Addressing British nuclear tests in Kiribati

A NEW OPPORTUNITY FOR VICTIM ASSISTANCE AND ENVIRONMENTAL REMEDIATION

Briefing by UNA-UK and Article 36

Introduction

Following the UK's first test on 3 October 1952 at Australia's Monte Bello Islands, the UK became the third country to acquire a nuclear weapons capability, after the United States and the Soviet Union.

From 1952 to 1991 the UK undertook 98 nuclear weapon tests internationally including 45 explosive nuclear weapon tests, as well as 29 minor trial series and facilitation of a further 24 tests which took place on British-administered and colonised lands.

UK NUCLEAR TESTS

- 12 atmospheric tests between 1952 and 1957 on Australian territories at Maralinga, Emu Field and Monte Bello Island
- 9 atmospheric tests between 1957 and 1958 over Kiritimati (Christmas Island) and Malden Island in the central Pacific Ocean in what is now the sovereign country of Kiribati
- 24 US atmospheric nuclear tests on Kiritimati in 1962 while Kiribati was under UK colonial control
- 24 underground tests conducted jointly with the United States between 1958 and 1991 at the Nevada Test Site in the US
- 29 minor trial series across Maralinga and Emu Field Australia inclusive of 600 technical tests. These trials implemented conventional explosions to map out radioactive dispersal

These tests have had long lasting humanitarian and environmental consequences. Victims include affected communities in the countries where tests took place, including indigenous peoples, as well as the British and colonial service personnel directly involved or serving nearby. The harmful physical and mental health effects and social, economic and cultural impacts persist to this day, not only for those directly affected, but for the descendants of those affected by ionising radiation and other aspects of the testing programme (such as displacement and lack of access to lands). With onshore and offshore habitats degraded, livelihoods are destroyed and social and economic rights of local communities are denied. Recognition of and remediation for this harm caused by the British Government remains largely elusive, and limited to generic veteran support programmes.[1] [2]

Communities affected by conventional weapons, including landmines, cluster munitions, explosive remnants of war and small arms have benefited from a humanitarian sector dedicated to demining, victim assistance and risk reduction education.[3] [4] Until recently, there had been no comparable global framework for addressing the humanitarian and environmental consequences of nuclear weapons.

[1] Bolton & Minor (2021) 'Addressing the Ongoing Humanitarian and Environmental Consequences of Nuclear Weapons: An Introductory Review', Global Policy
[2] Alexis-Martin (2019) 'Disarming doomsday: The human impact of nuclear weapons since Hiroshima', Pluto Press
[3] Guide to Mine Action 2014, Geneva International Centre for Humanitarian Demining (GICHD)
[4] Bolton (2020) 'Political Minefields: The Struggle against Automated Killing', Bloomsbury Publishing

This changed in 2021 when the Treaty on the Prohibition of Nuclear Weapons (TPNW) entered into force. Article 6 of the TPNW requires states parties affected by the past use and testing of nuclear weapons to provide assistance to individuals affected towards the full realisation of their rights, as well as to undertake measures towards environmental remediation.

Article 7 on international cooperation and assistance creates a framework of responsibility through which all states parties work to support affected states, with international organisations, civil society and others also able to support these efforts.[5]

As with the Anti-Personnel Mine Ban Convention, where states not party to the Treaty have engaged and contributed to humanitarian mine action in the past and continue to do so, any state, whether or not they have joined the TPNW, is able to cooperate and contribute to this work. As a country that has carried out 45 explosive nuclear weapon tests as well as other tests, this opportunity is especially relevant for the UK Government.

Countries will come together to begin operationalising the victim assistance, environmental remediation and international cooperation and assistance provisions of the TPNW at the first Meeting of States Parties, taking place in Vienna from 21-23 June 2022. Kazakhstan and Kiribati, two affected states parties to the TPNW (and in the case of Kiribati, a country where the UK previously tested nuclear weapons), have been leading work to develop recommendations for the conference outcome documents in coordination with others.

70% OF THE INTERNATIONAL COMMUNITY[6]

The TPNW has the backing of 70% of the international community:

62 STATES PARTIES

27 SIGNATORIES

49 OTHER STATES SUPPORT IT

For affected states, these recommendations include conducting assessments on the ongoing effects of nuclear use and testing. They also include the development of implementation plans and the establishment of informal intersessional working arrangements to advance work in this area of the Treaty.

As well as having a moral responsibility to support this work, the classified information and technical knowledge that the UK possesses means that UK participation would be of significant practical value.

The health impacts veterans, local and indigenous populations associate with the UK's tests remain under-assessed and largely dismissed by successive UK Governments. With work under the TPNW bringing a new focus to responding to nuclear legacies, the UK has an opportunity to make a crucial contribution to addressing ongoing humanitarian and environmental impacts - both where it previously tested nuclear weapons, and through technical expertise, potentially elsewhere. Nevertheless, the UK government has so far stated that it will not participate as an observer in meetings of the TPNW.[7]

[5] The full text of the Treaty is available on the UN's website
[6] See Nuclear Ban Monitor 2022, The Status of the TPNW
[7] Parliamentary Question response by UK Minister James Cleverly, 25 February 2022

Photo: Taneti Maamau (on screens), President of Kiribati, addresses the General Assembly meeting to commemorate the International Day for the Total Elimination of Nuclear Weapons, Sept 2020 © UN Photo - Rick Bajornas

This briefing is co-written by NGO experts and academics that have conducted significant field research relating to the UK's nuclear testing. It focuses on the harm caused by the UK's tests in Kiribati in the context of new opportunities for recognition and remediation, given Kiribati's role as a state party to the TPNW. It is part of a series produced by members of an informal working group composed of professionals from the humanitarian, arms control, UN reform and academic sectors. We hope it will be useful for UK officials, parliamentarians and civil society organisations, and complement work by others on communities affected by UK tests, including work relating to indigenous populations in Australia[8] and the US[9], and nuclear veterans.[10]

The authors gratefully acknowledge and pay respect to all lived experience and expert knowledge contributions to this brief by Kiribati and Pasifika peoples. Testimonies used have been done so with the consent of those involved.

[8] See for example, Ruff and Hawkins (2020) '315 nuclear bombs and ongoing suffering: the shameful history of nuclear testing in Australia and the Pacific', The Conversation
[9] See for example, Zabarte (2020) 'A message from the most bombed nation on earth', Al Jazeera
[10] Legacy Of The Atomic Bomb Recognition For Atomic Test Survivors (LABRATS International)

Impacts on People and Environment

Between 1957 and 1962, the UK and USA tested 33 nuclear devices at Malden Island and Kiritimati (Christmas) Island, now part of the Republic of Kiribati. British, Fijian, New Zealand and US veterans of the testing program and I-Kiribati civilians who lived on Kiritimati claim their health (as well as their descendants') was adversely affected by exposure to ionising radiation. Their concerns are supported by independent medical research. However, analysis of the ongoing humanitarian, human rights and environmental impact of nuclear weapons testing at Kiritimati and Malden Island has been inadequate.[11]

This briefing looks specifically at the impacts of British and British-facilitated tests on Kiribati's local populations and the affected natural environment. Recent peer-reviewed research has investigated and documented the humanitarian, human rights and environmental harm caused by these nuclear weapons tests.

FINDINGS INCLUDE[12]:

- The 500 I-Kiribati civilians living on Kiritimati during the tests received little protection during the nuclear weapon tests and no support afterwards.
- There are at least 48 first generation survivors in Kiribati, plus 800 children and grandchildren of survivors, according to the Kiritimati Association of Cancer Patients Affected by the British and American Bomb tests.
- Many civilian survivors have health problems consistent with exposure to radiation; descendants also report multi-generational health problems. This includes both physical and mental health challenges.
- The tests killed thousands of birds and fish. The environmental impact of the nuclear tests has not been adequately analysed.

KIRITIMATI (previously known as Christmas Island) is a Pacific Ocean atoll with the largest land area of any atoll in the world, about 150 square miles. The atoll is one of the Line Islands and comprises around 70% of the total land area of the country to which it belongs - the Republic of Kiribati. The UK and the US detonated 30 nuclear weapons between 1957 and 1962 on Kiritimati, which had a civilian population of 278 at the start of the testing programme, and around 500 by its end.[13]

MALDEN ISLAND is a low, uninhabited atoll in the central Pacific Ocean, about 15 sq mi in area. It is one of the Line Islands belonging to the Republic of Kiribati. The UK detonated 3 nuclear weapons during 1957 on Malden Island. The land mass was uninhabited by humans during the testing period but was biodiverse and home to bird breeding colonies; it is also the site of significant archaeological sites of prehistoric Pacific peoples.[14]

[11] Bolton (2018) 'Addressing Humanitarian and Environmental Harm from Nuclear Weapons: Kiritimati (Christmas) and Malden Islands', International Disarmament Institute, Pace University & Friedrich-Ebert-Stiftung New York Office

[12] Alexis-Martin, Bolton, Hawkins, Tisch and Mangioni (2021), Addressing the Humanitarian and Environmental Consequences of Atmospheric Nuclear Weapon Tests: A Case Study of UK and US Test Programs at Kiritimati (Christmas) and Malden Islands. Glob. Policy

[13] Alexis-Martin et al (2021) Data table for Article on Kiribati for the Special Section on 'Addressing the Humanitarian Impact of Nuclear Weapons', Global Policy

[14] Piazza & Pearthree (2001) 'Voyaging and basalt exchange in the Phoenix and Line archipelagoes: the viewpoint from three mystery islands'. Archaeology in Oceania, 36: 146-152.

The Human Cost

The Kiritimati Association of Cancer Patients Affected by the British and American Bomb Tests has reported numerous health problems that they attribute to the testing. As of 2018 this Association identified at least 48 survivors in Kiribati who had experienced the tests first hand as well as 800 descendants. Many survivors have health problems consistent with exposure to radiation including blindness, hearing problems, cancers, heart disease, and reproductive difficulties.

They report that their children and grandchildren have suffered similar illnesses and other intergenerational effects. The terror which the first generation survivors experienced through the nuclear explosions has caused some of them to feel persistent anxiety, and uncertainty about their own futures and that of their descendants[15].

A group of 1000 i-Kiribati people resettled on Wagina Island in the Solomon Islands believe their forcible relocation during 1963-4 was due to the nuclear tests, and have been calling for recognition of this[16].

"Our communities still suffer from the long-term impacts of the tests, experiencing higher rates of cancer, particularly thyroid cancer, due to exposure to radiation."

– Statement by Kiribati's then-permanent representative to the UN, Ambassador Makurita Baaro, for the 2015 International Day against Nuclear Tests.

A Handley Page Hastings (TG 582) flying over Kiritimati at the time of the British H Bomb test. © Dennis Hobbs

[15] See footnote 10

[16] Alexis-Martin, Bolton, Hawkins, Tisch and Mangioni (2021), Addressing the Humanitarian and Environmental Consequences of Atmospheric Nuclear Weapon Tests: A Case Study of UK and US Test Programs at Kiritimati (Christmas) and Malden Islands. Glob. Policy

Local accounts lay bare what a terrifying experience the nuclear detonations must have been. Dr Becky Alexis-Martin conducted research around the health impacts of the UK's nuclear tests on local populations and veterans. Her fieldwork took her to Kiritimati where she interviewed a number of islanders who were present during the tests.

In an article for The Conversation, she wrote *"Teeua Tetua was just three when she was blindfolded with a rough cloth by her mother. They then braced themselves for the Grapple Y explosion. She was very young, but still recalls being frightened in her mother's arms during the deafening blast."*[17]

Dr Alexis-Martin further writes: *"...Taabui Teatata was 11 at the time of the first test. She described to me how her community was unexpectedly moved at midnight by a military commander beforehand. She was frightened, but remembers the army commander who moved her and her family telling her: 'Don't worry, you're safe – this is the British military.'*

She described being loaded onto a ship and taken offshore before the tests, and being too frightened to talk. She said: "It was very crowded, it was meant for cargo and there was no room for children like me to play. There was no space, we were treated like animals."

Philomena Lawrence, a Kiritimati islander who now lives in the UK was too young to remember the tests but recounted what her older sister experienced: *"It was a very scary time for them. During those tests they were either taken on board the ship and put in the manhole of the ship or they were all put on a tennis court covered with tarpaulin.*

My sister had a baby son and when the bomb exploded the light was so bright she could see all the bones in her baby's body as she held him. When she looked at the people sitting next to her they all looked like skeletons. My sister didn't live long - she died in her mid forties. Her husband died in his fifties and my nephew died in his forties. We wonder why my sister and her family died so young." [18]

Teeua Tetua is now the chairwoman of the Association of Nuclear Victims in Kiritimati
© B.Alexis-Martin, 2018

[17] Alexis-Martin (2019) 'The atomic history of Kiritimati – a tiny island where humanity realised its most lethal potential', The Conversation
[18] Public letter from Philomena Lawrence to Boris Johnson (2022), UNA-UK

"The legacy of nuclear testing is one of the cruellest examples of environmental injustice. Today it is important to reflect on the racial and ethnic discrimination of nuclear testing, and the victims of this legacy that continue to suffer"

– UN Special Rapporteur on toxics and human rights in 2020, Baskut Tuncak.

As late as 2005 - over forty years after the end of the tests - hazardous military material was still being cleaned up from the island.[19] However, despite the risks to their health from the tests themselves and from the presence of military waste on the island following the tests, no medical studies of the local population have ever been carried out. A study into exposed servicemen by Dundee University found increased frequencies of multiple myeloma, cataracts, arthritis, gastrointestinal disorders, respiratory diseases and cancer among exposed servicemen, as well as a high incidence of congenital malformations in their offspring.[20] Similarly, a comprehensive and independent analysis of ongoing environmental impacts, which in turn may pose risks to people, has not been carried out. In its Article 2 Declaration submitted on joining the TPNW, Kiribati noted that remnants of nuclear materials and waste from UK and US testing may remain on its territory.[21]

In 2006, 300 former Christmas Island residents submitted a petition to the European Parliament, accusing the UK of knowingly exposing them to radioactive fallout despite knowing of the dangers.[22] To this day the UK refuses to acknowledge any causation between its nuclear tests and the health problems witnessed by the first generation survivors and their descendants. The UK has also stated its intention not to attend the first Meeting of States Parties of the Treaty on the Prohibition of Nuclear Weapons.[23] If this stance is maintained and continued into the future, this would also mean not attending discussions on addressing the legacies of nuclear weapons use and testing that will take place through the framework, to which the UK could make a valuable contribution.

Drum store and bitumen spill near the town of London in Kiritimati Island prior to to remediation. © Mark Shaffer, Safety & Ecology Corporation

[19] Kerr (2009) 'Remediation of Kiritimati Island and the Challenges of Hazardous Waste Disposal', Safety & Ecology Corporation Ltd
[20] Busby (2014) 'Bomb test veterans' grandchildren suffer health impacts',The Ecologist
[21] Nuclear Weapons Ban Monitor (a research programme of Norwegian People's Aid) 'The obligation to remediate affected territory'
[22] Edwards (2006) '300 Islanders Accuse UK Government of Exposing Them to A-bomb Fallout' Sunday Herald
[23] Parliamentary Question response by UK Minister James Cleverly, 25 February 2022

Why Kiribati?

The UK's ambitions to become an independent "nuclear power" did not stop at the atomic bomb (A Bomb). In 1954 a committee chaired by Prime Minister Churchill examining the UK's nuclear posture concluded that "we must maintain and strengthen our position as a world power so that Her Majesty's Government can exercise a powerful influence in the counsels of the world." A month later Britain initiated plans to develop its own thermonuclear weapon (H Bomb). With this came the requirement for more test detonations.

As with the UK's A Bomb tests, which took place in Australian territories, the British Government chose not to conduct these tests on home soil. Australia had been ruled out due to domestic public opposition to the tests relating to concerns around the radioactive fallout.[24]

Kiritimati (Christmas Island) and Malden Island - part of an archipelago under UK colonial control - was chosen to provide the answer. South Pacific islands like Kiritimati were often described as part of an uninhabitable wilderness by the military officers who selected them. A Pathe News feature to report back on the tests to the British public described the islands as "hundreds of miles from anywhere", but this was far from the truth.

These islands were home to indigenous Gilbertese islanders, who in some cases were forcibly displaced and in other cases were left on the island to experience the risk of ionising radiation and the trauma of 33 nuclear detonations. The islands were also rich in biodiversity, including exquisite coral reefs and breeding colonies of rare birds.

Racism was present on many levels in the decision to detonate nuclear weapons on Kiribati. A 1956 UK military report preparing for the Kiribati Island tests stated that "in the possible regions of fall-out at Grapple [the name of the test series] there may be scantily clad people in boats to whom the category of primitive peoples should apply." This report established that the UK would apply lower safety standards to these indigenous people with the permissible dosage set "about 15 times higher" for "primitive peoples" than the standards set by the International Commission on Radiological Protection (ICRP).[25]

By contrast, military personnel were given protective clothing to wear, although safety precautions were relaxed as the programme proceeded and were widely regarded as inadequate and, in some cases, non-existent.[26] There was also notable concern relating to the wellbeing of scientists whose presence would be required. For example, William Penney, scientist leading the UK's nuclear weapons development based at Aldermaston, demanded insurance for his staff in case any developed radiogenic diseases.[27]

[24] Maclellan (2017) 'Grappling with the Bomb, Britain's Pacific H-Bomb Tests', Ch. 1, ANU Press
[25] Maclellan (2005) 'The Nuclear Age in the Pacific Islands'. The Contemporary Pacific, 17(2), 363–372.
[26] See LABRATS for more details about harm caused to military veterans
[27] Carol Monaghan MP (2019) during a Parliamentary Debate on 'Christmas Island Nuclear Testing: Compensation'

Addressing British nuclear tests in Kiribati

Photo: 65 years on from the nuclear tests and Kiribati now faces another external threat. A view of mangrove shoots planted by Secretary-General Ban Ki-moon and others on Tarawa, an atoll in Kiribati during an official visit in 2011 to discuss local people's concerns about climate change © UN Photo - Eskinder Debebe

Kiribati gained its independence from the United Kingdom in 1979, becoming the Republic of Kiribati. 60 years after the nuclear tests, islanders face a further threat that is not of their own making. Sea level rises caused by climate change pose existential risks to almost all islands within the Republic of Kiribati archipelago, whose entire territory is less than two metres above sea level (except the volcanic island of Banaba).

The impacts of climate change are also already precipitating anticipatory migration from the most low-lying islands across Kiribati. The resultant loss of cultural connections, heritage and home is severe and largely overlooked when it comes to much-needed support from the Global North. This has led to new collaborations between the People's Republic of China and Kiribati.

Despite Kiribati's status as a former British colony and a nuclear weapons test site, little work has been undertaken by the British state to date to address the historic legacies and future challenges facing this country. By region, the Pacific receives the lowest proportion of the UK's bilateral Overseas Development Aid, receiving just 0.4% (£19 million) of the UK's £14.5bn aid spend in 2020.

The UK does not have a direct bilateral aid relationship with Kiribati although according to the Department for International Development, in 2020, it supported Pacific Island Countries, including Kiribati, through multilateral institutions such as the Green Climate Fund, the World Bank's International Development Association, and the Asian Development Fund.[28]

[28] Parliamentary Question between Dan Jarvis and James Duddridge (2020) on 'Kiribati: Overseas Aid'

Recommendations

- The UK should recognise the rights of indigenous and local peoples, whose health and environments have been affected by British nuclear weapons testing, production and ongoing related activities and make an official apology to the local population for the testing.
- The UK should use the opportunity of the victim assistance and environmental remediation framework of the Treaty on the Prohibition of Nuclear Weapons to cooperate fully with efforts to assess the harm caused as a result of the UK's nuclear testing and provide corresponding redress, support and assistance.
    - Kiribati, as an affected state party, is likely to take on commitments at the first meeting of states parties including to conduct initial assessments of the ongoing impacts of past testing on its population and territories: the UK Government should seek to engage and offer its cooperation and assistance with these efforts.
- The UK should declassify archives, studies and documentation on Britain's nuclear weapons testing and associated programmes, including any that relate to accidents, environmental or health impacts arising from nuclear programmes or activities, and should assist affected people in their efforts to address all the impacts on their rights, including to their health, environment and access to justice.
- The UK should provide cooperation and assistance - including information, technical and financial assistance - to states working to address the impacts of UK nuclear tests on the rights of their populations and their environment.

About this briefing

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Article36

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ARTICLE 36 is a UK-based specialist non-profit organisation, focused on reducing harm from weapons. It works together with civil society partners and governments to develop new policies and legal standards that prevent civilian harm from existing and emerging weapons technologies. Article 36 is part of leadership team of the International Campaign to Abolish Nuclear Weapons (ICAN), which won the 2017 Nobel Peace Prize, and currently coordinates the International Network on Explosive Weapons (INEW) and the Stop Killer Robots campaign.

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Cover image: In 2018 a memorial was unveiled marking the shared past of Kiritimati and the UK. The ceremony included local survivors and British nuclear test veterans whose lives were perilously entangled during the Operation Grapple tests that produced Britain's first hydrogen bomb. The memorial was unveiled on Kiritimati on 28 April 2018 - 60 years after the largest British detonation on the Island.