Mongolia’s Nuclear Policy: From Security to Serotype Research

By J. Enkhsaikhan

A vast country wedged between Russia and China, Mongolia has a unique history when it comes to understanding nuclear security risks. During the Cold War, as a satellite of the Soviet Union, it faced being caught in the middle of a potential nuclear conflict between its two powerful neighbors. And given its geography, hundreds of nuclear tests conducted by Moscow and Beijing took place not far from Mongolian territory.

So it is perhaps no surprise that Mongolia after the Cold War declared itself a nuclear-weapon-free zone. But that was just the start of Mongolia’s quest to forge a nuclear policy, writes J. Enkhsaikhan.

DISCOVERY of the atom and its potential uses has changed the course of human history. Nuclear power, however, is a double-edged sword and needs to be dealt with accordingly. It can cause grave dangers as well as provide great opportunities for human progress.

The nuclear era officially began with the detonation of the first atomic bomb by the United States in July 1945 and the dropping a month later of atomic bombs on the Japanese cities of Hiroshima and Nagasaki. The nuclear arms race became one of the main features of the Cold War, when the opposing sides held so many weapons that if even a small fraction of them were used, they could greatly damage the Earth or make human and other life hard if not impossible. The past seven decades have witnessed nuclear weapons states threaten others with the use of such weapons. Historical documents also show that there were many incidents that could have sparked nuclear conflicts and exchanges.

Although in the post-Cold War period the number of nuclear weapons has been reduced to around 15,000, the number of countries possessing such weapons has increased. The race to modernize weapons, perfect the means of their delivery and regulate their destructive capacity are making them more “useable,” thus making nuclear doctrines even more dangerous. That is why in response to a lack of tangible progress in nuclear disarmament, the non-nuclear-weapons states and international non-governmental organizations (NGOs) have recently launched a campaign aimed at immediately starting international negotiations to prohibit and abolish such weapons, an idea endorsed in a recent resolution adopted by the United Nations General Assembly.

It is not all destruction, of course. Production of energy, isotopes and nuclear science have created vast possibilities for peaceful uses of the atom. This constructive side of nuclear energy is widely used, and the risks that come with the peaceful uses of nuclear energy are also being addressed, including improving the safety of nuclear reactors and searching for ways to safely dispose of the spent nuclear fuel or waste.

THE CASE OF MONGOLIA

Mongolia’s policies are mainly connected with its geographical location and reflect its history. In many cases, its policies are related to events in neighboring Russia and China, in their bilateral relations as well as their relations with other major powers. Mongolia’s geographical and geopolitical location is unavoidable. However, that does not mean that it has to be doomed to geographical determinism. On the contrary, its location demands that it be more creative in order not to be used to harm others or to find itself subject to others’ domination.

As a result, Mongolia tries to the extent possible to influence events in order to reduce harm for itself or to turn circumstances to its advantage. That is why Mongolia’s location makes it imperative to deal with nuclear security, both military in nature and that connected with peaceful uses of nuclear energy. It could choose either to be passively affected by the perils of the nuclear age or try to play a somewhat active role by promoting its national interests, shaping its own future and benefiting, as much as possible, from the dividends of the peaceful atom. Mongolia has chosen the latter. In order to do that, it needs to squarely address nuclear weapons-related threats, the potential nuclear risks near Mongolia and the benefits from the peaceful uses of nuclear energy.

REMNINDERS OF THE RISKY PAST

In the early 20th century, when Mongolia reasserted its independence, it had to determine its foreign policy direction: be closer with one of its two immediate neighbors, be under their domination or opt for some third option. At that time, it chose the lesser of two evils, moving closer to Russia, which unlike China did not have territorial claims over Mongolia. During the Cold War, Mongolia was a Soviet satellite and followed pro-Soviet policies inside the country as well as in its foreign policy. With respect to the nuclear arms race, it sided with the Soviets. Thus, it condemned all nuclear-weapons tests in general except for those by the Soviet Union, which were conducted not far from its territory. At that time, it thought it was politically incorrect to condemn Soviet tests since, in its view, Soviet nuclear weapons balanced US and NATO forces and served as a guarantee of world peace and stability.

In the 1960s, during the Sino-Soviet dispute, Mongolia found itself involuntarily involved in the dispute and, by implication, the military standoff. When China developed nuclear weapons and the Sino-Soviet dispute turned into border clashes in 1969, the Soviets briefly entertained the idea — or at least made others believe that it was doing so — of a pre-emptive strike against China’s fledgling nuclear weapons and related facilities. In military circles, it was called “nuclear castration.” The Soviets not only communicated their intention to their Warsaw Pact allies, but also approached the US for its possible reaction. In the meantime, the Chinese worked on their nuclear weapons program and dispersed their nuclear facilities, building underground networks of tunnels to house some of their nuclear warheads and to serve as nuclear shelters. A pre-emptive strike would surely have had a devastating effect on international relations, especially on Mongolia, since the Chinese side was well aware...
of the Soviet bases there and the dual-use weapons placed in Mongolia, and they had plans to take counter measures. Soviet-Mongolian relations were not an alliance of equal partners; there was no joint command or mechanism for making joint military decisions. Mongolia was a pawn, there to support Soviet forces. Hosting Soviet military bases automatically meant that in addition to being a target of possible Chinese military responses, even some US nuclear weapons, most probably based in Japan, were trained to hit those bases. The US response to the Soviets was that it would not idly stand by if Moscow attacked China, but would launch its own nuclear attack against the Soviet Union. That was perhaps decisive in avoiding a catastrophe. That was also an important lesson for Mongolia — not to blindly side with one of the belligerent parties.

The end of the Cold War in the early 1990s, the normalization of Sino-Russian relations, the closure of Russian military bases and withdrawal of troops from Mongolia have radically changed the country’s external security environment. Mongolia is no longer a junior partner of a nuclear-weapon state. Russia and China declared they would not use territories or airspace of neighboring states against each other. Mongolia, for its part, declared that henceforth it would pursue balanced relations with its neighbors and neutrality in possible bilateral disputes that did not affect Mongolia’s vital interests.

MONGOLIA TAKES THE INITIATIVE

Mindful of the enormous risks of the Cold War period, in September 1992, Mongolian President P. Ochirbat, the country’s first democratically elected president, declared at a session of the UN General Assembly the country as a single-state nuclear-weapon-free zone (NWZFZ) and pledged to have that status internationally guaranteed.

In June 1994, the State Great Hural (Mongolia’s parliament) adopted the first post-Cold War national security concept, which underlined the country’s nuclear-weapon-free status as an important element of strengthening its security through political means. Since then, Mongolia has been working hard in pursuit of that grand goal.

The bottom line was that Mongolia did not have nuclear weapons on its territory, and no country, near or far, would be allowed to place such weapons on its territory. Although this might seem a selfish act, in practice it meant that no nuclear weapons threat to it or to others would emanate from Mongolian territory, which in size is as large as the UK, France, Germany and Italy combined. President Ochirbat’s reference to international guarantees implied that the five nuclear-weapon states (or P-5), including its two immediate neighbors Russia and China, would recognize Mongolia’s NWZFZ status, commit to respect that status and not involve Mongolia in their geopolitical rivalries, nuclear doctrines or policies. In this way, Mongolia’s seemingly selfish act would contribute to greater regional predictability and stability.

THE PATH TO ACHIEVE THE GOAL

Non-proliferation of nuclear weapons is one of the most pressing international issues. It commands the widest international support. Putting the issue of single-state NWZFZs, Mongolia’s initiative, on the agenda of the UN General Assembly could have enjoyed wide support, and surely a vote on the issue would have carried the day. However, international relations are characterized not only by competition (in this case between nuclear-weapons states and non-nuclear-weapons states), but also co-operation. For Mongolia to have pursued a Pyrrhic, one-off victory at the UN on the issue of single-state NWZFZs, which some advised, would have soured the atmosphere surrounding the issue of nuclear weapons. International relations know many examples of such hasty approaches used to decide issues by mechanical voting that in the end leads to a lengthy impasse. A clear example is the issue of turning the Indian Ocean into a zone of peace. Hence, Mongolia decided to follow the slow yet sure path of dialogue, engagement and negotiation.

Working closely with the P-5 and other members of the United Nations, Mongolia was able to have the General Assembly adopt in 1998 a resolution entitled “Mongolia’s International Security and Nuclear-weapon-free Status,” which welcomed that status as contributing to stability and predictability in the region and putting the issue on the UN’s agenda.

For its part, in February 2000, the State Great Hural adopted a law that defined Mongolia’s nuclear-weapon-free status and criminalized acts that violate the status. It also formally outlawed the stationing and transit through its territory of nuclear weapons by any means. Mindful of the importance of the issue for society as a whole, the law allowed NGOs and even individuals, within the mandate provided by the legislation, to exercise public oversight of the implementation of the law and submit proposals on it to relevant state authorities. An NGO named Blue Banner, established in Mongolia in 2005 for that purpose, has three times formally raised the issue of implementation of the law by Mongolian authorities and submitted recommendations to the government regarding follow-up measures.

Although the vast majority of UN member states support Mongolia’s policy, the P-5 had difficulties with it, not so much to do with Mongolia itself but with the fact that supporting Mongolia’s policy would set a precedent for other states to follow suit and declare their territories single-state NWZFZs — and thus demand security assurances from the P-5. Despite their somewhat reluctant position the P-5 agreed, at Mongolia’s insistence, to provide it with some form of assurances. Thus, in October 2000, they made a joint statement at the UN providing Mongolia with negative and positive security assurances. Mongolia welcomed the P-5 joint statement, but only as an initial positive step in institutionalizing its status as a single-state NWZFZ. In terms of content, Mongolia thought that the statement was made in a Cold War spirit, enumerating conditions under which the P-4 (minus China, which declared that its unconditional security assurances provided to NWZFZs applied to Mongolia) would not use or threaten to use nuclear weapons against it. Mongolia complained that the substance of the joint statement was in stark contrast with the good-neighborly relations that

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1 Meaning that they would not use or threaten to use nuclear weapons against Mongolia and, in case it becomes victim of such weapons use, make sure that the Security Council takes “immediate steps to provide, in accordance with the Charter, the necessary assistance.”
it enjoyed with Russia and China and the other nuclear-weapon states. The P-5 knew that their “one size fits all” approach was not appropriate in Mongolia’s case. However, they were reluctant to adjust it accordingly. The P-5 believed that they had already made enough concessions to Mongolia. On the other hand, Mongolia believed that the P-5 had not done enough to address its concerns and that in order to “right the wrong,” it suggested Mongolia-specific security assurances in a legally binding form.

There ensued prolonged on-again, off-again talks on whether or in which form to provide security assurances that would be acceptable to Mongolia and the P-5. The process revealed the positions of each one of the P-5 as well as their joint positions, at times reminding one of Gulliver’s travels to the land of giants. The many arguments and counter-arguments could have made up a whole volume for anyone interested in reading them. Numerous bilateral, trilateral and “P-5 plus Mongolia” meetings were held, with the last persistently pointing out the inconsistency of the very nature of the P-5 joint statement, given Mongolia’s de facto relations with each one of them, and complaining of the political form of the assurances that were being given. As a result of these meetings, Mongolia agreed not to insist on a legally binding treaty that would define its unique status, provided that the P-5 pledged to respect Mongolia’s status and refrain from any act that would contribute to violating it. In September 2012, the P-5 and Mongolia signed parallel declarations, underlining the utility of pursuing the interests of all parties involved through dialogue, and by political and diplomatic means.

In practical terms, the P-5 joint declaration meant, in Mongolia’s view, that none of them would involve Mongolia in their future nuclear rivalries, including possible defense systems or counter-defense systems. In that sense, the joint P-5 declaration was not only in the national interests of Mongolia, but also, in an age when time and space have become strategic military assets, in the interests of regional stability and predictability, since the P-5 reassured each other that Mongolia and its territory would not be used against each other.

Mongolia is presently working to make the status of a single-state NWFZ an organic part of East Asian security arrangements that would contribute to regional stability and predictability. As a Mongolian proverb says, a duck is calm when the lake is calm. This provides the country with the opportunity to spend less on its defense (currently under 1 percent of the state’s budget) and more on addressing the country’s challenges, promoting human development and human security for every member of society, as prescribed in the UN’s Sustainable Development Goals.

At the regional level, Mongolia’s Blue Banner is working with like-minded NGOs and think-tanks in Northeast Asia to promote the idea of a possible NWFZ, mindful of the region’s challenges and specific characteristics.

SHADOWS OF THE PAST: NUCLEAR WEAPON TESTS AND THEIR IMPACT

Mongolia is sandwiched between two nuclear powers that conducted close to a quarter of their nuclear-weapons tests close to Mongolia — Russia at Semipalatinsk and China at Lop Nor. From a geographical standpoint, Mongolia is “downwind” from Semipalatinsk, with all of the attendant consequences.

Having witnessed over 500 nuclear-weapons tests in its vicinity and as a member of the Conference on Disarmament, Mongolia took an active part in the negotiations on the Comprehensive Test Ban Treaty (CTBT) and was one of the first to sign and ratify it. Today, it advocates the earliest entry into force of the CTBT and hosts duly certified primary seismic, infrason and radio-nuclide stations under the CTBT’s International Monitoring System. It has detected all of North Korea’s nuclear-weapons tests.

Since Mongolia enjoys good relations with both Russia and China, it should not shy away from raising the issue of assessing together with them and relevant international organizations the impact of nuclear-weapons tests on the Mongolian people, especially those living in the areas close to the test sites. When raising the issue with Moscow and Beijing, Mongolia should underline the importance of the findings of the impact study on the second and third generations of affected people and not necessarily for the purpose of asking for belated compensation. Most of the countries that have been affected by nuclear-weapons tests have assessed the impacts and have taken appropriate, though perhaps belated, remedial or compensation measures. Mongolia should do the same for its people.

In addition to physical proximity to nuclear weapons and related facilities of its neighbors, Mongolia also faces the safety challenge of other nuclear facilities in the vicinity of its territory that cannot be independently verified by IAEA inspectors, since the P-5 have a special status that allows them to determine whether the agency’s inspectors can conduct inspections or not. Hence, Mongolia’s dilemma is that most Russian and Chinese civilian nuclear facilities, like those of other nuclear powers, are not transparent enough to allay fears of an accident.

Another challenge is the safe and secure disposal of spent nuclear fuel for these facilities, commonly known as nuclear waste. The world’s 440 or so nuclear reactors in some 30 countries have produced hundreds of thousands of tonnes of spent nuclear fuel, most of which are waiting for permanent disposal. Though new generations of fast reactors are expected to reduce the amount of spent nuclear fuel produced in reactors, nevertheless the annual increase in the production of nuclear power requires a permanent geological disposal solution. Since the 1980s, ideas have been flagged to bury high-level radioactive waste in remote areas, including perhaps in the Gobi Desert, south of Mongolia. At present, Russia and China are studying the possibility of establishing permanent nuclear waste repositories in the Krasnoyarsk region of Russia and in Gansu Province in China, both not far from Mongolian territory, thus raising the prospect of Mongolia finding itself sandwiched between the nuclear waste repositories of its neighbors.

URANIUM MINING AND PEACEFUL NEEDS

The third area of interest for Mongolia is the peaceful use of nuclear energy, which has enormous potential for generating energy and contributing to the country’s socio-economic development. Despite the nuclear accidents at Three-Mile Island, Chernobyl and Fukushima, interest in nuclear energy is not abating. Radioisotopes and radiation provide many useful and increasing applications in agriculture, medicine and healthcare, industry, mining and other areas. Besides, Mongolia has an enormous amount of uranium: around 74,000 tU of available reserves and estimated reserves of nearly 1.47 million tU, if not more. What is needed is a sound and effective nuclear policy. Thus, uranium could allow Mongolia to pursue nuclear energy and not be so dependent on imported oil and electricity as it is today. However, due to its small population, vast territory and lack of a developed national power grid, it is currently not economically viable to build a nuclear power plant. The question of when to start uranium production and in what form its products could be used or exported are still at a research stage and under discussion. Export of unprocessed uranium ores or partially
processed yellowcake are currently not commercially viable. Hence, I believe that at present there is no need for Mongolia to rush to build a nuclear power plant or export uranium, since the market value and price will surely increase with time. There are numerous projects under way in the world to build smaller and safer nuclear power plants that would produce less waste. This could meet the needs of smaller developing countries or smaller developed communities. Therefore, Mongolia can afford to wait before it develops its own nuclear energy. But it is high time, as an initial step, to build a research reactor to train people, engage in non-destructive testing of materials and produce radioisotopes as well as medical — and industrial-use — isotopes. Working with a research reactor will gradually build and instill a nuclear safety culture for the nuclear industry.

In the non-energy area, Mongolia needs to focus on three areas: training of personnel, cancer diagnosis and treatment, and addressing the challenges connected with the occasional outbreak of animal foot-and-mouth disease, which hinders export of meat and meat products to its neighbors and to the world market in general.2 The area of most heightened interest for Mongolia today is nuclear medicine, especially cancer prevention, diagnosis and treatment, since cancer is spreading at a high rate. Almost three-quarters of those diagnosed with cancer learn about their disease at the terminal stages.3 That is why more emphasis needs to be placed on awareness-raising, effective preventive measures, correct diagnosis and effective treatment. The challenge is that Mongolia is a vast country, and while initial scanning for some forms of cancer may be made in most of the provinces, differentiated diagnosis and effective therapy can only be provided in Ulaanbaatar. Also, very few people can afford to make annual long trips to Ulaanbaatar for differentiated diagnosis. Hence, the government needs to broaden co-operation with countries with well-developed nuclear medical sectors and experience, including its two immediate neighbors.

A final area of peaceful nuclear activity is animal husbandry, which until recently has been the backbone of the country’s economy and still produces about 20 percent of gross domestic product (GDP). This traditional sector has periodically been devastated not only by the harsh-weather-related dzud,4 but also by outbreaks of foot-and-mouth and other transboundary animal diseases that do not necessarily begin in Mongolia but perhaps also in neighboring countries. According to the World Organization for Animal Health, Mongolia needs better equipped labs and experts to speedily determine the serotype of an animal disease, i.e. whether the disease is a serotype A or O, for example. The results help determine the appropriate, and hence effective, serotype and vaccine. It also needs to set up a vaccine production facility to provide the required type of vaccine. Co-operation with Russia and China and other nuclear powers is important in all these areas. Increased export of world-standard natural meat products and other agricultural products would benefit all three countries.

All the aforementioned demonstrates that it is time for Mongolia to develop a viable nuclear policy that addresses its security concerns as well as provides a framework for enjoying the peaceful dividends of the atom by co-operating closely with the IAEA and states with developed nuclear science and industry.

2 Mongolia has more than 70 million head of livestock compared to a population of 3 million people.
3 Today, cancer is the cause of 22 percent of deaths in the country.
4 Enormous loss of livestock due to summer drought followed by extreme cold winter.

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