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North Korea, Factor 17: Good Governance

### **North Korea: Political Change to Redefine Food Development**

Global hunger is a direct and indirect threat to every person on the planet. The World Food Program estimates that one in nine people on Earth do not have enough food to sustain a healthy lifestyle (World Food Programme). Food insecurity threatens nations and their neighbors across the globe. Global food insecurity leads to famine, wars, disease and political strife that make our planet less secure and safe for all inhabitants.

North Korea is a geographically small, mountainous nation in northeastern Asia. It is located between China and the Republic of South Korea. It occupies the northern half of the Korean peninsula. It has a land area of roughly 120,500 square kilometers. This nation was created as the Democratic People's Republic of Korea (DPRK) in 1953 following a bloody conflict known in the United States as "The Korean War." Officially speaking, the Korean War has never ended. In 1953, the conflict ended in a stalemate between the communist North and the democratic South. The two nations are divided by the 38th parallel (Wikipedia).

North Korea has approximately 25 million inhabitants. The population has increased by 8 million people over the past 35 years. North Korea has a continental climate with four distinct seasons. Long winters bring very cold and clear weather with snowstorms as a result of northern winds that blow from Siberia. Summer tends to be short, hot, humid, and rainy because of the southern monsoon winds that bring moist air from the Pacific Ocean. Spring and autumn are transitional seasons marked by mild temperatures and variable winds (CIA World Factbook). Over the past several years, North Korea has experienced more extreme drought conditions; summer rains have become less predictable and reliable. This has negatively impacted agricultural production in a country where less than 20% of the land is considered arable (CIA World Factbook).

The DPRK is one of the world's last ideologically extreme communist states. In the West, the DPRK is categorized as a communist dictatorship. Kim Il-Sung founded the national government. It is presently ruled by his grandson Kim Jong-Un. He is known by the citizens of the nation as "our supreme leader." The DPRK is unofficially known in the West as "the Hermit Kingdom" (Wikipedia). The reason for this label is the fact that it is a bizarre, secretive and closed society. There is a "cult of personality" surrounding the leading communist elite. They are viewed as "God like beings" to most North Korean citizens. This notion of government is difficult for most other citizens of the world to comprehend.

As a student interested in history, world affairs and politics, I have a distinct interest in North Korea; and the issues facing its citizens due to the misbehavior and destructive actions of the government there. According to many international experts, the ruling regime of the DPRK is directly or indirectly responsible for the deaths of millions of its citizens over the past three decades.

Prior to the 1990s, the DPRK actually achieved relatively high levels of human development in terms of life expectancy, infant mortality, access to health services, and access to clean water and sanitation. In the early 1990s, several factors (such as the collapse of the Soviet Union, several natural disasters, and several massive misguided government projects) caused the situation in North Korea to drastically decline. According to the UN, after 1990, many of the Human Development Index indicators (such as per capita income, life expectancy, and infant mortality) changed drastically for the worse. From 1994 through 1998 more than 10% of the DPRK's total population died from starvation and malnutrition

related illnesses. Some experts believe that as many as three and a half million North Koreans perished in this famine (Goodkind et al).

In North Korea, sixty four percent of the population is considered to live in an urban setting. Thirty six percent of the population lives in a rural situation (CIA World Factbook). The population is highly literate. According to the CIA Factbook, 100% of citizens there are able to read and write; in reality however very little is known about the educational system in the DPRK (CIA World Factbook). Based on observed propaganda, it would be a reasonable idea to think that much of the education of students in the DPRK focuses on reverence for and submission to Kim Jong-Un and his communist regime.

The DPRK is a highly militarized nation. Over one million citizens serve in the armed forces. This is an unusually large percentage of the population for such a small country. It is estimated that 200,000 people are imprisoned in North Korea. Prisons in the DPRK are typically classified as “gulags” or prison camps. Conditions are harsh in these facilities. There is evidence to indicate that perhaps up to 40% of people incarcerated in the DPRK will eventually die from malnutrition (North Korea Now). The UN estimates that over the past thirty years, over 400,000 people have perished while imprisoned in the DPRK (Wikipedia).

Approximately 20% of children under the age of five in the DPRK are considered “underweight.” Maternal mortality rates are relatively high compared to the rest of the world’s nations. There are only three physicians in the DPRK for every 1000 citizens (Wikipedia).

North Korea has a very limited amount of arable land for food production. There is absolutely no urban food production. The DPRK is a very mountainous nation. In the past several decades the government implemented massive deforestation projects to increase the amount of arable land (PBS Frontline). Unfortunately, this deforestation has led to repeated drought and flood cycles in much of the country leading to extreme soil erosion and less productive farmland. The DPRK has a strict food rationing system. This system is known as the Public Distribution System also known as the PDS. Almost two thirds of the North Korean population is solely reliant on the PDS for weekly or biweekly food distribution. The exceptions to this are the ruling elite, military personnel and the citizens who reside and work on the state run collective farms. It has been noted in recent years, however, that even for farm workers food security is highly tenuous. The PDS is meant to distribute 700 grams of cereals (rice, barley, corn) per day to its citizens. In recent years the daily ration has been reduced to numbers as low as 150 grams per day. Over the past several years, the average daily cereal ration for most North Korean citizens has been less than 500 grams daily (Wikipedia).

Twenty three percent of the labor force in the DPRK works in agriculture. Most of the arable land is along the west coast of the country (CIA World Factbook). There is a smaller fertile region of the DPRK located on its east coast. Only about 14,000 square kilometers of the DPRK is available for agricultural production; compared to the US where there are over 4 million square kilometers for agricultural production (Wikipedia). The top two agricultural products of the DPRK are rice and potatoes. It is estimated that twenty two percent of GDP (gross domestic product) in the DPRK comes from agricultural output. In 2006, the World Food Program estimated that the DPRK had a “grain requirement” of 6.5 million tons. Unfortunately, the DPRK typically produces less than 4 million tons of grains annually. In 2014, the DPRK is not even listed in the Global Food Security index report by The Economist magazine. This is another reflection of how little data are put forth to the international community by the secretive communist regime. The DPRK has a very undeveloped and archaic economy. The infrastructure is poor. For example, there are less than 800 km of paved roads in the country. The DPRK has a very fragile electrical services grid. It ranks near the bottom of all nations in terms of electrical efficiency, output and consistency. Power outages and shortages are frequent and harmful for the citizens of the DPRK. There

have been many satellite images of the DPRK at night circulated around the internet in recent years. These stark and shocking images from space reveal a near total “blackout” at times across the entire nation. These images are even more alarming when visualized “side by side” with the DPRK’s southern neighbor, South Korea.

In 2013, it is estimated that the gross national income of the DPRK was equivalent to approximately 33 billion US dollars. This is contrasted with South Korea, which has a gross national income that is 97% higher (Wikipedia).

With respect to “small scale” food security; one “bright spot” in the rural areas of the DPRK over the past two decades has been the productivity of individual family farm plots.

Each rural farm worker is permitted to grow a small garden of vegetables to supplement their family’s food supply. Many outside governmental agricultural experts and NGO workers who have visited the DPRK have noted that these “small family plots” have undoubtedly improved local food security conditions and health in rural areas of the DPRK (Wikipedia). Unfortunately, most citizens in North Korea continue to suffer from profound food insecurity that is caused by two main forces.

Generally speaking, the main barrier to increased agricultural production and improved quality of life in the DPRK is the government. The government of the DPRK is considered a rogue government by most of the world’s nations. Since the 1950s the country has been under the absolute rule of only one family. Kim Il Sung, grandfather of the present leader, established his authoritarian rule following the Korean War. It is generally believed that former Soviet premier and dictator, Josef Stalin, was instrumental in the ascension of Kim Il Sung in North Korea (History.com). Kim Il Sung established a unique form of socialist absolute rule called “juche.” This term means that the culture of the DPRK is to remain focused on militarism, rigidity and austerity. For the first thirty years of its existence, the DPRK was essentially kept afloat (economically and socially speaking) by its larger communist neighbors, China and the Soviet Union. Since the fall of the Soviet Union in the late 1980s, economic and food support to the DPRK has dwindled dramatically (Wikipedia).

The government of the DPRK is the most isolated regime in the world. In recent years, this isolation has led to the “doubling down” of the government against the world community at large. Although, aid still does penetrate the DPRK from other nations; there is a generalized lack of cooperation, education and diplomatic warmth that could potentially foster improvements in the government’s own ability to care for its citizens. While its citizens face extreme hardships and poor quality of life, there is tremendous corruption and militarism. It appears that the only news to ever emanate from North Korea is vague reports of missile tests, bizarre celebrity visits (ie Dennis Rodman) and threats against its neighbors (ie Japan and South Korea).

In 2014 it was reported by multiple western news outlets and through a UN report that in 2012 current leader of the DPRK, Kim Jong Un, spent \$645.8 million US dollars on luxury goods (Fox News). In the year prior to his death in 2011, his father Kim Jong Il, spent about 300 million US dollars on personal luxury items. Like his father, Kim Jong Un is an avid collector of exotic Mercedes-Benz vehicles. It is estimated by some sources that his collection of luxury cars totals greater than one thousand (Telegraph).

In the DPRK it has been reported that the regime makes over one billion dollars annually through the illegal sale of alcohol in Islamic countries and the illegal smuggling of ivory from Africa to China. North Korea is also a huge producer of poppy plants, which are essential in the production of heroin. In the 1990s following an economic downturn Kim Jong Il ordered all farmers on collective farms to designate at least 12 acres to the production of poppy plants.

The DPRK is known to make considerable income from the illegal manufacture, distribution, and sale of heroin. It is also understood, that the DPRK is a large producer of cannabis for illegal sale in Asian

nations. All of this money earned from the illegal narcotics trade goes directly to the dictator and his ruling elite (Fox News)

In addition to the illegal sale of narcotics, the DPRK has suffered from many misguided government projects. One of the most detrimental projects was the building of the Nampo Dam (also known as the Barrage). The dam was built in order to display the power of the DPRK's civil engineering program to the international community. The dam closed the Taedong river off from the Yellow Sea. The Barrage was built to facilitate shipping traffic on the river and to decrease the salinity of the river's flow. Unfortunately, upon the completion of the dam, the level of the Taedong river began to rise dramatically. Within several years, recurrent flooding destroyed all of the arable land in the area. It is estimated, that the DPRK has lost much of its rice-producing region since the building of the dam (Vice News). This site is commonly visited by international tour groups and is viewed by regime propaganda as a great achievement for the North Korean government. In reality, however, the Nampo dam has (directly and indirectly) caused incredible misery for the citizens of the DPRK, while its benefits are unclear.

One final consideration of how government policy negatively impacts the situation with food security in the DPRK is the lack of freedom that individual persons have to attempt to produce food for themselves. As mentioned above, in rural areas small farm plots have enabled agriculture workers a measure of food security at the local level. Most citizens in the DPRK are not permitted to do this. There exists many opportunities for small volume localized food production throughout the country (even in small plot urban gardens); however the regime controls agricultural production with an iron fist. This is a major policy flaw in a country where arable land is limited, the climate is often unpredictable and the international community is excluded from helping the citizens of the DPRK in a collaborative and consistent manner.

Since the main problem facing the citizens of the DPRK is the government itself, the international community must move slowly forward and achieve stepwise victories for the citizens of the DPRK in the years ahead. The problems of political and diplomatic relations with this country are huge; however, it is conceivable that a concerted and mindful approach by the international community could ultimately bring change to the country. In 2013 for example, the Republic of South Korea gave over 8 million dollars to the DPRK. Also, according to Zhu Feng (a scholar of pan Asian politics at Nanjing University) tighter collaboration between China and the USA in dealing with the regime in North Korea (with respect to its militaristic and nuclear ambitions) will have the added benefit of ultimately improving domestic policies and quality of life for the citizens of North Korea. Feng advocates for a "new diplomacy" with Sino-US unity in dealing with the North Korean regime to ultimately affect change and improvement in the lives of the people there (Emory University).

In addition to the main issues caused by government and cultural corruption, the people of the DPRK are plagued by a number of other issues that prevent proper food development. There is a lack of education of the citizens on agricultural production and engineering. Due to the centralized nature of the food production system, farmers and general citizens are not locally educated on how to provide food security for themselves. This notion can be a problem in any society where citizens are somewhat removed from agriculture (even in the USA and other developed nations) however, in the DPRK this issue is magnified. An increase in localized agricultural education in North Korea could potentially empower citizens and farmers to attain food security at the local level. Health care is another area of concern for the people of the DPRK. It has been reported that the North Korean health care system is among the worst in the world. Many citizens of the DPRK are chronically ill and plagued by ailments that in western countries are viewed as minor and could be cured by routine medical care. One such example in the DPRK is the issue of cataracts. Many citizens in North Korea go blind from cataracts (even at young ages). This scenario would be highly unlikely in many other countries in the world. Hospitals in the DPRK are very poorly supplied. For example, it has been reported that in some North Korean hospitals empty beer

bottles are used to infuse intravenous solutions and that operating tables are stained with the blood of previous surgical patients (National Geographic). Over the past two decades children born in North Korea have been called the "stunted generation" because they tend to be significantly lighter and shorter than their counterparts in South Korea. This is because of poor prenatal care and maternal malnutrition. This problem has led to a generation of chronically ill young adults. These citizens may be unable to reach their full potential and productivity due to chronic illness and frailty (National Geographic).

When one considers solutions for the food security problems of the DPRK one sees a very complex list of items. The first solution to consider is diplomatic. The present isolation of the communist regime and citizens of North Korea is not sustainable for the global community. In recent years the Obama administration has turned its focus toward Asia. Although one might see this policy shift as focusing on China, one could also envision an opportunity to find innovative ways to engage with North Korea. As mentioned previously, the US should forge a new relationship with China pertaining to North Korea. It is clear that the US cannot unilaterally pressure the government of North Korea with positive results. It is also clear that a regime change at this exact moment in time is unlikely in the DPRK.

North Korea is surrounded by some of the world's fastest growing economies such as China, South Korea, Vietnam (The Diplomat). The United States could leverage its relationships with these other Asian partners in order to indirectly and positively impact the lives of the North Korean people. It is hopeful to believe that some of the recent pan-Pacific trade agreements between the United States, Canada, and Asian nations could eventually have a positive impact (agriculturally and technologically speaking) on North Korea. In August 2014, a North Korean diplomatic delegation headed by foreign minister Ri Su Yong visited five countries in southeast Asia on a diplomatic and economic mission (The Diplomat). The group visited with senior political and economic leaders in Laos, Vietnam, Myanmar, Indonesia and Singapore. This is an indication of the North Korean regime's desire to foster stronger economic ties with its regional partners (The Diplomat). The US and China should collectively and openly encourage such dialogue between these Asian nations so that the DPRK can strengthen and liberalize its trade agreements and economic policies.

Another move that could be helpful to the North Korean people and economy is the growth of areas like the Kaesong industrial region in which over 100 South Korean companies employ over 50,000 DPRK workers (Newsweek). Unfortunately, there have been times over the past 12 years that this productive industrial hub has been "shuttered" due to North Korea's provocations and nuclear testing (Wall Street Journal). Another zone similar to Kaesong is the Rason Special Economic Zone, which was established by the DPRK in the 1990s to promote economic growth through foreign investments. Both China and Russia have invested into Rason and it has been reported that in the 1990s over 50 foreign investors also invested money into the Rason zone. The United Nations Industrial Development Organization estimates that foreign interests could inject over \$150 million US dollars into the economy of the DPRK via the Rason Special Economic Zone in years to come (UNIDO). Areas such as Rason and Kaesong are an extremely effective way for nations to establish diplomatic, economic and educational relationships with the government and citizens of North Korea. When one reviews the lists of corporations involved in these special development zones in the DPRK, one notices the absence of western nations.

The US, Canada, Australia and the European Union could consider joint economic ventures via Asian nations (South Korea and China for example) to foster agricultural and technological innovations within these zones in the DPRK to improve food security in North Korea.

In 2014, the Guardian newspaper published a landmark series of articles describing how the international community can best implement policies to change the lives of individuals in North Korea. This series was based on interviews and writings from North Korean defectors living abroad in Asia and western nations. The fundamental themes of this series were: 1) awareness of the suffering of the citizens of the

DPRK by the international community 2) engagement at the political, economic and moral level with the leadership and citizens of the DPRK and 3) taking a “hard stance” against the regime’s human rights abuses whilst encouraging engagement and conversation beyond the regime to best help the people of North Korea. The articles and interviews by former North Koreans had a recurring optimistic theme that a “carrot and stick” approach to the regime over time will be the only effective way to ultimately change this bizarre nation in the years to come.

The international community via non-governmental agencies, trans-Pacific partnerships and trade agreements and the UN must put South Korea at the forefront of the process to change North Korea. These two nations share a geography, culture and genetics that are unique to this region of the world. South Korea must be the “tip of the spear” to bring the people and government of North Korea into the 21st century. The US has allowed other nations to have a much more robust trading and economic relationship with South Korea over the past decade. This is very unfortunate, because it allows the regime of North Korea to continue to point to the US as the source of its mistrust of the world at large. Only through the US increasing international trade with South Korea (and other regional partners) will the lives of ordinary suffering citizens in North Korea be improved.

The US continues to maintain a massive military presence on the Korean peninsula, but a more robust economic and diplomatic presence is needed. The regime of the DPRK (through its massive and effective propaganda machine) uses the US military as a persistent excuse and symbol of fear to maintain isolation and control of its citizens. It would certainly illustrate a commitment to change by the west if the US reduced its military footprint on the Korean peninsula and increased its diplomatic and humanitarian presence there. Opponents to this approach may argue that this would represent a “victory” for the corrupt and highly militarized regime of the DPRK; however, it is this author’s opinion that if one takes the “long view” of the situation on the DPRK (and in Asia generally) bullets, guns, missiles and tanks are relatively short lived while economic changes, democratization, increased trade and currency flow always survive and prosper much longer in human terms.

In recent years, the Obama administration has turned increasing attention to the Pacific Rim for trade and military presence. This has been a deliberate move in order to counter the increasing economic and military power of China in this region. The US should use this increased presence to not only increase our military visibility but also the economic visibility here. For example, encouraging increased investment and trade with Asian nations and Australia will ultimately benefit the people of the DPRK. With increased economic growth and stability in North Korea (brought about by foreign participation and investment) it likely would only be a matter of time before regime change, economic growth, development and democratization would follow.

Another option for realizing improvements in the food security of the DPRK is to consider using responsible NGOs (non governmental organizations) in a clandestine fashion to educate and improve the food security situation in North Korea. One such organization based in the Netherlands is “Agriculture Without Borders.” This is an innovative group of farmers and educators who are highly active in African nations. They educate local peoples and governments about sustainable agriculture, environmental change and agriculture technology (Agriculture Without Borders). US agricultural policy leaders and educators could partner with such NGOs in a clandestine fashion to penetrate the DPRK and help to improve the agricultural and food production system there. As mentioned earlier, a focus on localized (decentralized) production of food in places like the DPRK has already proven highly effective in feeding populations in a smaller geographic area.

It is a fact that China has become highly invested in Africa over the past three decades. Utilizing western agricultural based NGOs, which are already highly active in neutral African nations where the Chinese have a strong presence, provides western nations (such as Australia, the US, the EU and Canada) a unique

opportunity to partner and encourage involvement by these groups into the DPRK via the “China connection.”

Two particular innovative and expanding areas of food production worldwide are “aquaculture” and “hydroponics.” The DPRK is uniquely positioned to benefit from both of these innovations. It is a peninsular nation with many large river systems and estuarial habitats. Aquaculture (the farming of fish and marine animals and vegetation) is rapidly expanding worldwide (Republic of South Korea Aquaculture Factsheets). The UN estimates that as world population approaches 9 billion persons in the decades ahead that fish and mollusks will become more and more important as a source of protein for human populations. Aquaculture has a long history on the Korean peninsula. The DPRK’s neighbors (Vietnam, South Korea and China) are already highly active nations in this industry. The DPRK has already publicly exclaimed an extreme interest in “fish farming” in recent months. Given these realities, it would appear that the time is right for increasing development of both “on shore” and “off shore” fish farms to benefit the people of North Korea. Hydroponics (or water based agriculture) is another exciting area to consider in improving the food security situation in the DPRK. South Korea is actively developing vertical hydroponic farming on a large scale (Al-jazeera news). As mentioned above, there are many factors that lead to diminished agricultural production in the DPRK. Large scale, indoor, industrial hydroponic food production (even coupled with sustainable aquaculture by products) in places like Rason would certainly be something that could strongly improve the lives of the citizens of North Korea with respect to food security.

North Korea is plagued by many issues that prevent it from achieving high levels of human development and keep it from developing a secure food network. Problems keeping the DPRK from reaching its full food production capacity include: government, geography, and economy. The communist regime has total rule over all aspects of life in the country leading to slow and/or no progress. The geography of the DPRK makes it one of the most difficult places on earth for food production. Government mismanagement of the land and resources compounds this problem. Finally, the economy is operated almost entirely from within the country and there are few foreign relationships that could help the country advance. In spite of the many issues facing the North Korean people, there are potential long-term solutions. Non-governmental organizations can be utilized to educate citizens of North Korea on agricultural practices and technology for local sustainable food production. The international community led by governments in the west and in Asia can properly educate their citizens about the situation in the DPRK. Dissidents and defectors from North Korea should be given a strong voice via social media and the internet to effect changes within the DPRK. International governments should actively engage and invest in the economies of North Korea’s regional neighbors to change the economy of the DPRK. Agricultural technologies such as aquaculture and hydroponics could potentially be utilized on a larger scale to provide food security to the nation of North Korea. Given the rise of China and a new focus on the Asia-Pacific region generally by the United States and other western democracies, this author is optimistic that eventually change will come to the “hermit kingdom” and the lives of the citizens of North Korea now and in future generations will improve.

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