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IS THE THREAT OF NUCLEAR TERRORISM REAL?

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NUCLEAR THREAT INITIATIVE REPORT 2018

The latest biennial index of nuclear security prepared by the **Nuclear Threat Initiative**, that was published on 5th September, 2018, titled **"Building a Framework for Assurance, Accountability, and Action"[1],** indicate that even after years of progress on nuclear security and continued improvements following the last of four global Nuclear Security Summits, the preventive measures countries have taken to secure nuclear materials against theft by terrorist organizations have not obviated the risk. The report found that since 2016, risk environment factors (including political instability, ineffective governance, pervasiveness of corruption, and presence of groups interested in illicitly acquiring nuclear materials or in committing acts of nuclear terrorism) have deteriorated in 54 countries. Such deterioration has occurred at a time when well-organized, well-financed, and increasingly capable terrorist organizations are actively seeking the materials necessary to build weapons of mass destruction. Additionally, cyber threats to nuclear facilities are rapidly expanding and evolving. Moreover, 22 countries around the globe have weapons usable nuclear materials, 154 countries have less than one kilogram of or no weapons-usable nuclear materials and 44 countries and Taiwan have nuclear facilities that run the risk of an act of sabotage resulting in a dangerous release of radiation.[2]Among those countries that have been identified as having deteriorating risk environments, 7 are estimated to have nearly 1,000 metric tons of weapons-usable nuclear materials combined and 12 countries have a total of more than 120 nuclear sites[3].

Meanwhile the NTI report also pointed out the vulnerabilities of the states towards newer kinds of attacks, such as cyber-attacks and their inefficiency to defend themselves. About one thirds of the countries with weapons-usable nuclear materials or nuclear facilities, lack all of the basic cybersecurity regulations that can prevent the states from being vulnerable to newer kind of attacks. Since 2016, 12 countries

have improved their cybersecurity regulations and were rendered full credit of putting in place the basic cybersecurity regulations measured by the NTI Index

On the positive side, the report notes that the number of countries with more than one kilogram of highly enriched uranium, the fuel for a nuclear bomb has dropped from 32 to 22 in six years, with Argentina and Poland removing or disposing off those materials most recently. The others that have given up their nuclear materials are Austria, the Czech Republic, Hungary, Mexico, Sweden, Ukraine, Uzbekistan and Vietnam. That's down from more than 50 countries in the early 1990s.

During the Nuclear Security Summits biennially held from 2014 to 2016, the heads of states came forward to discuss relevant issues focussing on nuclear security, heightened the understanding of countries by addressing the steps needed to be taken to prevent nuclear terrorism, and also urged the countries to make significant commitments for protecting vulnerable nuclear materials and facilities from falling into the wrong hands. However, after the end of these summits in 2016, no such comparable global efforts to prevent nuclear theft have emerged till date.

HOW TO DEAL WITH THE VULNERABILITY

Nuclear security is and must remain a high priority for all the countries across the world to save mankind from the extreme effects of this unpredictable global menace. To ensure nuclear security, countries must therefore ensure that groups interested in and capable of committing acts of nuclear terrorism those that may be present in their own countries should never acquire nuclear weapon building materials i.e., terrorists and other malicious actors should be prevented from gaining access to nuclear materials with which they could make an improvised nuclear device. Secondly, thefts of nuclear material or technology should be prohibited. Along with that it is also very important to have a sound nuclear security practice which also forms a part of the foundation upon which the international efforts to share civil nuclear power generation capabilities and to promote technical cooperation in nuclear-related areas of enormous benefit to the health, nutrition, prosperity, and comfort of people all around the world rests. Lastly, all countries must also have a powerful shared interest in coming together to ensure an international community that is capable of meeting the emergent and unpredictable nuclear security challenges such as nuclear terrorism and cyber warfare.

CONCLUSION

Though there are reasons to believe that during the recent years approaches towards the elimination of loose nukes have been strengthened, yet in the face of the emerging and escalating global threats the possibility of an unwanted catastrophe cannot be erased. Hence,

the foremost obligation of the world leaders should be to recommit themselves towards strengthening the security agenda laid down during the Nuclear Security Summits. The governments should also take this threat seriously and make concrete efforts to protect their nations against terrorist attacks that can have almost unfathomable consequences. Moreover it should be remembered that protecting nuclear material is not just an issue for countries possessing nuclear weapons alone. It is also a matter of effective international co-operation because the consequences of a major security failure could be a catastrophe that transcends borders. Hence, this threat should be taken seriously by nations and effective amendments, ratification and proper implementations of the 13 relevant international mechanisms support nuclear security objectives and prohibiting the use of weapons as well as protecting nuclear materials should be ensured. Though countries without weapons-usable nuclear materials continue to support global nuclear security norms, yet it is very essential for more number of countries to ratify the amendments of the Convention on the Physical Protection of Nuclear Materials (NM)[4] and its amendment as it is the only internationally legally binding agreement in the area of physical protection of nuclear material that establishes measures related to the prevention, detection and punishment of offenses relating to nuclear material.

Notes

[1] Nuclear Threat Initiative. Building a Framework for Assurance, Accountability, and Action. NTI, 2018.

[2] Countries without weapons-usable nuclear materials are assessed across a subset of the framework that considers their contribution to global nuclear security.

[3] Notably, between 2016 and 2018, risk environments declined more in countries with weapons-usable nuclear materials than they did in the period of 2014–2016

[4] Convention on the Physical Protection of Nuclear Material". Bureau of International Security and Non-proliferation. United States Department of State. March 3, 1980.