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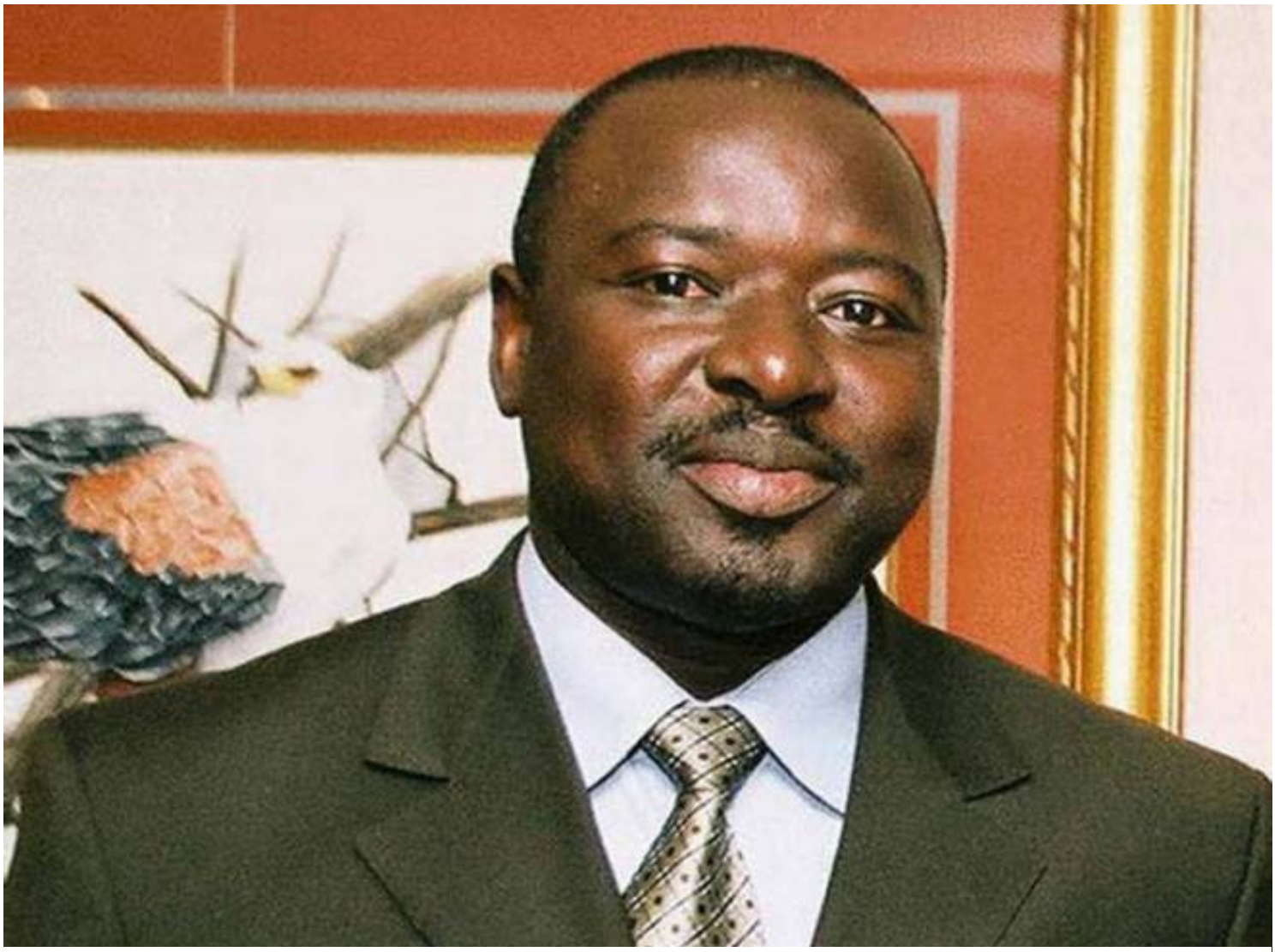
WORLD VIEW COLUMNS

India and the CTBT



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India's future with the CTBT is still unwritten. Leadership until now may have been delayed, but there are opportunities for it to be reengaged and renewed

India's past with the treaty to ban all nuclear tests in all places for all time is well known. Some might characterise it as leadership defaulted or, more optimistically, merely delayed. A lot has

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changed for India since the Comprehensive Nuclear Test Ban Treaty (CTBT) was opened for

about some renewed engagement.

India did not support the treaty in 1996 — and still does not — but it had been very supportive during negotiations. The roots of that exuberance can be traced to Prime Minister Jawaharlal Nehru's famous initiative in 1954 for a "standstill agreement" on nuclear testing. His intervention came at a time when the U.S. and the Soviet Union were detonating powerful nuclear weapons with increasing frequency. Nehru played an important role in building international momentum for the 1963 Limited Test Ban Treaty, which India joined. This treaty significantly reduced global levels of fallout, but did little to constrain the nuclear arms race. The CTBT was created as a result.

It has been hard in recent years to discern a public debate on the CTBT in India. This is tragic in the very country that made the path-breaking call for the "standstill agreement"; has been observing a unilateral moratorium since 1998; is a champion of nuclear disarmament; and, in the words of Prime Minister Narendra Modi, "will continue to contribute to the strengthening of the global non-proliferation efforts." For all of its efforts in galvanising the creation of an effective international verification system, India is currently unable to derive either the political or the technical benefits from it. But 183 other countries do.

The CTBT with its 183 signatories and 163 ratifications is one of the most widely supported arms-control treaties. This near universal support is due to the treaty's non-discriminatory nature, where everyone has the same obligation never to conduct a nuclear explosion. As another mark of progress, the prohibition against testing has emerged as an established global political and behavioural norm. The international condemnation of North Korea as the only country that has conducted nuclear tests in this millennium is a vivid illustration.

After each of the North Korean nuclear tests, all CTBT State Signatories received the same high-quality information about the location, magnitude, depth and time of the event within hours of detection by the Comprehensive Nuclear-Test-Ban Treaty Organisation's (CTBTO) system of monitoring stations.

CTBTO has evolved from a mere blueprint to the custodian of the world's largest and most sophisticated multilateral verification system. Over 300 stations in 89 countries have been built to monitor for signs of nuclear explosions around the globe and round the clock. The International Monitoring System (IMS) monitors the Earth's crust, listens in the atmosphere and in the oceans and sniffs the air for traces of radioactivity. While scanning the globe for signs of a nuclear test, this monitoring system produces data that have many spin-off

applications, from disaster early warning to scientific research on the Earth's inner structures.

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Nuclear safety

CTBTO is also making contributions to the nuclear safety field. After the March 2011 Fukushima nuclear accident, CTBTO data provided timely information on the radioactive emissions from the crippled plant and their global dispersion.

In spite of all these achievements, the CTBT has yet to become global law due to its demanding entry into force clause, which requires the signature and ratification of all 44 countries listed as nuclear technology capable. At present, eight of those countries are yet to join: India, Pakistan and North Korea are the only non-signatories from this list.

Before India even signs the CTBT, it can reacquaint itself with today's global nuclear test ban, while making an important contribution to the multilateral verification system. Radionuclide stations, which "sniff out" radioactive particles and noble gases, are the only means to confirm a nuclear explosion. In particular, the radionuclide station still sought for India to host is vital to finishing the now 90 per cent complete IMS, which is already highly effective in detecting nuclear explosions.

The IMS has also facilitated a rich international exchange of data and expertise and boosted technological advancements pertaining to infrasound and noble gas monitoring. Additionally, the CTBTO has an active programme of engagement with the international scientific community who can tap into a wealth of data generated by the IMS, and civil and scientific applications are booming. India should be part of this.

Science should support diplomacy. Today, a first step toward reengagement would be for relevant scientific and other government institutions to initiate contact with the CTBTO for the purpose of beginning scientific cooperation. This could eventually lead to India participating in the international exchange of data from the monitoring stations and would be an important first step to establishing familiarity and trust.

Taking these initial steps within the scientific context is wholly consistent with India's standing in the 21st century as it looks to strengthen the global non-proliferation regime. Scientific cooperation is crucial for sustainable dialogue. Interactions between scientists serve to promote cross-border exchanges and can become a precursor for greater engagement. One avenue for engagement takes place this June in Vienna at the CTBT: the Science and Technology Conference 2015, which is the world's largest scientific forum on nuclear-test-ban verification and its other benefits. Encouragingly, Indian scientists attended the last conference and I look forward to welcoming more this year.

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(Courtesy: UN Information Centre for India and Bhutan)

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