Chapter 10

North Korea's Reactivated Nuclear Weapons Program

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I. Introduction

The situation in North Korea in 2021 has two differences and one continuation from 2020. The first difference is that the President of the United States is replaced with Joe Biden. Trump's presidency has made no real contribution to North Korea's abolition of nuclear weapons development, except for three meetings with North Korean leader Kim Jong-un. Moreover, when Biden took office, North Korea gradually increased tensions with U.S. diplomacy in the first half of 2021, as a review of North Korea's policy had yet to be released. The second difference is that the floods in 2021 will cause a crisis in food production in North Korea, resulting in a wave of flights from North Korea. A continuation refers to the novel coronavirus pneumonia (COVID-19). It has been rampant since 2019 and is not expected to subside significantly by 2021. In order to prevent COVID-19 from entering North Korea, North Korea has closed its borders and conducted a self-imposed blockade that is more thorough than the United Nations economic sanctions.

II. North Korea's Nuclear Weapons Development

North Korea displayed a submarine-launched ballistic missile at a military

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parade in January 2021 but did not test-fire the missile. Since the parade was held before President Joe Biden's inauguration, drawing the Biden administration's attention should be its primary purpose. Further, North Korea's failure to progress nuclear weapons development should be the main reason. North Korea's past behavior has usually been to test-fire and then announce that the missiles have been successfully test-fired and that they are nuclear warhead capable. However, in 2020, North Korea held a night parade, except for the display of the 22-wheeled truck and the "Mars-15" (Hwasong-15) intercontinental ballistic missile, the relevant information of the missile disappeared and has not been reported. Therefore, it is reasonable to suspect that the missile demonstrated in 2020 is a prototype that has not yet been successfully developed. By 2021, the missile has not yet broken through the development bottleneck. Therefore, North Korea has neither test-fired nor publicized it nor intimidated neighboring countries.

1. North Korea's Refusal to Communicate

Two incidents in North Korea in January 2021 are worth noting. First, North Korean leader Kim Jong-un told the Labor Party's National Convention on January 5 that while strengthening the threat of nuclear weapons, he must also do his best to build the most powerful military possible. Kim Jong-un also said that the nature of the U.S. and its basic policy of hostility toward North Korea would never change, no matter who is in charge of the U.S. president. In addition, Kim Jong-un has identified the United States as North Korea's greatest enemy and an obstacle to innovation. Second, on January 15, as Biden was about to take office, North Korea held a military parade. Among the weapons on display, the most notable was the Pukguksong-5 submarine-launched ballistic missile, which the Korean Central News Agency (KCNA) even called "the most potent weapon in the world."

[&]quot;Kim Jong-un: US is North Korea's 'biggest enemy'," *Deutsche Welle*, January 9, 2021, https://p.dw.com/p/3nine; "Incumbent Kim Jong-un Vows to Strengthen Nuclear Weapons Development," *Central News Agency*, January 13, 2021, https://www.cna.com.tw/news/firstnews/202101130052.aspx.

² Jiang Yuzhen, "North Korea's Military Parade Showcases Submarine-launched Ballistic Missiles, Shouting to Biden with a Strong Military Attitude," *China Times News*, January 15, 2021, https://www.chinatimes.com/real timenews/20210115004722-260417?chdtv.

However, the missile has not been tested, and North Korea has not claimed success in its development, so its effectiveness is questionable.

President Biden, who took office on January 20, has not immediately taken a position in North Korea. White House Press Secretary Jen Psaki said at a January 22 press conference, "President Biden believes, without question, that North Korea's nuclear ballistic missiles and other proliferation-related activities pose a serious threat to world peace and security and undermine the nuclear on-proliferation establishment. Our core interest, like that of Japan, remains to deter North Korea." Then, from March 16-18, Secretary of State Antony Blinken and Secretary of Defense Lloyd Austin attended "2+2 talks" with Japan's foreign and defense chiefs, followed by a visit to South Korea and participation in another "2+2 talks". The purpose of these two meetings was to reaffirm the U.S. security commitment to its two allies in Northeast Asia to maintain stability, security, and prosperity in the Indo-Pacific region and around the world.

North Korean Vice Minister of Labor Kim Yo-jong, speaking through the official North Korean newspaper Rodong Sinmun on March 16, said she had been informed of the South Korean authorities' aggressive war drills against North Korea that began on March 8, warning that it would be difficult for the two Koreas to return to the "spring of three years ago." Kim stressed that "if the U.S. wants to sleep soundly for the next four years, it would be better not to create a situation where it cannot sleep in the first place".⁵

In fact, since mid-February, the U.S. has tried unsuccessfully to contact North Korea through various channels, such as phone calls, emails, and even through third countries. North Korean Deputy Foreign Minister Choe Son-hui, attending a working meeting between North Korea and the United States in Singapore on March 18, said that the main reason for the failure of these approaches is that North

^{3 &}quot;Press Briefing by Press Secretary Jen Psaki and National Economic Director Brian Deese," The White House, January 22, 2021, https://www.whitehouse.gov/briefing-room/press-briefings/2021/01/22/press-briefing-by-press-secretary-jen-psaki-and-national-economic-director-brian-deese/.

^{4 &}quot;Secretary Blinken's Travel to Tokyo and Seoul," U.S. Department of State, March 10, 2021, https://www.state.gov/secretary-blinkens-travel-to-tokyo-and-seoul/.

Wu Yingfan, "Kim Yo-jung Fires Again, I can't Read the United States, Choke on Biden First," Zhongshi News Network, March 16, 2021, https://www.chinatimes.com/realtimenews/20210316001227-260408?chdtv.

Korea believes that these U.S. "cheap tricks" are simply a way to stall for time and gain public support.⁶

2. Restart of Nuclear Facilities and Missile Test Launch

On March 1, 2021, Rafael Mariano Grossi, director of the International Atomic Energy Agency (IAEA), said to the General Council that no enriched uranium production had been detected at Yongbyon in North Korea but some movement had been detected at Kangson. Grossi added that although there is no sign that the 5-megawatt nuclear reactor is operating, the steam plant at the radioactive chemical laboratory shows signs of operation. This means North Korea is not communicating with the U.S. but is beginning to raise tensions.

On March 25, North Korea test-fired two tactical guided weapons, successfully hitting a target 370 miles away in the Sea of Japan. It has been about a year since North Korea's last missile test. According to a report in the South Korean newspaper JoongAng Daily, the test launch was the second in 2021, with the first one occurring on January 22. The timing of the test launch was similar to last year's, but some observers thought it was a review North Korea's protest due to the recent joint visit of Blinken and Austin to Japan and South Korea, as well as the U.S. North Korea policy review. Biden warned that if North Korea continued to test-fire missiles to escalate the situation, the U.S. would respond accordingly. 10

^{6 &}quot;North Korea Says U.S. Uses 'Cheap Tricks' to Reach North Korea for Dialogue with U.S. as a 'Waste of Time," *Voice of America Cantonese*, March 18, 2021, https://www.voacantonese.com/a/ North-Korea-says-US-initiates-to-contact-is-cheap-trick-20210318/5819618.html.

⁷ "IAEA Director General's Introductory Statement to the Board of Governors," *IAEA*, March 1, 2021, https://www.iaea.org/iaea-director-generals-introductory-statement-to-the-board-of-governors - 1-march-2021.

Alexander Smith, "Kim Jong Un and North Korea Make a Splash for Biden with Ballistic Missiles," *NBC News*, March 26, 2021, https://www.nbcnews.com/news/world/north-korea-makes-splash-biden-ballistic-mis sile-salvo-n1262130. *Yonhap News Agency* pointed out that North Korea launched a cruise missile on March 21, please see "North Korea Test-fired a Long-range Cruise Missile, which Accurately Hit a Target 1,500 kilometers Away! Range Covers Most of Japan," *Wind Media*, September 13, 2021, https://www.storm.mg/article/3936440.

⁹ Quoted in Yang Mingwei, "Rise of Rivalry: U.S.-DPRK Restart Dialogue Looming," *China Times*, March 26, 2021, https://www.chinatimes.com/amp/realtimenews/20210326000672-261601.

Joshua Gallu and David Wainer, "Biden Warns North Korea of 'Responses' to More Missile Tests," *Bloomberg*, March 26, 2021, https://www.bloomberg.com/news/articles/2021-03-25/biden -warns-north-korea-of-respons es-to-more-missile-tests.

On April 28, Biden told a joint congressional meeting that he described North Korea and Iran's nuclear programs as a "serious threat" and pledged to work with allies to respond through diplomacy and severe deterrence. On April 30, White House Press Secretary Psaki said in an informal meeting with reporters aboard U.S. Air Force One that a policy review of North Korea had been completed. The U.S. government will take a "calibrated, practical approach, keeping an open mind and exploring diplomatic approaches with North Korea to make real progress to enhance the security of the U.S., its allies, and the garrison."

The North Koreans also responded. On May 2, North Korean Foreign Minister Kwon Jong-gun warned the U.S. that if Washington continues to respond to U.S.-North Korea relations with outdated policies derived from Cold War thinking and perspectives, the U.S. will face "a severe crisis in the near future that will be more difficult to control." ¹²

3. Dialogue and Confrontation: A Two-pronged Strategy

On June 15, 2021, Kim Jong-un told the third plenary session of the 8th Central Committee of the North Korean Labor Party that a strategy of dialogue and confrontation should be prepared for the United States. U.S. Assistant to the President for National Security Affairs Jake Sullivan responded on June 20 that this was an exciting signal and that the U.S. was waiting for a clear signal from North Korea on whether to return to dialogue. North Korean Labor Party Vice Minister Kim Wooy-jung later said on June 22 that the U.S. had false expectations and that false expectations would lead to even greater disappointment.¹³

The U.S. remains hopeful that Kim Jong-un's proposed strategy for dialogue will be successful. Deputy Secretary of State Wendy Sherman met with South Korean Foreign Minister Chung Eui-yong and Unification Minister Lee In-young

[&]quot;Press Gaggle by Press Secretary Jen Psaki Aboard Air Force One En Route Philadelphia, PA," *The White House*, April 30, 2021, https://www.whitehouse.gov/briefing-room/press-briefings/2021/04/30/press-gaggle-by-press-secretary-jen-psaki-aboard-air-force-one-en-route-philadelphia-pa/.

[&]quot;N. Korea Says Biden 'Made Big Blunder,' Warns of 'Worse Crisis Beyond Control'," Yonhap, May 2, 2021, https://en.yna.co.kr/view/AEN20210502000651325?section=nk/ nk.

Fang Hua, "North Korea Responds to U.S. Kim Yo-jong's Claim that Washington is 'Wrong Expectations'," Radio France Internationale, June 22, 2021, https://pse.is/3hz9cb.

in Seoul on July 22. A statement following the meeting indicated that the two sides had decided to continue close consultations and bring North Korea back to the negotiating table.¹⁴

Regarding confrontation, the media cited the IAEA's published but not yet online 2021 report, which states that North Korea's nuclear reactor at Yongbyon began operating in early July 2021. Since on-site inspections were not possible, the start of operation of the reactor was inferred from the discharge of cooling water from the reactor in Yongbyon, mainly by satellite observation. In addition, satellite observation also reveals signs of mining and enrichment operations at the uranium mine and plant in Pyongsan County. The annual report states that there is no sign of operation at Ningbian from the beginning of December 2018 to the beginning of July 2021. The nuclear facility has a 5 MW reactor that can extract weaponsgrade plutonium from nuclear waste. Is In light of this, the U.S. response has been to engage in immediate dialogue with North Korea to achieve the complete denuclearization of the Korean Peninsula.

4. Further Military Parades and Ongoing Missile Test Firings

On September 9, 2021, North Korea again held a military parade at night. Although the parade was titled a celebration of the 73rd anniversary of North Korea's political establishment, it was an attempt to mobilize workers and farmers to create an image of internal unity and economic development. Therefore, no new weapons were displayed at the parade. In addition, the orange entire protective gear anti-epidemic squad showed that the North Korean authorities are not taking

Liya, "US-ROK Officials: Will Push North Korea Back to the Negotiating Table," VOA Cantonese, July 23, 2021, https://www.voacantonese.com/a/us-south-korea-north-korea-china-20210722/5976294.html

Francois Murphy and Josh Smith, "Renewed Activity at N. Korea Nuclear Reactor 'Deeply Troubling,' IAEA Says," *Reuters*, August 30, 2021, https://www.reuters.com/world/asia-pacific/north-korea-appears-have-restart ed-nuclear-reactor-iaea-says-2021-08-29/.

Doina Chiacu, "US Says North Korea Nuclear Report Shows 'Urgent Need for Dialogue'-Official," Reuters, August 30, 2021, https://www.reuters.com/world/china/us-says-north-korea-nuclear-report-shows-urgent-need-dialogue-official-2021-08-30/.

the COVID-19 pandemic lightly.¹⁷ After six months of silence, North Korea has continued testing-fire missiles. On September 15, North Korea launched two more ballistic missiles from the central inland region into the eastern seas.¹⁸ Notably, the missiles were test-fired from a train, demonstrating the mobility and accompanying survivability.¹⁹

III. The Stability of the North Korean Regime

1. Kim Jong-un's Health Situation is Again a Concern

Kim Jong-un's health is the key to the stability of the North Korean regime. If Kim Jong-un's health is not good, internal competition for the throne may occur, affecting North Korea's regime stability and even relations with neighboring countries. Kim Jong-un's appearances in 2021 increase considerably compared to 2020. However, the more appearances in 2021, the worse the health condition in 2020. Kim Jong-un's public appearances in 2021 include the National Convention of the Labor Party in January and the first plenary session of the 8th Central Committee of the Labor Party afterward, the second plenary session of the 8th Central Committee in February, several visits to the high-class residential complex in Punggyang from March to April, a performance in Pyongyang in May, the third plenary session of the 8th Central Committee in June, and the 8th Central Committee of the Labor Party in September and the third expansion meeting of the Political

^{17 &}quot;North Korea's Military Parade does not Show New Weapons, Workers, Peasants and Red Guards Become Protagonists," *Yonhap News Agency*, September 10, 2021, https://cb.yna.co.kr/gate/big5/cn.yna.co.kr/view/ ACK20210910001000881?section=nk/index.

^{18 &}quot;Details: North Korea's Test Launch of Long-range Cruise Missile, Kim Jong-un did not Attend to Observe," Yonhap News Agency, September 13, 2021, https://cb.yna.co.kr/gate/big5/cn.yna.co.kr/view/ACK20210913000400881?section=nk/index; "Details: North Korea Launches 2 Ballistic Missiles into Eastern Sea," Yonhap News Agency, September 15, 2021, https://cb.yna.co.kr/gate/big5/cn.yna.co.kr/view/ACK20210915002900881?section=nk/index.

[&]quot;North Korea Unveils 'Railway Missile Regiment' South Korean Experts: Higher Mobility and Survivability," Liberty Times, September 19, 2021, https://news.ltn.com.tw/news/world/breakingnews/3676996.

Bureau of the Eighth Central Committee of the Labor Party in September.²⁰

Despite Kim Jong-un's frequent appearances in 2021, there are still concerns about his health, For example, Kim had stayed out of public eyes for 24 days in May. On June 4, 2021, Kim Jong-un's appearance at the third plenary session of the 8th Central Committee drew even more attention. In the image, Kim Jong-un's face was visibly slimmer, and it was speculated that his weight might have decreased by 10 to 20 kilograms from the original 140 kilograms.²¹ In addition, on June 18, an image of Kim Jong-un was broadcast on North Korean Central Television, and his slimmer figure was also evident. The same news item includes a rare video clip of a Pyongyang citizen worrying about Kim Jong-un's health condition.²² In addition, from Kim Jong-un's public appearances from July 24 to 29, a green mark appeared on the back of his head, and an OK bandage was also shown on the same area, raising concerns about Kim Jong-un's health situation again.²³

2. Kim Yo-jong's Political Status is Uncertain

Compared to last year, when Kim Jong-un was in poor health, his sister Kim Yo-jung repeatedly spoke out, seemingly indicating her sudden rise in political status. The main observation is that Kim was formerly the first vice minister of the North Korean Labor Party, but when she spoke in January 2021, she was only a vice minister of the North Korean Labor Party. In other words, Kim's former position as chief vice-minister is no longer available. In addition, in January 2021,

Wang Peihua, "Bloody Leader → Slimming Oppa! Kim Jong-un's 'Recent Photo Directly Smaller' Chin Shocked Foreign Media: North Korea Has Concussion," *Zhongtian GOTV*, August 22, 2021, https://gotv.ctitv.com.tw/2021/08/1860594.htm; "Kim Jong-un chairs Workers' Party Politburo meeting to stress epidemic prevention and control," *Yonhap News Agency*, September 3, 2021, https://cb.yna.co.kr/gate/big5/cn.yna.co.kr/view/ACK20210903000500881?section=nk/index.

²¹ Hyung-Jin Kim and Kim Tong-Hyung, "N Korea's Kim Looks Much Thinner, Causing Health Speculation," Associated Press, June 16, 2021, https://apnews.com/article/coronavirus-pandemic-health-lifestyle-effd 61316feab540d6eb1922935ba1e2.

²² Alistair Coleman, "North Korea: Kim Jong-un Weight Loss Remark Aired on State TV," BBC News, June 28, 2021, https://www.bbc.com/news/world-asia-57634593.

²³ Jennifer Hassan, "Kim Jong Un's Mysterious Head Bandage Fuels Further Speculation about His Health," *The Washington Post*, August 3, 2021, https://www.washingtonpost.com/world/2021/08/03/kim-jong-un-bandage-health-rumors/.

the North Korean Labor Party added a first secretary, who is considered the second in command in North Korea, second only to Kim Jong-un. However, although the post of the first secretary was created, it was not immediately filled.²⁴ In light of Kim's reduced political status, it seems that she has no chance to be the first secretary of the Labor Party.

Combining the cases in 2020 and 2021 that Kim spoke publicly, it is found that she frequently did so when there were speculations on her brother's health condition in 2020. The situation remains the same in 2021. If Kim Jong-un's health had been on red in June and July 2021, Kim and Jong warned as early as March 2021 that relations between the two Koreas would not return to the "spring of three years ago." Thus, although Kim's title is declining rather than rising in 2021, her political status does not seem to be related to her title, judging from the frequency and force of her speeches.

IV. The Challenges Posed by North Korea and the Response of Related Countries

North Korea's reluctance to abandon nuclear weapons development and its continued missile tests are the most significant security challenges to regional countries from the past to the present. In addition, North Korea is experiencing flooding and a significant reduction in food production, which may lead to a possible exodus as an additional challenge for regional countries. The following is a summary:

1. Security Threats

After Biden took office, he changed the diplomatic strategy of former President Trump to deal with international issues alone and instead joined forces with allies to deal with them. For example, during Biden's visit to Europe, the seven major

²⁴ Zhang Yousheng, "The First Secretary of the North Korean Labor Party, Only Jin Zhengne," UDN, August 2, 2021, Https://udn.com/news/story/6809/5502867.

industrialized nations issued a joint statement on June 13 urging North Korea to denuclearize the Korean Peninsula and welcome the U.S. diplomatic approach to the North Korean nuclear issue. ²⁵ The next day, the North Atlantic Treaty Organization (NATO) also issued a joint statement calling on North Korea to denuclearize the Korean Peninsula in accordance with the principles of Complete, Verifiable, Irreversible, Denuclearization. ²⁶ These are all part of the Biden administration's efforts to unite allies to address international security threats.

In addition to its allies in Europe, the U.S. needs to strengthen its alliance with South Korea in response to the security threats posed by North Korea. On August 2, Kim called on South Korea to stop the joint military exercises, stressing that the exercises would damage the prospects for improved relations between the two Koreas. This is the second time that Kim has spoken on the joint military exercises after she warned in March that it would be difficult for the two Koreas to return to the "spring of three years ago." The Ministry of Defense said, however, it would continue to consult with the U.S. on the joint exercises. U.S. Defense Department spokesman John Kirby also said that all matters related to the joint exercises are decided through close consultation between South Korea and the U.S. and that South Korea has not requested that the joint exercises be canceled.²⁷

On August 10, when rehearsals for the joint military exercises began, Kim said that the U.S.-South Korean military exercises were exacerbating the unstable situation on the Korean Peninsula and that North Korea would develop a preemptive strike capability in response to the growing military threat from the United States.²⁸

^{25 &}quot;G7 Calls for 'Complete' Denuclearization of Korean Peninsula," The Korea Times, June 14, 2021, https://www.koreatimes.co.kr/www/nation/2021/06/120 310433.html.

²⁶ Ji-Sun Choi, "NATO Calls for 'Complete, Verifiable, Irreversible' Denuclearization of N. Korea," *Dong-A Ilbo*, June 16, 2021, https://www.donga.com/en/article/all/20210616/2725315/1/NATO-calls-for-complete-verifiable-irreversible-denuclearization-of-N-Korea.

^{27 &}quot;Kim Yo Jong Calls for End to South Korea-U.S. Joint Military Exercise, U.S. Department of Defense: South Korea Never Asked for Cancellation," *Liberty Times*, August 4, 2021 https://news.ltn.com.tw/news/world/breakingnews/3626577.

^{28 &}quot;Dissatisfied with U.S.-South Korea Joint Military Exercise with Reduced Scale, Pyongyang Says to Improve Pre-emptive Strike Capability," *Voice of America Cantonese*, August 10, 2021, https://www.voacantonese.com/a/north-korea-warning-20210810/5997194.html.

2. Floods and Food Shortages may Generate Refugee Flows

In response to the delayed outbreak of COVID-19, North Korea closed its borders in January 2020 in an effort to keep the epidemic out of the country, making it more severe than the economic sanctions imposed by the United Nations.²⁹ As a result, North Korea has claimed to have no confirmed cases in the country so far.³⁰ According to the World Health Organization (WHO), from January 3, 2020, to September 3, 2021, there were zero confirmed cases of COVID-19 in North Korea.³¹ North Korea's average trade and smuggling channels, on which it relied, have been almost completely cut off.³² Hence, North Korea's economic situation has deteriorated into a severe recession, and diplomats from many countries have been unable to maintain primary, everyday living conditions in North Korea and have had to return to their home countries.³³ If this was the case for diplomats in North Korea, imagine what average citizens are going through.

Crop failures have exacerbated the long-standing food shortage in North Korea due to floods. According to a report released by the United Nations Food and Agriculture Organization (FAO) on June 14, 2021, North Korea is expected to have a shortage of 535,000 tons of rice, 407,000 tons of corn, and 106,000 tons of barley between November 2020 and October 2021. The shortage was estimated to reach 858,000 tons, despite the possibility of importing 205,000 tons of grain. On June 15, Kim Jong-un said at the opening day of the third plenary session of the

²⁹ Ken Dilanian, Carol E. Lee and Dan De Luce, "North Korea Has More Nuclear Weapons than Ever. What Should Biden Do?," NBC News, April 17, 2021, https://www.nbcnews.com/politics/national-ecurity/north-ko rea-has-more-nuclear-weapons-ever-what-should-biden-n1263983.

³⁰ According to the testimony of a former North Korean defector, the reason North Korea has had no confirmed cases of COVID-19 is that there are simply no tests available. See Hyung-Jin Kim, "North Korean Defectors, Experts Question Zero Virus Claim," *Associated Press*, October 20, 2020, https://apnews.com/article/ap-top-news-north-korea-international-news-seoul-virus-outbreak-c94f460ca06cb5e9fe18d74dd4515750.

³¹ See WHO webpage, https://covid19.who.int/region/searo/country/kp.

Robert King, "Number of North Korean Defectors Drops to Lowest Level in Two Decades," Center for Strategic & International Studies, January 27, 2021, https://www.csis.org/analysis/number-north-korean-defectors-drops-lowest-level-two-decades.

^{33 &}quot;North Korea: Russian Diplomats Leave by Hand-pushed Trolley," BBC News, February 26, 2021, https://www.bbc.com/news/world-asia-56206033.

^{34 &}quot;The Democratic People's Republic of Korea Food Supply and Demand Outlook in 2020/21 (November/ October)," Food and Agriculture Organization of the United Nations, June 14, 2021, https://reliefweb.int/sites/reliefweb.int/files/resources/cb5146en.pdf.

8th Central Committee of the North Korean Labor Party that the Party and State "attach the highest priority to agricultural production and urgently need to secure food production with the efforts of the whole Party and the whole country.³⁵ In August 2021, North Korea began to release grain reserves.³⁶ On September 2, Kim Jong-un told the third expansion meeting of the Political Bureau of the 8th Central Committee of the North Korean Labor Party that all efforts would be mobilized to ensure adequate agricultural supplies and equipment for the transportation, processing, and distribution of grain.³⁷ All of these demonstrate the importance Kim Jong-un attaches to the issue of food security while confirming the FAO's forecast of a food shortage. The UN-affiliated World Food Programme (WFP) is reported to have distributed food to about 140,000 people in North Korea in early September 2021.³⁸

If the food shortage problem is not improved, it could lead to a refugee wave. Such a situation occurred in 1995-1998 when North Koreans fled due to a prolonged food shortage, and the current shortage could lead to another wave of refugees. As a result, the North Korean people and the North Korean military may defect. Moreover, since the troops guarding the border have the advantage of location, it is easier for them to flee to China. In view of this, the Pyongyang authorities have been building additional facilities such as wire fences and walls along the North Korean border with China since August 2020. In order to prevent the defection of soldiers on border-containment duty, middle-ranking military officers were sent to supervise the construction of the blockade. North Koreans crossing the border illegally. Therefore, to prevent North Koreans from crossing

[&]quot;Kim Jong-un Admits Severe Food Shortages: Deciphering Four Basic Problems of North Korea's Food Shortage," BBC Chinese, June 20, 2021, https://www.bbc.com/zhongwen/trad/world-57526363.

^{36 &}quot;North Korea Feeds War Rations to the Poor after Heatwave Ravages Food Supply," ABC News, August 4, 2021, https://www.abc.net.au/news/2021-08-04/north-korea-feeds-war-rations-to-the-poor/100347846.

^{37 &}quot;North Korea Holds Politburo Meeting Calls for Strengthening Epidemic Prevention," Wen Wei Po, September 3, 2021, https://www.wenweipo.com/a/202109/03/AP613184f2e4b08d3407d7fdc5.html.

^{38 &}quot;The 140,000 Flood Victims in North Korea Have Food to Eat! WFP to Help," Storm Media, September 14, 2021, https://www.storm.mg/article/166126.

^{39 &}quot;Severe Food Shortage, North Korean Defense Soldiers Defect, China-DPRK Border Builds Wall," UDN, August 28, 2021, https://udn.com/news/story/6809/5705732?from=udn-catelistnews ch2.

the border illegally, China has maintained its existing troops stationed at the border and its second-line police force and installed a large number of surveillance devices in dead-end areas as a precautionary measure. ⁴⁰ Although China and North Korea have had a blood alliance in the past, and the two countries have had to strengthen their bilateral relationship in the current international environment, China has taken every precaution against North Koreans crossing the border illegally.

V. Conclusion

At the beginning of 2021, Kim Jong-un may have already made a pre-emptive plan to fight against the U.S. and interrupt the communication channel with the U.S. to force the U.S. to give in first. The reluctance of Biden to adopt the wishy-washy approach of former President Trump after taking office has caused tensions to continue to rise in North Korea. The March and August reports of the International Atomic Energy Commission show signs of a resurgence in North Korea's nuclear weapons development. While the border closure policy to prevent the entry of COVID-19 into North Korea has already caused the economy to decline, the food shortage caused by the floods could lead to a wave of refugees. Although Kim Jong-un announced on June 15 that he would adopt a two-pronged strategy of confrontation and dialogue with the U.S., there has been no progress on the dialogue yet. Since that declaration, North Korea has conducted another missile test launch since September 11 to increase pressure on the U.S., indicating that Kim Jong-un continues to take a confrontational approach. Kim Jong-un's thinking is that the more tension he creates externally, the more he can gain from the dialogue at that time. Although it is not known how long North Korea's increasing posture will last, Kim Jong-un's announcement at the third expansion meeting of the Political Bureau of the 8th Central Committee of the Labor Party on September 2 to mobilize all forces to ensure sufficient agricultural supplies and

^{40 &}quot;Brothers will settle accounts! China Deploys Great Wall of Surveillance to Defend North Korean Refugees," Liberty Times, July 21, 2021, https://news.ltn.com.tw/news/world/breakingnews/3610960.

equipment, and to do an excellent job of transporting, processing and distributing food, as well as holding a night parade to unite workers and farmers on September 9, indicate that Kim Jong-un is not willing to show weakness. The question is, how far will Kim Jong-un raise tensions? If the U.S. decides not to respond to the rising tensions without North Korea taking the lead in abandoning its nuclear weapons development, North Korea's current economic, flooding, and food problems will not be enough to sustain a foreign war, but it will most likely adopt a strategy of gradual brinkmanship. Test firing of missiles is the way it has always been done and will most likely be one of the options to be adopted in the future. Either by increasing the frequency of test firings or moving the target area closer to South Korea or Japan to create more pressure to gain a more significant advantage in the dialogue with the United States.