Today, the international community stands at what is essentially a nuclear power crossroads. Indeed, the moment is upon us to make critical decisions about the place of nuclear power in our world – decisions which will indelibly shape our future for generations to come. Given the life-changing nature of nuclear power, its divisive nature is only to be expected.

It is crucial that the line between prohibited and permitted nuclear activities is drawn clearly and irrevocably. The Comprehensive Nuclear-Test-Ban Treaty (CTBT) provides the last and most visible barrier against nuclear weapons development.

In this regard, Trinidad and Tobago believes that the CTBT stands as a beacon, lighting the path towards a peaceful world, free from nuclear explosions, whether for military or for peaceful purposes. For this reason, Trinidad and Tobago signed the CTBT on 8 October 2009 and ratified it on 26 May 2010.

### A Longstanding Commitment to Global Peace and Security

Trinidad and Tobago is also a State Party, since 1963, to the Treaty banning Nuclear Weapon Tests in the Atmosphere, In Outer Space And Under Water (Partial Test Ban Treaty); to the Treaty for the Prohibition of Nuclear Weapons in Latin America and the Caribbean (Treaty of Tlatelolco) which was signed in 1967 and ratified in 1970; and the Nuclear Non-Proliferation Treaty (NPT) which was signed in 1968 and ratified in 1986. Becoming a State Party to these international instruments bears testimony to our long held commitment to global peace and security.

It should be noted that during the Commonwealth Heads of Government Meeting which was held in Trinidad and Tobago in November 2009, the threats posed by weapons of mass destruction, especially nuclear weapons, were acknowledged, resulting in the reaffirmation by States of their commitment to eliminate the world of these weapons. As Chair-in-Office of the Commonwealth until October 2011, Trinidad and Tobago has continued to promote this aspect of the Final Communiqué.

The country has also consistently voted in favour of the General Assembly resolution calling for the entry into force of the CTBT, the most recent being A/RES/65/91, which welcomed the ratification by Trinidad and Tobago as a significant step towards the early entry into force of the Treaty.

### Addressing the Vital Links Between Women and Disarmament

Affirming that the CTBT constitutes the cornerstone of the nuclear non-proliferation regime, during my
contribution to the General Debate of the 65th Session of the United Nations General Assembly, in September 2010, Trinidad and Tobago announced that it would introduce in the First Committee, which is devoted to disarmament, internal peace and security, a resolution on women, disarmament, arms control and non-proliferation.

As the first female Prime Minister of Trinidad and Tobago, it was encouraging to see that on 8 December 2010 the said resolution, A/RES/65/69, was adopted by consensus “recognizing that the participation of both men and women is essential for the attainment of sustainable peace and security”, and also “the valuable contribution of women to practical disarmament measures carried out at the local, national, regional and subregional levels in the prevention and reduction of armed violence and armed conflict, and in promoting disarmament, non-proliferation and arms control…”

The adoption of resolution 65/69 marked the first time that the General Assembly formally addressed the vital links between women and disarmament, and was welcomed by many disarmament, peace and security activists as a means of enhancing the United Nations Security Council Resolution 1325 of 2000, which it was believed, did not sufficiently address disarmament issues.

In sponsoring resolution 65/69, Trinidad and Tobago clearly demonstrated not only its ongoing support for a nuclear-weapon free, demilitarized global world, but more so reiterated its belief that all discussions on disarmament, conflict resolution and peace-building must include women to ensure an expansion of their role. This is absolutely crucial since women increasingly suffer the greatest harm as a result of armed conflict, despite being in the minority among the combatants and perpetrators. The Executive Secretary of the Preparatory Commission for the Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO), Tibor Tóth, perhaps said it best with the phrase: “Security is too important to be left just to men”. Trinidad and Tobago firmly agrees with his view that a secure world must be based on gender equality, and that efforts to achieve such a world must include women at all levels and in all processes in order to obtain the best results.

Also during the 65th Session of the General Assembly, Trinidad and Tobago’s contribution by Dr Surujrattan Rambachan, Minister of Foreign Affairs, to the High-Level Meeting on Revitalizing the Work of the Conference on Disarmament and Taking Forward Multilateral Disarmament Negotiations, underscored the view that disarmament is a major factor in the promotion of peaceful relations among States. For this reason, Trinidad and Tobago became party to certain Conventions including the CTBT.

CIVIL AND SCIENTIFIC USES

Trinidad and Tobago has noted, with interest, that the data collected by the CTBTO, which are being employed to monitor the planet for nuclear explosions, also offer a wide range of civil and scientific uses. These comprise real-time notification of the location and size of potentially damaging earthquakes and natural disasters, early detection of volcanic eruptions, and scientific studies of the earth, including the oceans and atmosphere. Of particular interest to Trinidad and Tobago are the seismic and hydroacoustic technology and data, with the capacity for rapidly acquiring and disseminating data on potentially tsunami-generating earthquakes and generating research on climate change, respectively.

ESTABLISHING A TSUNAMI EARLY WARNING SYSTEM FOR THE CARIBBEAN

At present, efforts are underway to establish a tsunami early warning system in the Caribbean through the Intergovernmental Coordination Group for the Tsunami and other Coastal Hazards Warning System for the Caribbean and Adjacent Regions (ICG/ CARIBE EWS). Established in 2005, the ICG/CARIBE EWS is a subsidiary body of the Intergovernmental Oceanographic Commission of the United Nations Educational, Scientific and Cultural Organization (UNESCO).

As part of this effort, the Government of Trinidad and Tobago has partnered with the United States Agency for International Development (USAID) and the Australian Agency for International Development (AusAID) to strengthen the capacity to detect, monitor and provide early warning of tsunamis and related geologic hazards; and facilitate the development of information sharing policies between earthquake monitoring agencies in the Caribbean, Central America and the northern countries on the South American continent. In this vein, Trinidad and Tobago remains committed to strengthening the capacity of the Seismic Research Centre located at the University of the West Indies, St. Augustine Campus, in Trinidad and Tobago, to detect, monitor and warn persons at risk from tsunami and other related geological hazards.

CTBTO DATA CAN HELP PROVIDE FASTER TSUNAMI WARNINGS

In the interim, the Pacific Tsunami Warning Center (PTWC) would send a warning to specific government agencies

ARTICLE CONTINUES ON PAGE 32

BIOGRAPHICAL NOTE

KAMILA PERSAD-BISSESSAR

is the Prime Minister of Trinidad and Tobago and Commonwealth Chair-in-Office and has made history by being the first woman to hold either position. She has been a legislator in the Trinidad and Tobago Parliament for the past 24 years, serving in such capacities as Attorney General, Minister of Education, Minister of Legal Affairs and Opposition Leader. Mrs. Kamla Persad-Bissessar has pledged her continued commitment to advance women’s empowerment, reduce poverty and promote global peace building.
some of the key radionuclides

Caesium-134 (134Cs) has a half-life of 2.1 years. Only a small amount of 134Cs is produced by nuclear weapon testing but it accumulates in nuclear reactors. It can therefore be used to distinguish between releases from nuclear weapon testing and nuclear power plants.

Caesium-137 (137Cs) has a half-life of 30.1 years. This is the most common radioactive form of caesium and is produced by nuclear fission. 137Cs is one of the major radionuclides in spent nuclear fuel and radioactive wastes associated with the operation of nuclear reactors and fuel reprocessing plants. Large amounts of 137Cs and other radioactive isotopes were released into the environment by atmospheric nuclear weapon tests between 1945 and 1980. 137Cs did not occur in nature before nuclear weapon testing began.

Iodine-131 (131I) has a half-life of 8.0 days. 131I is a radioactive isotope released into the environment mostly in gaseous form as a result of the atmospheric testing of nuclear weapons and accidents that have occurred at nuclear power plants (e.g. the Chernobyl nuclear power plant in 1986 and the Fukushima power plant in March 2011). It was a significant contributor to the effects on human health from atmospheric nuclear weapon testing and from the Chernobyl disaster.

CTBTO data proved to be of great value

Considering the usefulness, reliability and relevance of the CTBTO radionuclide data, it is very important to have access to the data in the future during accident scenarios. Without the data, many conclusions in the beginning would not have been possible. I believe that, in the aftermath of the events, the cooperation between CTBTO and the International Atomic Energy Agency (IAEA) needs to be further strengthened, as well as the cooperation between CTBTO and WMO. This future cooperation should build on existing roles, responsibilities and technical competencies, and would certainly create added value for the whole international community. The conventions regulating the notification as well as the assistance after a nuclear incident were created after the Chernobyl accident. The events in Fukushima 25 years later are providing a unique opportunity to review these conventions, to check their effectiveness, and to include the most important lessons learned.

A unique verification system

Finally, I would like to mention that the major lesson I learned from Fukushima was actually a non-technical one. In a crisis situation in the world of the 21st century, it is evidently not enough to stick to mandates and to fulfil duties. Everybody is expected to do everything that is possible, as quickly as possible. This is true for national as well as international organizations. In this sense, I think that together, the technical staff of national organizations like ZAMG as well as CTBTO staff can be proud of what was achieved, based to a remarkable degree on the invaluable data collected by a unique international verification system.

Biographical note

Gerhard Wotawa

is the Coordinator of the Group on Earth Observation/Global Earth Observation System of Systems at the Central Institute for Meteorology and Geodynamics (ZAMG). He was responsible for managing the ZAMG’s response during recent crisis situations such as the Eyjafjallajökull volcanic eruption in 2010 and the Fukushima accident. Prior to this, Dr Wotawa worked as an Atmospheric Sciences Officer at the International Data Centre at the CTBTO from 2000 to 2009.

Trinidad and Tobago’s long standing support continued from page 10

in the Caribbean, including the Seismic Research Centre in Trinidad and Tobago, should an earthquake occur or trigger a tsunami that may affect the Caribbean. In light of the fact that the PTWC utilizes the CTBTO monitoring data, Trinidad and Tobago is already a potential recipient of this invaluable technology.

The indispensable contribution of the CTBTO monitoring system to global safety and security was never more fully demonstrated than during the devastating 9.0 magnitude, tsunami-generating earthquake which struck Japan in March 2011. The data from the CTBTO monitoring stations were among the fastest and most accurate, which allowed Japanese authorities to issue tsunami warnings within a few minutes, thereby allowing many people to escape to higher grounds. The CTBTO data also allowed for early tsunami warnings to Japan’s neighbours, as well as to the wider Pacific region.

The way forward

The global community of States deserves commendation for its unified efforts to mitigate the effects of armed conflict. Having been bestowed with the privilege and honour of a leadership position, my role is to encourage my fellow leaders, particularly women leaders, to join me in placing emphasis on strategic frameworks and mandates for implementing and measuring changes in the lives of men and women in conflict-affected territories.

It is my firm belief that States can definitely strengthen the prospects for sustainable peace by including a gender lens in the approach to peace-building efforts, through equal involvement of women and men in policy formation, accountability, post conflict and humanitarian planning.

I remain deeply committed to these causes.