

Nuclear Catastrophe in the Democratic People's Republic of Korea: The End or a New Beginning

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Introduction

Nuclear disasters, political crises, and the Democratic People's Republic of Korea (DPRK) are three phrases that are not only inextricably linked but also a looming symbol of a threat to international security. DPRK holds the distinction of being one of the most militarized states in the world, with unparalleled capabilities to produce weapons of mass destruction. In fact, for DPRK's leader Kim Jong Il, acquisition of nuclear power is the preferred route to establishing DPRK as a respectable and feared global power.

DPRK's position on acquisition of nuclear power and weapons was clarified by a 2005 report released by the KCNA, which quoted the Foreign Ministry as saying, "We have manufactured nuclear weapons for self-defense... we are compelled to suspend our participation in the six-party talks for an indefinite period" (Chinoy 242). The announcement naturally provoked anger and confusion from different parts of the world. Nonetheless, DPRK's stance on the issue was not surprising as the republic had always desired to be a nuclear power, despite global turmoil, controversies, the decades immediately following the Korean War, and even the difficult years of the USSR's dissolution, much to the dismay of both its neighboring regions and other nations.

One of the clear failings of DPRK's stance is its willingness to acquire nuclear power even at the cost of negligible improvements in national wealth and

well-being. For generations, the regime, which was founded by Kim Il-Sung (known as the “Great Father”), transferred to his son Kim Jong-Il (referred to as the “Dear Leader”), and is soon to be handed over to the third generation of the Kim family—Kim Jong-Un—has favored the pursuit of nuclear advancement. In a bid to justify its position, the regime resorts to constant and intense propaganda, much of which borders on racism and contains strong Anti-American and Anti-Japanese sentiments. The DPRK regime also falsifies information about its relationship with the Republic of Korea, projecting ROK as aggressive, harsh, uncooperative, and unreasonable, while using extreme military action to eliminate any dissidents, traitors, or spies.

(<http://brokentelegraph.com/2010/06/26/north-korean-oppression/>)

Another factor that may have contributed to DPRK’s aggressive nuclear strategy is its uncomfortable geographical proximity to some of the world’s fastest growing economies, i.e., the ROK, the People’s Republic of China (PRC), and Japan as well as its vulnerable financial and political situation. PRC has an especially tight control over DPRK’s treasury, as it fulfills ninety percent of the DPRK’s energy demands. DPRK is, thus, torn between the interests of three largely different world-class economies.

Today, DPRK is touted to be one of the most dangerous and fanatically unbalanced nations in the world, with an extremely active nuclear power plant capable of developing uranium-based weapons of mass destruction. However, DPRK’s engagement in nuclear activities has not remained unchallenged. Kim and his nation have been often been subjected to fierce anti-DPRK sentiments from the international community. DPRK, on its part, has had several close counters with war and war-like situations, including its blatant destruction of the ROK battleship, which resulted in the death of 46 crew members, the testing of long-range ballistic missiles that strayed into neighboring territory, and, of course, civil and political discussions. Although DPRK has acknowledged its involvement in nuclear activities, it is alarming to note that the nation has repeatedly evaded an inspection of the safety and precaution standards in its main nuclear power and weapons plant, Yongbyon, by an external international atomic body or committee such as the WHO or the IAEA (U.S. Dept. of State).

These evasion tactics fuel the suspicion that DPRK is attempting to conceal facts from the world, possibly related to the production of nuclear weapons and the violation of international safety laws. It is likely that DPRK is withholding information about the type and number of nuclear weapons being produced to

prevent intelligence threats and unnecessary international tension. Given DPRK's non-compliance with internationally recognized policies, it is reasonable to assume that its nuclear activity is potentially threatening.

Although the likelihood of a nuclear meltdown in DPRK is low, it is not improbable or impossible. This report speculates the long- and short-term effects of such an occurrence. How would a nuclear accident impact DPRK? Aside from the genetic deformities that are bound to plague several generations of living species, DPRK will certainly experience a major economic decline in the aftermath. However, unlike in most countries, an economic decline in this case may be a blessing in disguise.

An economic slump will force the markets and finances of DPRK to rely heavily on those of democratic, capitalistic, and wealthy nations. Nations such as the ROK, PRC, the U.S, and Japan will rush to provide DPRK with pharmaceutical and food supplies, not only for humanitarian reasons but also out of their desire to positively influence DPRK, given its unique position in the global community (PRC Focus).

Dependence on global powers for basic necessities such as food and medicine will naturally force DPRK to reconsider its future as a relatively reclusive independent nation. While it is difficult to predict DPRK's future course of action given the numerous available options, one can argue that the profits earned from international trade are sure to tempt DPRK to either temporarily or permanently liberalize the economy.

The rest of the paper presents evidence and reasons for the arguments outlined above. Although a nuclear disaster will undoubtedly damage DPRK's health, morale, and economy in the short term, it may also lay the foundation and pave the way for successful democratic relationships with free-trade countries in the long term. The rest of the paper discusses how a nuclear disaster can transform a communist dictatorship into a democratic capitalistic economy. The following section discusses the likely effects of nuclear radiation on medicine and agriculture in DPRK. This is followed by a section that examines the impact of such an event on DPRK's ties with China and other neighboring countries. The fourth section highlights the different factors that will motivate countries to extend aid to DPRK. The fifth section addresses strengths of certain arguments counter to the view presented in this paper. The last section concludes the paper. By

speculating on the probable outcomes of a nuclear disaster in DPRK, this report intends to shed light on the grim realities of the nuclear and political situation in the country and make an appeal for intervention from the international community.

Effects of a Nuclear Disaster on Medicine and Agriculture

A country's survival depends on its resources. DPRK currently lacks adequate resources, especially comfortable living conditions for its citizens. Given this fact, a nuclear disaster would severely affect DPRK's already frail sustainability and economy, ruining Kim Jong Il's goal of becoming a respected and feared nation through nuclear development and military expansion. Thus, failure to exercise caution in nuclear activity can be fatal to the country's already weak economy. With a major portion of the country's resources and finance being diverted to military sustenance, a nuclear crisis would not only further damage the citizens' livelihoods but also weaken the country's main motivation for advancement—the military. Eventually, DPRK will have to suffer medical and biological consequences similar to those seen in Chernobyl.

A review of nuclear disasters that have occurred in the past can help in accurately predicting the possible outcomes of such an event in DRPK. The Chernobyl nuclear disaster, perhaps the most catastrophic nuclear disasters in the history of mankind, occurred in 1986 in the region now known as Ukraine. A disaster of that magnitude in DPRK would be more devastating, given the prevailing conditions of the nation.

The heavy medical expenditure that follows a nuclear disaster would, first and foremost, cripple DPRK's economy. Diseases, injuries, and the rising death toll will be an additional burden on DPRK's already unstable financial conditions. The medical resources needed to hospitalize and care for the victims of the disaster would necessitate diversion of the state funds from national advancement projects to medication and aid. Such a diversion will halt the advancement of DPRK's military power. The long-term medical problems resulting from a nuclear disaster, such as leukemia, breast, lung, and stomach cancer, birth defects, and miscarriages will probably continue to impede DPRK's nuclear growth for several years. Women who were victims of the Chernobyl disaster were reluctant to or even completely refused to become pregnant because of abundant birth defects. Some pregnant women also opted for abortion to prevent their offspring from developing such genetic defects. The compromised immunity of the victims led to a disease known as Chernobyl AIDS, which was incurable (Mara 77). A large number of

people living near the nuclear plant suffered short-term ailments such as muscle and joint pain, respiratory problems including the shortness of breath, metallic taste in the mouth, blurred vision, dizziness, nausea, vomiting, and diarrhea. In the aftermath of the disaster in 1987, death rates increased by 400 percent, cancer-related mortality increased by 300 percent, and deaths caused by breast cancer, general disease, and pneumonia rose by 26 percent, 500 percent, and 220 percent, respectively (Nelson 119).

Thyroid cancer and tumor is one of the most debilitating fallouts of the Chernobyl disaster. In 1986, before the incident, only two cases of thyroid cancer had been reported in the world. However, according to reports from the World Health Organization, nearly 50,000 people developed thyroid-related defects after the nuclear disaster. In fact, this figure captures only the incidents reported in Ukraine, but not in countries such as Russia and Belarus that were undoubtedly affected. Nuclear outbreaks, such as one in Chernobyl, are known to emit Iodine 131, which has a malignant effect on the thyroid gland. This gland secretes certain proteins, which aid other hormonal reactions and plays a role in the utilization of energy (Mara 75).

In the event of a nuclear disaster in DPRK, Kim Jong Il may not be willing to divert funds toward the medical needs of its citizens, especially at the risk of depriving the military of its necessary resources. In any case, a nuclear disaster of any magnitude in DPRK is bound to affect its military personnel. Thus, regardless of whether Kim Jong Il chooses to divert attention or aid, the nuclear and defense advancement programs will face financial constraints because of a nuclear crisis, which will force DPRK to seek and accept aid from external sources. Such a situation will be detrimental to the very goal of the defense-building efforts: to establish a strong, independent, and globally respected DPRK.

The above discussion confirms that a nuclear disaster in DPRK will lead to large-scale expenditure on medical technology, medicine, and hospitalization, irrespective of whether it benefits the country's military personnel or its citizens. It will plunge the nation into financial debt, further compounding the problem of trade deficits.

Refusal to curtail or exercise caution in nuclear development could also threaten the nation's agricultural resources. Forty percent of the nation's land is devoted to agriculture, and it accounts for an estimated 20% of DPRK's GDP.

A nuclear outbreak would jeopardize one-fifth of the nation's sustenance (U.S. Dept.). As seen in the Chernobyl incident, nuclear radiation introduces morphological changes in the vegetation. These include phyllotaxis, or disturbances in the branching and leafing patterns, thickening or thinning of leaves, premature fall of flowers, asymmetry, curvatures, and, most significantly, tumors. Even after five years of the Chernobyl incident, 80% of the corn sowthistle in the region had tumors in the main or adjacent vegetative shoots. Exposure to nuclear radiation also leads to chromosomal aberrations and mutations in crops and plants as well as a detrimental increase in their immunity. For example, contaminated wheat crops, during the fall, have 50% lower resistance against mildew than unharmed wheat. The activity of proteinase inhibitors, which form stable complexes within the plant, was 30%–35% lower in affected wheat and grains. With increased radioactive particles, such as Cesium 137, in the soil, agricultural produce was irreconcilably harmed (Burlakova 243).

Compared to Ukraine's total arable land area of 233,090 square miles, DPRK has a meager 46,541 square miles. Thus, it is safe to conclude that a nuclear disaster will have a greater impact on DPRK than in a larger country. (World Atlas, National Geo.). Nearly a decade after the Chernobyl incident, the Ukrainian government declared that five percent of all land was unsuitable for human habitation. This is staggering 13,500 square miles, which is approximately a third of DPRK's total land area.

In Chernobyl, exports of agricultural and livestock products to other countries were halted for several years. Dairy products, such as butter, chocolate, ice cream, and milk, too, were banned because the milk from cows that consumed contaminated food was also contaminated (Mara 78). A similar ban on exports from DPRK will severely deplete the country's income source, forcing it to seek and accept external aid.

Cultivation in the Chernobyl region was prohibited for nearly two decades after the disaster. However, in 2004, under the presidency of Alexander Lukashenka, lands were once again declared safe for growing crops. This led to widespread controversy, with scientists refuting Lukashenka's claims. New techniques had to be adopted to somewhat minimize the absorption of radioactive particles by the crops (Nelson 179). This negated Lukashenka's claim of the lands being safe for cultivation and even the residents attested to the contamination of local foods. The percentages of illnesses continue to remain as high as they were decades ago.

With 25 percent of Belorussian land deemed to be contaminated even during Lukashenka's rule, agriculture is, to this day, affected by the nuclear disaster.

Marine life and ecosystems will also suffer the adverse impacts of the nuclear disaster. Radioactive particles that directly contaminate the water will chemically react with water and its mineral and organic contents. Rivers tend to have the lowest concentration of radioactive particles, while closed water reservoirs, especially lakes, contain considerably high contamination levels. Radioactive elements including Strontium-90 and Cesium-137 have been detected in fishes, freshwater mollusks, and aquatic plants. Other organisms that feed on such aquatic life also fall prey to the radiation (Burlakova 293).

A nuclear disaster can, essentially, cause irreversible damage to all forms of biological life—crops, livestock, marine life, and the environment at large. To date, Ukraine continues to struggle with the after-effects of the Chernobyl catastrophe. Genetic mutations in certain livestock, crops, and marine life have not only depleted resources but also permanently altered biological life and food chains.

A nuclear disaster in DPRK will wipe out the already constrained resources of the country, making it dependent on external aid for survival and severely limiting its advancements as a global power. The adverse consequences in the fields of medicine and agriculture, as discussed in the above paragraphs, will severely cripple DPRK and its attempts to establish itself as a significant global power. A nuclear disaster will, without a doubt, debilitate all biological life forms in the region, which in turn will affect the nation's resources and economy.

Effects of a Nuclear Disaster on DPRK's Ties With PRC and Other Nations

PRC and DPRK have strong ties, with the former fulfilling 90 percent of DPRK's energy demands and annually donating a million ton of food as aid (Korea Times). PRC not only offers economical aid but also political support. In fact, PRC has been protecting DPRK from the other democratic nations and justifying much of DPRK's controversial actions. For instance, after the attack on the ROK battleship, the Cheonan, in 2010, PRC sided with DPRK and protected it from further ROK backlash (BBC News).

PRC is set to emerge as the new world power and is fully aware of its potential. With its economy growing at a rate of 9.5% per year for the last 20 years, PRC can overtake the US economy, which is growing at a sluggish rate of 1.8%, within decades (Economic Times). With a population of 1.3 billion and the third largest landmass of 10 million square miles, PRC is the world's fourth largest trading nation. Its GDP accounts for 13% of the world's total output, and it is one of the largest emerging global markets, climbing from 32th position in the world rankings to the 10th in just 9 years (Economist). The recent drop in the ratings of the American currency released by Standard & Poor (S&P) (an AA+ rating) is expected to prompt many countries to exchange their US currency for a more stable AAA rated currency. In fact, in September 2010, even before the decline in ratings, the UN proposed the Yuan as the new world currency instead of the dollar (The New American). With increased involvement in global trade, PRC now enjoys the distinction of being the largest trading partner of Africa, Middle East, and Asia.

John Chamers, the head of independent rating agency S & P, explained that, "Once a company loses their AAA rating, it usually doesn't bounce back" (CNN). This unexpected decline in ratings could signify the deterioration of U.S.'s financial stability and possibly the end of its reign as a super power. Mahbubani, a Chinese official, stated that this decline has "definitely undermined U.S. credibility" and that "it is very dangerous for the world" (Huffington Post). Moreover, PRC is one of the few nations in the world that have a positive debt. The US owes 1.2 trillion dollars to PRC, offering the country at a natural advantage (National Public Radio). Recently the PRC even berated the US for its "debt addiction" and demanded that the US tighten its fiscal policies after the S&P's decision to downgrade the US credit rating. A report from Xinhua news agency stated, "the US government has to come to terms with the painful fact that the days of borrowing their way out of their own mess are finally over." PRC currently wants to ensure the safety of its dollar assets. While the economy of the US and the rest of nations is weakening, that of PRC is only growing in strength. In a few years, PRC will be the most capable country to provide financial aid, investment, and credit to foreign countries. The ability to provide credit is typically followed by the power to exert political influence. For example, during the mid-1900s, the United States acquired global power by offering credit to newly developing capitalistic nations in Europe via the Marshall plan. Likewise, PRC will rise in power and impose its political opinion upon countries in debt.

However, to secure its position as a world power, PRC may be forced to withdraw its support of DPRK's radical and dangerous missions. The Council on Foreign Relations, Scot Snyder and See-won Byun, of the Asia Foundation accurately summarized the nuclear tests recently conducted by DPRK as a "demonstration of the tension between PRC's emerging role as a global player with increasing international responsibilities and prestige and a commitment to DPRK as an ally with whom PRC shares longstanding historical and ideological ties." Recognizing its role as a responsible global leader, in 2006, abiding by the UN Security Council Resolution 1718, PRC agreed to impose sanctions on Pyongyang after DPRK's testing of nuclear weapons. Again in May 2009, PRC agreed to imposing stricter sanctions on Pyongyang after DPRK's second nuclear test (UN). Thus, disregarding its traditionally strong ties with DPRK, PRC has dropped its diplomatic approach in favor of a more strategically sound punitive approach. PRC is now more willing to criticize DPRK's actions instead of protecting or overlooking them. New leaders in PRC are no longer interested in maintaining friendly or cordial relations with the "Dear leader" of DPRK. In fact, Chinese officials are starting to view him as nothing short of an embarrassment, as they have begun to recognize the prospective drawbacks of supporting DPRK.

Under these circumstances if DPRK were to suffer a nuclear disaster, although PRC would extend its help, the adequacy of the aid is uncertain. DPRK will thus be forced to accept aid from other neighboring nations as well. Close involvement with its neighboring capitalistic nations could perhaps help DPRK realize the benefits of switching to a capitalistic economy. Moreover, nations providing aid to DPRK will be in a better position to negotiate economic and/or political terms in exchange for aid. The dire situation resulting from the nuclear disaster will leave DPRK with no choice but to concede to their demands.

Another factor that strengthens the speculation that DRPK will embrace capitalism is its recent willingness to engage negotiations. After a constructive bilateral meeting with the US on nuclear proliferation in August 2011, DPRK agreed to resume the six party talks without any preconditions. DPRK has also agreed to let U.N. inspectors verify its uranium enrichment program, one of the most controversial nuclear programs in the world (Council on Foreign Relations). This indicates a significant improvement in its international relations, unlike in the past when DPRK declared that it would

“never again take part in such six party talks” or “be bound by any agreement reached at the talks” (The National Committee on DPRK). At the time, DPRK also expelled nuclear inspectors from the country and announced its intention to resume its nuclear weapon program. The recent relaxation in its approach is perhaps an indicative of its intention to arrive at peaceful terms through negotiation.

Several attempts have been made in the past to peacefully negotiate with DPRK, including the North Joint Communiqué in 1972, the Korean National Community Unification Formula in 1989, and the Joint Declaration of the Denuclearization of the Korean Peninsula 1992 (East Asian Review). However, one of the most significant efforts in this regard was the implementation of the sunshine policy in 1998 by Kim Dae Jung. The sunshine policy allowed ROK to actively cooperate with DPRK without any armed provocations. ROK enforced this policy in the hope of establishing an inter-Korean alliance that will gradually promote the peaceful unification of the two Koreas, with the two countries understanding and respecting each other while promoting mutual benefits. In return for financial aid from ROK, DPRK had to invest honest efforts in reforming its ways (BBC News). ROK had invested around 2 billion dollars by the end of the program in 2008 through different methods such as investing in fertilizers during the 1999 food shortage, donating up to 218,000 tons of corn and flour in 2000, and shouldering a burden of 3.22 billion dollars to improve DPRK’s light water nuclear reactors (East Asian Review). Unfortunately, DPRK did not honor its end of the deal, and the sunshine policy was repealed, with many believing it to be a failure (International Business Times). However, contrary to popular opinion, the sunshine policy actually succeeded in improving trade relations between DPRK and ROK. In accordance with the policy terms, the ROK government relaxed regulations and simplified procedures for economic transactions with private enterprises in DPRK. It also created conditions conducive for economic exchange and cooperation between the two nations. During the initial phase of the sunshine policy, many ROK companies started investing in DPRK, forging a bond between the two countries (East Asian Review).

While a nuclear disaster will cripple DPRK economically, it will also force DPRK to review and reform its economic and political strategies in the interest of survival. The pressure to secure aid from neighboring countries, including PRC, will drive DPRK toward creating a stronger economy. Although PRC currently has a communist government, its economy is capitalistic. Experts predict that in

40 years, PRC will emerge as a democratic nation and abandon its communist principles (Foreign Policy). This will deprive DPRK of a key factor that was common between the two countries. Thus, the need to align with its longstanding ally, PRC, coupled with pressure to secure a steady stream of aid to support its nation-building efforts in the wake of a nuclear disaster will eventually propel DPRK in the direction of democracy and liberalization of trade. While a nuclear disaster is one of the worst tragedies that can befall a nation, in the case of DPRK, ironically, such a setback may actually be its first step in the right direction.

Factors That Will Secure Financial Aid During a Nuclear Catastrophe

In the face of a nuclear catastrophe, DPRK may not be able to exclusively rely on aid from strongest ally—the PRC—because of the escalating tensions between the two nations. However, despite DPRK's aggressive stance and its poor diplomatic ties, the international community will extend its support to this country for a number of reasons. This section explores some of the key ones among them.

Altruism and empathy from nations that have experienced the horrors of nuclear catastrophes is naturally one of the foremost reasons for extending aid. Worldwide organizations such as UNESCO, UNICEF, and UNDP that are committed to helping nations in need will also offer support. In fact, these organizations continue to extend technological and economical aid to countries and regions that were affected by the Chernobyl disaster (Ukrainian National Chernobyl Museum). Countries such as Switzerland, Canada, and Germany who have actively contributed to alleviating the effects of the Chernobyl disaster can also be expected to lend support to DPRK in the event of a nuclear disaster (Ukrainian National Chernobyl Museum). While foreign intervention will prevent the fragile DPRK economy from crumbling, the country will need additional forms of support to ensure its long-term survival.

Neighboring countries, for instance, can play an important role in ensuring the survival of DPRK. In 1986, the country that was worst hit by the Chernobyl disaster was, surprisingly, not Ukraine but Belarus, located north of Ukraine (Foroughi). Later, radioactive particles spread further westward and northward, affecting other countries such as Sweden, Scandinavia, and Poland (Ukrainian National Chernobyl Museum).

However, the Soviet government's attempts at concealing the details of the incident prevented the neighboring nations from actively and effectively responding to the crisis. In fact, even the victims of Chernobyl and Pripjat were not informed of the potential hazards of nuclear radiation (Volkov). However, today, if a nuclear accident were to occur in the DPRK, it would be impossible to conceal this information from neighboring nations such as Japan, ROK, and PRC given the technological advancements in information dissemination, including advanced satellite imaging system (Gilman). Moreover, the measures taken by the neighboring countries to counter the radiation effects will ensure the safety of their people as well as the citizens of DPRK, to some extent.

Neighboring countries will also invest efforts in preserving shared natural resources. For instance, ROK, Japan, PRC, and DPRK are equally dependent on a critical natural resource—the sea. A nuclear disaster in DPRK will cause permanent damages to the marine ecology and adversely affect the other countries. Efforts taken by the neighboring nations to protect the marine life will also benefit DRPK.

The recent explosion of the nuclear reactor in Fukushima, Japan, led to an immediate decline in Japanese exports. The sharp fall in the demand for Japanese products significantly damaged the economy (The Economist). Tourism in Japan also suffered a setback because of the rising fears of radiation (Financial Culture). A nuclear disaster in DPRK would have similar effects on the east Asian economy. Thus, despite its hostile past, Japan would be obliged to help DPRK.

For similar reasons PRC will also have extend its help to DPRK, despite the growing tensions between the two countries. Like Japan, PRC depends on the natural marine resources. As it shares a border with DPRK, PRC is more likely to suffer the repercussions of a nuclear disaster. From a political viewpoint, PRC might want DPRK to act as a buffer between itself and the United States, which can be another reason for extending support to DPRK.

Of all the neighboring nations, ROK will be the most supportive, although for reasons that are vastly different from those of Japan and PRC. ROK also shares a border with DPRK, and to safeguard the welfare of its citizens, it will also undertake efforts that will benefit the DPRK. However, another factor that will spur ROK into action is the likelihood of a reunification of the two nations. An economic slump in DPRK may completely thwart ROK's hopes of gaining access to valuable resources within DPRK borders (Peimani). Before the Second World War, ROK and DPRK were a unified nation known Dangun (Soh, Leitich). The

heightened chances of reunification, brought on by the threat of nuclear devastation, may enhance cooperation between DPRK and ROK and, in turn, the latter may safeguard DPRK's valuable resources from being obliterated.

The unification would grant ROK access to another precious resource: the cheap labor force in DPRK. High labor wages in ROK have led most manufacturing firms in the country to set up factories in places such as PRC and Vietnam (Peimani). By tapping into the cheap labor available in DPRK, ROK will be able to substantially boost its industrial exports and circulate money within its own country. The mineral reserves of DPRK represent yet another valuable resource. Despite being one of the major manufacturing countries, ROK lack mineral resources (Peimani). In fact, minerals accounted for 50.5% of the total imports of ROK in 1999 (Peimani). Access to new mineral resources, as a result of the unification, would greatly strengthen the economy of ROK, leading to a drastic reduction in imports and an increase in exports.

Counterargument

It has been widely speculated that in the wake of a nuclear disaster, DPRK—infamous for its reclusiveness and extreme self-pride—will be forced to forge relations with foreign countries to secure aid. The willingness to engage with other countries can actually result in positive consequences for the economy of DPRK. However, experts argue that most countries will be unwilling to lend a helping hand given that the benefits of such an exercise would be marginal.

DPRK is known to house one of the most active and potentially dangerous nuclear power plants in the world. There is no doubt that an explosion will lead to complete annihilation of the land, its people, and its economic and political structures. The destruction that will result from the release of radioactive substances into the air and soil is unimaginable. It is plausible that no country will extend help to a nation that expresses blatant disregard for nature and life.

However, as discussed earlier, the effects of a nuclear disaster are rarely localized. Efforts undertaken by border countries to mitigate the effects of radiation will benefit DPRK, even if the countries are not in favor of offering aid. In fact, DPRK's technologically advanced neighbors—Japan, PRC, and ROK—are likely to divert substantial resources to clear the region of nuclear wastes and radioactivity. Although acting in their own interests, they will inadvertently help

DPRK. Further, strategic allies of ROK, which is bound to be adversely affected by a nuclear disaster in DPRK, may be compelled to assist DPRK in the course of extending aid to ROK. Thus, it is unlikely that DPRK will be boycotted by the entire international community.

PRC represents another roadblock that could impede DPRK's economic revival after a nuclear disaster. PRC and DPRK have shared cordial relations. PRC has been DPRK's main trading partner and its primary source of fuel, food, arms, and other vital resources. This almost parasitic affiliation began during the Korean War in 1950 when PRC lent political and economic support to Kim Jong-Il and Kim-Il Sung (Council on Foreign Relations). However, the relationship between these two countries has not always been smooth. PRC has, in the past, threatened to withdraw its support to indicate its displeasure with many of the actions and decisions of DPRK. The two nuclear tests in Pyongyang in October of 2006 and May 2009 led PRC to take a firm stand on DPRK (Council on Foreign Relations). Given the escalating tensions, a nuclear explosion in DPRK may serve as the final blow on the relationship. In other words, PRC may choose to not support DPRK in the face of a nuclear catastrophe.

However, such a move by PRC is unlikely given that DPRK plays the vital role of a buffer between the United States and itself. PRC relies on DPRK to protect it against any further encroachment by the US (Council on Foreign Relations). For instance, despite the large-scale chaos resulting from the Chernobyl disaster, the Soviet Union invested money, time, and energy in restoring the Chernobyl area because it was worried that Chernobyl, in its weakened state, would become vulnerable to the capitalistic practices of the United States. The Soviet Union did not want political interference from the United States in Eastern Europe, especially in an area that was a key strategic zone (World Nuclear Association). Similarly, after a nuclear explosion in DPRK, PRC will lose no time in providing aid and resources, because it may not want to relinquish its hold over such a strategically located nation.

Finally, experts argue that foreign nations would be unwilling to forge alliances with DPRK because the country is unreliable and symbolizes negativity. They believe that a nuclear explosion would elicit volatile and distasteful behavior from DPRK, which act as a deterrent to the growth and development of another country. While countries may initially hesitate to form a relationship with a disaster-struck DPRK, they may change their stance once they learn of its strategic location and natural resources. Their need for power will fuel their interest in

DPRK. A calamity tends to unite nations. Thus in the event of nuclear tragedy, even a reclusive and guarded country such as DPRK will have no choice but to open itself up to new opportunities, and other countries will have no choice but to abide.

Conclusion

Logically, one could argue that in the event of a nuclear disaster in DPRK, PRC will single-handedly aid DPRK, monopolize its economy, and acquire complete control over the relationship between the two nations, and thus emerge as the world's largest global power. Even if the relationship between the PRC and the DPRK relaxes long enough for democratic and capitalist nations, such as the United States or the Republic of Korea, to intervene in the process of rebuilding the economy, the geographic proximity of DPRK to PRC would make it uneconomical for the US to import goods all the way into the country.

However, before predicting such a bleak outcome, one must also remember the United States and the ROK's desperate need for fiscal reconciliation with DPRK. The international community has held the six party talks, instituted a ridiculously expensive and Nobel Peace Prize selection policy, and offered billions of dollars to fulfill the pharmaceutical and food needs of DPRK. The looming threat of a nuclear disaster is likely to prompt DPRK into formulating policies that favor increased trade between the DPRK and other wealthy countries outside east Asia, because most East Asian economies will be as severely affected. Thus, DPRK will come to depend heavily on European countries and the U.S for aid.

This reliance would then improve the relationship between DPRK and the United States, as economic reliance typically results in future economic alliance. This relationship can pave the way for DPRK's transformation into a nonaggressive, cooperative member of global politics, on the strength of its liberalized trade relations with other nations and the re-establishment of the Kim regime.

Currently, the only factor contributing to DPRK's state of complete economic stagnation is its ideal of *juchae*, or political self-sufficiency or self-reliance. A nuclear meltdown, however tragic, seems to be the only incident grave enough to spur Pyongyang into action toward economic improvement, without the involvement of nuclear power, reclusiveness or arrogant independence. Although the relations between DPRK and the rest of the world are unsteady at

best, in times of a nuclear disaster, such matters are hardly of any concern. This is evidenced in the foreign support extended to Chernobyl and Fukushima victims, both in the form of pharmaceutical and food supplies.

DPRK has the potential to become an economically and politically strong nation after a nuclear disaster. With DPRK's inclusion in the world economy, a number of pressures will be eased off the world's shoulders, especially concerns related to nuclearization, securing basic human rights, and a decrease in military size from the army's current strength 1.19 million personnel.

Despite popular opinion, the DPRK is not entirely an incorrigibly secluded state. There is no doubt that DPRK has the capability to build from its rubble; however, first there must be rubble.

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