ADVANCING THE TPNW









Member states of the Caribbean Community (CARICOM) played a leading role in the negotiation and adoption of the United Nations Treaty on the Prohibition of Nuclear Weapons (TPNW) – the first global, legally binding instrument to prohibit nuclear weapons. The principled support of CARICOM states for the TPNW and its continued strong commitment to realizing a world without nuclear weapons are demonstrated through the signature and ratification of the TPNW. This paper addresses why it is so critical for CARICOM states to adhere to the TPNW as a matter of urgency. This is particularly so because the use or atmospheric testing of nuclear weapons anywhere in the world would have a severe and immediate impact on the globe, including the Caribbean, which is a nuclear-weaponsfree zone. In October 2018 at the UN General Assembly, CARICOM called for the TPNW's early entry into force and its universal adherence.¹ ICAN calls on every CARICOM member state that has not yet done so to adhere to the TPNW without delay.



BACKGROUND

The TPNW was adopted on 7 July 2017 at the United Nations, with the support of 122 states, including 12 of the 14 CARICOM states.² The Treaty was negotiated in response to the concern of the international community on the catastrophic humanitarian consequences that would result from any use of nuclear weapons. As one leading diplomat from the region has observed, like "all Small Island Developing States, we view the prospects of a nuclear detonation, whether by design, accident or negligence, as an existential horror that could decimate the entire Caribbean region."³

Moreover, the region "has long advocated for a holistic approach to addressing matters of peace and security, recognizing fully the intrinsic link between peace, security and development." This holistic approach was reflected by the positions taken by CARICOM and its member states during the negotiation of the TPNW. In an intervention in March 2017, during the first session of the UN diplomatic conference, CARICOM called for the future treaty to include "positive provisions that address human and environmental harms, recognize rights and offer remedial measures to victims. These provisions should include environmental remediation, risk education, victim/survivor assistance and stockpile destruction." These elements were ultimately included in the TPNW, reflecting the engagement of CARICOM member states.

To date, five CARICOM states have signed the TPNW (Antigua and Barbuda, Guyana, Jamaica, Saint Lucia, Saint Vincent and the Grenadines). So far, only two of these signatories — Guyana and Saint Lucia — have also ratified it, although others have begun the process of ratification domestically. In 2018, at the United Nations General Assembly First Committee, six CARICOM member states (Antigua and Barbuda, Guyana, Jamaica, St Vincent and the Grenadines, St Lucia, and Trinidad and Tobago) co-sponsored the annual resolution on the TPNW, and all but one CARICOM states voted in favor of the resolution when it came to plenary.⁶

The TPNW will enter into force once 50 states have ratified or acceded to it; worldwide 23 had done so as of 29 May 2019.

THE IMPORTANCE OF THE TPNW FOR THE CARIBBEAN

The risks of use of nuclear weapons are now as great as they were during the Cold War. Indeed, in May 2019, a senior UN expert said that the risk was at its highest since World War Two, the last time these weapons of mass murder were used, calling it an "urgent" issue that the world should take more seriously. The nuclear-armed states are engaged in modernizing their arsenals, committing huge sums of the money to the vicious spiral of a new nuclear arms race. Just weeks ago, two nuclear-armed states — India and Pakistan — fought out a brief armed conflict that could have seen each use nuclear weapons against the other. Had they done so, the devastating consequences would not have been confined to South-East Asia. Experts have calculated that nuclear war between the two nations involving just 100 Hiroshima-sized weapons (bombs with an explosive yield equivalent to about 15 kilotons of TNT) would cause worldwide climatic disruption and a catastrophic decline in food production across the planet putting up to 2 billion people at risk of starvation. As the International Committee of the Red Cross (ICRC) has observed, "More than 5 million tons of soot from fires in urban and industrial areas targeted by these weapons could be lofted into the upper atmosphere? and cause

global temperatures to fall by an average of 1.3oC for several years, shortening the growing season in many areas.¹⁰ ... The cooler temperatures would result in a major decline in precipitation, as less water evaporates from the oceans to fall back as rain and snow. In addition, there would be a large reduction in ozone levels in the upper atmosphere, allowing increased levels of harmful ultraviolet (UV) light to reach the earth's surface." ¹¹

We are still paying the price for atmospheric testing of nuclear weapons in 1944–80. Indeed, the 2000 Report of the UN Scientific Committee on the Effects of Atomic Radiation to the General Assembly states that: "The main man-made contribution to the exposure of the world's population [to radiation] has come from the testing of nuclear weapons in the atmosphere. ... Each nuclear test resulted in unrestrained release into the environment of substantial quantities of radioactive materials, which were widely dispersed in the atmosphere and deposited everywhere on the Earth's surface." Winds can carry particles of plutonium-239 thousand of kilometers away. Plutonium has a radioactive half-life of 24,000 years. If ingested, particles of plutonium and strontium never leave the body. Irreversible contamination was inflicted on people, animals, vegetation, and the environment. It has been calculated that up to two million people worldwide have died or will die prematurely from cancer as a result of atmospheric testing around the world even though the last such test occurred almost forty years ago. If

Nuclear accidents remain a live issue. The United States has still not cleaned up all of the contaminated land in Palomares in Spain, the site of a nuclear accident in 1966 when a US B-52 bomber exploded mid-air. The plane was carrying four hydrogen bombs, each capable of releasing 1.45 megatons of explosive power: 100 times as much as the bomb dropped on Hiroshima. The bombs were not armed but the explosive core of two bombs detonated, scattering radioactive plutonium over a large area of farmland. As long as nuclear weapons exist, the Caribbean is not immune to the occurrence of such accidents.

The effects are especially fierce in women and young children – who are biologically more vulnerable to the harmful effects of ionizing radiation than men. These dangers are explicitly recognized in the preamble to the TPNW wherein the states parties refer to the "disproportionate impact on women and girls, including as a result of ionizing radiation". During the negotiations, CARICOM member states had called for explicit acknowledgement of the gendered dimension of the development, testing, and use of nuclear weapons.¹⁷

The impacts of radiation from nuclear testing may also be transgenerational. An assessment of endowments at birth of Norwegian children who were influenced by exposure to radiation in utero as a result of Russian nuclear testing in the 1950s and 1960s found a decline in IQ scores among men aged 18, with declines in educational attainment, secondary-school completion, and earnings among both men and women. The research further found that the children of persons affected in utero also have lower cognitive scores, suggesting a persistent effect of the shock to endowments.

But the consequences of harm from nuclear disaster come indirectly as well as directly. According to the International Committee of the Red Cross and Crescent (ICRC), a major radioactive event from nuclear weapon use or testing affecting would displace hundreds of thousands if not millions of people, leading to a huge humanitarian and social protection challenge to which health personnel and humanitarian agencies would not be able to respond adequately.¹⁸ The impact on the land would be poisoned air, soil, and water which would impact large populations access to vital services leading to migration. The clamor for scarce resources would be immense among populations; rampant crime to secure a living; epidemics and diseases with inadequate health provisions and facilities. Reaching affected populations would be almost impossible and dangerous due to poor road networks, limited communication, exposure to radiation and limited health care provisions.

The current expenditure on nuclear weapons by nuclear-armed states — approximately US\$2 trillion over the coming decades — will reduce funding for development and achievement of the Sustainable Development Goals (SDGs).

THE TPNW AND THE TREATY OF TLATELOLCO

The TPNW builds on the achievement of the 1967 Treaty for the Prohibition of Nuclear Weapons in Latin America and the Caribbean (Treaty of Tlatelolco) that makes the Caribbean part of a nuclear-weapons-free zone. As Ambassador Luiz Filipe de Macedo Soares, the Secretary-General of the Agency for the Prohibition of Nuclear Weapons in Latin America and the Caribbean (OPANAL), which oversees treaty's implementation, has observed: "Latin America and the Caribbean brought to world peace and security an inestimable and truly innovative contribution. A space equivalent to 20 million square kilometers, which is home to about 600 million people, has been kept free of nuclear weapons. Not a single country in the region is party to any military alliance based on nuclear weapons".

In March 2017, the Secretariat of OPANAL submitted a working paper to the UN diplomatic conference that negotiated the TPNW, noting that some progress in the reduction of nuclear arsenals was "not enough to fulfill the provisions of Article VI of the Treaty on the Non-Proliferation of Nuclear Weapons".²⁰ In September 2017, OPANAL publicly condemned the last nuclear test by the

Democratic People's Republic of Korea on 3 September 2017, and expressed its firm rejection concerning all kinds of nuclear tests anywhere in the world.²¹

States parties to the Treaty of Tlatelolco, which comprise 14 CARICOM states, can join the TPNW without difficulty. Indeed, as the Nuclear Weapons Ban Monitor concluded in October 2018, all members of CARICOM were in full compliance with the TPNW's core prohibitions.²² The Treaty of Tlatelolco, which entered into force on 22 April 1968, prohibits all use, testing, production, or acquisition by any means of any nuclear weapons by its 33 states parties, as well as the storage, installation, deployment of any nuclear weapons.²³ The Treaty does, though, permit the detonation of other nuclear explosive devices for peaceful purposes.²⁴ Given the complementarity between the two treaties, progress in implementing one supports implementation of the other, with the TPNW closing off the legal loophole that allows so-called "peaceful" detonation of nuclear weapons.

The TPNW is primarily a preventive instrument of international law, as are all disarmament treaties. Collective action is needed urgently to help ensure that a disaster does not occur. Crisis management of a nuclear disaster is not a realistic option and post-conflict reconstruction would be hugely challenging. Only prevention will be effective, and this demands the framing of the issue as a strategic priority.

Speedy entry into force of the TPNW will help to strengthen peace and security in the Caribbean. Caribbean nations continue to have a critical role to play also in global security. By ensuring early entry into force and full implementation of the TPNW we will all be safer. It will put pressure on the nuclear-armed states and their allies to take more seriously their obligations under international law to move towards ending the arms race and proceeding to nuclear disarmament. CARICOM member states could and should play a central role in this; the alternative is too horrific to contemplate.

Notes:

- 1 CARICOM statement to the First Committee of the UN General Assembly, New York, 8 October 2018, at: http://bit.ly/2Z1b4zF.
- 2 The fifteenth member of CARICOM is Montserrat, a British overseas territory that is not recognised as an independent state by the UN Secretary-General and is therefore not in a position to adhere formally to the TPNW.
- 3 Lecture by Shorna-Kay Richards on Regional Perspectives on the Treaty on the Prohibition on Nuclear Weapons:
- View of CARICOM States, James Martin Center for Non-Proliferation Studies, Monterey, 11 November 2018.
- 4 Ibid.
- 5 Statement of CARICOM, UN Conference to negotiate a legally binding instrument to prohibit nuclear weapons, leading towards their total elimination, New York, 29 March 2017.
- 6 UN General Assembly Resolution 73/48, adopted on 5 December 2018 by 126 votes to 41 with 16 abstentions.
- 7 T. Miles, "Risk of nuclear war now highest since WW2, UN arms research chief says", Reuters, 21 May 2019, at: https://reut.rs/2JPn1F6, citing Renata Dwan, Director of the UN Institute for Disarmament Research (UNIDIR).
- 8 International Physicians for the Prevention of Nuclear War (IPPNW), "Nuclear Famine: climate effects of regional nuclear war", at: http://bit.ly/2I0Jqxs.
- 9 O. B. Toon et al., "Atmospheric effects and societal consequences of regional scale nuclear conflicts and acts of individual nuclear terrorism", *Atm. Chem. Phys.*, Vol. 7 (2007), pp. 1973-2002. 10 lbid., pp. 2003-2012.
- 11 ICRC, Climate Effects of Nuclear War and Implications for Global Food Production, Information Note, Geneva, February 2013, at: http://bit.ly/2ELbe6D.
- 12 CTBTO, "General overview of the effects of nuclear testing", at: http://bit.ly/2Z1aDFx.

- 13 S. Plokhy, *Chernobyl: History of a Tragedy*, Allen Lane, United Kingdom, 2018, pp. xii, 343.
- 14 Samia Henni, "Toxic Imprints of Bleu, Blanc, Rouge: France's Nuclear Bombs in the Algerian Sahara", The Funambulist Vol. 14 (November–December 2017).
- 15 See, e.g., A. Makhijani and S. I. Schwartz, "Victims of the Bomb", in S. I. Schwartz (ed.), Atomic Audit, Brookings Institution Press, Washington, DC, 1998, p. 395ff.
- 16 K. Brown, *Manual for Survival: A Chernobyl Guide to the Future*, Allen Lane, United Kingdom, 2019, p. 109.
- 17 See, e.g., Statement of Jamaica, UN Conference to negotiate a legally binding instrument to prohibit nuclear weapons, leading towards their total elimination, New York, 28 March 2017.
- 18 "Nuclear Weapons: Averting a global catastrophe", Appeal to States, global leaders and citizens by Mr Peter Maurer, President of the ICRC, Statement, 23 April 2018, at: http://bit.ly/2WJ68Sw.
- 19 OPANAL homepage at: http://bit.ly/2JMhiQC.
- "Recommendations for the negotiation of a legally binding instrument to prohibit nuclear weapons, leading towards their total elimination", Submitted by the Secretariat of the Agency for the Prohibition of Nuclear Weapons in Latin America and the Caribbean (OPANAL), UN doc. A/CONF.229/2017/WP.1, 23 March 2017, para. 3, at: http://bit.ly/2W8m9Ch.
- OPANAL, "Nuclear test by the Democratic People's Republic of Korea", Communiqué, OPANAL doc. Inf.19/2017Rev.3, 14 September 2017, at: http://bit.ly/2Z078iV.
- 22 Norwegian People's Aid/ICAN, *Nuclear Weapons Ban Monitor*, Geneva, October 2018.
- 23 NTI, "Treaty for the Prohibition of Nuclear Weapons in Latin America and the Caribbean (LANWFZ) (Tlatelolco Treaty)", Last updated 29 April 2019, at: http://bit.ly/2EltJc6.
- 24 Art. 18, Treaty of Tlatelolco.

Photo: Jiri Flogel / Shutterstock

: VILLE DE GENÈVE



