden. Hazards were greatest for the military and civilian personnel who staffed the test sites, as well as villagers living on nearby and downwind islands. Years later, many of these nuclear test survivors are suffering health problems related to their exposure to radiation from the explosions. In all cases where adequate health studies of participants in atmospheric nuclear tests have been undertaken, adverse health consequences have been demonstrated, even many decades later. Increased rates of cancer, including blood cancer (leukaemia), have been found among nuclear test veterans from the UK, the US, Australia, France and New Zealand. Test veterans from Pacific islands such as Fiji faced no lesser hazards.

Downwind communities in the Marshall Islands bore the brunt of acute radiation sickness and direct organ radiation damage related to high radiation exposure, as well as long-term cancer risks including increased rates of thyroid cancer. As well as direct exposure to radioactive fallout, they confront long-term contaminated environments and food sources.

They also face ongoing psychological stress and anxiety and concern for subsequent generations. Some in Micronesia and Polynesia have also been subjected to the profound health impacts of dislocation. Environmental studies have documented serious levels of continuing radioactive contamination at test sites.

The nuclear-weapon states have been willing not only to expose people to direct fallout and contaminate their homes and food sources, but also leave substantial quantities of long-lived radionuclides in fractured underground and underwater environments. These warrant major remediation works and require indefinite monitoring. They have generally failed to adequately assess the long-term consequences, undertake thorough clean-up of nuclear test sites and minimize risk of leakage of radionuclides into the biosphere. In the Marshall Islands, food plants such as breadfruit and coconut take up radioactive caesium-137 from the soil and this hazard continues on Rongelap Atoll and other contaminated islands to this day. To avoid exposure to this contamination, some nuclear survivors have been exiled from their home islands for decades.

“In the immediate aftermath of the nuclear testing, white ash fell from the sky, and shortly thereafter people began to experience skin burns, hair loss, finger discolouration, nausea and other symptoms of acute radiation poisoning. They also [suffered from] ailments that they had never experienced before, including cancers and growth retardation in children.”

– UN SPECIAL RAPPORTEUR, 2012

In French Polynesia, researchers investigating thyroid cancer have reported an increasing risk with increasing thyroid dose received before the age of 15 years. A 2010 study in the British Journal of Cancer notes that, while the risk is low, “the release of information on exposure, currently classified, would greatly improve the reliability of the risk estimation”. Much relevant health-related data for test workers and downwind communities has either not been appropriately collected, or been covered up.

A 2012 report by the UN special rapporteur on the implications for human rights of the environmentally sound management and disposal of hazardous substances and wastes found: “Displacement due to the nuclear testing, especially of inhabitants from Bikini, Eniwetak, Rongelap and Utirik atolls, has created nomads who are disconnected from their lands and their cultural and indigenous way of life.”
Moruroa Atoll: Clean-up workers unprotected from radiation

Teravetea Raymond Taha was just 16 years old when he started working on Moruroa Atoll, the site of France’s nuclear testing centre in the South Pacific. “I left school at 12 years of age after my father died, as I had to help out the family,” he explained. “At that time, the Pacific Testing Centre needed a lot of workers. For most Polynesians like me who started work in those years, it was the first time we would have a job and money in our pocket.”

No protection for workers
Like other Maohi (Polynesian) workers at the centre, Raymond was involved in clean-up operations. He recalled the aftermath of an atmospheric test in September 1966 on Moruroa Atoll: “We had to pick up all the dead fish and clean up all the debris that littered the roads.”

The staff of the Radiological Safety Service were testing the soil with their apparatus. “They were all dressed in special outfits with gloves and a mask. We Maohi workers were just following on behind them, without any special gear to protect us,” he recounted. “The bosses said: ‘It’s OK, you can go over there.’ We were scared, but if we’d refused, we would have been on the next plane back to Tahiti. We would have lost our job, so we went ahead cleaning up without asking any questions.”

In 1980 Raymond’s daughter, Cinya, was born, the only girl of five children. She died a year later from complications with a malformed lung. In 1994 Raymond was diagnosed with leukaemia and sent on a stretcher to a hospital in Paris, where he underwent two years of chemotherapy.

Seeking compensation
In 2009, for the first time, compensation cases were lodged in Tahiti for Maohi workers who staffed the test sites. Raymond’s case was one of eight lodged before the Tribunal de Travail in the capital, Papeete – a court which can determine if his illness was caused in the course of his employment in an unsafe workplace.

Of the eight cases, only three of the survivors were present on the opening day of hearings. The other five workers had died of radiation-related illnesses and were represented in court by their family members. Raymond has since passed away, his claim unfulfilled.

John Taroanui Doom, secretary of the Moruroa e Tatou association, has said that French legislation to compensate nuclear survivors, known as the Morin law, is too restrictive: “So far, the association has begun to compile case files for former Moruroa workers, of whom 146 have already died. But our workers don’t have the documents required to win the court case, and very few have received any recognition or compensation.”

The inhabitants of Rongelap Atoll were evacuated from their homes in 1946, returned in 1957 and, ultimately, moved voluntarily from Rongelap in 1985 on the Greenpeace vessel Rainbow Warrior.

The US Congress has allocated US$45 million to a Rongelap resettlement trust fund for the partial clean-up on the main island of the atoll. But less than 10 per cent of Rongelap, Rongerik and Ailinginae atolls have been remediated, and exiled residents are calling for more comprehensive efforts before they return.

Another important health problem unrelated to radiation is ciguatera fish poisoning, a common problem in the Pacific. Certain dinoflagellate algae produce toxins, which accumulate up the food chain in fish and can poison people when eaten. These algae proliferate on dead and damaged coral surfaces. Large increases in ciguatera as well as dramatic outbreaks over a number of years occurred in the Marshall Islands and French Polynesia related to reef damage caused by nuclear test programmes.
Sui Kiritome is a citizen of the Republic of Kiribati, a group of 33 atolls spanning the equator in the central Pacific. During the 1950s, Kiribati was a British colony, and Britain conducted a series of nuclear tests at Malden Island and Christmas Island (now called Kiritimati Island).

There were a number of Gilbertese plantation workers on Kiritimati, as Britain established a military base to support its nuclear testing programme in 1957–58. Mrs Kiritome witnessed the nuclear test explosion codenamed “Grapple Y” in April 1958, a 3-megatonne detonation that sent fallout across the British naval task force and the military camp on Christmas Island.

No protection from fallout
Local inhabitants of the island were informed “just before the test” that it was about to take place, she explains. They were told to get on a British warship, where “a movie was shown, and sweets were shared around”. Mrs Kiritome’s husband was an interpreter for the British military and helped explain to the islanders what was happening.

“When the countdown to the blast began, my husband told the people to put their hands to their ears to muffle the sound of the blast. Just after the blast, the captain came to my husband and invited us to accompany him to the deck to see what happened,” she recalls.

“We went up on deck and we saw everyone on deck wearing protective clothes … We went on deck wearing normal clothes. We were watching the black cloud and smoke from the blast, which was drifting towards us. When it came overhead, I felt something like a light shower falling on me. I thought it was rain.”

When she arrived home later that day, she noticed the door and glass windows in their house were broken. The concrete wall was cracked, and the pet frigate bird was running around the house blind.

“Some time after the test, something happened to my head and face. Every time when I combed my hair, I was losing strands of my hair and something like burns developed on my face, scalp and parts of my shoulder,” she recalls.

“My face was the worst affected because I was looking up at the black cloud from the blast, which was directly above us when the light shower fell on my face … The mark remains on my face till today. It has been there for 40 years or so now.”

Fijian test veterans
Hundreds of Fijian soldiers and sailors witnessed Britain’s atmospheric tests at Christmas Island. With the British government refusing to compensate them for the harm to their health, the Fijian government decided in 2015 to offer compensation itself.

Upon announcing the scheme, Fiji’s prime minister, Frank Bainimarama, said: “We salute you for following your orders at the time – the orders of a colonial power pursuing its own agenda in the world. You are living testament to our determination to never again allow our pristine Pacific environment to be violated by outside powers in such a destructive and terrible manner.”

One of the soldiers to witness the explosions was the prime minister’s father, Ratu Inoke Bainimarama, who led an initial group of 39 Fijians deployed for the test programme.

Many Fijian troops were placed in hazardous locations, which increased the risk of exposure to ionizing radiation. After each test, they were involved in clean-up operations, including disposing of thousands of birds that were maimed, blinded or killed in the nuclear explosions. They were ordered to dump drums of radioactive waste into the ocean.
For many Australians, nuclear weapons are not a distant, abstract threat, but a lived reality – a persistent source of pain and suffering, of contamination and dislocation. Indigenous communities, long marginalized and mistreated in Australia, bear the brunt of this ongoing scourge.

From 1952 to 1963, Britain, with the active participation of the Australian government, conducted 12 major nuclear test explosions and up to 600 so-called “minor trials” in the South Australian outback and off the West Australian coast. Radioactive contamination from the tests was detected across much of the continent. At the time and for decades after, the authorities denied, ignored and covered up the health dangers. The “minor trials” dispersed 24.4 kg of plutonium in 50,000 fragments, beryllium, and 8 tonnes of uranium. Little was done to protect the 16,000 or so test site workers, and even less to protect nearby Indigenous communities.

Today, survivors suffer from higher rates of cancer than the general population due to their exposure to radiation. Only a few have ever been compensated. Much of the traditional land used for the blasts remains radioactive and off limits to this day.

Nuclear test survivors have repeatedly urged the Australian government to support a global ban on nuclear weapons, but it has ignored their pleas. It insists that these ultimate weapons of terror and mass destruction are necessary for Australia’s defence and prosperity.

It shelters under the so-called “nuclear umbrella” of the United States, and has strongly opposed moves towards a treaty prohibiting nuclear weapons. In 2016 it attempted to derail the UN working group on nuclear disarmament in Geneva, much to the disappointment of neighbouring nations.

The Australian government’s position stands in stark contrast to that of Pacific island states, who have been motivated to speak out against nuclear weapons based on their first-hand experience of the weapons’ catastrophic humanitarian impact.

Radioactive racism

The Australian nuclear test survivor Sue Coleman-Haseldine, of the Kokatha-Mula nation, provided testimony at the Vienna conference on the humanitarian impact of nuclear weapons in December 2014.

“Atomic bomb tests began in the desert areas north of my birthplace in 1953 when I was two years old – first at Emu Field and then Maralinga. The area was picked because the British and Australian governments didn’t think our land was valuable. But Aboriginal people were still looking after and living off the land,” she said.

“There are lots of different Aboriginal groups in Australia. For all of us, our land is the basis of our culture. It is our supermarket for our food, our pharmacy for our medicine, our school and our church. Aboriginal people have special places throughout Australia, including in the vast arid areas. Looking after these places is our religion.

“Our old people remember the good life of hunting for wild game and collecting bush fruits. Life was healthy. There were still Aboriginal people living and travelling this way in the Emu Field and Maralinga region when the bomb tests started. The government was no good at ensuring everyone was safe.”

The first atomic bomb, called “Totem 1”, spread far and wide and there are many stories about the “black mist” it created, she said, “which killed, blinded and made people very sick”.

“There’s a cemetery at Woomera [in South Australia] which we call the children’s cemetery. It’s filled with children who died around the time of the tests. And these were just the non-Aboriginal children. There’s no record of how many Aboriginal children died. The Aboriginals were not allowed to be buried in white cemeteries.”

In 2006, Coleman-Haseldine went to an Australian Nuclear Free Alliance meeting to learn more about radiation fallout, and was devastated when she found out that bush foods being consumed by her community were possibly contaminated.

“We want nuclear weapons permanently banned and the uranium that can create them left in the ground. If you love your own children and care for the children of the world, you will find the courage to stand up and say ‘enough’ – always keeping in mind that the future forever belongs to the next generation.”

Sue Coleman-Haseldine in Vienna in 2014.
Pacific island states played an active role in the three major intergovernmental conferences in 2013 and 2014 on the humanitarian impact of nuclear weapons. At the first conference, hosted by Norway, Fiji informed delegates of the long struggle against nuclear testing in the Pacific: “The nuclear issue is not a new thing to Fiji. Between the 1960s and 1990s, we were part of a campaign against nuclear testing in the Pacific ... Anti-nuclear protests led to the Pacific adopting the South Pacific Nuclear Free Zone Treaty.”

Fiji expressed the view that “nuclear weapons serve no useful purpose in the world in this day and age but rather exist only as a risk that could lead to human catastrophes of unprecedented proportions”.

The Cook Islands warned of the potential for catastrophic accidents at former nuclear test sites in the Pacific, particularly Moruroa Atoll in French Polynesia. It urged all nations to heed the call of the International Committee of the Red Cross to negotiate an instrument to prohibit and eliminate nuclear weapons.

A united Pacific voice

At the second humanitarian conference, hosted by Mexico in February 2014, the Pacific island states of Kiribati, the Marshall Islands, Papua New Guinea, Samoa, Tonga and Tuvalu spoke with a united voice in favour of negotiations on a treaty banning nuclear weapons.

“The discussions here should lead us all to the same conclusion: that nuclear weapons must be outlawed and eliminated without delay,” they said in their joint statement. “As Pacific island nations, we understand all too well the devastating impact of nuclear weapons.” They argued that it is unacceptable that “the deadliest weapons of all” are the only weapons of mass destruction not yet expressly prohibited by an international convention. “A treaty banning the use, manufacture and possession of nuclear weapons is long overdue.”

Nuclear-free nations, which make up the vast majority of the international community, should not sit back and wait for nuclear-armed nations to lead the way. “We must set the agenda,” they said.

Jeban Riklon, a senator from the Marshall Islands, also addressed the conference, providing his personal testimony. “I was only two years old [at the time of the Castle Bravo test], but I grew up to witness and experience the unforgettable human consequences of the fallout,” he said.

“When you spend your whole life seeing that much physical and emotional pain, your tears dry up and you force yourself to question intentions, justice and human value. Many of our survivors became human subjects in laboratories, and almost 60 years on we are still suffering. “You see, no one fully understands the human costs of nuclear weapons testing. The irony is that when the people of Bikini Atoll were asked to give up their islands for the testing, they were told that it was ‘for the good of mankind’.”

New Zealand told delegates that it had worked to stop nuclear testing in its neighbourhood, including by taking a case against French nuclear testing to the International Court of Justice in 1973 and again in 1995.

“Even today, we remain alert to the consequences for the New Zealand environment of the tests which were carried out in the Pacific.” Entirely as a result of the testing, New Zealand continues monthly radiation testing of its milk products and similar analysis of rainwater samples every week.

Learning from the Pacific

Samoa spoke at the third conference on the humanitarian impact of nuclear weapons, held in Austria in December 2014. It said that the testimonies of survivors “drive and incentivize important discussions like this one and move us closer to the ultimate goal of a nuclear-free world for our future generations”. It voiced support for a treaty banning nuclear weapons, but cautioned against including burdensome reporting requirements.

Abacca Anjain-Maddison, a former senator from the Marshall Islands, said that her people were used as “guinea pigs”. Women living in the vicinity of the nuclear test explosions had numerous miscarriages, she recounted. “They gave birth to jellyfish- and monster-like babies. They had thyroid cancer, liver cancer and all types of radiogenic cancers … Let us learn from the experience of the Marshallese people.”
At the height of the nuclear arms race between the US and Soviet Union, a treaty to create a South Pacific nuclear-free zone was opened for signature on Hiroshima Day in 1985, at the South Pacific Forum meeting in Rarotonga, the Cook Islands. The Rarotonga Treaty was negotiated after decades of campaigning by unions, Pacific churches and the Nuclear Free and Independent Pacific movement. The governments of Fiji, New Zealand and Papua New Guinea had co-sponsored a UN resolution in 1975 calling for such a treaty.

Obligations under the treaty
Under the treaty, countries in the zone commit never to develop nuclear weapons. There are also three protocols, where nuclear states with territories in the zone (France, Britain and the United States) agree to apply the treaty to their territories. In accepting the protocols, all nuclear powers also undertake not to use or threaten to use any nuclear device against countries in the zone, and not to test nuclear devices in the zone.

Some Pacific island nations such as Papua New Guinea and the Solomon Islands sought a more comprehensive nuclear-free zone that would ban activities such as missile testing or port visits by nuclear-armed vessels. However, Australia and New Zealand lobbied to ensure that the zone would not constrain deployments by their ANZUS ally, the US. An Australian Cabinet submission in April 1985 noted: “The proposal is designed to maintain the security advantages afforded to the South West Pacific through the ANZUS Treaty and the United States security presence in the region.”

Russia and China were first to sign the protocols, in 1986 and 1987 respectively, pledging not to store or test nuclear weapons in the region or use them against Australia, New Zealand or island nations. France, Britain and the United States refused to sign the treaty protocols for a decade, only signing on 25 March 1996 after the end of French nuclear testing at Moruroa and Fangataufa atolls. Until now, however, the US government has failed to ratify its signature by passing legislation through the US Senate.

Time for action to abolish nuclear weapons
Many Pacific island nations have expressed their disappointment and frustrated at the slow rate of progress currently being made towards a nuclear-weapon-free world. The nuclear-armed nations, despite being legally obliged to pursue negotiations “in good faith” for nuclear disarmament, have so far failed to present a clear road map to elimination. Instead, all are investing heavily in the modernization of their nuclear forces, with the apparent intention of retaining them for many decades to come. Continued failure on nuclear disarmament is not an option. So long as nuclear weapons exist, there is a real danger that they will be used again — whether by accident or design — and the consequences will be catastrophic.

This is why Pacific island states are working hard for a ban on these worst weapons of terror and mass destruction. In recent years, they have helped build momentum for the start of negotiations, joining other nations in highlighting the humanitarian impact of nuclear weapons. They have put forth ideas on what the ban should entail — determined to ensure that no one else ever suffers as their people have suffered.
The mushroom cloud from "Romeo", an 11-megatonne hydrogen bomb detonated by the US, rises over Bikini Atoll in March 1954.
“For the sake of present and future generations, we must free the world of the nuclear menace. Pacific island states stand ready to join multilateral negotiations towards this end.”

– FIJI, NAURU, PALAU, SAMOA AND TUVALU, 2016