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# NORTH KOREAN NUCLEAR AMBITIONS: A STUDY

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*by*

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# North Korean Nuclear Ambitions: A Study

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## Abstract

North Korea is a peculiar example of a rogue state in a global system which does not thrive on mutual respect and rule of law. A country governed by its own regressive laws does not uphold the notions of internationalism. This paper traces North Korea's nuclear ambitions driven by threat perception and illicit network of countries involved in illegal transfer of nuclear technology. It further highlights various nuances that region holds in case of instability. The role countries like China, US, Japan and South Korea play in diffusing or escalating crises in case of a conflict in the region has also been dealt with.

The international system is a system of anarchy where survival and self-interest are the only things that matter. The power for struggle and survival drive nations to take extraordinary measures. One such option is building nuclear capabilities and nuclear deterrence. Nuclear deterrence has made an all-out war obsolete in the present times. Countries resort to building their nuclear capabilities which act as guarantee for their survival. Therefore, nations equip themselves with nuclear technology either to build a nuclear weapon—that guarantees their survival—or use the same technology for peaceful/civilian purposes. The nuclear technology utilisation is thus categorised into two types: civilian usage and military usage. The nuclear technology was first used by America when it dropped nuclear bombs on Hiroshima and Nagasaki in 1945 during World War II. As of now, there are 9 Nuclear Weapon States (NWS) in the world viz. the US, Russia, the UK, France, China, India, Israel, Pakistan and North Korea, out of which 4 are Non-Proliferation Treaty (NPT) states. The quest for acquiring nuclear weapons has seen an upward trend with many countries aspiring for the technology. Quite recently, the UAE's has started exploring nuclear technology. However, the UAE stresses that its intentions are peaceful and nuclear technology will be used only for civilian purposes. This increasing quest by nations to acquire nuclear capabilities and nuclear technology potentially reduces the significance of NPT and other efforts towards nuclear disarmament.

Since this technology is both destructive and susceptible to incompetent utilisation, its monitoring and regulation is all the more necessary. International Atomic Energy Agency (IAEA) is an organisation that has been given the task of monitoring and regulation.<sup>1</sup> The organisation has been involved in the regulation and monitoring of states which are in the process of acquiring or have already acquired the nuclear capabilities and the technology. In recent times, IAEA has also laid down possibilities of nuclear power to mitigate the effects of climate change. It has argued

that part of the heat produced at nuclear power plants can be redirected from electricity production to provide heat for buildings, drive industrial production and much more<sup>2</sup>. In contrast to its destructive capabilities, nuclear technology can also be used for civilian purposes. An important usage of this technology recently has been in agriculture.

The nuclear technology used for military purposes causes damage that is much more severe and long-lasting than is otherwise assumed, which is why it makes sense for countries like the US and other nuclear weapon states to try and prevent other countries, especially countries like North Korea from getting access to nuclear weapons and technology. The question now arises, why did North Korea need access to nuclear weapons, and is it intending to use them against another country? This essay will delve into these questions.

## As a Geopolitical Threat

Regardless of economic sanctions coupled with endless rounds of negotiations between the major powers and Democratic People's Republic of Korea (DPRK), the latter has been able to develop its own nuclear weapons. North Korea (DPRK) a very small, yet very erratic country, has been giving jitters to the whole world with its nuclear weapon programme. The country is located in the north of the Pacific Ocean surrounded by the Sea of Japan and the Yellow Sea. It shares borders with longtime frenemy South Korea in the South, and with a slightly less eccentric China in the North and close by in the region towards its east lies Japan, which is often concerned about North Korea's nuclear programme and its weapon testing manoeuvres. North Korea's presence in the Asia-Pacific has repeatedly been a cause of concern for the region and beyond. There are mutual agreements amongst countries in the region, including North Korea's strategic ally China, against its nuclear ambitions and its testing incidents.

Additionally, North Korea's firing of a ballistic missile

1. Fisher, Matt. 2020. "Nuclear Energy for Non-Electric Applications Key for Climate Change Mitigation." *International Atomic Energy Agency (IAEA)*, August 7. Accessed August 13, 2020. <https://www.iaea.org/newscenter/news/nuclear-energy-for-non-electric-applications-key-for-climate-change-mitigation>

2. Ibid.

over Japan in 2017 further drew international dissent over its growing nuclear capabilities. While these actions result in possibly reduced economic- and trade-related benefits to North Korea, they also exert indirect pressure over North Korean allies such as China and Russia whom the world expects to prevent North Korea from participating in such reckless and inconsequential provocations.

## North Korea's Nuclear Capabilities

North Korea produces both weapons-grade plutonium and enriched uranium with one US government estimate in 2017 suggesting that the country may be producing enough nuclear material each year for 12 additional nuclear weapons. North Korea has tested its nuclear weapons 7 times so far. Its nuclear tests have been a cause of concern for its immediate neighbours China and South Korea, as conducting these tests always pose a subsequent risk of leaked radiation in the atmosphere. Although immediate radiation tests are conducted by China's Nuclear Safety Administration and South Korea's Nuclear Safety and Security Commission, there is no way of concluding the actual amount of radiation released within the periphery of North Korean borders.

North Korea possesses a wide range of missiles whose capability of reaching long distances and high altitudes has been successfully tested throughout 2017. The country tested its first '*Thermonuclear Bomb*' which has been claimed as its most powerful test till date; the bomb's explosive power ranges from 100-370 kilotonnes.<sup>3</sup> To put the intensity in context, the thermonuclear bomb dropped over Hiroshima in 1945 produced an energy of just 15 kilotonnes. Additionally, it has tested its *Hwasong-14* missile, first ICBM, which demonstrated a bigger reach than that of '*Hwasong-12*,' with a capacity of travelling to a maximum of 10,000 km, that is a distance as far as Korea to New York.

It is certainly surprising how a country which is so globally isolated and economically debilitated got

access to highly sophisticated nuclear technology and was able to build and advance the same with such efficacy. The answer to this lies in North Korea's illicit networks across the globe with countries and people who were willing to trade nuclear technology secrets for reasons ranging from political interests to weapon exchanges. One of the major players in the supply of nuclear technology to North Korea has been the Soviet Union back in the 1960s that helped set up its first nuclear reactor. Additionally, North Korea was a founding member of the Joint Institute for Nuclear Research led by the Soviet Union from where many of its scientists acquired nuclear energy training which they brought back home to North Korea.

Most importantly, there have been discoveries about DPRK's links to Pakistan's nuclear pioneer AQ Khan, who is known to have supplied a huge amount of uranium centrifuges, enrichment machines and technical data to North Korea. In the book *Nuclear Black Markets*<sup>4</sup>, the author gives a detailed account of how Pakistan and DPRK established a strategic relationship of mutual benefit, in which Pakistan acquired North Korean Ballistic Missiles and in exchange traded its own centrifuge technology secrets. The reason why North Korea saw the need for acquiring nuclear weaponry is centred on its global isolation and fear of attack by the US. Until 2009, when North Korea acquired nuclear technology, a pre-emptive attack on North Korea by the US was not a far-reaching possibility. Its nuclear programme got especially precipitated during the Bush administration which did not hold back from openly declaring it an evil state, thus formally vocalising its dissent against the North Korean regime.

## UN Resolutions on North Korea

The United Nations Security Council (UNSC) plays a significant role in regulating North Korea's actions and attempting to check its nuclear technology advancements. The most notable and consequential efforts of the UN are the economic sanctions imposed on North Korea which mainly demand a direct ban or

3. <sup>3</sup>"North Korea nuclear tests: What did they achieve?" 2017. *BBC*, August 13. Accessed August 13, 2020. <https://www.bbc.com/news/world-asia-17823706>.

4. <sup>4</sup>*Nuclear Black Markets: Pakistan, A.Q. Khan and the Rise of Proliferation Networks (A Net Assessment)*. 2007. International Institute of Strategic Studies, 65-86.

limitation of North Korean trade with other countries. In regard to non-proliferation, the “*United Nations Security Council Resolution 825*” was passed in 1993, in order to persuade North Korea to reconsider its withdrawal from the NPT.

Additionally, a number of sanctions are imposed on North Korea every time it conducts a nuclear test, with the most recent one being passed in 2017 when its sixth nuclear test was conducted. In response to the test, the “*United Nations Security Council Resolution 2375*” limited exports of refined petroleum products to the country to 2 million barrels annually. After North Korea’s most recent test, with the launch of a *Hwasong-15* ICBM on 28 November 2017, the “*United Nations Security Council Resolution 2397*” was adopted to tighten sanctions and restrict its foreign trade.

## Summits and Nuclear Negotiations

The lobbying for North Korean denuclearisation is not a recent phenomenon. It started back in 1992 when the two Koreas signed a treaty agreeing to denuclearise the peninsula. “The governments of North and South Korea agreed to “not test, manufacture, produce, receive, possess, store, deploy, or use nuclear weapons,” as well as ban nuclear reprocessing and uranium enrichment facilities. The treaty also committed the two Koreas to use nuclear energy only for peaceful purposes.<sup>5</sup>” A new era of negotiations started recently with the election of US President Donald Trump in 2016 whose term witnessed a historic summit with Kim Jong-un in Singapore in June 2018. The summit ended with a joint statement regarding building of a long-lasting and robust peace regime and a complete denuclearisation of the Korean peninsula. However, the statement has been questioned for its vagueness, since it provides very limited details about how and when denuclearisation will take place.

This was followed by the second US-North Korea Summit held in February 2019 in Hanoi, but ended on a rather unfortunate note with the two leaders disagreeing on any deal. The leaders also had different accounts of what happened during the summit and why it ended without a deal. “Trump says Kim agreed to dismantle the nuclear and fissile material production facilities at Yongbyon in exchange for complete sanctions relief, but the US President wanted more substantial steps on denuclearization and verification. North Korean officials dispute Trump’s account, saying Kim demanded only partial sanctions relief.<sup>6</sup>” The future seems bleak for a third summit between the two leaders, since both countries are still under a fairly vague disagreement.

## Fallouts of Instability

By now it is clear that all historical events kept aside, North Korea is actively manufacturing, testing and refining its nuclear capabilities amidst a halt in all negotiations and talks of denuclearisation. Even if a case of a preemptive strike to destroy nuclear weapons or nuclear sites or waging a limited war with North Korea seems a measurable option, it will have far reaching and catastrophic consequences not only for the region but also for the whole globe. Any such strike or limited war would invite devastating retaliation against South Korea and perhaps Japan. With its approximately 15,000 conventional artillery launchers placed within 50 miles of Seoul, North Korea is capable of causing mass casualties in South Korea and beyond, without even resorting to its nuclear missiles. And in case of an all-out war with North Korea, large-scale Korean as well as American casualties will also occur. South Korea and Japan will also get drawn into the war. In the domains of economics and trade, global supply chains will severely be affected. Hence, all possible options must be traded to maintain peace and stability in the region.

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6. <sup>6</sup>Ibid.

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