



Lost generation

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W. COURTLAND
ROBINSON

LOST



The Health and Human Rights of
North Korean Children, 1990–2018

GENERATION

LOST GENERATION: THE HEALTH AND HUMAN RIGHTS OF NORTH KOREAN CHILDREN, 1990–2018

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The Committee for Human Rights in North Korea

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Dedicated to Ang, Yani, and J.D.

In memory of the countless numbers of North Koreans—men, women, and children—who have suffered and died from famine, exposure, overwork, imprisonment and torture, or malign neglect by their government.

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LIST OF ACRONYMS

ASDR	Age-Specific Death Rates
AMA	Arm Muscle Area
ANC	Antenatal Care
BCG	Bacillus Calmette-Guerin
BMI	Body Mass Index
CEDAW	Convention on the Elimination of all Forms of Discrimination against Women
CKIE	Community Key Informant Estimation
COI	United Nations Commission of Inquiry on Human Rights in the DPRK
CRC	Convention on the Rights of the Child
CRPD	Convention on the Rights of Persons with Disabilities
DALY	Disability Adjusted Life Year
DPRK	Democratic People's Republic of Korea
DPT3	Diphtheria, Pertussis, and Tetanus-Haemophilus Influenzae Type B-Hepatitis B
EPI	Expanded Program on Immunization
FAO	Food and Agriculture Organization
FDRC	Flood Disaster Rehabilitation Committee
HRNK	Committee for Human Rights in North Korea
HRW	Human Rights Watch
ICCPR	International Covenant on Civil and Political Rights
ICD	International Classification of Diseases
ICESCR	International Covenant on Economic, Social and Cultural Rights
IDI	In-Depth Interview
IDP	Internally Displaced Persons
IMR	Infant Mortality Rate
IOM	International Organization for Migration
IRB:	Institutional Review Board
IRIN	Integrated Regional Information Networks
KBSM	Korean Buddhist Sharing Movement
KII	Key Informant Interview
KWP	Korean Workers' Party
LPDR	Lao People's Democratic Republic
MCV1	Measles-Containing-Vaccine-First Dose
MDR-TB	Multidrug-Resistant Tuberculosis
MICS	Multiple Indicator Cluster Survey
MMR	Maternal Mortality Rate
MOU	Ministry of Unification
NCD	Non-Communicable Disease
NGO	Non-Governmental Organization
NK	North Korea
NKHRA	North Korean Human Rights Act
NMR	Neonatal Mortality Rate
OPV	Oral Polio Vaccine
PDC	Public Distribution Center
PDS	Public Distribution System
PRC	People's Republic of China
PTSD	Post-Traumatic Stress Disorder
RISS	Research Information Sharing Service
RMB	Renminbi
ROK	Republic of Korea
RTI	Reproductive Tract Infection
SD	Standard Deviation
SK	South Korea
TB	Tuberculosis

TFR	Total Fertility Rate
TIP	Trafficking in Persons
TVPA	Trafficking Victims Protection Act
U5MR	Under-Five Mortality Rate
UDHR	Universal Declaration of Human Rights
UN	United Nations
UNCRC	United Nations Convention on the Rights of the Child
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
WFP	World Food Programme
WHO	World Health Organization
XDR-TB	Extra Drug-Resistant Tuberculosis

ABOUT THE COMMITTEE FOR HUMAN RIGHTS IN NORTH KOREA (HRNK)

The Committee for Human Rights in North Korea (HRNK) is the leading U.S.-based nonpartisan, non-governmental organization in the field of North Korean human rights research and advocacy, tasked to focus international attention on human rights abuses in that country. It is HRNK's mission to persistently remind policymakers, opinion leaders, and the general public that more than 20 million North Koreans need our attention. Since its establishment in October 2001, HRNK has played an important intellectual leadership role in North Korean human rights issues by publishing more than 35 major reports (available at <https://www.hrnk.org/publications/hrnk-publications.php>). Recent reports have addressed issues including political prison camps, the dominant role that Pyongyang plays in North Korea's political system, North Korea's state sponsorship of terrorism, the role of illicit activities in the North Korean economy, the structure of the internal security apparatus, the *songbun* social classification system, and the abduction of foreign citizens. HRNK is now the first non-governmental organization that solely focuses on North Korean human rights issues to receive consultative status at the United Nations (UN). It was also the first organization to propose that the human rights situation in North Korea be addressed by the UN Security Council. HRNK was directly and actively involved in all stages of the process supporting the work of the UN Commission of Inquiry (COI) on North Korean human rights. Its reports have been cited numerous times in the report of the COI, the reports of the UN Special Rapporteur on North Korean human rights, a report by the UN Office of the High Commissioner for Human Rights, a report of the UN Secretary-General António Guterres, and several U.S. Department of State Democratic People's Republic of Korea Human Rights Reports. HRNK has also regularly been invited to provide expert testimony before the U.S. Congress.

ABOUT THE AUTHOR: W. COURTLAND ROBINSON

W. Courtland Robinson, Ph.D., is an Associate Professor in the Department of International Health and core faculty in the Center for Humanitarian Health at the Johns Hopkins Bloomberg School of Public Health. His research interests have focused on populations in migration, whether displaced by conflict or natural disaster, or in the context of migrant labor and human trafficking. His research on health and human rights in North Korea began in the late 1990s when he conducted a study of famine mortality in North Korea by interviewing North Korean refugees, migrants and asylum-seekers in China. Current work includes efforts to build a network of researchers and practitioners to promote effective humanitarian programs and policies for North Korean populations within and outside their country.

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Given that the research described in this report represents more than two decades of field work and analysis of the humanitarian and human rights crisis in North Korea, there are a great many people I wish to thank personally for their contributions over the years. It starts with my parents, Court and Sally Robinson, who took me to Korea in 1960 where they served as Presbyterian missionaries in the fields of medicine and education for more than ten years. I watched Seoul rebuild from the rubble of war and occasionally wondered and worried about the population in the North. After college, I became involved with refugee work in Washington, DC, in the 1970s and 1980s, working mainly on issues of Southeast Asian refugee protection and assistance.

It was not until the late 1990s, when I was pursuing a PhD at Johns Hopkins University, that I began to focus more intently on the North Korean famine, and the internal and external displacement caused by economic hardship, food insecurity, and ongoing human rights abuses. With the support of many friends and colleagues at Johns Hopkins as well as in the humanitarian and human rights community, I conducted a study in the late 1990s of the North Korean famine by interviewing North Korean refugees, migrants, and asylum-seekers in Northeast China. This led to further studies in China, South Korea, and in various Asian countries that provided temporary asylum and transit to North Koreans seeking safety in other countries. While I can neither name some of the organizations involved nor name some of the individuals who helped with this research, I am grateful to Heena Brahmabhatt, Brent Burkholder, Gilbert Burnham, Jiho Cha, Byung-Ho Chung, Roberta Cohen, Shannon Doocy, Michel Gabaudan, Kenneth Hill, Jin Yong Kim, Sin Gon Kim, Taeyoung Kim, Robert King, Myung-Ken Lee, Hayoung Lee, Keum-soon Lee, Yunwhan Lee, Nancy Lindborg, and Jane Park.

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Finally, I want to thank my wife, Ang, whom I first met doing refugee work in Thailand in the early 1980s, and who is also an educator and advocate for refugee and immigrant rights. Throughout our 35 years (and counting) of marriage, she—along with our two children, Yani and J.D.—have tolerated my absences and supported me with their love. I dedicate this work to them, and in memory of the countless numbers of North Koreans—men, women, and children—who have suffered and died from famine, exposure, overwork, imprisonment and torture, or malign neglect by their government.

W. Courtland Robinson

FOREWORD

Dr. W. Courtland Robinson and his six-member research team of the Center for Humanitarian Health, Johns Hopkins Bloomberg School of Public Health (Jiho Cha, Soim Park, Casey Branchini, Daeseong Kim, Seung Yun Kim, Taeyoung Kim) write a new chapter in the history of HRNK and its publications with their report, *Lost Generation: The Health and Human Rights of North Korean Children, 1990–2018*. The result of many years of assiduous teamwork, this is by far the most comprehensive, thoroughly researched, and scrupulously detailed English-language study on the status of North Korean children since the end of the Cold War. This is a generation severely traumatized by the “Arduous March,” the devastating North Korean famine of the 1990s, one of the greatest tragedies in the 5,000-year history of the Korean people. In both scholarly work and media reports, the same generation of young North Koreans has often been celebrated as the “Jangmadang Generation,” the cohort of young North Koreans who learned to live off informal markets, as the Public Distribution System imploded during the famine. When examined through rights-based lens, the same generation comes into sight as the “Lost Generation,” a generation deprived of fundamental human rights; a generation that grew up amid dire humanitarian circumstances. Through Dr. Robinson’s landmark report, one can grasp the true extent of the human insecurity and human rights violations affecting a most vulnerable group, North Korea’s children, and, thus, better understand the suffering caused by the great famine and its aftermath.

Lost Generation examines the effects of the North Korean famine on children, looking at a multitude of criteria, including temporal patterns of mortality, causes of death among children, nutrition and food security, as well as physical and mental health. North Korea’s health care system, fairly functional for most of the 1960s, 1970s, and 1980s, collapsed in the 1990s, only to undergo a partial recovery in recent years. Vector-borne diseases, once practically eradicated, came back, with malaria re-emerging as a serious threat to the public health of North Koreans. The report also looks into communicable diseases, including the threat posed to North Korea’s children by TB and XDR-TB. *Lost Generation* goes further to look into the physical and mental health status of North Korean children refugees and migrants in South Korea.

Whether or not just Korean Workers’ Party propaganda, North Korea used to boast a nearly perfect literacy rate. During and after the famine, while only ideological indoctrination has been thoroughly sustained, the North Korean education system has degraded dramatically. Children perform forced labor as an “extension of learning,” often working for 11 hours a day or longer. Their time is further occupied with “mini assignments” to bring scrap iron and other “recyclables” to school and participation in compulsory self-criticism sessions.

The study also dedicates ample attention to children in detention, held at various types of detention facilities. *Lost Generation* goes beyond just looking at North Korea’s *kotjebi* street children to include orphanages as well as the plight of other unaccompanied and separated North Korean children. The report aims to answer questions that have been the subject of heated scholarly debate in recent years, such as the number of North Korean women still present in Northeast China and the number of children born in China to North Korean women, which it estimates at about 10,000 and 22,000, respectively. Following an overview of the circumstances of North Korean migrants and refugees in South Korea and third countries as well as the challenges they face, *Lost Generation* puts forth a set of recommendations to the two Koreas, China, the United States, and the international community.

On the one hand, as the author recommends, resources are needed to attend to the humanitarian needs of North Koreans, children in particular. On the other hand, UN agencies, especially the UNDP, FAO, UNICEF, WFP, WHO, and other actors that have been involved in humanitarian operations in North Korea, must not separate humanitarian assistance from fundamental human rights concerns. Through its rights-based approach to investigating the status of North Korean children, Dr. Robinson’s report constitutes a powerful argument in favor of a *human rights up front* approach to solving the North Korean humanitarian conundrum.

HRNK hopes that its work and publications, in particular Dr. Courtland Robinson’s *Lost Generation*, will be critical in demonstrating that human rights concerns are the solution, and not a spoiler of discussion on the hard political, security and military issues in North Korea. Only a North Korea earnestly working to improve its human rights record can constitute a reliable negotiating counterpart. It is not by accepting the Kim regime’s current *modus operandi*, in the hope that gradual change will come, that the stalemate on the nuclear and missile issues will be broken. For North Korea, the first step toward rebuilding the international credibility it has been squandering for decades is to seriously acknowledge and address its human rights situation. To move forward, North Korea will have to cease directing precious resources away from the humanitarian needs of its population, in particular the most vulnerable, toward the development of its nuclear weapons, missiles, and other tools of death. North Korea will have to collect and share its real statistical data. North Korea will have to ensure the transparency needed in order to disburse international humanitarian assistance unhampered by diversion and other distortions. North Korea will have to learn how to work with

providers of international humanitarian assistance in order to prepare for the development technical assistance stage. Taking the first step by improving the human rights and human security of the “Lost Generation” would be a crucial way to build goodwill and sustain credibility.

Greg Scarlatou

Executive Director

October 18, 2019

EXECUTIVE SUMMARY

Lost Generation: The Health and Human Rights of North Korean Children, 1990–2018 is a nearly thirty-year study monitoring the health and human rights conditions of North Korean children. “Health” is defined by the World Health Organization as a “state of complete physical, mental, and social well being, and not merely the absence of disease or infirmity.” *Lost Generation* applies three core international human rights instruments—primarily the Universal Declaration of Human Rights (UDHR), the Convention on the Rights of the Child (CRC), and the Convention Relating to the Status of Refugees (Refugee Convention)—from a public health perspective.

W. Courtland Robinson, Ph.D., with contributions from Jiho Cha, MD, Ph.D., Soim Park, MA, Casey Branchini, Ph.D., Daeseong Kim, MPH, Seung Yun Kim, MD, and Taeyoung Kim, provide a comprehensive assessment of the health of North Koreans within and outside the country’s borders, focusing on health, nutrition, education, and especially vulnerable children, including children in detention, child laborers, unaccompanied and separated children, and refugee and migrant children (including children born in China to North Korean mothers and Chinese fathers).

Lost Generation reviews more than 200 English and Korean articles and reports, analyzes qualitative data from 61 interviews conducted in China and South Korea in 2016 for HRNK, and reviews and summarizes seven previous studies carried out on the China–North Korea border beginning in 1998 for the Center for Humanitarian Health at the Johns Hopkins Bloomberg School of Public Health. The report applies a public health perspective that treats health as a human right that must be guaranteed to every individual without discrimination.

Chapter 1 provides an overview of the population and demography of North Korea since 1990, factoring in the “Arduous March,” North Korea’s great famine and its effects on children. 2,692 households were surveyed from 1995 to 1998, resulting in reports on 10,640 individuals. In addition, the chapter examines the question: How has the population of North Korea changed over the period from 1990 to 2018 that has encompassed two hereditary transfers of power, a major famine and ongoing food insecurity, natural disasters, economic hardship and restructuring, an exodus of several hundred thousand refugees and migrants into China and beyond, and halting social change even in the face of political stasis? Mortality and causes of death among North Korean children are highlighted.

Chapter 2 examines the food situation in North Korea during the past three decades, focusing on food aid, food accessibility, and the nutritional status of children between 1990 and 2017. The authors include results from a study conducted by the Johns Hopkins Bloomberg School of Public Health in 2007 of household food security in North Korea by interviewing North Korean migrants, both documented and undocumented, in China. While recognizing the limitations of interviewing North Korean migrants, there are “clear indications of a continuing problem,” in which “undernourishment is a common denominator for many of the health problems afflicting North Koreans.” Data from four studies of North Korean refugee and migrant children in South Korea is also reviewed and analyzed. All four studies found that North Korean children were shorter than their South Korean counterparts, with the magnitude of these differences depending on age and gender.

Chapter 3 begins with an overview of the North Korean healthcare system prior to the 1990s, its collapse in the 1990s, and partial recovery in the last ten years. While modernization in secondary and tertiary hospitals has been a priority under Kim Jong-un as well as new telemedicine initiatives and the construction of a large new medical center in Pyongyang, there is continued evidence of under-resourcing of the health sector. The authors also focus on three areas of specific importance to children’s health—maternal and child health, immunizations, and infectious disease. Finally, the authors review available data and studies about the physical and mental health of North Koreans in China and South Korea.

Chapter 4 provides an overview of North Korea’s education system beginning in 1956, changes in the education system post-famine, including compulsory labor as “an extension of learning,” “mini assignments,” where students have to submit supplies, such as rabbit skins, to the school for the state, and school attendance. The authors complete the chapter on education by reviewing the available education for North Korean refugees in China as well as educational challenges in South Korea, including the highly competitive nature of South Korea’s education system. For North Korean students who struggled and were unable to handle the academic pressure, they were often considered to be poor students and were discriminated against. However, the authors note a recurring theme of self-worth among North Korean children in South Korea, based on the unique strengths of children who have escaped and arrived in South Korea with hopes for their future.

Chapter 5 focuses on the most vulnerable sub-groups of North Korean children from the 1990s to 2018. In particular, “children outside of family care” and “children on the move,” both umbrella terms, are examined. Children in these sub-groups include children who have been trafficked, children who migrate, children displaced by conflicts or natural disasters, and children who live and work on the streets or *kotjebi*. This chapter specifically highlights children who are orphans and institutionalized children, including children in orphanages and children in detention, child laborers, and unaccompanied and separated children, including *kotjebi*. The authors’ interviews confirm concerns raised by the Committee on the Rights of the Child in 2017, including that children in orphanages were subject to sub-standard conditions, including a lack of food (one meal a day), clothing, and/or shelter. Children were often subjected to forced labor instead of attending school. As a result, many were malnourished and in poor physical condition.

Chapter 6 summarizes the situation of North Korean refugees and migrants in China beginning in 1996. It outlines the impact the “Arduous March” had on displacement and migration, and focuses on six studies that the Johns Hopkins Bloomberg School of Public Health, Center for Humanitarian Health (formerly the Center for Refugee and Disaster Response) conducted in northeast China, particularly Yanbian Korean Autonomous Prefecture in Jilin Province, but also in neighboring Liaoning and Heilongjiang Provinces from 1998 to 2014. These studies explored famine migration, trafficking of North Korean women into forced marriage, durable solutions for North Korean children, monitoring of migration patterns and vulnerability, and population estimates of North Koreans in China, North Korean women, and children born to North Korean women and Chinese men.

Chapter 7 examines the migration of North Korean refugees and migrants to South Korea and the United States. The focus is on migration routes, demographic characteristics of the population, and issues in asylum-seeking and resettlement, particularly differences in protection and settlement support to children born in China to North Korean women over time. The authors provide an overview of the situation of North Koreans in the United States and the North Korean Human Rights Act of 2004.

Chapter 8 provides conclusions and recommendations. Specific conclusions focus on the status of North Korean children during the period from 1990 to 2018, expressed in terms of rights: the right to food; the right to health; the right to education; the right to freedom from child labor; the right to freedom from arbitrary detention; the right to freedom of movement; and the rights of migrants, refugees and asylum-seekers to leave from and return to their own country, to seek and enjoy asylum, and not to be returned to a country where their life would be in jeopardy.

The following are recommendations made to North Korea, China, South Korea, the United States, and the international community:

1. To the DPRK:

- Ensure equal and transparent access to adequate food and nutrition, especially to vulnerable and disadvantaged populations, and proper monitoring of humanitarian food aid.
- Commit to rebuilding the public health and primary healthcare infrastructure, including the health workforce. In doing so, prioritize marginalized populations, including the poor, people living with disabilities, people in detention, mothers, children—including children living outside of family care—and older adults.
- Commit to supporting teachers' salaries and ending demands for children and their families to subsidize public education through the collection of unauthorized fees and assignments.
- Commit to increasing investment and resources in agricultural production to provide greater food security for the population.
- End excessive political indoctrination in the school curriculum and the physical or psychological punishment of students.
- Acknowledge the right of all North Korean citizens to leave and return to their country without penalty, and to freely choose their place of residence and employment.
- Amend the Criminal Code, specifically Article 62, which bans citizens from traveling to another country without State permission, and remove restrictions on internal travel.
- Ratify the (Palermo) Protocol to Prevent, Suppress and Punish Trafficking in Persons, Especially Women and Children, supplementing the UN Convention against Transnational Organized Crime.
- Ratify the 1951 Convention relating to the Status of Refugees and its 1967 Protocol, the 1954 Convention relating to the Status of Stateless Persons, and the 1961 Convention on the Reduction of Statelessness.
- Immediately grant access to the Office of the UN High Commissioner for Refugees and the UN Special Rapporteur on human rights in the DPRK to monitor the human rights of North Korean deportees from China.
- Immediately grant access to the Office of the UN High Commissioner for Human Rights and the UN Special Rapporteur on human rights in the DPRK as well as the International Committee of the Red Cross to monitor North Koreans in detention. Children and family members detained with prisoners should be released.
- End the practice of requesting the deportation of North Koreans in China, and release from detention and waive all penalties for those who have been deported from China or caught trying to return.

2. To the People's Republic of China:

- Immediately grant access to the Office of the UN High Commissioner for Refugees and the Office of the UN High Commissioner for Human Rights to monitor and protect the rights of North Korean asylum-seekers in China.
- Immediately grant access to the International Organization for Migration (IOM) and other relevant international organizations to monitor the status of vulnerable migrants and persons at risk of human trafficking.
- End the practice of deporting North Koreans from China, and release from detention and waive all penalties for those who have been arrested simply for crossing the border without documentation.
- Clarify that Article 4 of the Nationality Law—"Any person born in China ...one of whose parents is a Chinese national shall have Chinese nationality"—applies to children born in China to North Korean women and Chinese men and will be applied without discrimination or penalties against the non-Chinese national parent regardless of his or her nationality or immigration status. To provide for adjustment of nationality status of the North Korean mothers, should they seek it, Article 7 of the Nationality Law allows foreign nationals, or stateless persons who are "near relatives of Chinese nationals," or those who "have settled in China" to become naturalized Chinese citizens.
- To facilitate registration of marriages between North Korean women and Chinese men, issue temporary residence permits for North Korean women, thereby enabling them to meet one of the provisions for the registration of marriage between Chinese citizens and foreigners. Registration of marriages would also clear the way to registration of births, issuance of *hukou* (legal residence) to children and their mothers, and access to education for the children.
- For children in China who are born in North Korea or unaccompanied, China's 1992 Adoption Law provides for the adoption of minors under the age of 14 whose parents are deceased, who are abandoned, whose parents cannot be ascertained or found, or "whose parents are unable to rear them due to unusual difficulties." By applying this law, such children can be legally adopted and obtain Chinese nationality. For North Korea-born children over the age of 14, Article 7 of the Nationality Law could be applied to give them Chinese nationality, after which local foster-family placement should be arranged.
- While North Korean children are in China, whether born there or not, they should have access to primary and secondary education, basic health care, and other community services at levels comparable to those available for Chinese nationals and consistent with international standards and best practices. As children and adolescents spend much time in school, enacting policies which could help North Korean refugee students adjust to school life, such as providing consultation services, is crucial.
- The option of resettlement directly from China to a third country should be available, on a case-by-case basis, to North Korean children in China for whom such resettlement is deemed appropriate for the purposes of promoting family reunification, or necessitated by extenuating circumstances, including an insecure family environment, special medical needs, or evidence of other special vulnerability. In all cases involving resettlement of a minor child, the views of the parents or guardians and the child should be sought and consensus promoted. In cases where consensus cannot be achieved, a local arbitration panel should be established to determine what is in the best interests of the child.
- The option of returning to North Korea should not be promoted until there are conditions that enable such return to be carried out voluntarily, in safety and in dignity. Such conditions do not exist at present.

3. To the Republic of Korea:

- Restore adequate funding for monitoring North Korean human rights. A budget bill put forward by President Moon Jae-in makes dramatic cuts in the budget for South Korean organizations focused on human rights in North Korea. Engagement with the North Korean government and support for humanitarian and development aid should not come at the expense of the monitoring of and advocacy for North Korean human rights.
- Support improved integration of North Korean refugees, including children and adolescents, through increased interaction with South Korean peers in school and community settings and enhanced mental health and counseling services. In 2010, the Ministry of Unification amended legislation to designate professional counselors for North Koreans at the 32 Hana Centers (resettlement centers) in South Korea. This is a positive step, but these counselors have many duties and only a small number are registered mental health care providers.
- Increase resettlement support and social services for children born to North Korean mothers and Chinese fathers who resettle in South Korea. As of November 2018, South Korean government data showed 1,530 children of North Korean mothers and Chinese fathers enrolled in South Korean schools. These children are provided with citizenship, a vital form of protection, but have only limited access to other forms of government support, such as free health care, college tuition, and subsidized housing. According to Reverend Chun Ki-Won of the Durihana International School in Seoul, "these children are more disadvantaged than North Korean defectors."

4. To the United States of America:

- U.S. sanctions on North Korea must not prohibit humanitarian aid, and the U.S. government should not restrict travel by American aid workers. In October 2018, a group of U.S.-based NGOs sent a letter to President Trump, asking him to “modify sanctions regulations” and ease travel bans “to allow timely delivery of humanitarian aid and other NGO engagement” in North Korea. The U.S. Special Representative for North Korea, Stephen Biegun, committed to meet with American aid groups in early 2019 “to discuss how we can better ensure the delivery of appropriate assistance.” Such talks need to take place quickly and a solution found to break the year-long impasse on U.S. humanitarian aid to North Korea. The United States and other bilateral donors, should support prioritization of aid to reach the most vulnerable populations, including children living in poverty, children living outside of family care, and children in detention.
- The U.S. and other international donor nations should respond to the March 2018 call for \$111 million in humanitarian aid to the DPRK, which would help meet the food, health, and sanitation needs of 6 million vulnerable people, including 1.7 million children under 5 and more than 340,000 pregnant and lactating women. As of October 2018, only 20.6 percent of the appeal had been met, with donations coming from only five countries—Switzerland, Sweden, Canada, France, and Russia.
- The United States should renew its commitment to resettle North Korean refugees. Since 2004, when Congress first passed the North Korean Human Rights Act, the U.S. has resettled around 220 North Korean refugees. While this number is far lower than many supporters of the Act had hoped for, they were at least in double digits until 2016. In 2017, only one North Korean refugee was resettled, and only five were resettled in 2018. North Korea is one of 11 countries singled out for travel bans and “extreme vetting” by U.S. officials. One North Korean woman, recently resettled in Salt Lake City, Utah said she spent two “very hard and long” years in an immigration detention facility in Bangkok, Thailand before she could leave for the United States.
- The U.S. should seek re-election to the UN Human Rights Council in 2019. In June 2018, citing the Council’s frequent criticism of Israel and the fact that some members of the Council have poor human rights records, the Trump Administration withdrew from the UN Human Rights Council. Joining ten other NGOs, HRNK signed a letter to U.S. Secretary of State Mike Pompeo, stating that “Forfeiting the U.S. seat on the UN Human Rights Council only serves to empower actors on the Council, like Russia and China, that do not share American values on the preeminence of universal human rights....[W]ithout strategic U.S. engagement at the Council as a member, the U.S. loses a platform to influence the course of human rights globally for the better and the victims of human rights abuse globally will fall prey to the machinations of governments that will take advantage of this strategic vacuum.”

5. To the international community:

- Support the 2018 UN appeal for \$111 million in humanitarian aid to the DPRK. As part of this, support the recommendation by the UN Special Rapporteur on human rights in North Korea that humanitarian agencies should seek to reach all vulnerable groups, including “persons in detention.”
- Promote access on the part of the Office of the UN High Commissioner for Refugees and the Office of the UN High Commissioner for Human Rights to monitor and protect the rights of North Korean asylum-seekers in China as well as deportees and returnees to North Korea.
- Promote further access to and appropriate durable solutions for North Korean children living in China, particularly children born in China to North Korean mothers and Chinese fathers. This could include settlement in place with Chinese nationality and household registration, resettlement in another country, such as South Korea or the United States, or voluntary and safe return to family in North Korea.
- Support a return to North Korea of The Global Fund to Fight AIDS, Tuberculosis and Malaria and press the North Korean government to provide necessary transparency and accountability for the proper allocation of medical supplies and grants. In February 2018, The Global Fund announced that it was ending its activities in North Korea. A Global Fund official stated this was necessary “because the unique operating environment in the DPRK prevents us from being able to provide our Board with the required level of assurance and risk management around the deployment of resources.” Funds for the 2017–2020 funding cycle appear to be available. Without these resources, the gains in TB control could be reversed and, as one public health expert stated, “an explosion of drug-resistant tuberculosis is almost certain.”
- Support improved monitoring of North Korean refugees and asylum-seekers worldwide, including access to temporary protection and status determination procedures as well as effective health and social services for those granted temporary leave to remain or permanent residence.

INTRODUCTION

Ever since its founding, the Democratic People's Republic of Korea (DPRK) has remained isolated from much of the outside world, due to both internal decisions (*juche* ideology) and broader geopolitical conditions. While South Korea evolved from a virtual U.S. protectorate to a military dictatorship to a vibrant democracy, North Korea has remained an authoritarian, Stalinist regime that has completed two hereditary transfers of power. With the death of the “Great Leader” Kim Il-sung in July 1994, his son, Kim Jong-il, inherited a country beset with problems. The collapse of the Soviet Union in 1989 left North Korea without a key political ally and economic patron. Beginning in 1990, the North Korean GDP began to decline and, as many sources suggest, was in negative growth at least until the turn of the millennium, due in large part to faltering agricultural production.¹

As if the political and economic shocks from the loss of the Great Leader and his primary patron state were not enough, natural disasters struck several successive blows to North Korean farmers in the mid-1990s. A ten-day period of intense rainfall from late June to early July of 1995 brought floods “that were considered the worst in a century.”² More floods in 1996 damaged or destroyed an estimated 1.2 million metric tons of crops, comprising 12% of total production.³ The floods of 1995 and 1996 were followed in mid-1997 by the “worst drought in decades,” according to one international assessment. After two years of relative calm, drought struck again in 2000. “To make a long story short,” wrote one observer, throughout the 1990s, “North Korea seems to have been at the center of a global ecological disaster.”⁴

Following a joint mission in late 1995, the Food and Agricultural Organization (FAO) and the World Food Programme (WFP) issued a joint statement in December 1995 that 2.1 million children and 500,000 pregnant women were on the brink of starvation and appealed to the international donor community for contributions.⁵ Natural disasters were partly to blame for the crisis, along with the loss of Soviet patronage. However, the inefficiency and ideological rigidity of North Korea's agricultural and food policies exacerbated the crisis and created complications for the internal and international response.

A severe food crisis and famine ensued, peaking in 1996 and 1997, characterized by significant malnutrition, rise in infectious disease, and a dramatic spike in mortality among all age groups. Mortality estimates ranged from 240,000 to 3.5 million. Children were affected profoundly by the crisis in a variety of ways, including: elevated morbidity and mortality; negative impacts on education, health care, and family stability; and displacement and migration, both within and outside family care, and both within and outside the DPRK.

Beginning in 1998, the Center for Humanitarian Health (formerly the Center for Refugee and Disaster Response) at the Johns Hopkins Bloomberg School of Public Health, through projects led by W. Courtland Robinson in conjunction with other faculty, has monitored the health and human rights of the North Korean population within and outside the country's borders, including the status of children. We were invited by the Committee for Human Rights in North Korea (HRNK) to produce a report on the health and human rights of North Korean children over the past 25 years, focusing on health, nutrition, education, and especially vulnerable children, including children in detention, child laborers, unaccompanied and separated children, and refugee and migrant children, including children born in China to North Korean mothers and Chinese fathers.

This report examines the health and human rights of North Korean children from 1990 to the present, incorporating three methodological approaches: 1) a structured literature review of more than 200 relevant articles and reports in English and Korean; 2) analysis of qualitative data from 61 interviews conducted in China and South Korea in 2016; and 3) re-analysis and summarization of seven studies conducted on the China-North Korea border. This includes reports by the Center for Humanitarian Health on North Korean famine mortality and displacement, trafficking of North Korean women, durable solutions for North Korean children, psychosocial needs of North Korean children in China, monitoring of North Korean migration and vulnerability, and

1 Marcus Noland, Sherman Robinson, and Tao Wang, *Famine in North Korea: Causes and Cures* (Washington, D.C.: Institute for International Economics, 1999), 3.

2 Don Oberdorfer, *The Two Koreas: A Contemporary History* (Basic Books, 1997), 370.

3 Center for Disease Control and Prevention, “Status of public health in the Democratic People's Republic of Korea,” *MMWR* 46.24 (Aug. 1997).

4 Meredith Woo-Cumings, “Research Paper 31: The Political Ecology of Famine: The North Korean Catastrophe and Its Lessons,” *Asian Development Bank Institute* (Tokyo, Jan. 2002): 28.

5 Oberdorfer, *The Two Koreas*, 371.

estimation of populations of North Korean refugees and migrants in China, including children born to North Korean mothers and Chinese fathers.⁶

This report is not a legal analysis, and it does not seek to document specific, individual instances of human rights violations. That work has been done by many and more competent human rights lawyers and investigators, most comprehensively by the United Nations Commission of Inquiry (COI) on Human Rights in the DPRK.⁷ We endorse and support the principal findings of the COI that “widespread and gross human rights violations have been and are being committed by the Democratic People’s Republic of Korea” and that victims of these violations include children, particularly homeless children, child laborers, child prisoners, children born to North Korean women in China, and others.⁸

Our focus is on the health and human rights conditions of North Korean children over time, examining the available data on physical and mental health, education, work, punishment, and displacement and migration. This information is assessed using various categories of human rights standards, including: non-discrimination; best interests of the child; name, nationality and family; education/access to information; separation from parents and family reunification; asylum, freedom of movement, and refugee status; physical and mental health; adequate standard of living; child labor/human trafficking; nutrition/right to food; and protection from all forms of violence, abuse and neglect/freedom from torture and deprivation of liberty. In identifying these categories, we applied a number of international human rights treaties and instruments, including three core instruments:⁹

1. *Universal Declaration of Human Rights*

Several Articles of the 1948 Universal Declaration of Human Rights (UDHR) apply to North Korean children:

- **Article 6.** Everyone has the right to recognition everywhere as a person before the law.
- **Article 13.** (1) Everyone has the right to freedom of movement and residence within the borders of each state. (2) Everyone has the right to leave any country, including his own, and to return to his country.
- **Article 14.** (1) Everyone has the right to seek and enjoy in other countries asylum from protection.
- **Article 15.** (1) Everyone has the right to a nationality. (2) No one shall be arbitrarily deprived of his nationality nor denied the right to change his nationality.
- **Article 25.** (1) Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services...(2) Motherhood and childhood are entitled to special care and assistance. All children, whether born in or out of wedlock, shall enjoy the same social protection.
- **Article 26.** (1) Everyone has the right to education.

The UDHR establishes a number of fundamental rights relevant to the protection and care of children: recognition as a person under law, freedom of movement within one’s country, the right to leave one’s country and to return, the right to seek asylum, the right to a nationality and to change one’s nationality, the right to special care and assistance for children born in or out of wedlock, and the right to an education.

2. *Convention on the Rights of the Child*

The 1989 Convention on the Rights of the Child (CRC) defines a child as “every human being below the age of eighteen years unless, under the law applicable to the child, majority is attained earlier.” Both China and North Korea are States Parties to the CRC. Articles that are of particular relevance to the situation of North Korean children are:

- **Article 2.** (2) States Parties shall take all appropriate measures to ensure that the child is protected against all forms of discrimination or punishment on the basis of the status, activities, expressed opinions, or beliefs of the child’s parents, legal guardians, or family members.
- **Article 3.** (1) In all actions concerning children, whether undertaken by public or private social welfare institutions, courts of law, administrative authorities or legislative bodies, the best interests of the child shall be a primary consideration.

⁶ For a more detailed discussion of the study methodology, see Appendix 1.

⁷ UN Human Rights Council, *Report of the detailed findings of the commission of inquiry on human rights in the Democratic People’s Republic of Korea*, UN Doc. A/HRC/25/CRP.1 (Feb. 7, 2014).

⁸ In this report, we describe “homeless children” as unaccompanied and separated children.

⁹ Also relevant are the International Covenant on Economic, Social and Cultural Rights (ICESCR), the International Covenant on Civil and Political Rights (ICCPR), the Convention on the Elimination of all Forms of Discrimination against Women (CEDAW), and the Convention Relating to the Status of Stateless Persons.

- **Article 7.** (1) The child shall be registered immediately after birth and shall have the right from birth to a name, the right to acquire a nationality and, as far as possible, the right to know and be cared for by his or her parents.
- **Article 9.** (1) States Parties shall ensure that a child shall not be separated from his or her parents against their will, except when competent authorities subject to judicial review determine, in accordance with applicable law and procedures, that such separation is necessary for the best interests of the child.
- **Article 10.** (1) Applications by a child or his or her parents to enter or leave a State Party for the purpose of family reunification shall be dealt with by States Parties in a positive, humane and expeditious manner. (2) States Parties shall respect the right of the child and his or her parents to leave any country, including their own, and to enter their own country.
- **Article 11.** (1) States Parties shall take measures to combat the illicit transfer and non-return of children abroad.
- **Article 20.** (1) A child temporarily or permanently deprived of his or her family environment, or in whose own best interests cannot be allowed to remain in that environment, shall be entitled to special protection and assistance provided by the State. (2) States Parties shall in accordance with their national laws ensure alternative care for such a child.
- **Article 22.** (1) States Parties shall take appropriate measures to ensure that a child who is seeking refugee status or who is considered a refugee in accordance with applicable international or domestic law and procedures shall, whether unaccompanied or accompanied by his or her parents or by any other person, receive appropriate protection and humanitarian assistance.
- **Article 28.** (1) States Parties recognize the right of the child to education.

The CRC stipulates core responsibilities for the care and protection of children, making it clear that the obligations of States Parties apply regardless of the status of the parents and that the best interests of the child should be paramount. In the context of a child who is seeking refugee status or considered a refugee under international or domestic law, the CRC calls upon States Parties to provide appropriate protection and humanitarian assistance.

3. *Convention Relating to the Status of Refugees*

The 1951 Convention Relating to the Status of Refugees—to which China, the Republic of Korea (South Korea), and the United States are signatory—defines a refugee as a person who “owing to a well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion—is outside the country of his nationality and is unable, or owing to such fear, is unwilling to avail himself of the protection of that country; or who, not having a nationality and being outside the country of his former habitual residence...is unable or, owing to such fear, is unwilling to return to it.” The DPRK is not a signatory to this treaty. Articles of relevance to the situation of North Korean children in China include:

- **Article 3.** The Contracting States shall apply the provisions of this Convention to refugees without discrimination as to race, religion or country of origin.
- **Article 4.** The Contracting States shall accord to refugees within their territories treatment at least as favorable as that accorded to their nationals with respect to freedom to practice their religion and freedom as regards the religious education of their children.
- **Article 22.** (1) The Contracting States shall accord to refugees the same treatment as is accorded to nationals with respect to elementary education.
- **Article 27.** The Contracting States shall issue identity papers to any refugee in their territory who does not possess a valid travel document.
- **Article 31.** (1) The Contracting States shall not impose penalties, on account of their illegal entry or presence, on refugees who, coming directly from a territory where their life or freedom was threatened...enter or are present in their territory without authorization, provided they present themselves without delay to the authorities and show good cause for their illegal entry.
- **Article 32.** (1) The Contracting States shall not expel a refugee unlawfully in their territory save on grounds of national security or public order. (2) The expulsion of such a refugee shall be only in pursuance of a decision reached in accordance with due process under law. (3) The Contracting States shall allow such a refugee a reasonable period within which to seek legal admission into another country.
- **Article 33.** (1) No Contracting State shall expel or return...a refugee in any manner whatsoever to the frontiers of territories where his life or freedom would be threatened on account of his race, religion, nationality, membership of a particular social group or political opinion.

In undertaking this study of the health and human rights of North Korean children, both inside and outside their country, we apply a public health perspective that treats health as a human right that must be guaranteed to every individual without discrimination. For the purpose of this report, we define health as a “state of complete physical, mental, and social well being, and

not merely the absence of disease or infirmity.”¹⁰ In other words, a population’s state of health is not only determined by disease risk and burden and access to health care, but also by access to clean water, nutritious food, safe shelter, a productive livelihood, quality education, and basic freedoms.

It is this perspective that compels us to review all available data—government documents, reports by the UN and other international organizations, NGO reports, and academic research—to identify patterns and trends that may provide evidence of poor health among individuals or populations, and evidence of discriminatory or abusive practice, especially by the government. Some of the evidence, including population studies as well as individual interviews, include specific information about when and where certain events occurred. Other pieces of evidence pertain to broader time periods or areas, or individual experiences that cannot be easily mapped in space and time.

As this report will show, the available data on North Korean children over the last quarter century are limited and problematic in two important ways. First, data on children inside North Korea are constrained by the very limited access given to outside organizations and observers. Some data from the government, even when gathered in cooperation with international organizations, are flawed, incomplete, and distorted.¹¹ All of it must be reviewed with a degree of caution, with close attention to both what is revealed and what is not revealed.

Second, the available data on children outside of North Korea—whether they are in China, South Korea, the United States, or other countries—is subject to a different form of bias. Simply put, people who leave their country are not the same as those who do not leave. They may be healthier, since they have survived the rigors of escaping North Korea and were able to make the effort to leave. On the other hand, they may have left because they were facing a dire situation, or because they were more exposed to deprivation and oppressive treatment. They are likely to be closer to geographic crossing points and more likely to have the means to migrate, relative to those who do not leave. Thus, we must be cautious in drawing overly broad conclusions about conditions inside North Korea from studies of those who have left the country.

Taken together, these two sets of data provide an incomplete patchwork of often contradictory information and images. This report does not attempt to make a seamless and fully coherent picture, since there is much that is hidden from view. However, we are able to offer the following conclusion. Given all that we know from the data from inside North Korea, the situation is no better than what we can see. The actual situation is likely to be worse, but even what we can see is dire enough. And given all that we know from the data from outside North Korea, as obtained from refugees and migrants in other countries, the situation of the displaced populations, and the families and communities they describe, is nothing short of calamitous.

¹⁰ Preamble to the Constitution of WHO as adopted by the International Health Conference, New York, June 19–July 22, 1946. Signed July 22, 1946 by the representatives of 61 States (Official Records of WHO, no. 2, 100) and entered into force on April 7, 1948. The definition has not been amended since 1948. See <https://www.who.int/about/who-we-are/frequently-asked-questions>.

¹¹ See Nicholas Eberstadt and Judith Banister, *The Population of North Korea* (Berkeley: Institute of East Asian Studies, University of California, 1992) which includes a chapter, “Faithfully Reported or Falsified,” in which the authors state that “North Korea has released some evidently politicized, and highly suspect, statistics in its time” (9). Regarding population and census data, the authors conclude that “for the most part, population statistics released to the United Nations were reported as they were collected and calculated from the registration system” (11). In a chapter on “The Health Care System,” however, they note “puzzles and inconsistencies” in data provided to the United Nations Population Fund (UNFPA). In 2001, Eberstadt declared “preposterous” the reported low incidence of low birthweight babies in 2000/2001 data published by the DPRK. See Nicholas Eberstadt, *The North Korean Economy: Between Crisis and Catastrophe* (New Brunswick, NJ: Transaction Publishers, 2007).

CHAPTER 1.

POPULATION AND DEMOGRAPHY OF NORTH KOREA

A. Overview

When Kim Jong-il assumed the mantle of leadership from his father in 1994, he “inherited the most precarious situation in the DPRK’s history. The DPRK’s contest with the ROK for diplomatic, economic and military superiority [had] clearly been lost and the economy [was] in rapid decline.”¹² If North Korea had lost the contest for superiority with the South, this was not immediately clear in many of the demographic indicators from the early 1990s (see Table 1 below). The UN’s estimate of the crude birth rate for 1990–1995 was 21.8 per 1,000, and the estimated crude death rate was 5.5 per 1,000. Infant mortality was estimated at 24.4 deaths of children under one year old per 1,000 live births.¹³ Life expectancy was estimated at 67.2 years of age for both genders.

Table 1. North and South Korea: Demographic Indicators, c. 1990

	North Korea	South Korea
Population (millions)	21.2	44.2
Population Density (persons per sq. km)	173	445
Urban Population (% of total population)	73.6	78.1
Sex Ratio (males per 100 females)	94.9	101.3
Median Age (years)	27	31
Population Aged 0–14 (percent)	27.9	23.2
Population Aged 15–64 (percent)	66.6	70.7
Population Aged 65+ (percent)	5.5	6.1
Crude Birth Rate (total births per 1,000 population)	21.8	16.5
Crude Death Rate (total deaths per 1,000 population)	5.5	5.5
Life Expectancy at Birth, Females	72.0	75.4
Life Expectancy at Birth, Males	65.6	67.4
Total Fertility Rate	2.4	1.7
Infant Mortality Rate (deaths <age 1 per 1,000 live births)	33	14
Under-Five Mortality Rate (deaths <age 5 per 1,000 live births)	43	16
GNP Per Capita (in \$US)	970	7,660

Sources: DPRK Central Bureau of Statistics, 1993; ROK National Statistics Office, 1995; UNDP Human Development Report, 1994; UNESCO Yearbook, 1993; UNICEF, 1999; UN Inter-Agency Group for Child Mortality Estimation, 2017.

¹² Commonwealth of Australia, “DPRK-Country Information, November 2000.” www.dfat.gov.au/geo/dprk/dprk_brief_historical.html.
¹³ UN Department of Economic and Social Affairs, *1996 Demographic Yearbook* (New York: United Nations, 1998).

North Korea did not seem to differ dramatically from South Korea in many of these measures, despite a per capita GNP that was only one-eighth the size of its neighbor. But, as it happened, the 1990s in the DPRK were marked by sharp reversals in almost every sector of society. The contrast between the two countries, to the extent that it could be measured accurately, would become starkly clear by the end of the decade and into the new millennium.¹⁴ The most pronounced change was in the crude death rate, which stood at 5.5 per 1,000 population for both countries in the mid-1990s, and age-specific death rates for children, including infant mortality (under the age of one) and under-five mortality. All of these death rates rose significantly in North Korea during the 1990s as a result of natural disasters and crop failures combined with economic collapse and political intransigence. The impacts of severe food insecurity and social collapse have been dramatic, as this chapter and subsequent chapters will demonstrate.

B. “Famine in Slow Motion” or “Arduous March”?

In *The Great North Korean Famine*, Andrew Natsios relates how, in 1991, North Korean government officials had approached Kim Jong-il, conveying their worries of a large food deficit and seeking permission to approach the World Food Programme (WFP) for help. He reportedly agreed, but suggested that they should not mention the matter to his father, perhaps out of concern for his failing health.¹⁵ A food assessment, conducted jointly by the WFP and the Food and Agriculture Organization (FAO), found no particular needs requiring a food aid response, and in fact politely questioned why food aid had been requested at all, particularly given the government’s claim of a 10 million MT [metric ton] harvest, no poor people and no malnutrition. The report concluded: “For a number of reasons...the mission has been unable to establish a case for food aid. It has not been unwilling to do so, but unable.”¹⁶

Although the WFP was not aware at the time, Natsios suggests, “it had played a starring role in an early scene in the famine drama.” Kim Il-sung apparently learned of the assessment team’s visit and, angry at not being involved in the decision, countermanded his son’s approval of the visit. WFP was to receive no information about food shortages, even though there was other evidence of such shortages. As early as 1991, the government had launched a propaganda campaign, exhorting its citizens: “Let’s eat only two meals a day.” Reports about food riots in 1993 filtered out; in 1994, North Korean radio broadcasts acknowledged the existence of hunger.¹⁷ In early- to mid-1995, before the floods, North Korean representatives had approached the U.S., South Korean, and Japanese governments with requests for up to 1 million tons of emergency food aid.¹⁸

Another sign of encroaching food scarcity in the 1990s was the decline in food rations available to North Korean workers through the government-run Public Distribution System (PDS). A 1952 government decree established daily food rations for various groups, comprising around 62 percent of the population. These included adult workers, soldiers, elderly and children. Workers on cooperative farms who relied on their own production were outside the PDS, while workers on state farms received only six months’ rations through the PDS. Official allocations ranged from 300 grams per day for children under the age of 6 and the elderly to 700 grams per day for adult workers and 800 grams for soldiers, although reductions to maintain government stockpiles cut this by about 22 percent.¹⁹

By the early 1990s, according to Natsios, food distribution through the PDS was becoming more irregular and intermittent. Sometime in 1993 or 1994, he notes, Pyongyang cut off food subsidies to the northeastern region of the country, effectively leaving it to fend for itself: “As the economy contracted, what little remained of the rice surpluses, donor food aid, and commercial imports was directed to feeding the capital city, the party elites, the military, and laborers in essential industries.”²⁰ Natsios likely would concur with Noland’s assessment that “[a]lthough flooding precipitated the food crisis in North Korea,

14 For an extended discussion of North Korean population data, and their veracity, see Nicholas Eberstadt and Judith Banister, *The Population of North Korea* (Berkeley, CA: Institute of East Asian Studies, 1992).

15 Andrew S. Natsios, *The Great North Korean Famine: Famine, Politics and Foreign Policy* (Washington, D.C.: United States Institute of Peace Press, 2001), 165.

16 Ibid., 166.

17 Noland, Robinson, and Wang, *Famine in North Korea*, 4.

18 Natsios, *Great North Korean Famine*, 167; Noland et al., *Famine in North Korea*, 4.

19 Noland et al., *Famine in North Korea*, 6. As Noland et al. note, “Agricultural operations are organized into state farms and peasant cooperatives. On the state farms, peasants are paid fixed salaries. In the case of the cooperatives, which are theoretically owned by the members, members receive equal shares paid in cash and in kind, with bonuses going to work units overfilling targets” (5).

20 Natsios, *Great North Korean Famine*, 106.

agriculture, like the rest of the economy, has been in secular decline since the beginning of the decade. Even without flooding, North Korea would have entered the mid-1990s with a substantial apparent food deficit.”²¹

International food shipments began in 1995, with contributions that year totaling 544,500 metric tons. In 1996, following the second round of flooding, international aid contribution totaled another 505,200 metric tons, donated either through the WFP or bilateral public and private channels.²² In April 1997, the WFP announced that North Korea was “on the knife edge of a major famine” and made a \$95 million emergency appeal for 200,000 tons of food for an estimated 5 million North Koreans facing starvation. By the WFP’s estimates, the North Korean government’s food rations issued through the PDS had declined from a level of 700 grams per person per day to about 100 grams per person per day in 1997.²³

By 1997, North Korea was either teetering on the edge of famine or had already fallen in. The DPRK, for its part, strongly resisted the term “famine,” saying that the country was simply facing temporary food shortages brought on by climatic reversals. North Korea experiencing “food-related problems” (*meong-neun mun-je*) brought on by natural disasters, not famine. Citizens were forbidden to talk about famine in North Korea. They could only discuss an “adverse impact on food rations” (*singnyang tagyeok*).²⁴ Editorials in the *Rodong Sinmun*, the Korean Workers’ Party’s official newspaper, called on the people to overcome food shortages with the same revolutionary spirit shown by Kim Il-sung in his legendary “Arduous March” (*Gonan-ui haenggun*, also known as the “March of Suffering”) through Japanese-controlled Manchuria in the 1930s.²⁵

To reinforce its narrative that the food crisis was caused primarily by natural disasters, the government agency that was established to oversee the food relief effort and manage relations with humanitarian agencies was named the Flood Disaster Rehabilitation Committee (FDRC). The international media and many non-governmental organizations (NGOs), on the other hand, were saying that North Korea appeared to be in the grip of famine, though the evidence was elusive. Western donors were ambivalent and the UN agencies were trying to define the problem without taking sides. Following a visit to the northeastern provinces in April 1997, a senior WFP official, Tun Myat, held a press conference in Beijing, at which he first coined the phrase that many others would come to repeat: “famine in slow motion.” As Natsios writes,

*This darkly evocative term... provided the WFP senior leadership with an elegant compromise to the contending sides in the debate over what was happening. The compromise satisfied everyone a little. For the U.S. NGOs that claimed a massive famine was ravaging the country, the operative word “famine” was used. For the European NGOs and the European Union, which were skeptical of the alarmist claims, the slow motion qualification allowed a measure of comfort. The term gave donors such as the U.S. government a defense against the legislative branch and media criticism concerning the commitment of food aid to a repugnant regime; moreover, their modest aid commitments seemed more generous when the famine was described as being in slow motion. Most important, the moderated language diminished the anger of the North Korean government, humiliated by public disclosure of its internal problems. The term allowed some negotiating room for the nutritional scientists who themselves were engaged in a debate over what was occurring... Clearly, people were in trouble and nutritional conditions were deteriorating, and yet expatriates saw no visible evidence of famine comparable to what they had seen in Somalia or Ethiopia.*²⁶

Two studies conducted under UN auspices in 1997 and 1998 showed significant signs of wasting and stunting among young children.²⁷ But there was little reliable information about the impact of the North Korea food crisis on the population in general, and practically nothing was known about recent mortality rates. Efforts to obtain this sort of data were repeatedly blocked by the North Korean government. Although the DPRK sought and had begun to receive substantial contributions of international aid, the reclusive regime discouraged outside organizations from documenting vital rates or otherwise measuring the public health impacts of the crisis. Frustrated by North Korea’s unwillingness to permit random sample surveys or independent interviewing of the population, some organizations began to look at the Chinese border, which North Koreans had been crossing in search of food.

In July 1997, World Vision, a U.S.-based NGO, interviewed a few dozen individuals at the China-North Korea border and concluded that 15 percent of the population in the northern provinces had died in the previous two years. “This famine,” said

21 Noland et al., *Famine in North Korea*, 6.

22 WFP, “Food Aid Deliveries to Democratic People’s Republic of Korea from 1995 to 2003,” (International Food Aid Information System, 2003).

23 WFP, “On the knife edge of a major famine,” (Rome: Apr. 18, 1997).

24 Sandra Fahy, “Mapping a Hidden Disaster: Personal Histories of Hunger in North Korea.” *Natural Hazards Observer* (Sep. 2015): 22-27. <https://hazdoc.colorado.edu/bitstream/handle/10590/5438/C024508.pdf>.

25 *Ibid.*, 26.

26 Natsios, *The Great North Korean Famine*, 170.

27 Results from a 1997 study were published in Judit Katona-Apte and Ali Mokdad, “Malnutrition of children in the Democratic People’s Republic of North Korea,” *Journal of Nutrition* 128 (1998): 1315-1319. A 1998 survey was published in European Union, UNICEF, World Food Programme, *Nutrition Survey of the Democratic People’s Republic of Korea* (New York: UNICEF, 1998). These studies, and others, are examined in more detail in Chapter 4.

the report, “may well be much more severe than any news reports have indicated.”²⁸ In February 1998, a private South Korean organization called the Korean Buddhist Sharing Movement (KBSM) released the first of a series of reports on the North Korean food crisis based on interviews with North Korean migrants in China. The KBSM’s findings, based on a larger number of interviews than the World Vision assessment, suggested dramatic rises in mortality in 1996 and 1997. “We have determined,” the report stated, “that the worst famine in human history is now transpiring in North Korea.”²⁹

Concerned by these accounts but unable to assess the reliability of their findings, the Center for Humanitarian Health at the Johns Hopkins Bloomberg School of Public Health collaborated with international and local partners to conduct a study among North Korean migrants in China. The principal findings, presented below, are based on a one-year, retrospective study of 2,692 North Korean households and the mortality risks they were facing in light of the food crisis in the DPRK. For the purposes of this report, we focus on our findings about children in particular.

C. The North Korean Famine and Its Effects on Children

Methodology

The study site selection was based on a network of community-based aid sites identified by the Johns Hopkins study team and partner organizations. A total of nine sites were selected within Yanbian Korean Autonomous Prefecture along or near the China-North Korea border that assisted anywhere from 25 to 100 arrivals per month. At these nine selected sites, 2,692 North Korean adult migrants were interviewed between July 1999 and June 2000. Respondents were asked to provide a list of their household members as of January 1995, including age, gender, education level, occupation, and relationship to the respondent as well as information on births, deaths, and migration patterns in their household in North Korea from the beginning of 1995 to the end of 1998. Respondents were also asked how much food they received each year through government distributions, to name the main source of the household’s food each year, and to rank food sources by order of importance. In addition, information on other household factors, such as dwelling size and political background, and community factors, such as province of residence and whether it was an urban or rural residence, was also obtained.

Of the 2,692 households surveyed, information was collected on 10,640 individuals, who were members of the household for all or part of the four-year period.³⁰ To analyze child mortality and its association with either individual or household characteristics, we examined data on 2,791 children in 1,855 households between the ages of 0 and 14.³¹ We chose this age range for two reasons. First, this is the standard age range used in a number of recent and expert global analyses of child mortality.³² Second, among the 15 to 19 age group, 18- to 19-year-olds are considered adults, 17-year-olds can be conscripted into the military, and 16 is the minimum age for work. To measure child mortality within households, therefore, including 15- to 19-year-olds can be problematic.

Demographic Characteristics of Children

As noted above, the survey contained 10,640 individuals, among whom 2,791 (26.2%) were children between the ages of 0 and 14. A majority (1,500 or 53.7%) of children were male, while 1,028 (46.3%) were female (see Table 2).

28 World Vision, “North Korea Food Questionnaire” (Federal Way, Washington: 1997).

29 Korean Buddhist Sharing Movement, *The Food Crisis of North Korea Witnessed by 1,019 Food Refugees* (Seoul: 1998).

30 This includes those who were in the household for a part of the period, either entered the household through birth or in-migration, or left the household through out-migration or death.

31 For purposes of the analysis presented in this report, “age” refers to age at entry into the study household, thus treating the age variable as fixed rather than time-varying over the four-year period.

32 See, for example, UN Inter-Agency Group for Child Mortality Estimation, *Levels and Trends in Child Mortality: Report 2017* (UNICEF, New York: 2017).

Table 2. Age and Gender Distribution of Children

Age *	Male (% of Total)	Female (% of Total)	Total Number (% of Total)
0–1	364 (13.0%)	403 (14.4%)	767 (27.5%)
1–4	355 (12.7%)	294 (10.5%)	649 (23.3%)
5–9	374 (13.4%)	300 (10.7%)	674 (24.1%)
10–14	407 (14.6%)	294 (10.5%)	701 (25.1%)
Total	1,500 (53.7%)	1,291 (46.3%)	2,791 (100.0%)

* Age at entry (through residence as of 1995 or subsequent birth or in-migration) into the household.

This distribution between male and female is consistent both with other observations about the North Korean migrant population in China at the time, and is comparable to 1993 North Korean census data, which showed a distribution of 51.7% males and 48.3% female for the same ages.

Table 2 shows the characteristics of the children by their mortality outcome. Chi-square tests were applied to determine statistically significant differences in the number of deaths across the categories of each variable. Nearly half of the 188 deaths (48.9%) among 0- to 14-year-olds occurred among infants (0–1), followed by the 1 to 4 (20.7%) and the 5 to 9 (23.9%) age groups. The lowest number and proportion of deaths (6.4%) were among 10- to 14-year-olds, who typically experience the lowest age-specific death rates in populations. The proportion of deaths across the different age groups was statistically significant ($p < 0.001$). Mortality rates were not significantly different between male and female children. At most age levels, except the very young and the very old, females have been shown to have a “mortality advantage” compared to males, something that is evident when examining mortality across all age intervals in the sample population.³³ Children in rural populations had a higher rate of mortality than children in urban areas.

Two of the household-level variables had significant associations with differential mortality outcomes for children: dwelling space ($p < 0.001$) and household size in 1995 ($p = 0.006$). Roughly half of all children in the sample lived in households where living space was between 20m² and 39m². A 1991 analysis of North Korean housing by the Korea National Housing Corporation, based in South Korea, concluded that families in North Korea lived in 28.7m² to 36.3m² of living space in 1990.³⁴

The same study also concluded that North Korean housing was divided into five grades, depending on class:

Houses with more than 198 square meters of space with a bathroom and a garden were taken by vice directors and the upper classes of the Workers’ Party. Newly built apartments with 66–82.5 square meters were provided for professors and bureau chiefs of the Party. Most workers lived in publicly financed houses with only 26.4–33 square meters of space.³⁵

Taking a 20–39m² living space as a reference, children living in sub-standard dwelling spaces (6–19m²) had higher proportions of mortality: 47 of 376 (12.5%), which is essentially double the mortality rate of children in larger dwelling spaces. While this may be seen primarily as a marker for lower socio-economic and political status, it is also possible that smaller space is related to crowding and increased susceptibility to infectious disease.

33 See Kate MacIntyre, “Famine and the Female Mortality Advantage,” in *Famine Demography*, edited by Tim Dyson and Cormac O. Grad (Oxford University Press, 2002), 240–259.

34 As of 1995, the same figure for South Korean families was 82.8 square meters.

35 “Housing Supply Rate in NK Tallied at 56–63 Pct,” *Korea Times*, September 21, 2001.

Table 3. Characteristics of Children by Mortality Outcome, 1995–1998

Variable	Mortality Outcome		Chi-Square test p-value
	Died During Period (n=188)	Survived During Period (n=2,603)	
Individual-level Variables			
	Sample No. (%)	Sample No. (%)	
Age¹			
0–1	92 (48.9%)	675 (25.9%)	< 0.001 ***
1–4	39 (20.7%)	610 (23.4%)	
5–9	45 (23.9%)	629 (24.2%)	
10–14	12 (6.4%)	689 (26.5%)	
Sex			
Male	99 (52.7%)	1,401 (53.8%)	0.76
Female	89 (47.3%)	1,202 (46.2%)	
Household-level Variables			
Urban or Rural Residence			
Rural	99 (52.7%)	1,255 (48.2%)	0.24
Urban	89 (47.3%)	1,348 (51.8%)	
Dwelling Space			
6–19 m ²	47 (25.0%)	329 (12.6%)	<0.001 ***
20–39 m ²	89 (47.3%)	1,449 (55.7%)	
40–59 m ²	42 (22.3%)	641 (24.6%)	
60+ m ²	10 (5.3%)	184 (7.1%)	
Household Size in 1995 (No. of People in Household)			
1–2	17 (9.0%)	110 (4.2%)	0.006 **
3–4	126 (67.0%)	1,757 (67.5%)	
4–5	45 (23.9%)	736 (28.3%)	
5+			
Family's Class Background²			
"Hostile"	10 (5.3%)	119 (4.6%)	0.14
"Wavering"	160 (85.1%)	2,315 (89.3%)	
"Core"	18 (9.6%)	158 (6.1%)	
Party Member in Household			
No	103 (54.8%)	1,298 (49.9%)	0.19
Yes	85 (45.2%)	1,305 (50.1%)	
Average Monthly Food Rations			
0–5 kgs per month	99 (52.7%)	1,194 (45.9%)	0.19
5–15 kgs per month	64 (34.0%)	1,001 (38.5%)	
15+ kgs per month	25 (13.3%)	408 (15.7%)	
International Food Aid³			
No	154 (81.9%)	1,881 (72.5%)	0.005 **
Yes	34 (18.1%)	714 (27.5%)	

*P<.05; **P<.01; ***P<.001.

¹Age at entry into the household through residence in 1995, or birth, or in-migration during the four-year period.

²11 individuals, all surviving the 4-year period, were missing or did not report political class background.

³8 individuals, all surviving the 4-year period, were missing or did not report international food aid information.

The households in the sample occupied an average of 33.5m² of living space as of 1995. Due to a combination of deaths in excess of births and household out-migration in excess of in-migration during the four-year interval, household size declined from an average of 4.0 at the beginning of 1995 to 3.6 at the end of 1998. Compared to official DPRK statistics for 1987, which reported a national average household size of 4.8 and an average of 4.7 for North Hamgyong Province,³⁶ the households in the sample appear about 20% smaller at the start of 1995 and declined even further by the end of 1998.³⁷

36 81.7% of the households with children in the sample were from this northeastern province.

37 It should be noted again that respondents were interviewed in China in 1999–2000 and, while they were asked to include themselves in any household counts while they were members of those households in 1995–1998, it is possible that they did not always do this. It is also possible that households with one migrant (in this case, a cross-border migrant) might be more likely to have other household members migrating as well, thus creating smaller-than-average households.

Respondents were asked about their family's class background (*songbun*). Since the late 1950s, the North Korean regime has divided its population into three main classes: "core," "wavering," and "hostile."³⁸ These three basic categories, in turn, comprise as many as 51 sub-categories (though this number is believed to have been condensed to around 10 since the 1980s):

- The "core" class, comprising around 25 percent of the population in the 1990s, includes Party members, industrial workers, farm-workers, families of poor farmers, office workers, families of revolutionary heroes, intellectuals educated after 1945 in North Korea or other socialist countries, families of war veterans and war victims, military families, and wounded veterans.
- The "wavering" class, which comprised up to half of the population, includes former small merchants, artisans, factory owners and traders, political independents, returnees from China and Japan, families of those who went to South Korea, medium-scale farmers and capitalists, intellectuals educated before liberation, the lazy and corrupt, "tavern hostesses," practitioners of superstition, and economic offenders.
- The "hostile" class, comprising around 25 percent of the population, include former merchants, landlords, and capitalists, wealthy farmers, pro-Japanese and pro-American sympathizers, reactionary bureaucrats, religious practitioners (Protestants, Catholics, and Buddhists), Confucian scholars, persons returning from South to North after liberation, persons expelled from the Party or from office, employees of "enemy" organizations, spies and collaborators, freed political prisoners, ex-convicts, families of prisoners, families of executed persons, and anti-Party and counter-revolutionary elements.

As Choi noted in 1999,

These loyalty ratings determine access to employment, higher education, place of residence, medical facilities, and certain stores. They also affect the severity of punishment in the case of legal infractions. While there are signs that this rigid system has been relaxed somewhat in recent years—for example, children of religious practitioners are no longer automatically barred from higher education—it remains a basic element of North Korean society.³⁹

Mortality outcomes among children were not significantly associated with the household's class background. Indeed, mortality rates among children in the "core" class households in the sample had higher mortality rates. This could be an artifact of the small sample size, or it could reflect the possibility that the experiences of "core" class households from 1995 to 1998 that eventually included at least one migrant in China were different from households that did not have any migration to China. As a number of observers have pointed out, it is also possible that the effects of *songbun* status are not as direct and specific as they were in earlier decades. It is also possible that there is significant variation within a given broad political class. Among the "core" political class designations, for example, the family of a Korean War victim living in a remote farming community in North Hamgyong Province might have little in common with the family of a high-ranking "revolutionary hero" living in Pyongyang. Though both enjoyed favored political status, regional and other factors may have played a significant role in moderating childhood mortality impacts from 1995 to 1998. Our sample was much more likely to include the former than the latter.

Respondents were also asked whether their household included a member of the Korean Workers' Party (KWP). As Table 4 indicates, nearly half of all households were reported to include a KWP member as of January 1995. Among households in the four main "hostile" class sub-categories, the percentage with KWP members ranged from 0 to 2.6%. Among the three main "wavering" class sub-categories, KWP membership ranged from 48.2 to 53.4% of households. Finally, among the three main "core" class sub-categories, between 84.8 and 92.3% of households included at least one KWP member. While KWP membership is highly correlated with class background, the presence or absence of a Party member in the household, irrespective of class background, may be the more important marker for socio-economic status. While the proportion of deaths was not statistically different depending on whether or not the household included a member of the KWP party, mortality rates were higher among children living in households without a KWP member.

38 Sung-Chul Choi, *Human Rights and North Korea* (Seoul: Hanyang University Institute of Unification Policy, 1999), 235. The designations "core," "wavering," and "hostile" have also been translated as "loyal," "unstable," and "impure" respectively.

39 Choi, *Human Rights and North Korea*, 235-236.

Table 4. Political Classification of Households with a Korean Workers' Party Member

	Category	Number (% with Party Member)
"Hostile"	Political Prisoner	24 (0.0%)
	Collaborator	1 (0.0%)
	Those Who Went South	28 (0.0%)
	Internal Exile	76 (2.6%)
"Wavering"	Rich Peasant	55 (49.1%)
	Middle Peasant	657 (53.4%)
	Poor Peasant	1,763 (48.2%)
"Core"	War Victim	46 (84.8%)
	Veteran	91 (90.1%)
	Revolutionary Hero	39 (92.3%)
	Other	6 (50.0%)
	Missing	5 (20.0%)
	Total	2,791 (49.7%)

Regarding their household's food situation in North Korea, respondents were first asked to identify the amount of food that their household had received through the PDS since 1995. Under the ten-tiered structure based on age and occupational status, a working adult was entitled to 700g of food-grain per day, with children receiving 500g and elderly receiving 600g per day. By 1997, according to UN estimates, PDS allocations were averaging only about 100g per person per day.

Among the sample households, respondents reported that household members should have been given an average of 12kg of food per person per month, or approximately 400g of food-grain per person per day. This official ration amount did not vary substantially during the four years, 1995 to 1998. In contrast to the ration amounts officially promised, however, respondents reported a steady decline in the amounts that were actually provided. Even at the beginning of the period (1995), respondents reported that household members were being given an average of only 3.2kg of food per person per month, or about 110g per person per day. This declined steadily throughout the four-year period to an actual ration of about 50g of food per person per day (Table 5).

Table 5. Household's Actual Rations by Year

Actual Ration	1995	1996	1997	1998
Kilograms per Household per Month	12.7	8.7	6.0	5.0
Grams per Person per Day	107	77	53	47

Note: The calculation of grams per person per day takes into account that average household size was declining during the four-year period from 3.93 in 1995 to 3.86 in 1996 to 3.74 in 1997 and in 1998 to 3.62 persons per household.

We constructed a categorical variable based on the average kilograms of food grain per month that each household received between 1995 and 1998. The three categories were 1) less than 5kg of food-grain per month; 2) between 5kg and 10kg of food per month; and 3) 15 or more kilograms per month. The average actual ration per year during the study interval was 8.11 kilograms per household per month, calculated using the average household size for the period under study. While mortality rates were not significantly different across categories, the proportion of children dying rose as average household food rations declined.

Finally, survey respondents were asked whether any household members had received international food aid between 1995 and 1998. Respondents were not asked to specify the particular source, amount, or the timing and frequency of the international food assistance.⁴⁰ This variable simply measures whether a household had ever received any amount of international food aid in a given year. More than a quarter of the households (26.9%) said they had received international food aid during the four-year period, and a lower number of childhood deaths were reported by households receiving such aid ($p = 0.005$).

Temporal Patterns of Mortality

Looking at four-year patterns of mortality by year and season, it can be seen that the year of 1997 and the summer season were the times when the highest number and proportion of deaths occurred (Table 6). Although international food aid was available to roughly a quarter of the households in the sample at least by the end of 1997, the level of rations and the total amount of locally produced food varied with the seasons.

The categorical variable for season divides the year into three four-month periods: Winter/Spring (January to April), Summer (May to August), and Autumn (September to December). The number of deaths was lowest in the Autumn or harvest season, and the highest in the Summer, or what is often referred to as the “lean season,” when the food from the previous year’s harvest has been consumed and new crops have not yet matured. These seasonal mortality patterns, particularly regarding the “lean season,” are most pronounced during 1997, when food shortages were reportedly most acute.

⁴⁰ Key informant interviews among North Koreans in China suggested that this information was not likely to be known reliably at the household level.

Table 6. Children's Mortality, by Year and Season

Temporal Variables	Number of Deaths 0-14 (%)
Year of Death	
1995	24 (12.8%)
1996	41 (21.8%)
1997	66 (35.1%)
1998	57 (30.3%)
Season	
Winter/Spring (January–April)	34 (18.1%)
Summer (May–August)	98 (52.1%)
Autumn (September–December)	56 (19.8%)
Total	188

Causes of Death among Children

For all deaths reported in the household from 1995 to 1998, respondents were asked to identify the cause of death. As shown in Table 7, out of 188 total deaths among children aged between 0 and 14, the cause of death was reported for 182 cases (96.8%). No attempt was made at verbal autopsy. Respondents simply were asked to state the cause of death in their own words for each household member who died during the recall period of January 1995 to December 1998. A physician trained in South Korea reviewed the answers given and classified the cause of death into one of 17 major categories in the International Classification of Diseases-9 (ICD-9).⁴¹ One additional classification, “Starvation/Malnutrition,” was created to aggregate various answers given by respondents indicating that the household member died from “starvation,” “lack of food,” “weakness from no food,” and “malnutrition.”

41 See World Health Organization. *International Classification of Diseases for Mortality and Morbidity Statistics*. <http://www.who.int/classifications/icd/en/>. ICD-9 has since been replaced by ICD-10, which first came into use among WHO member states in 1994, but was not adopted and adapted in Korea until later.

Table 7. Cause of Death by International Classification of Disease-9 (ICD-9) for Children Aged Between Zero and Fourteen

Cause of Death	Male (% of Total)	Female (% of Total)	Total Number (% of Total)
Infectious and Parasitic Diseases	19 (10.1%)	20 (10.6%)	39 (20.7%)
Diseases of Respiratory System	6 (3.2%)	5 (2.7%)	11 (5.9%)
Symptoms, Signs & Ill-defined Conditions	14 (7.4%)	7 (3.7%)	21 (11.2%)
Injury and Poisoning	7 (3.7%)	5 (2.7%)	12 (6.4%)
Starvation/Malnutrition	40 (21.3%)	43 (22.9%)	83 (44.1%)
Missing	4 (2.1%)	2 (1.1%)	6 (3.2%)
Other*	9 (4.8%)	7 (3.7%)	16 (8.5%)
Total	99 (52.7%)	89 (47.3%)	188 (100%)

*"Other" includes 7 deaths (4 male, 3 female) to "Diseases of the Blood and Blood-forming Organs", 2 deaths (1 male, 1 female) to "Diseases of the Nervous System and Sense Organs", 6 deaths (3 male, 3 female) to "Diseases of the Digestive System", and 1 death (1 male) to "Diseases of the Skin and Subcutaneous Tissue."

This added category, "Starvation/Malnutrition," ranked at the top of the causes of death with 83 out of 188 deaths (44.1%). The second-largest classification was "Infectious and Parasitic Diseases" with 39 deaths (20.7%). A total of 21 deaths (11.2%) were classified under "Symptoms, Signs & Ill-defined Conditions." This refers to instances when respondents gave non-specific answers like "illness" (*byeong*) or listed only a symptom ("fever" for example). The fourth most common category was "Injury and Poisoning" with 12 deaths (6.4%). Overall, the number and proportion of male deaths (52.7%) were higher than female deaths (47.3%). Male-female disparities were not apparent in the major categories.⁴²

Table 8 shows a similar trend for children under five, where "Starvation/Malnutrition" also ranked at the top of the causes of death with 61 deaths (46.6%). However, the number of deaths between males and females was reversed, with the number of female deaths (52.7%) outnumbering the number of male deaths (47.3%).

⁴² The one exception is the category of "Symptoms, Signs & Ill-defined Conditions," where the male to female mortality ratio was 2:1. This should be interpreted with caution, however, due both to the small number of deaths in that category for both sexes and due to the fact that, by definition, the underlying causes and conditions are "ill-defined."

Table 8. Cause of Death by International Classification of Disease (ICD-9) for Children under Five

Cause of Death	Male Deaths (% of Total Deaths)	Female Deaths (% of Total Deaths)	Total Number (% of Total Deaths)
Infectious and Parasitic Diseases	13 (9.9%)	15 (11.5%)	28 (21.4%)
Diseases of Respiratory System	4 (3.1%)	5 (3.8%)	9 (6.9%)
Diseases of the Digestive System	3 (2.3%)	3 (2.3%)	6 (4.6%)
Symptoms, Signs & Ill-defined Conditions	8 (6.1%)	7 (5.3%)	15 (11.5%)
Injury and Poisoning	4 (3.1%)	2 (1.5%)	6 (4.6%)
Starvation/Malnutrition	26 (19.8%)	35 (26.7%)	61 (46.6%)
Missing	3 (2.3%)	1 (0.8%)	2 (1.5%)
Other*	1 (0.8%)	1 (0.8%)	2 (1.5%)
Total	62 (47.3%)	69 (52.7%)	131 (100.0%)

*"Other" includes 1 death (1 female) to "Diseases of the Blood and Blood-forming Organs" and 1 death (1 male) to "Diseases of the Skin and Subcutaneous Tissue."

Childhood Mortality and Household Change, 1995–1998

The mortality estimates we derived for children and other age groups were derived from a sampling design with evident limitations.⁴³ The key limitation is the sample, which consists of North Korean refugees, migrants, and asylum-seekers in China. These individuals were not only escaping food insecurity, economic hardship and state oppression in North Korea, but also needed to remain hidden in China to avoid detection and forcible repatriation. The study was also limited in its geographic scope. Over 80% of the sample came from North Hamgyong Province and another 9% came from South Hamgyong Province (8.7%), with the remaining households originating from 11 other provinces and special regions.

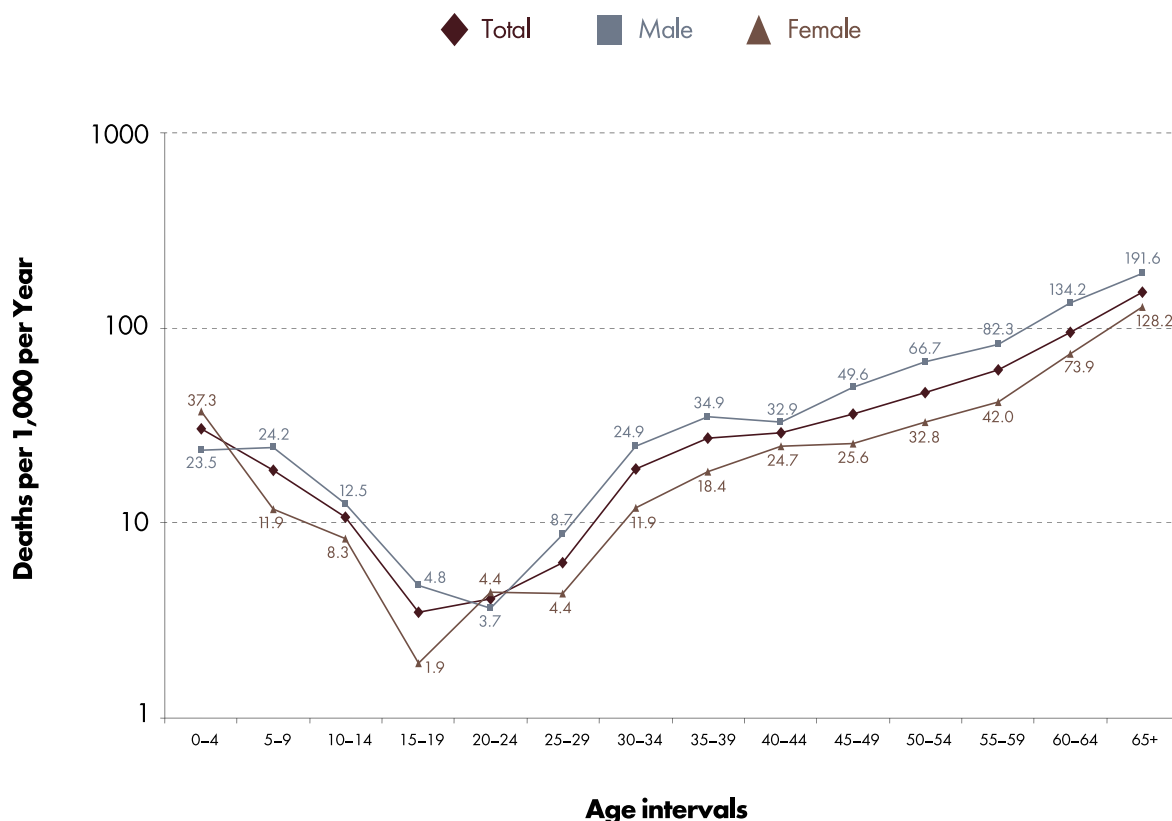
Despite these and other limitations, the findings from the study provide an empirical basis for examining the effects of famine and food insecurity on child mortality in North Korea between 1995 and 1998. As noted above, higher child mortality risk was associated with younger age (especially infants under age 1), smaller dwelling space (which, like household occupations, is often government-assigned), and smaller household size. It was at least somewhat protective to have a KWP member in the household, and it was clearly protective to have had access to some form of international food aid. In terms of temporal patterns, child mortality—

43 For reasons of focus, and because this report is targeted at a more general audience, we do not present results from multivariate regression analyses of child, adult, and overall mortality rates. Virtually all of the statistically significant associations for increased child mortality risk observed in the bivariate analysis were also found in the multivariate analyses. For additional results of this study, see Courtland Robinson, Myung-Ken Lee, Kenneth Hill, and Gilbert Burnham, "Mortality in North Korean Migrant Households: A Retrospective Study," *Lancet* 354: 291-295; and Courtland Robinson, Myung-Ken Lee, Kenneth Hill, Edward Hsu, and Gilbert Burnham, "Demographic Methods to Assess Food Insecurity: A North Korean Case Study," *Prehospital and Disaster Medicine* 16.6 (2001).

like mortality in other age intervals—was highest in 1997 and highest in the “lean season” (May to August). As for the cause of death, “Starvation/Malnutrition” was the leading cause of child mortality, followed by “Infectious and Parasitic Diseases.”

Figure 1 shows the age-specific death rates (ASDRs) calculated for all household members and reflects the four-year average of ASDRs from 1995 to 1998. ASDRs for the sample households, calculated using mid-interval population estimates (at the end of 1996) as the denominators, reached a peak of 153.1 per 1,000 for persons 65 years of age and older. The infant mortality rate for 1995–1998 (not shown as deaths of infants aged 0–1 were combined with 1- to 4-year-olds) was 57.4 per 1,000 live births. Under-five mortality calculated as an age-specific death rate (ASDR-U5) averaged 30.3 per 1,000 during the time period.

Figure 1. Age and Gender-Specific Death Rates (Four-Year Average: 1995–1998)



The under-five mortality rate (U5MR), defined by UNICEF as “the probability of dying between birth and exactly five years of age expressed per 1,000 live births,” was 140.7 per 1,000 during the four-year period.⁴⁴ Though ASDRs were significantly elevated at all age groups in the sample population, compared to the 1993 DPRK census, female ASDRs were generally lower than for males, except in the age groups 0 to 4 and 20 to 24.

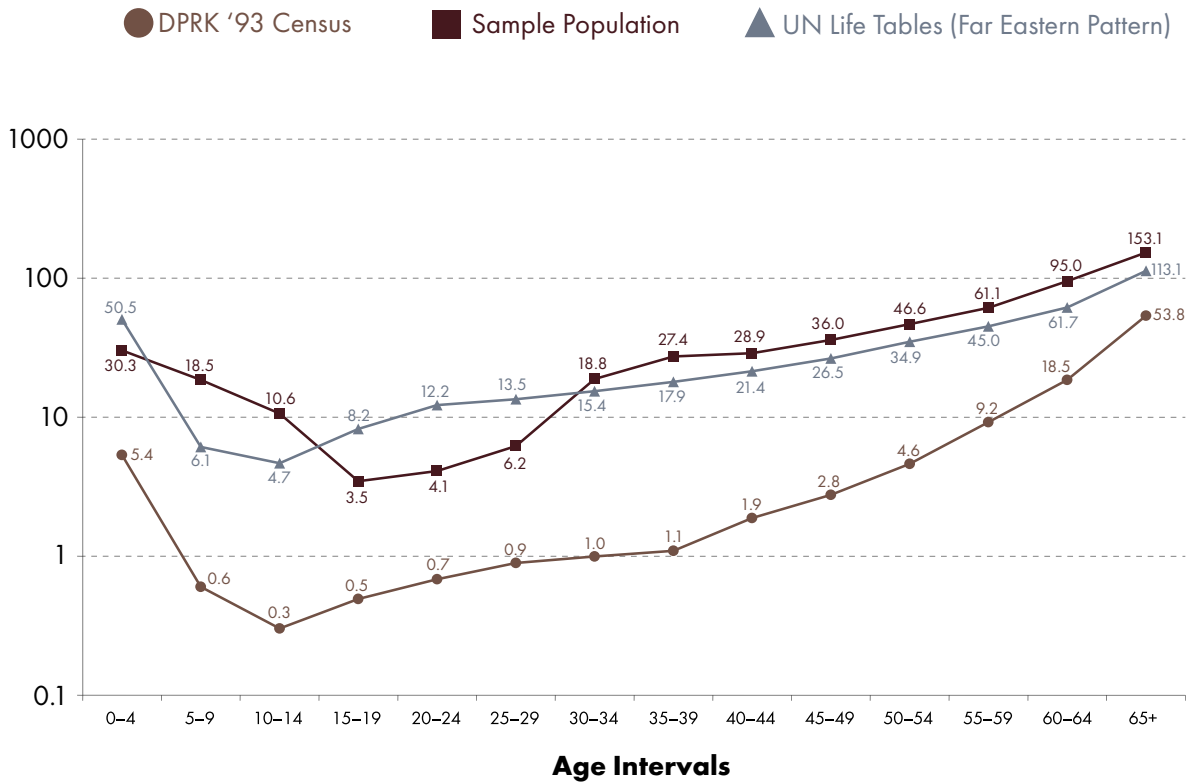
Figure 2 shows the ASDRs for the sample population compared to those from the 1993 North Korean census,⁴⁵ and a UN model life table (Far Eastern pattern) with a life expectancy of 38 for males and 41 for females.⁴⁶ Life expectancy at birth among the sample population was 39.4 years of age.

44 UNICEF, *The State of the World's Children 1998: Focus on Nutrition* (New York: Oxford University Press, 1998).

45 DPRK Central Bureau of Statistics, *Tabulation of the Population Census of the Democratic People's Republic of Korea, December 31, 1993*. 1995. See also Arjun Adlakha and Loraine A. West, *Analysis of Democratic People's Republic of Korea 1993 Population Census Data and Population Projections*. International Programs Center. Population Division, U.S. Bureau of the Census, 1997.

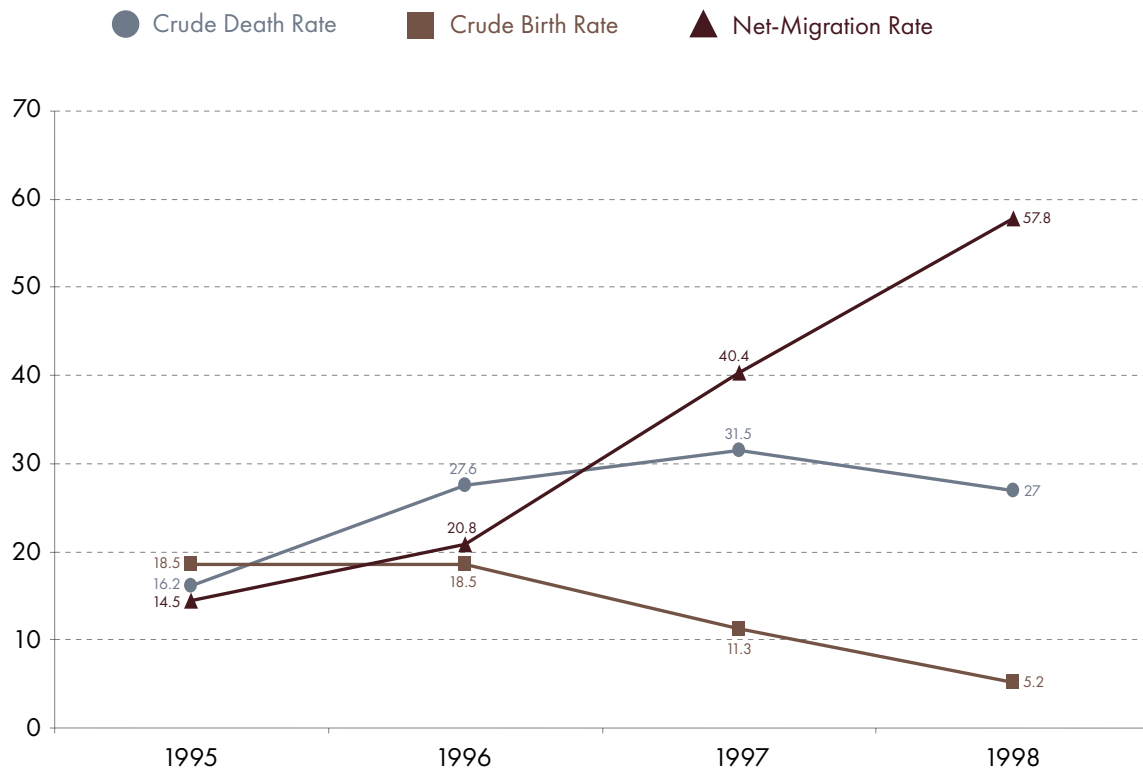
46 UN Department of International Economic and Social Affairs, *Model Life Tables for Developing Countries*. New York, 1982.

Figure 2. Age-Specific Death Rates: 1993 DPRK Census, Sample Population (4-Year Average, 1995–1998) and UN Model Life Tables with Life Expectancy for Males = 38 and Females = 41



The crude death rate for the sample population, estimated as a four-year average, was 25.2 per 1,000 per year, with annual crude death rates (not shown) rising from 16.2 in 1995 to 27.6 in 1996, 31.5 in 1997, and declining slightly to 27.0 per 1,000 in 1998. Standardizing sample population death rates on the age distribution of the 1993 DPRK census, the crude death rate as a four-year average would be 30.6. The increase is due to the fact that the sample population, relative to the national population, has smaller proportions in the older and younger age groups, where mortality rates are higher.

Household change in the sample population, however, was not all about mortality. Figure 3 shows crude birth rates (all live births per 1,000 population) and net-migration rates (calculated as a residual of out-migration minus in-migration per 1,000) for the households. As shown in Table 1 at the beginning of this chapter, the estimate of the North Korean crude birth rate in 1993 was 21.8 per 1,000. Households in the sample reported a crude birth rate of 18.5 per 1,000 in 1995 and 1996. The birth rate then declined to 11.3 in 1997 and 5.2 in 1998. The average crude birth rate for the four-year period was 13.4 per 1,000.

Figure 3. Death, Birth, and Migration Rates in Sample Households, 1995–1998

Female births outnumbered male births at 283 to 240 during the interval, a pattern that appeared consistently across each of the four years. The gap was most pronounced during the peak famine years of 1996 and 1997.⁴⁷

In terms of migration, North Korean respondents were asked to report any movements of people into or out of the household for a duration of one month or more. For each in-migrant or out-migrant, respondents were asked to give their age, gender, year of move, reason for moving, and the approximate amount of time they spent in or out of the household (between the date of the move and the end of the interval). As Figure 3 indicates, both the total number of people migrating increased in step-wise fashion from 1995 to 1998 and the rate of net-migration (calculated as a residual of out-migration minus in-migration) increased nearly four-fold from 14.5 per 1,000 in 1995 to 57.8 per 1,000 in 1998. Of the 560 in-migrants during the four-year period for whom age and gender were reported, 63% were female and 37% were male. Only 9% (50) were under 20, while 20% (112) were over 55. Of in-migrants under the age of 20, 58% (29) were male, while over the age of 55, 84% (94) of all in-migrants were female. Respondents said that about 28% of all in-migrants moved into the household primarily to obtain food.

Of the 1,811 out-migrants for whom age and gender were reported, 53% were male and 47% were female. More than 16% of out-migrants were under the age of 20 while only 6% were over 55. Of out-migrants under the age of 20, 64% were male, a gender disparity that is most stark among those between the ages of 10 and 19. For out-migrants over 55, females comprised 57% of the total. Respondents said that about 34% of all out-migrants left the household primarily to obtain food.

⁴⁷ An intriguing finding by Gibson and Mace is that “within a rural food-stressed community in southern Ethiopia, there is a strong association between the gender of the most recent birth and maternal nutritional status, measured either by body mass index (BMI) or mid-upper arm muscle area (AMA). Both measures are highly significantly associated with gender ratio but the effect of muscle mass is very marked: those women in the upper 25th percentile of AMA were more than twice as likely to have had a recent male birth than those in the lowest 25th percentile.” Mhairi A. Gibson and Ruth Mace, “Strong Mothers Bear More Sons in Ethiopia,” *Proceedings of the Royal Society of London* (2003).

D. North Korea Population Change, 1990–2018

How has the population of North Korea changed over the period that has encompassed two hereditary transfers of power, a major famine and ongoing food insecurity, natural disasters, economic hardship and restructuring, an exodus of several hundred thousand refugees and migrants into China and beyond, and halting social change even in the face of political stasis? The following three sections provide an overview of the three key factors in demographic change—mortality, fertility, and migration—and how these affected the size and shape of the North Korean population, particularly with respect to children.

Mortality

In the years following the period of famine and severe food insecurity, more population data has emerged—including a 2008 North Korean census, periodic nutrition surveys, and other demographic data—that provide a stronger empirical basis for estimating the mortality effects of the calamitous 1990s and for tracking mortality trends through to the present day. Early estimates of famine mortality ranged from 220,000 excess deaths to 2 or even 3 million excess deaths.⁴⁸ In 2001, Goodkind and West use a variety of data sources and demographic models to state that “[a]lthough some uncertainty remains, we conclude that famine-related deaths in North Korea from 1995–2000 most likely numbered between 600,000 and 1 million.”⁴⁹

Following North Korea’s release of the 2008 census, which enumerated a total population of 24.1 million, Goodkind, West, and Johnson utilize intercensal survival analysis along with demographic life table modeling to revise their original famine-related mortality estimates downward to suggest that “excess deaths from 1993 to 2000 likely ranged from 500-600,000. These estimates imply that at least 2.3 percent of the North Korean population perished during this era, a staggering proportion by any standard; a comparable per capita loss in the United States would total over 7 million.”⁵⁰ The authors further estimate that if mortality rates were applied to the full intercensal period (1993–2008), then the results, when compared with demographic models of “no famine scenarios,” the total excess deaths over 15 years would be 600,000 to 1 million. If these latter estimates are reasonably accurate, they might capture both the direct and indirect effects of the “Arduous March” and its aftermath in the following decade.

Spoorenberg and Schwekendiek also analyze the 1993 and 2008 North Korean censuses, reconstructing population trends using what is called the “cohort component method” of population projection.⁵¹ Based on their population reconstructions, they estimate that the demographic impact of the famine in the 1990s included “between 240,000 and 420,000 total excess deaths.” While even the higher bound of this estimate is lower than the revised lower bound of Goodkind et al.’s 2011 estimate of 500,000-600,000, Spoorenberg and Schwekendiek also estimated “the human cost of deteriorating living conditions over the 15 intercensal years” and concluded that total excess deaths were between 600,000 and 850,000, a figure quite consistent with Goodkind et al.’s 2011 estimate of 600,000 to 1 million.⁵² Another analysis conducted by Suk Lee, published by the Korea Institute for National Unification in 2005, argues that famine mortality began earlier than 1994 and lasted beyond 2004, producing estimates of 815,000 excess deaths, with a range of 506,000 to 1,125,000.⁵³

The implication of these various analyses is that while mortality spiked in the 1990s, with life expectancy dropping from 67.9 in 1993 to 59.3 in 1998, and the infant mortality rate more than doubling from 29.9 in 1993 to 78.1 in 1998, poor living conditions

48 See Daniel Goodkind and Loraine West, “The North Korean Famine and its Demographic Impact,” *Population and Development Review* 27.1 (2001): 219-238. For additional information on the various estimates of North Korean famine mortality, see also Thomas Spoorenberg and Daniel Schwekendiek, “Demographic Changes in North Korea: 1993–2008,” *Population and Development Review* 38.1 (2012): 133-158.

49 Goodkind and West (2001), 220.

50 Daniel Goodkind, Loraine West, and Peter Johnson, *A Reassessment of Mortality in North Korea, 1993–2008*. (Population Division, U.S. Census Bureau.

March 2011), 13. See also Saebom Jeon, Seoung Eun Kim, and Yunsung Park, “A Study on the Population Structure of Democratic People’s Republic of Korea,” *Communications for Statistical Applications and Methods* 22.1 (2015): 1-10. Jeon, Kim, and Park estimate that excess deaths in North Korea from 1995 to 2000 ranged from 489,972 to 574,306.

51 Spoorenberg and Schwekendiek (2012), 146.

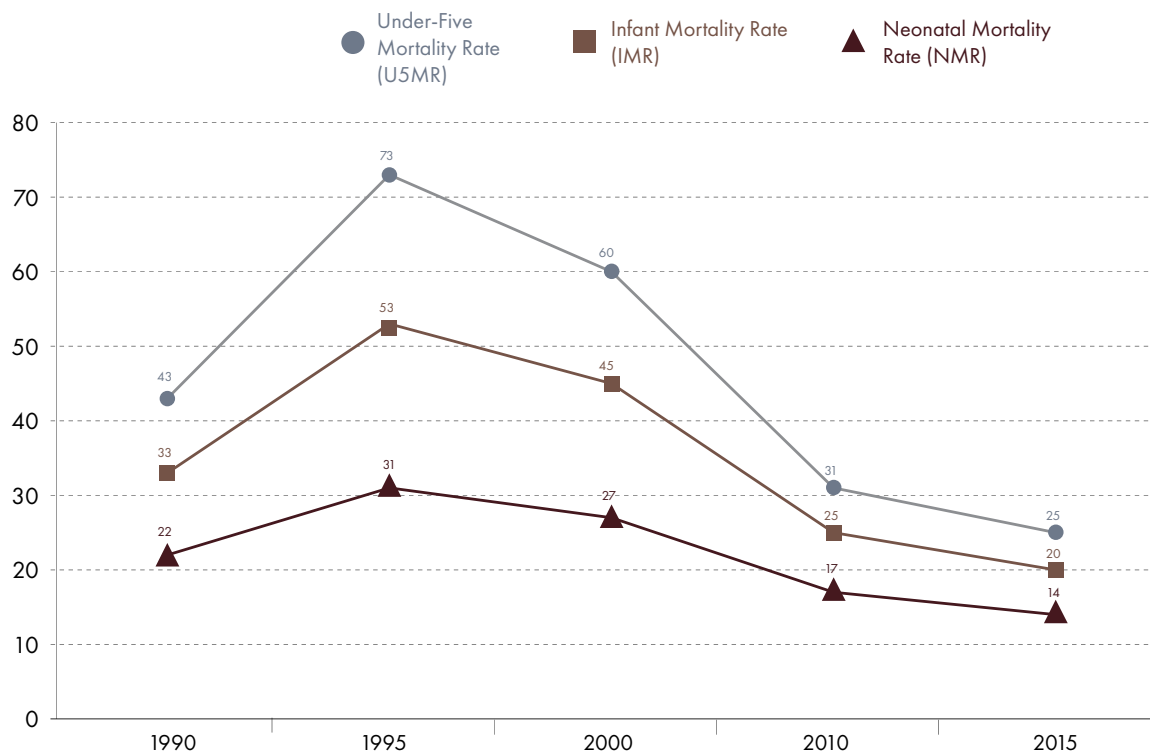
52 *Ibid.*, 153.

53 Suk Lee, “The DPRK Famine of 1994–2000: Existence and Impact,” *Korea Institute of National Unification Studies Series* 05-06 (2005).

and poor population health in the 2000s thwarted recovery and may have resulted in excess mortality at least as high as that experienced in the 1990s.⁵⁴

Figure 4 shows estimates of under-five mortality rates (U5MR), infant mortality rates (IMR), and neonatal mortality rates (NNMR) from 1990 to 2015 using data from UNICEF and the UN Interagency Group for Child Mortality Estimates. For all three rates, the trends from 1990 to 2000 show elevated mortality, peaking in 1995, with some decline from 2000 to 2010 but only appearing to return to 1990 levels by around 2008. The mortality impacts of this period represent perhaps the starkest measure of this "Lost Generation" of North Korean children.

Figure 4. Global Estimates of Under-Five, Infant, and Neonatal Mortality Rates: DPRK, 1990–2015



Source: UNICEF, 2016⁵⁵; Data from Interagency Group for Child Mortality Estimates, 2015.⁵⁶

Fertility

As noted previously, the crude birth rate for North Korea in 1993 was 21.8 per 1,000. And as we show in Figure 3, the households in our sample reported a crude birth rate of 18.5 per 1,000 in 1995 and 1996, which declined to 11.3 in 1997 and 5.2 in 1998. The average crude birth rate for the four-year period was 13.4 per 1,000. Examining national-level census data, and calculating a total fertility rate (TFR), which is more sensitive than the crude birth rate to changes in age-specific fertility rates over time, Spoorenberg and Schwekendiek estimated that TFRs declined gradually from 2.16 in 1993 to 2.00 in 2008.⁵⁷

54 Goodkind, West, and Johnson (2011), 19.

55 UNICEF, *Situation Analysis of Children and Women in the Democratic People's Republic of Korea – 2017* (Pyongyang, DPRK, 2016). https://www.unicef.org/dprk/Situation_Analysis_of_Children_and_Women_in_DPR_Korea_UNICEF_2017.pdf.

56 UN Inter-Agency Group for Child Mortality Estimation, *Levels and Trends in Child Mortality: Report 2017*. (UNICEF, New York: 2017).

57 Spoorenberg and Schwekendiek (2012), 142.

They also commented that data from both ends of this 15-year period “do not allow assessment of the effect of famine on fertility. It has been widely reported that women bear fewer children in times of famine, but once the crisis passes fertility peaks as a result of recuperation.”⁵⁸ Various data sources—including a 2000 Multiple Indicator Cluster Survey (MICS) report and 2002 Reproductive Health Survey data from the DPRK Central Bureau of Statistics—suggest that the total fertility rate declined to 2.00 in 1999 at the end of the famine, but climbed to 3.06 in the early 2000s before declining again to 2.35 in 2006.⁵⁹ By 2014, the TFR had declined to 1.89, below the replacement level of 2.0; absent positive immigration, the population would decline.⁶⁰

International Migration

The 1993 DPRK census recorded no data on international migration either into or out of the country. One official analysis of the 1993 census noted that “migrant numbers going out and coming into our country were neglected.”⁶¹ Data on internal migration from 1993 were limited to urbanization rates.⁶² The 2008 census also contained no international migration data, though internal migration coverage was expanded to include provincial migration within the last five years.⁶³ This data indicated that 234,817 individuals had moved from one province to another in the last five years, which represents roughly 1% of the population of 23,349,859.

While census data and other official DPRK documents suggest limited internal or external movement, unofficial sources reveal a great deal more mobility, mostly without formal authorization. Our 1998–1999 study, for example, which included nearly 3,000 North Korean refugees and migrants in China, asked about movements into and out of the household of more than one month. The results suggested a net migration rate of 18.7%, with much of the internal movement characterized as “distress migration.”⁶⁴

Since 1994 or 1995, anecdotal information suggested that significant numbers of North Koreans had been moving across the Chinese border in search of food for themselves and their families. It was estimated that between 50,000 and 150,000 North Koreans were staying temporarily in China, principally in Yanbian Korean Autonomous Prefecture, which is home to nearly one million Korean-Chinese. There are a great many unknowns about displacement and migration within and outside of the DPRK in the last two decades. However, there has been internal displacement and migration within the country. Displacement and migration to China peaked from 1998 to 1999 at upwards of 100,000 per year, though the numbers remaining in China had declined significantly as of 2018. Displacement and migration to South Korea totaled over 30,000 since the late 1990s, an estimated 40% of whom are children and young adults aged 10 to 29.⁶⁵

The question we are examining here is a demographic one: how many people left North Korea during the “Arduous March” of the 1990s and the nearly two decades that followed? Of these, how many returned either voluntarily or involuntarily? How many moved to China and stayed there? How many moved to other countries and stayed there? The only fairly accurate number we have is the official South Korean tallies of North Korean arrivals in South Korea from 1998 to 2018, but even that may not fully account for North Koreans who may have left to other countries, including possibly returning to North Korea.

Probably most contentious—because estimation is highly complex and politicized—is the question of how many North Koreans went to China, especially during the mid-1990s to early 2000s. Here, estimates have ranged from 50,000 to well over 300,000.⁶⁶ Whatever the number might have been at the time, what are they now? And if they are much lower now than before, as we estimate they are, where did the people go—if not to South Korea? Goodkind, West, and Johnson quantify one possible dimension of the

58 Ibid. See also Tim Dyson and Cormac Ó Grada (eds.), *Famine Demography: Perspectives from the Past and Present* (Oxford: Oxford University Press, 2002).

59 Spooenberg and Schwegendiek (2012), 142. See also Thomas Spooenberg, “Fertility Levels and Trends in North Korea,” *Population* 4.3 (2014): 433-445. Spooenberg noted in this more recent analysis that during the “Arduous March” period of the mid-1990s to the early 2000s, “total fertility declined by almost 0.3 children per women.”

60 DPRK Central Bureau of Statistics and United Nations Population Fund, *DPRK Socio-Economic, Demographic and Health Survey* (Pyongyang: 2014), xxi.

61 DPRK Population Center, *Analysis of 1993 Population Census Data, DPRK*. (Pyongyang: Population Center, 1996).

62 DPRK Central Bureau of Statistics, *Tabulation on the 1993 Population Census of the DPRK* (Pyongyang: Central Bureau of Statistics, 1993).

63 DPRK Central Bureau of Statistics, *DPR Korea 2008 Population Census National Report* (Pyongyang: Central Bureau of Statistics, 2009).

64 See Courtland Robinson, “Famine in Slow Motion: A Case Study of Internal Displacement in the Democratic People’s Republic of Korea,” *Refugee Survey Quarterly* 19.2 (2000): 113-127.

65 We explore the issue of internal displacement, particularly of children, further in Chapter 5. The issue of refugees and migrants in China is explored further in Chapter 6. The broader migration of North Koreans beyond China is explored in Chapter 7.

66 See Jiyoung Song, “Twenty Years’ Evolution of North Korean Migration, 1994–2014: A Human Security Perspective,” *Asia & the Pacific Policy Studies* 2.2 (2015): 399-415. See also Yoonok Chang, Stephan Haggard and Marcus Noland, *Migration Experiences of North Korean Refugees: Survey Evidence from China*. Working Paper (Washington, D.C.: Peterson Institute for International Economics, Mar. 2008). See also Stephan Haggard and Marcus Noland, *Witness to Transformation: Refugee Insights into North Korea* (Washington, D.C.: Peterson Institute for International Economics, 2011).

question by identifying a residual gap or shortfall of 369,000 people who cannot be accounted for between 1993 and 2008 once birth and death rates have been factored in.⁶⁷ Their conclusion, as is that of the U.S. Census Bureau, is that net emigration as of 2010 accounted for only about 40,000 people, and the remaining residual number is a result of uncertainty around adjustments to the crude death and birth rates used to model intercensal survival.

The total number of net out-migration is likely higher than 40,000, given that nine years have passed since 2010. Allowing for some uncertainty, and evidence from our own and other studies that only a minority of North Koreans who leave their country choose to return, it is likely that the total number of North Koreans who left between 1990 and 2018 and did not return is now over 50,000. Many tens of thousands likely moved to China in the 1990s and early 2000s only to return to North Korea. This may have been because they were only seeking temporary aid and shelter, because they were arrested by Chinese authorities and deported to North Korea, or because they failed to find routes out of China.

Of those who left but did not return, we must count those who moved to South Korea or other countries, those who have remained in China, and those who went missing or died in migration. In addition to those who left, we might also add those who were born to at least one North Korean parent in migration. As we will see in Chapter 8, this includes 15,000-20,000 children born to North Korean mothers and Chinese fathers in China. These children have never been to North Korea and may not ever wish to go, but they represent one measure of the migration and displacement impacts of the “Arduous March” and its enduring consequences.

E. North Korea Today

In 1990, North and South Korea had comparable life expectancies at birth—70 and 72 respectively—both of which were above the world average of 65 for that year. By 2017, North Korea’s life expectancy had rebounded to 72 from the peak famine years of 1995–1998, when it had declined to around 65. By 2017, however, South Korea’s life expectancy at birth had climbed to 82, while the world average rose to 72. Another way that demographers think of life expectancy is as a population’s mean age at death. If life expectancy climbs, it likely does not suggest that the entire population is living longer, but rather that a smaller proportion of the population is dying in infancy, childhood, or at young ages. Conversely, when life expectancy declines, it generally does so because children and younger adults are dying at higher rates.

67 Goodkind, West, and Johnson (2011), 6.

Table 9. North and South Korea: Demographic Indicators, c. 2017

	North Korea	South Korea
Population (millions)	24.9	50.5
Population Density (persons per sq. km)	210	519.4
Urban Population (% of total population)	61.2	82.5
Sex Ratio (males per 100 females)	105	107
Median Age (years)	34	41.8
Population Aged 0–14 (percent)	20.8	13.2
Population Aged 15–64 (percent)	69.4	72.7
Population Aged 65+ (percent)	9.8	14.1
Total Dependency Ratio	44.5	37
Crude Birth Rate (total births per 1,000 population)	14.6	8.3
Crude Death Rate (total deaths per 1,000 population)	9.3	6
Life Expectancy at Birth, Females	73.3	84.6
Life Expectancy at Birth, Males	66.3	78.0
Net Migration Rate (per 1,000 population)	0.0	2.5
Population Growth Rate (average annual percent)	0.5	0.48
Total Fertility Rate	2.0	1.3
Infant Mortality Rate (deaths <age 1 per 1,000 live births)	17	3
Under-Five Mortality Rate (deaths <age 5 per 1,000 live births)	22	3.5
Children <5 Underweight (percent)	15.2	0.7
GNP Per Capita (in current \$US)	695.9	18,866

Sources: UNICEF, 2016; UN Inter-Agency Group for Child Mortality Estimation, 2017; UN Population Division, 2017⁶⁸; CIA Factbook, 2017.⁶⁹

A comparative study of life expectancy in North and South Korea between 1993 and 2008, the two years in which North Korean censuses were conducted, concluded that “the mortality rate in 2008 among men and women 10–39 years of age (who experienced their childhood and adolescence in the 1990s) and in women 40–49 years of age (who were of childbearing age in the 1990s) were more than twice as high as the corresponding mortality rates in 1993.”⁷⁰

The mortality and other demographic impacts of the “Arduous March” were severe in the 1990s, but have also persisted into the 2000s and the 2010s. These impacts have not spared adults by any means, but they have been most acute among children. Neonatal mortality, infant mortality, and under-five mortality rates in North Korea in 2017 are less than half of what they were in 1990, and that has kept pace with world averages. However, these measures all sharply rose during the “Arduous March”, with disastrous impacts on children.

68 UN Population Division, 2017.

69 CIA World Factbook, 2017. <https://www.cia.gov/library/publications/the-world-factbook/geos/kn.html>.

70 Jinwook Bahk, Majid Ezzati, Yough-Ho Khang, “The life expectancy gap between North and South Korea from 1993 to 2008,” *European Journal of Public Health* 28.5 (2018): 830-835.

The subsequent chapters look further into the nutritional status and food security of North Korean children during this “Lost Generation,” along with their health and mental health, education, and special vulnerabilities due to socioeconomic, political, and other factors. We also examine North Korean children who were displaced within North Korea or migrated to China and South Korea. In the chapters that follow, we will try to weave the data we have gleaned from our own studies with that of other research, elucidating these data points with narratives from our interviews of North Koreans in China and South Korea.

CHAPTER 2.

NUTRITION AND FOOD SECURITY

This chapter examines the food situation in North Korea during the past three decades, focusing on food aid, food accessibility, and the nutritional status of children between 1990 and 2017. We include results from a study we conducted in 2007 of household food security in North Korea by interviewing North Korean migrants, both documented and undocumented, in China. We also review data from studies of North Korean refugee and migrant children in South Korea.

A. Food Security and Food Aid

As early as August 1984, according to at least one observer, Kim Il-sung had acknowledged the imperative of “opening up to the Western world in order to feed his people.” By the late 1980s, North Korea was no longer a net exporter of food, with agricultural imports rising to 1.2 million tons in 1991. In 1992, the government launched a belt-tightening “Let’s eat two meals a day” campaign and, in December 1993, admitted for the first time that its Third Seven-Year Plan was failing.⁷¹ In a May 1995 meeting with their historical adversary, Japan, senior North Korean trade officials made a humbling request, “We would like to ask Japan to lend as much rice as possible for a certain period of time.” The heavy rains and high tidal waves of July 30 to August 18, 1995 caused serious flooding and extensive crop destruction. But, as Samuel Kim notes, “there is a sense that the catastrophic summer floods came as a blessing in disguise as they provided a convenient alibi for breaking away from *juche* ideology in search of international help.”⁷²

Following a joint assessment mission in December 1995, the FAO and WFP reported that:

*There is little doubt that the floods this year were extremely serious and caused extensive damage to agriculture and infrastructure. However, it must be recognized that the floods made an already and rapidly deteriorating food supply situation much worse, rather than caused the situation in the first place. It was estimated by the Mission that [the] DPRK would have carried a substantial food deficit this year notwithstanding the floods. There are two important factors that contribute to this: a stagnating agriculture, exacerbated by the declining economic situation of the country.*⁷³

The assessment mission estimated that underlying problems in agriculture contributed to half of the roughly 1.7 million ton shortfall in production of rice and maize, while flooding was responsible for the other half. In order to meet the emergency food needs of 500,000 flood-affected people, the FAO/WFP Mission requested nearly 20,250 tons of rice and 675 tons of vegetable oil. By the end of 1995, only 5,140 tons of food aid had been delivered; the international response was underwhelming.⁷⁴ The WFP, which opened an office in Pyongyang in late 1995, was forced to close only several months later for lack of funds.

As the international humanitarian community still was taking stock of North Korea, the country was hit by another round of floods in July 1996. Though the flooding was not as destructive as the previous year, the FAO/WFP estimated that the 1996 floods resulted

71 Samuel S. Kim, “North Korea in 1995: The Crucible of ‘Our Style Socialism,’” *Asian Survey* 36.1 (1996), 64.

72 Ibid.

73 FAO/WFP, *Crop and Food Supply Assessment Mission to the DPRK: Special Report* (FAO, Dec. 1995), 1.

74 FAO Global Information and Early Warning System on Food and Agriculture, *Special Report—FAO/WFP Crop and Food Supply Assessment Mission to the Democratic People’s Republic of Korea* (Dec. 22, 1995).

in the loss of 300,000 tons of grain. Moreover, “two successive years of floods have undoubtedly set back agriculture and have significantly compounded underlying food production problems in the country.”⁷⁵

The 1996 assessment by FAO/WFP also noted two worrisome developments. First, the government-run Public Distribution System (PDS), the mechanism through which an estimated 13.5 million North Koreans received subsidized food rations, reduced its standard adult grain ration unofficially to around 425 grams (about 1,530 kilocalories) per day. During the summer months, the so-called “lean season” between May and August before the fall harvest, daily food rations had declined to about 200 grams (about 720 kilocalories) per person per day, well below half of the UN’s minimum nutritional standard of 1,600 kilocalories. Second, to make up for these deficits, the FAO/WFP report noted “extensive Government efforts to mobilize the population to consume non-staple and ‘alternative’ foods, such as fruits, roots and tubers, mushrooms, leaves and grasses. Some estimates suggest that in 1995–1996, almost 30 percent of caloric intake during the lean periods came from such sources.”⁷⁶

Since 1952, a government decree had stipulated that all North Korean households were to be registered at either a state farm or agricultural cooperative, or a village (*ri*) or town (*dong*). Each member of the household was then registered at a farm or cooperative or, in the case of the non-agricultural population, at the nearest PDS by category of entitlement based on age and type of work: newborns and infants, school-age children, adults by occupation or work grade (heavy or light), and pensioners (see Table 4.1). All key commodities—principally rice and corn but also meat, fish or vegetables—were distributed to the non-agricultural population, usually twice a month and according to a centrally-determined ration scale.

Groups outside the PDS principally comprised farming families either on state farms or agricultural cooperatives. In 1996, there were about 1,000 state farms and 3,000 agricultural cooperatives across the country. Workers on state farms were given six months of rations through the PDS with the other half allotted according to farm production, while agricultural cooperative workers were allotted an annual ration directly out of the harvest. Also outside the PDS system were prisoners, reportedly receiving as little as 200g of food per day on a regular basis, and those who—for political reasons or otherwise—had been terminated from the workforce.⁷⁷

Table 10. Official Levels of Per Capita Daily Rations Distributed Through PDS in the 1990s

Occupation and Age Group	Per Capita Daily Ration (Grams)	Ratio of Rice to Corn: Pyongyang	Ratio of Rice to Corn: Other Areas
Senior Government Officials	700	10:0	10:0
Regular Laborers	600	6:4	3:7
Heavy-labor Workers	800	6:4	3:7
Office Workers	600	6:4	3:7
Special Security	800	7:3	3:7
Military	700	6:4	3:7
College Students	600	6:4	3:7
Secondary School Students	500	6:4	3:7
Primary School Students	400	6:4	3:7
Pre-school Students	300	6:4	3:7
Children Under 3 Years	100-200	6:4	3:7
Aged and Disabled	300	6:4	3:7

Source: Kim, Lee and Sumner 1998.⁷⁸

75 FAO Global Information and Early Warning System on Food and Agriculture, *Special Report—FAO/WFP Crop and Food Supply Assessment Mission to the Democratic People’s Republic of Korea* (Dec. 6, 1996).

76 Ibid.

77 Kristin R. Gustavson and Jinmin Lee-Rudolph, “Political and Economic Human Rights Violations in North Korea,” in *North Korea After Kim Il-sung: Continuity or Change?*, Thomas H. Henriksen and Jongryn Mo, eds., (Stanford: Hoover Institution Press, 1997), 138.

78 Kim Woon-keun, Lee Hyun-ok, and Daniel A. Sumner, “Assessing the Food Situation in North Korea,” *Economic Development and Social Change* 46.3 (1998).

According to Noland, Robinson, and Wang, the official ration was reduced by as much as 22 percent to maintain government stockpiles. Thus, an adult worker who was entitled to receive 700g of food per day received 546g, and a soldier entitled to a standard ration of 800g would receive 694g.⁷⁹ Beginning in 1995, the standard adult grain ration for non-agricultural workers was reduced to around 425g per day and to 200g per day during the lean season. The annual grain ration allotted by the state to agricultural workers was reduced from 167kg per year (about 457g per day) to 107kg per year (293g per day).⁸⁰ At the end of 1996, the FAO/WFP Mission Report issued a strong warning about the year ahead:

The Mission's assessment shows that [the DPRK] will enter 1997 with a substantially larger food deficit than in 1996 which could further aggravate the already weak nutritional status of the population. At the forecast level, domestic food supplies from this year's harvest will be sufficient to cover needs for about 7 months, leaving requirements for the remaining 5 months to be covered by imports. The country, therefore, approaches 1997 in a far worse position than 1996 and will again depend heavily on large scale international assistance to help it meet minimum food requirements. The most critical time for food supply will be during the lean period from July to September next year. Only if adequate food assistance is mobilized before the onset of this period will further hardship to the population be averted.⁸¹

While prospects for the 1997 harvest initially appeared favorable, natural disaster struck for the third year in a row, this time in the form of a prolonged drought in June and July 1997, and a typhoon in late August. FAO/WFP assessments for 1997–1998 cited an overall deficit of 1.25 million tons of cereal and appealed for 795,000 metric tons in emergency food aid for a total of 9,290,000 beneficiaries, which was 40 percent of the entire population.⁸²

In 1998, North Korea's cereal production increased to 3.48 million tons, compared to 2.66 million tons in 1997. Although the country was spared further natural calamities, FAO/WFP assessments still cited a deficit of 1.35 million tons and appealed for 480,000 metric tons of emergency food aid for 4,466,000 North Korean beneficiaries. "However, it must be stressed," said the 1998 assessment report, "that large food assistance interventions are unlikely to be sustained for too long a period. It is, therefore, high time that efforts and resources are directed toward rehabilitation of the agriculture sector to realize its full production potential."⁸³

In 1995 and 1996, international food aid averaged around 500,000 metric tons per year (Table 11), with Japan contributing nearly half of that total in the first two years. In 1997, international food aid increased to over 900,000 metric tons and, between 1997 and 2005, annual contributions averaged more than 1 million metric tons, peaking at 1.5 million metric tons in 2000. While some food assistance was delivered through non-profit organizations, the bulk of the food aid was sent through either multilateral channels, primarily through the WFP, or through bilateral channels.

Table 11: Total Food Aid to North Korea, 1995–2012 (in 1,000 Metric Tons)

Year	1995	1996	1997	1998	1999	2000	2001	2002	2003
(1000 metric tons)	544.5	505.2	903.1	790.6	1000.1	1231.4	1508.1	1178.1	944.4
Year	2004	2005	2006	2007	2008	2009	2010	2011	2012
(1000 metric tons)	844.8	1097.3	307.4	720.5	375.2	300.7	104.2	62.1	372.6

Source: World Food Programme, *Food Aid Information System*, 2012
Donor countries listed include Republic of Korea, USA, China, Japan, EU, and Other

U.S. food contributions to WFP appeals totaled 2.1 million metric tons between 1996 and 2004. Japan provided food assistance

79 Noland, Robinson, and Wang, *Famine in North Korea*, 6.

80 Andrew Natsios, *The Politics of Famine in North Korea* (Washington, D.C.: United States Institute of Peace, Aug. 1999), 3.

81 FAO/WFP *Crop and Food Supply Assessment Mission to the DPRK* (Dec. 6, 1996).

82 FAO Global Information and Early Warning System on Food and Agriculture, *Special Report—FAO/WFP Crop and Food Supply Assessment Mission to the Democratic People's Republic of Korea* (Nov. 25, 1997).

83 FAO Global Information and Early Warning System on Food and Agriculture, *Special Report—FAO/WFP Crop and Food Supply Assessment Mission to the Democratic People's Republic of Korea* (Nov. 12, 1998).

through WFP starting in 1997, with most of its 1.3 million metric ton contribution coming between 1995 and 2001. Food aid was discontinued until 2004, when Japan pledged 250,000 metric tons. Of this amount, only 80,000 tons were delivered after bilateral relations suffered another downturn.

As food aid from the U.S., Japan, and European countries began to decline, much of the gap was filled by China and South Korea, which both preferred to give their aid bilaterally. Virtually all of Chinese aid and about four-fifths of South Korean food aid to North Korea has been sent bilaterally. As the Congressional Research Service noted in 2005, “Since the Soviet Union withdrew its patronage of North Korea in the early 1990s, China is widely believed to have emerged as the single largest provider of food to North Korea, though the precise amount is difficult to estimate due to lax controls on the North Korea-China border and the overall unreliability of official Chinese statistics.”⁸⁴ The WFP estimates suggest that China contributed 3.25 million metric tons of food aid from 1996 to 2012, exceeded only slightly by South Korea’s contribution of 3.3 million during the same period.⁸⁵ Seoul’s “sunshine policy” of engagement, first pursued by then-President Kim Dae-Jung in 2000, was expanded by Kim’s successor, Roh Moo-Hyun, leading to continued humanitarian assistance and increased funding for inter-Korean projects.⁸⁶ A North Korean request for 500,000 tons of rice in 2006, however, was initially rejected by South Korea, following Pyongyang’s decision on July 4 to test seven missiles, including the long-range Taepodong-2.

As North Korea moved into its second decade of food shortages in the 2000s, it was still commanding 13 percent of all food aid deliveries worldwide, second only to Ethiopia. Most of the aid to the DPRK came from China and South Korea. According to Haggard and Noland, “tensions and competing demands” led many donor governments, including the United States and Japan, to scale back on their commitments. These tensions and competing demands included:

*diplomatic conflicts over the North Korean nuclear program and Japan’s abductees; the apparent lack of progress in addressing the country’s underlying economic problems; concerns about the transparency and effectiveness of the humanitarian relief program; and its potential role in propping up a totalitarian regime. A variety of other humanitarian disasters, from the Horn of Africa to the countries affected by the tsunami of 2005, have placed strains on the humanitarian system, and forced a re-evaluation of where aid will be most effectively deployed.*⁸⁷

Haggard and Noland offer another critique of the international food aid to the DPRK. As food aid flowed in starting in the mid-1990s, North Korea cut its commercial food imports, which allowed for additional expenditures on other government priorities, including the military.⁸⁸ In 2013 testimony before the UN COI, Noland cited Article 11 of the International Covenant on Economic, Social and Cultural Rights (ICESCR), specifically the right of all people to adequate food and a state’s obligation to take necessary steps to fulfill that right to the maximum of its available resources. “If North Korea had simply maintained its imports, normal human demand would have been met during this period...generating adequate supply was not, and is not, beyond the capacity of the North Korean state.”⁸⁹

B. Food Security and Food Access

Concerns about the transparency and effectiveness of the humanitarian relief program led one international agency to commission, in 2005, a study by the Johns Hopkins Bloomberg School of Public Health, Center for Refugee and Disaster Response (now the Center for Humanitarian Health), along with collaborating partners at the China-North Korea border, to undertake an assessment of food security in North Korea.⁹⁰

84 Mark E. Manyin, “Foreign Assistance to North Korea,” *Congressional Research Service Report for Congress*, (May 26, 2005), 6.

85 WFP/INTERFAIS, 2012.

86 Manyin, “Foreign Assistance to North Korea,” 22.

87 Stephan Haggard and Marcus Noland, *Hunger and Human Rights: The Politics of Famine in North Korea*, (Washington, D.C.: Committee for Human Rights in North Korea, 2005), 10.

88 Stephan Haggard and Marcus Noland, *Famine in North Korea: Markets, Aid and Reform* (New York: Columbia University Press, 2007), 41-49.

89 Marcus Noland, “Testimony: North Korea and the Right to Food,” October 13, 2013. <https://piie.com/sites/default/files/publications/testimony/noland20131030.pdf>

90 Courtland Robinson and Shannon Doocy, *Household Food Security in North Korea: An Assessment Based on a Survey of North Korean Migrants in China* (Baltimore: Johns Hopkins Bloomberg School of Public Health, 2006). The report was embargoed by the donor and never published.

The study involved two primary research methods:

- **Sample survey:** The initial plan had a target sample size of 400 North Koreans in China, in order to make comparisons between households with a documented migrant in China compared to those with an undocumented migrant as well as to compare households in North Hamgyong province with those in other parts of the DRPK. In the end, due to reduced arrivals in late 2005 as well as security and logistical constraints, the sample included 208 respondents.
- **Key informant interviews:** The study team also conducted a total of 30 key informant interviews (28 North Koreans and 2 Korean-Chinese) focused on their understanding of various aspects of food security, both at the household and broader systemic levels. The primary areas of focus for key informant interviews included: general questions on access to food and markets; food production; food distribution; and international food aid.

The study was reviewed and approved by the Institutional Review Board (IRB) at Johns Hopkins and by a local IRB in China.

Of the 208 survey respondents, 70% were female. The age of the respondents ranged from 21 to 76, with an average of 43. The mean educational attainment was 10 years, with 79% of respondents completing at least middle to high school, 11% completing vocational school, and 6% completing college. Most respondents were from North Hamgyong (62%) and North Pyongan (18%) provinces. Other provinces of origin included South Hamgyong (7%), South Pyongan (4%), and Pyongyang (2%). The majority of respondents (67%) were undocumented migrants, while 33% were legally in China and had either passports or travel passes. Only 7% of respondents reported migrating with one or more family members.

The primary reasons for migration were to earn money (38%), family reasons (26%), to find food (9%), to do trade or business (7%), to get money from relatives (7%), and to find a better quality of life (5%). Only three respondents (1%) cited fear of persecution as their reason for leaving North Korea. In terms of political class background, about 20% of all migrants reported a “core/loyal” class background. However, 78% of legal migrants were from a “wavering” class background compared to 65% of undocumented migrants, and 15% of undocumented migrants reported a “hostile” class background compared to only 3% of legal migrants.

The key findings of the survey are as follows.

- Nearly 70% of households did not receive any food from regular state distribution in 2004. The mean and median per capita daily ration received by PDS households were 97g and 0g respectively.
- In per capita terms, the mean and median daily cereal equivalent access was estimated at 550g and 514g respectively. Nearly half of the respondents (45%) reported consumption below the minimum per capita daily cereal equivalent need of 457g.
- 52% of households reported sometimes having enough to eat and 32% reported never having enough to eat. 78% reported not consuming regular amounts of food because there was not enough, and 20% reported weight loss resulting from inadequate food consumption.
- 43% of households reported using coping mechanisms, indicative of severe stress, including begging, illegal activities, consumption of wild foods such as grass and bark, and going entire days without eating.
- Among international food aid target beneficiaries between 2000 and 2005, additional food was received by an estimated 9% of nursery school children, 23% of kindergarten children, and 7% of primary school children. Among adult beneficiaries, an estimated 7% of households with pregnant or nursing women and 22% of households with pensioners reported that they had received PDC (Public Distribution Center) food rations in addition to their general ration.
- When respondents were asked, “How do you think most international food aid is distributed?” 35% answered that it was distributed to the military, 28% said it was sold in markets, and 26% said it went to the elite or upper classes, while only 5% said most international food aid was distributed to vulnerable groups like children and the elderly. Asked if they had ever seen UN aid in the markets or used by the military, 84% of respondents said they had seen UN food in the market, while 4% said they had seen it in the military.

The key informants included 18 females and 12 males ranging in age from 21 to 65, with a mean age of 40. The great majority (80%) came from North Hamgyong province, with 2 from South Hamgyong and 1 interviewee from Pyongyang. Two of the key informants were Korean-Chinese businessmen engaging in cross-border trade, one in the Yanbian area and one in Dandong. Most of the key informants were interviewed primarily for their insights as consumers of food rations through the PDS. Three of the interviewees had worked on cooperative farms, one had worked in a PDC, and three had been involved in petty trade involving the buying and selling of grain.

Key informant interviews offered a variety of perspectives on international food aid, though most offered the view that it was being systematically diverted. One reported observing a military truck delivering UN food aid to a military base in North Hamgyong province. He said he saw U.S. flags, UN seals, and “gifts from Korea” written on the bags and containers. On the way, the truck encountered a vehicle with UN staff and stopped in front of a kindergarten. After the UN vehicle left, the truck proceeded to the military base. Another key informant, who had a five-year-old daughter in school in 2004, said her daughter received biscuits about 5 times per year and had also been given a cup of milk once or twice a week. She estimated that about two-thirds of the food intended for the children was taken by teachers, delivery persons, and others.

Key informants commonly reported diversion of food assistance and the misleading of monitoring teams. Some responses were based on direct observation or participation. For example, one key informant reported earning income by brokering sales of UN food to private parties in the market. He reported earning commissions from both sides totaling 5-10% and noted that private sellers purchased the food from the state for about 10-15% below market value. Another key informant reported that “In the PDC, they kept 1-2 tons of rice for display. If they got news that a UN monitoring team was coming to their area, the PDC worker called people from the ‘core/loyal’ class and showed the monitoring team it was distributing food to people.” Other key informants made statements that reflected their impressions or what they had heard from others:

- *“Most food aid was sold by the upper class and military personnel in the market. Ordinary people or factory workers traded small amounts of food aid.”*
- *“Most North Koreans never see international food aid; it only goes to officials, police, and military.”*
- *“Most people know that military trucks were loaded with international food aid from ports...although international food aid was delivered to the military, official food rations were not given to soldiers, because military officers and drivers diverted it.”*
- *“In each step of the distribution chain, people responsible for handling food aid took some portion for their own benefit.”*

In terms of the study’s limitations, it should be recognized that North Koreans who crossed the border into China do not comprise a representative cross-section of the North Korean population. They came mainly from border provinces—North Hamgyong in the northeast and North Pyongan in the northwest. They were also predominantly female. Those who entered China legally may disproportionately represent the “haves”—those with relatively greater educational, economic, and political advantages. Those who enter illegally may over-represent the “have-nots”—those with sufficient distress and deprivation in their lives that they risked the dangers of unauthorized departure from North Korea and unauthorized entry into China.

Overall, however, information from both the survey and the key informant interviews supported the perception that international food aid—regardless of its origin or intended recipients—was viewed as a commodity to be bought, sold, bartered, or used as leverage. It was often not freely given. All too infrequently did food aid reach the vulnerable groups—schoolchildren, pregnant and nursing women, and the elderly—for whom it was specifically intended.

After 2006, international food aid continued, but with increasing signs of “donor fatigue” and ongoing concerns about transparency and effectiveness. A 2014 report by the Congressional Research Service noted that “Providing food to North Korea poses a number of moral and policy dilemmas for the United States.” Similar concerns were, no doubt, held by other countries and donors.

Pyongyang has resisted making economic reforms that would help pay for food imports or increase domestic production, as well as the political reforms that would allow for more equitable distribution of food. Additionally, the North Korean government restricts the ability of donors to monitor shipments of food aid. Multiple sources have asserted that a sizeable amount of the food assistance going to North Korea is routinely diverted for resale in private markets or other uses.⁹¹

The UN COI asserted in 2014 that the North Korean government “has used food as a means of control over the population” and that its “decisions, actions, and omissions...caused the death of at least hundreds of thousands of people and inflicted permanent physical and psychological injuries on those who survived.” By “knowingly causing prolonged starvation” of the North Korean population, the report charged that the government had committed crimes against humanity.⁹² A September 2017 report submitted by Tomás Ojea Quintana, the UN Special Rapporteur for human rights in North Korea, found that the DPRK “remains especially vulnerable to food insecurity,” citing a number of reasons, including that:

91 Mark E. Manyin and Mary Beth D. Nikitin, “Foreign Assistance to North Korea,” *Congressional Research Service Report for Congress* (Apr. 2, 2014), 14. The report cites Haggard and Noland, *Hunger and Human Rights*, in which the authors argue that up to half of WFP’s food aid deliveries did not reach the intended beneficiaries.

92 UN Human Rights Council, *Report of the commission of inquiry on human rights in the Democratic People’s Republic of Korea*, UN Doc. A/HRC/25/63, par. 53, 76.

*Chronic deficiencies in the Public Distribution System, a legacy of the 1990s famine, have aggravated food insecurity and pushed the population to adopt new coping mechanisms, using the large and growing informal sector. The situation seems to be especially difficult in the northern provinces that have been affected by cycles of severe drought and flooding in the past few years...Recent reports regarding the Public Distribution System depict a policy of discriminatory and unequal access to food, with many people either left out of the system or given irregular rations.*⁹³

In January 2018, an analysis by the humanitarian news agency Integrated Regional Information Networks (IRIN) noted that “after a year of nuclear threats, fiery brinkmanship, and retaliatory sanctions, the global aid sector is at a crossroads with North Korea.”⁹⁴ Diminishing funds had forced the WFP to cut back nutrition programs for children and reduce food rations. The 2017 UN global appeal for North Korea sought \$113.5 million. A total of seven countries, led by Russia and Switzerland, pledged less than \$13 million. The article cited Noland, who noted that “it’s been a pretty complicated and discouraging story of provision of aid over a long period of time: less than completely sincere behavior on both sides of the equation, questionable results, and now a situation where everybody is just sort of fed up...there’s not a lot of goodwill left.” The IRIN analysis concluded that “2018 is likely to prove to be another tough year, for groups like the WFP, but especially for the children and pregnant women who make up the majority of its beneficiaries.”

C. Nutritional Status of Children, 1997–2017

Malnutrition in children generally is measured by three indicators: stunting, wasting, and underweight. These anthropometric indicators are typically measured for children under five.

- *Stunting*, a measure of low height for age, is the percentage of children who are below two standard deviations (SD) of the WHO Child Growth Standards median. Stunting “reflects the cumulative effects of undernutrition and infections since, and even before, birth. This measure can therefore be interpreted as an indication of poor environmental conditions or long-term restrictions of a child’s growth potential.”⁹⁵ Since it is the result of long-term nutritional deprivation and is not subject to change in short periods of time, stunting “often results in delayed mental development, poor school performance, and reduced intellectual capacity.” Stunting is sometimes referred to as a measure of chronic malnutrition. Prevalence cut-off values of stunting for public health significance include $\geq 40\%$ as Very High prevalence, 30-39% as High prevalence, 20-29% as Medium prevalence, and $< 20\%$ as Low prevalence.⁹⁶
- *Wasting*, a measure of low weight for height, is the percentage of children who are below 2 SD of the WHO Child Growth Standards median. Wasting in children “is a symptom of acute undernutrition, usually as a consequence of insufficient food intake, or a high incidence of infectious diseases, especially diarrhea. Wasting, in turn, impairs the functioning of the immune system and can lead to increased severity and duration of, and susceptibility to, infectious diseases and an increased risk for death.” Wasting is sometimes referred to as a measure of acute malnutrition. Prevalence cut-offs of wasting for public health significance include: $\geq 15\%$ as Critical, 10-14% as Serious, 5-9% as Poor, and $< 5\%$ as Acceptable.⁹⁷
- *Underweight*, a measure of low weight for age, is the percentage of children who are below 2 SD of the WHO Child Growth Standards median. While weight is generally easy to measure, “underweight” is a composite indicator that could reflect wasting, stunting, or both and thus may be more difficult to interpret than the other two indicators. Prevalence cut-off values of underweight for public health significance include $\geq 30\%$ as Very High prevalence, 20-29% as High prevalence, 10-19% as Medium prevalence, and $< 10\%$ as Low prevalence.⁹⁸

While it is fair to say that North Korea has, over the decades, continued to impose restrictions on international aid organizations seeking to make independent assessments of the food security situation, greater exceptions have been made on behalf of young

93 UN General Assembly, “Situation of human rights in the Democratic People’s Republic of Korea—Note by the Secretary General,” UN Doc. A/72/394 (Sep. 18, 2017). On the allegation of “discriminatory and unequal access to food,” the report cited the Korea Institute for National Unification’s 2016 *White Paper on Human Rights in North Korea*, 261-270.

94 Irwin Loy, “Donors lose appetite for North Korean food aid,” *IRIN News*, Jan. 9, 2018. <https://www.irinnews.org/analysis/2018/01/09/donors-lose-appetite-north-korean-food-aid>.

95 WHO, *Nutritional Landscape Information System Country Profile Indicators: Interpretation Guide* (Geneva, 2010). http://www.who.int/nutrition/nlis_interpretation_guide.pdf.

96 Ibid.

97 Ibid.

98 Ibid.

children. In April 1997, the DPRK Ministry of Health stated that 15.6 percent of children under 5 years were suffering from malnutrition and, in July of the same year, announced that the figure had risen to 37 percent.⁹⁹

This sparked both interest and frustration on the part of international humanitarian monitors. The Ministry of Health would provide neither a description of its sampling methodology nor the cut-off points that were used to define malnutrition. In August 1997, a WFP-led assessment team was permitted to conduct a nutritional survey of 3,695 children under 7 years of age in 42 selected nurseries and kindergartens from 19 counties in five provinces. Among the children surveyed, the assessment team found a 16.5% prevalence of wasting and a 38.2% prevalence of stunting.¹⁰⁰ However, both the survey sites and the children included in the sample were not randomly selected.

Following a year of negotiations, another nutritional survey of children between the ages of 6 months and 84 months was carried out by UNICEF and WFP in collaboration with the DPRK government in September and October 1998. Using a multi-stage cluster sample design, 14 teams surveyed 1,762 children from 3,600 households in 30 counties. For access or security reasons, 82 counties containing 29% of North Korea's population were excluded. This survey found that wasting affected 15.6% of children, while 62.3% were stunted and 60.6% were moderately or severely underweight.¹⁰¹ By comparison, 18% of children under five in Bangladesh suffered from wasting and 55% were stunted; in Cambodia, the rates for 1990–1997 were 13% wasting and 56% stunting for children under five.¹⁰²

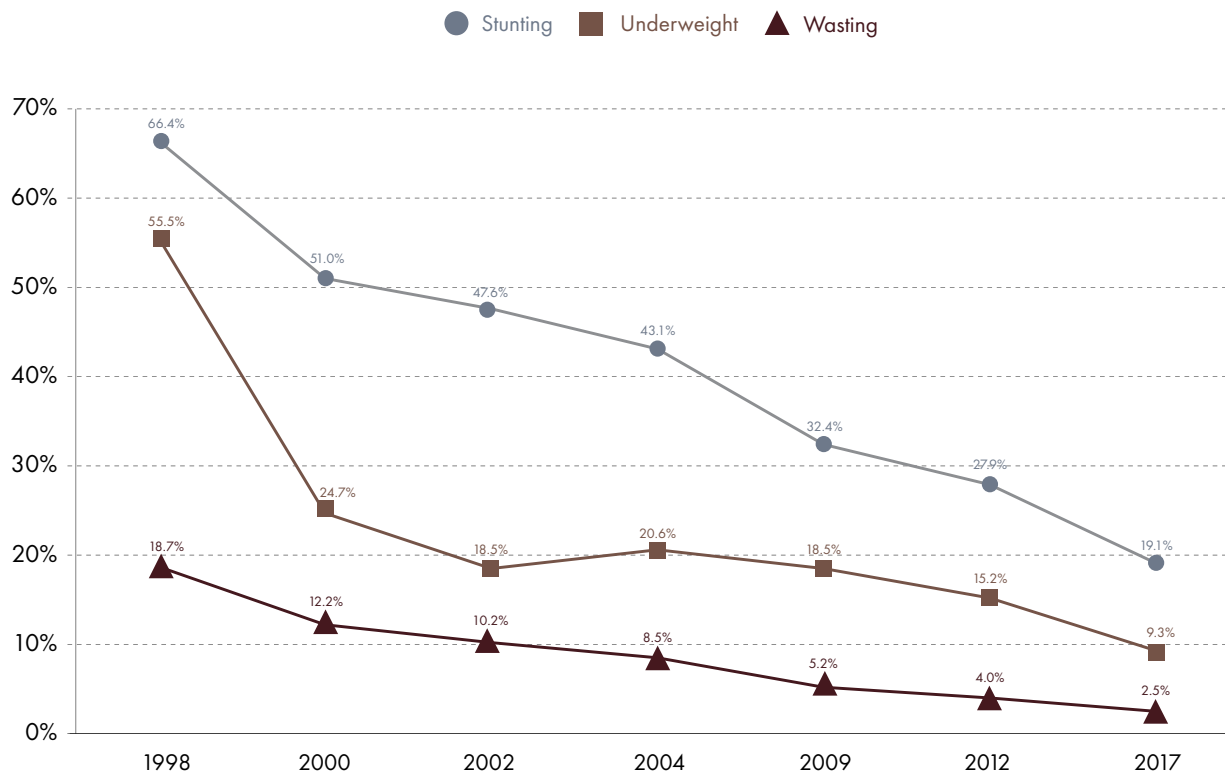
As Figure 5 shows, the 1998 multiple indicator cluster survey (MICS) showed stunting and underweight both at Very High prevalence levels, and wasting at a Critical level, measures that might have captured the famine at its peak. In 2000, the UNICEF, WFP, and North Korean government conducted another MICS at the national level. This survey showed a steep decline in the percentage of underweight children (55.5% in 1998 to 24.7% in 2000), shifting from Very High prevalence to High prevalence. Wasting in children also declined from 18.7% to 12.2% over the same period, dropping from Critical to Serious. While stunting declined from 66.4% to 51.0%, both measures remained at a Very High prevalence level.

99 Rebecca Norton and Jane Wallace, "Special Supplement to the RNIS Report: The Democratic People's Republic of Korea (DPRK)," Nov. 29, 1997.

100 Judit Katona-Apte and Ali Mokdad, "Malnutrition of Children in the Democratic People's Republic of North Korea," *Journal of Nutrition* 128 (1998): 1316.

101 European Union, UNICEF, and WFP, *Nutrition survey of the Democratic People's Republic of Korea* (New York: UNICEF, 1998).

102 UNICEF, *The State of the World's Children 1999* (New York, 1999).

Figure 5. Trends in North Korean Child Nutritional Status, 1998–2017

Source: Sources: Data for 1998 to 2009 is from *FAO/WFP Crop and Food Security Assessment Mission to the Democratic People's Republic of Korea*, Nov. 16, 2010. Data for 2012 is from Jeong-Eun Kim, "Nutritional State of Children in the Democratic People's Republic of Korea (DPRK): Based on the DPRK Final Report of the National Nutrition Survey 2012," *Pediatric Gastroenterology, Hepatology & Nutrition* 17.3 (2014): 135-139. Data for 2017 is from DPRK Central Bureau of Statistics, *Multiple Indicator Cluster Survey 2017: Survey Findings Report* (Pyongyang, Jun. 2018).

In 2002, a national nutritional survey showed additional, though more modest, declines in all three indicators, with underweight falling to Medium-prevalence levels and wasting to just above Poor levels. However, stunting remained at a Very High-prevalence level and would persist at a Very High level for several more years. Schwekendiek analyzed data from the 2002 and the 1997 surveys to examine regional variations in nutritional status among North Korean children. He finds that:

Pyongyang residents are generally better off than those living outside the capital. This largely agrees with the literature arguing that North Korea's elites, who have exclusive access to resources, are residing there... Children in the two Pyongan provinces are found to be the shortest, which might be because of the complete collapse of these heavy-industrialized regions in the post-Cold War era as a consequence of North Korea's geopolitical isolation and severe energy crisis.¹⁰³

In another analysis of the 2002 nutritional survey data, Schwekendiek reports that "older children and specifically boys suffer more during crises, whereas the age of the mother seems to have a positive effect on their well-being... Most importantly, we find a statistical impact for food dependency on the World Food Program: children of households primarily benefiting from international food aid seem better-off than those relying [on] the government or farmers."¹⁰⁴ Despite the diversions and the inequitable access to food, international food aid seemed to improve children's health at the population level.

103 Daniel Schwekendiek, "Regional Variations in Living Conditions During the North Korean Food Crisis of the 1990s." *Asia-Pacific Journal of Public Health* 22.4 (2010): 460-476.

104 Daniel Schwekendiek, "Determinants of well-being in North Korea: Evidence from the post-famine period." *Economics and Human Biology* 6 (2008): 446-454. See also Daniel J. Hoffman and Soo-Kyung Lee, "The Prevalence of Wasting, but Not Stunting, Has Improved in the Democratic People's Republic of Korea," *Community and International Nutrition* 135 (2005): 452-456.

Repeated nutritional surveys conducted in 2004, 2009, and 2012 continued to show declines in underweight, wasting, and stunting, though stunting only dropped from High Prevalence to Medium Prevalence sometime between 2009 and 2012. In June 2018, the DPRK Central Bureau of Statistics released the results of the 2017 MICS, showing the percentage of underweight children was down to 9.3% (Low prevalence) and wasting among children had declined to 2.5% (in the Acceptable range). Stunting had also declined to 19.1%, also in the Low prevalence range, but bordering on Medium at the national level and worryingly high in a number of provinces, including Ryanggang (31.8%, High prevalence), Jagang (23.0%, Medium prevalence) and North Hamgyong (21.5%, Medium prevalence).

We stated above that the DPRK's data must be treated with caution, and the nutritional surveys are no exception. Surveys in the early 2000s were conducted without the assistance of independent international organizations, and the 2006 data "is not cited much, due to its low credibility."¹⁰⁵ There is now somewhat greater involvement on the part of international organizations, and there is better adherence to stricter sampling methodologies. While it remains a matter of debate as to whether or not the data represents a full and accurate picture—certainly, child prisoners and internally displaced children would not be included—the data suggests two trends. First, malnutrition rates seem to have declined over the past two decades. Second, even if the situation is worse than what the data shows, there are "clear indications of a continuing problem," reflective of what some have called "North Korea's silent health crisis" in which "undernourishment is a common denominator for many of the health problems afflicting North Koreans," including children.¹⁰⁶

D. North Korean Refugee Children in South Korea

Of the more than 30,000 North Korean refugees in South Korea as of mid-2017, more than 5,000 entered the country before they turned 20.¹⁰⁷ Among the four studies of North Korean child refugee growth, three utilized relatively small convenience samples of North Korean children, with sample sizes ranging from 54 to 103. This sample was compared against samples of South Korean children or national-level child growth curves in South Korea.¹⁰⁸ The fourth study examined height and weight measures of 1,406 North Korean children taken at the time of their arrival at the Hanawon center between 1995 and 2007.¹⁰⁹

All four studies found that North Korean children were shorter than their South Korean counterparts, with the magnitude of these differences depending on age and gender. Pak finds that North Korean children born between 1995 and 1999, the peak years of famine and food insecurity, were shorter than children born before or after that period, although the difference was not statistically significant.¹¹⁰ Two studies found that the growth status of North Korean children improved the longer they lived in South Korea, but there were differences between height and weight in the extent of this improvement.¹¹¹ Comparing 1997 data from North and South Korea, Schwekendiek and Pak found that South Korean children were about 2-3 inches taller than North Korean children and about 6.6 pounds heavier.¹¹² Among North Korean refugee children in South Korea, weight gain was fairly rapid after leaving North Korea, but height recovery was slow.¹¹³

105 Jeong-Eun Kim, "Nutritional State of Children in the Democratic People's Republic of Korea (DPRK): Based on the DPRK Final Report of the National Nutrition Survey 2012," *Pediatric Gastroenterology, Hepatology and Nutrition* 17.3 (2014): 135-139.

106 Gianluca Spezza and Nazanin Zadeh-Cummings, "North Korea's silent health crisis," *The New Humanitarian*. February 2019. <https://www.thenewhumanitarian.org/opinion/2019/02/25/north-korea-s-silent-health-crisis>.

107 Soo-Kyung Lee, "North Korean children: nutrition and growth." *Annals of Pediatric Endocrinology & Metabolism* 22 (2017): 231-239.

108 SK Choi, SM Park, H Joong, "Still life with less. North Korean young adult defectors in South Korea show continued poor nutrition and physique," *Nutr. Res. Pract.* 4 (2010): 136-141; IS Lee, HR Park, YS Kim, HJ Park, "Physical and psychological health status of North Korean defector children," *J Korean Acad. Child Health Nurs.* 17 (2011): 256-263; SK Lee, SY Nam, D Hoffman. "Changes in nutritional status among displaced North Korean children living in South Korea" *Ann Hum Biol* 42 (2015): 581-584.

109 S. Pak, "The growth status of North Korean refugee children and adolescents from 6–19 years of age," *Econ. Hum. Biol.* 8 (2010): 385-395.

110 Ibid.

111 IS Lee et al. (2011), SK Lee et al. (2015).

112 Daniel Schwekendiek and Sunyoung Pak, "Recent growth of children in the two Koreas: A meta-analysis" *Economics and Human Biology* 7 (2009): 109-112.

113 Ibid.

CHAPTER 3.

PHYSICAL AND MENTAL HEALTH

This chapter begins with an overview of the North Korean healthcare system, from its early years to its collapse in the 1990s and partial recovery in the last decade. We also focus on three areas of specific importance to children’s health—maternal and child health, immunizations, and infectious disease. The chapter also examines the physical and mental health of North Koreans in China and South Korea.

A. The North Korean Healthcare System: Collapse and Partial Recovery

In many of its framing documents, North Korea declared a commitment to build a strong and effective healthcare system.¹¹⁴ Article 72 of the Constitution guaranteed universal and free health care for all citizens. The Public Health Law of 1980, revised in 2012, reinforced this commitment, placing emphasis on free medical care,¹¹⁵ promoting a “section” (household) doctor system,¹¹⁶ and prioritizing preventive medicine.¹¹⁷ The government started vaccination programs in the 1960s and expanded healthcare infrastructure to the point where, by 1970, North Korea had 20 times the number of hospital beds per capita than South Korea. By the 1980s, the government was claiming it had achieved universal health coverage.¹¹⁸

Before the 1990s, available evidence suggests that the North Korean healthcare system was both structurally sound and reasonably well functioning.¹¹⁹ Despite a much lower per capita GNP, North Korean life expectancy was quite close to that of South Korea and the crude death rate was identical (Chapter 1). There was a network of provincial, county, and *ri* (village) hospitals throughout the country. At the *ri*-level clinics, “section” (household) doctors provided primary care to each 50-household block in each community.¹²⁰

However, the healthcare system began to break down in the mid-1990s with the onset of the “Arduous March.” Primary health care centers such as *ri* hospitals and clinics, and the secondary hospitals such as *si* (municipal) hospitals were not able to carry out their core functions due to the lack of state financing and loosening of state organizational control. As local markets (*jangmadang*) began to play a greater role in the North Korean economy in the 2000s, a greater proportion of the population chose to pay for healthcare services through an emergent private healthcare sector. This weakened the existing public system, particularly with respect to the delivery of free medical care. As one North Korean told South Korean researchers:

You can say that the health system of North Korea has broken down. Hospitals cannot perform its roles. They can only do consultations and suggest which medicine to use. And then you buy the medicine from ‘Jangmadang’. As a result,

114 In this report we refer to “healthcare” when referring to the system of delivering health services, and “health care” when referring to particular services delivered. Thus a state has a healthcare system through which a person receives health care services.

115 People’s Public Health Law (Adopted Apr. 5, 1980, revised Apr. 3, 2012), Article 9. “The state gives benefits of receiving perfect free medical care to all people. All people including laborers, farmers, and intellectuals have rights to receive free medical care.”

116 Ibid., Article 28. “The state strongly develops section-doctor system that doctors take charge in certain number of residents and take care of their health.”

117 Ibid., Article 3. “The foundation of Socialist medicine is preventive medicine. The state adheres to the preventive medical strategies that incarnate Socialist medical principles.”

118 John Grundy, “History, International Relations and Public Health – the Case of the Democratic People’s Republic of Korea 1953–2015,” *Korea’s Economy* 31 (2017): 51–60.

119 Kim Su-Am et al., *Bukanjuminui salm-ui jil: siltae-wa insik* [Quality of Life for North Korean Residents: Situation and Perception] (Seoul: Korea Institute for National Unification, 2011), 124.

120 Grundy, “History, International Relations and Public Health.”

Jangmadang' in North Korea actually serve as a pharmacy. For example, when you go to [the] hospital for a cold, they will prescribe same medicine. And by the next time, you just directly go to [the] 'Jangmadang' and buy medicine and take it.¹²¹

In the sections that follow, we draw on our own interviews with study respondents who shared their experiences during the “Arduous March” and afterwards.

Limited or No Appropriate Medications

Officially, North Korea’s healthcare system is supposed to allow access to free medicines for all patients as prescribed by their designated doctors. In reality, hospitals often lack medicine and have underpaid medical staff who charge under-the-table fees.¹²² Even though doctors might provide diagnoses for free, patients have to pay for supplies and medicine.

*I just did the operation without having [a] precise diagnosis at the time to get rid of a kind of tumor beneath the skin. Though hospitalization was easy, almost no one was hospitalized... The operation and diagnosis were free of charge, but the patients could not have treatment without medicines unless they got them by themselves. I was hospitalized for only two days and came back home. Then, the doctor came to our home, and we paid the doctor for his work.
(IDI-SK-26)*

*In the mid-1990s, there were no medications in the hospital. People starved and there were more patients, but the hospital couldn't serve its role. For the operations, the hospital didn't have anesthetic drugs or other medications, so the individuals had to buy the necessary medications and go to the hospital. One person I know had an appendectomy without anesthetics because there were none.
(KII-SK-05)*

Respondents reported that when they were sick, family members tried to find appropriate medicines for them. When there was no way to buy medication, they sought “other routes,” a euphemism for smuggling medication in from China:

*Father became sick and there [in North Korea] you have to buy medicine from the hospitals. But we couldn't buy it from the hospital, so we bought from other people, through markets or some kind of 'other route', that cost a lot of money, and we began to find it hard to live.
(IDI-SK-25)*

*Paying money for medications impacted the household expenses. Children experienced increased burdens due to their or the family member's illness. One respondent reported: “My brother had hepatitis. There was no medication in the hospital so we bought those in the market. We couldn't afford it continuously. We bought a few of the medications in the market and discontinued when we couldn't afford it.”
(IDI-CH-06)*

Unable to access the proper medication, North Koreans found cheaper alternatives, some of which were inappropriate or fake and only aggravated the symptoms. One female respondent from Pyongyang reported:

*When we got sick, we made a trip to the town. The hospital was 15 minutes away. Private doctor lived in my village. We bought medicine and took it at home. When anyone got a cold, he/she went to the pharmacy and bought fever reducers and Jeong tong pyeon. Most of these medicines were from China.
(IDI-SK-09)*

121 Cited in Seog-Ju Kim, Wang-Jae Lee, Sang-Min Park, Haewon Lee and Heeran Choi, “Bukanjumin-ui jilbyeonggwang-gwa jilbyeong haengtae” [Illness model and illness behavior of North Korean people] (Seoul: Seoul National University Press, 2016): 93-94.

122 Amnesty International, *The Crumbling State of Health Care in North Korea* (London, 2010), 22.

Jeong tong pyeon, a painkiller derived from opium, is widely used in China and North Korea, and is one of the most common and inexpensive medications that North Koreans can buy in the market.^{123, 124}

Alternative Therapies and Coping Strategies

Lack of supplies in the healthcare system forced North Koreans to seek alternative ways to treat their illnesses. Folk therapies were commonly used, and magazines published by the government often included a folk therapy section. For example, *Chosun Nyeosung*, a monthly magazine for women published by the Socialist Women's Union of Korea (*Yeomaeng*), described preventive therapies for cancer or the common cold as including corn or beans, such as mung beans.¹²⁵ Some participants used folk therapies mainly because they could not afford the medicine.

Koryo (traditional Korean) medicine is widely used in North Korea, and developing *Koryo* medicine was an important part of the healthcare policy for the Korean Workers' Party (KWP).¹²⁶ Partly to reinforce *juche* (self-reliance) ideology and also to overcome the shortage of Western medicine,¹²⁷ the North Korean government encouraged the use of herbal medicine and acupuncture. In the 1970s, even when the economy was functional, *Koryo* medicine covered 60-70% of treatments in the primary healthcare system, and more than 80% of treatments in hospitals used *Koryo* medicine.¹²⁸ North Korea's Ministry of Public Health reported that Western (allopathic) medicine is more commonly used in large hospitals, whereas *Koryo* (homeopathic) medicine is more commonly used in small healthcare facilities, such as in *ri* clinics at the community level.¹²⁹

Other alternative treatments used in North Korea include opioids or narcotics. One respondent from South Hamgyong Province reported that when her grandmother was diagnosed with terminal cancer, her family had to buy opioids because the hospital could not provide any treatment. The opioids were expensive, and her family faced even more dire straits due to her grandmother's disease (IDI-SK-30). Some respondents in China said that drug addiction is prevalent in North Korea:

There's a panacea in NK, by which all diseases are prevented and treated. Everybody uses it no matter if they are young or old. That is 'ice.' Everyone can easily get ice. It is particularly good to prevent stroke. It lets people forget their hunger. During the period of the Arduous March, people handled hunger with this. I think more than 50% of people still use drugs. (IDI-CH-08)

One news report cited a South Korean researcher who stated that about 30 percent of North Koreans use drugs; methamphetamines or opioids are the most easily accessible.¹³⁰

Hospitalization and Healthcare Utilization

There were also problems with hospitalization. The issue was not only the lack of medicine and materials, but also the poor quality of care.

123 Eun-Ji Kim, "North Korean Escapees were excessively taking drugs prior to arrival in South Korea" [Talbukja-deul, hangook ipguk jeon yangmul gwada bogyong]. *VOA News*, Jul. 29, 2009. <https://www.voakorea.com/a/a-35-2009-07-29-voa16-91370039/1322592.html>.

124 Amnesty International, *The Crumbling State*, 25.

125 Soon-Hee Lim, *Chosun Nyeosung Buseok* [Analysis of Chosun Nyeosung] (Seoul: Korea Institute for National Unification, 2009), 79.

126 Changho Seung, *Inmin bogeon saeop gyeongheom: juche sasang-ui gichi mite sae sahoe geonseoleseo irukan gyeongheom* [Experience on Peoples' Public Health Policy: Experience of building new society under the banner of Juche ideology] (Pyongyang: Korean Workers' Party, 1965), 138.

127 Young-Hwan Seok, *Bukan-ui uiryosiltae* [Situation of North Korean Healthcare System] (Seoul: Korea Institute for National Unification, 2003), 14.

128 Dal-Rae Kim, "Bukan-ui hanbang bogeon uiryu hyeonhwang" [The Present Situation of Oriental Health Care in North Korea], *Journal of Korean Medicine* 19.2 (1998): 153-176.

129 Ranjit R. Chaudhury and Uton M. Rafei, *Traditional Medicine in Asia* (New Delhi: World Health Organization, 2001), 71-72.

130 Elizabeth Shim, "More than 30 percent of North Koreans use meth, opium," *United Press International*, Dec. 1, 2016. https://www.upi.com/Top_News/World-News/2016/12/01/More-than-30-percent-of-North-Koreans-use-meth-opium/3341480607505/.

*I fell down while I was playing with other kids. At first, it was just a simple contusion in my knee, so I paid little attention to it. As time went by, the wound was infected and the pus formed. I was seven years old at the time, and spent almost a year at the hospital. I could not receive an operation. The medical staff just made an incision into my wound and kept disinfecting the area. I was fed little food and no medicine, so the infection kept worsening.
(IDI-SK-21)*

*When I was in the 4th grade of elementary school, there was a typhoid epidemic. I was hospitalized for a week. I was treated on the floor instead of beds. There were four beds in one room, but around ten people were there. Some were given blankets, the rest got their own. We prepared medicines and needles and the hospital just gave an injection. That was during winter. The heating was not working properly.
(IDI-SK-29)*

*I had surgery on a tumor that was found in my abdomen when I was in kindergarten. During the operation, I didn't get put under anesthesia. So six doctors held my body, one for the head, two for the arms, two for legs, one for the operation. That is what I remember. I still don't know why I didn't get put under anesthesia. During operation, it was so painful.
(IDI-SK-28)*

There has been uneven recovery in the healthcare system since the 2000s, as it has transformed into a mix of public and private services. Modernization in secondary and tertiary hospitals has been a priority under Kim Jong-un as well as new telemedicine initiatives and the construction of a large new medical center in Pyongyang.¹³¹ However, there is continued evidence of under-resourcing of the health sector. A 2008 evaluation of Women's and Children's Health Project, for example, found consistent reporting of 30% stockouts in the previous three months of pediatric drugs, and up to 50% stockouts of emergency obstetric drugs.¹³² Moreover, maternal and child health, immunizations, and infectious disease all experienced dramatic setbacks in the 1990s and have yet to fully recover.

Maternal and Child Health

While there is some evidence of a “female mortality advantage” during the “Arduous March,” part of this may have been due to the fact that fewer North Korean women were becoming pregnant. As noted in Chapter 1, the total fertility rate (TFR) decreased from 2.12 in 1995 to 1.61 in 2016.¹³³ For women who did become pregnant, the maternal mortality ratio (MMR) is a useful measure of maternal risk during the 1990s, 2000s, and 2010s.¹³⁴ The MMR is the most widely used measure of maternal deaths. Although it does not measure specific causes of high maternal mortality, it measures obstetric risk—the risk of dying once a woman becomes pregnant. Maternal mortality is “widely acknowledged as a general indicator of the overall health of a population, of the status of women in society, and of the functioning of the health system. High MMRs are markers of wider problems of health status, gender inequalities, and health services in a country.”¹³⁵ Figure 6 shows the MMR and, for comparison purposes, the infant mortality rate (IMR) from 1990 to 2015.¹³⁶

131 Heeyoung Shin, Haewon Lee, Kyeongsoo An and Jieun Jeon, “Kim Jung-un sidae Bukan uiryochegye donghyang” [North Korea's Trends on Healthcare System in Kim Jong Un Era: Concentrated on Healthcare Delivery and Organizational System], *Journal of Peace and Unification Studies* 8.2 (2016): 181-211.

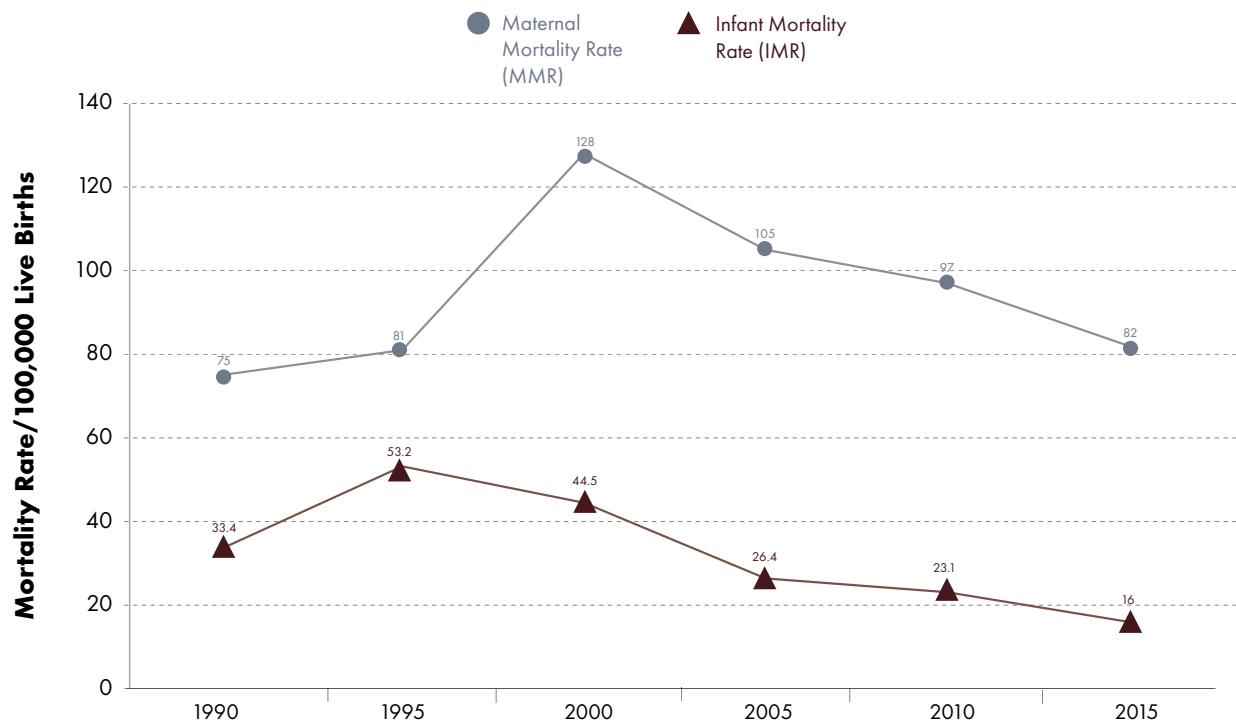
132 Nossal Institute for Global Health, *University of Melbourne Evaluation of Women's and Children's Health Program* (2008). Cited in Grundy (2017).

133 “Democratic People's Republic of Korea - Fertility rate, total (births per woman),” World Bank Data, accessed Jul. 31, 2018. <https://data.worldbank.org/indicator/SP.DYN.TFRT.IN?locations=KP>.

134 UNICEF defines the maternal mortality ratio as “the number of maternal deaths during a given time period per 100,000 live births during the same time period. It depicts the risk of maternal death relative to the number of live births and essentially captures the risk of death in a single pregnancy or a single live birth. Maternal deaths: The annual number of female deaths from any cause related to or aggravated by pregnancy or its management (excluding accidental or incidental causes) during pregnancy and childbirth or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy. See <https://data.unicef.org/topic/maternal-health/maternal-mortality/>.”

135 “Maternal mortality ratio (MMR),” MEASURE Evaluation, accessed Nov. 5, 2018. https://www.measureevaluation.org/prh/rh_indicators/womens-health/sm/maternal-mortality-ratio-mmr.

136 UNICEF, “Maternal mortality,” accessed Jul. 31, 2018. <https://data.unicef.org/topic/maternal-health/maternal-mortality/>.

Figure 6. Maternal Mortality Ratio and Infant Mortality Rate, 1990–2015

Source: UNICEF. Available from <https://data.unicef.org/topic/child-survival/under-five-mortality/>.

Both the MMR and IMR rose between 1990 and 1995, as would be expected with the onset of the food crisis. While infant mortality began to decline after 1995, maternal mortality further rose to 128 maternal deaths per 100,000 live births. This was not unusually high compared to the global average of 287.6.¹³⁷ Nevertheless, it shows that the healthcare system was in continued decline.

In the 2000s and 2010s, with WHO support and in collaboration with UNICEF and UNFPA, hospitals in North Korea improved their capacity to manage basic emergency obstetric and neonatal care. As of 2014, the WHO reported that 87% of *ri* hospitals in North Korea had basic emergency obstetric care capacity, compared to 30% in 2009. It warned however, that “given the susceptibility to extreme weather events and in the context of food insecurity, pregnant women and lactating mothers and children under the age of five are highly vulnerable to the public health impacts generated by these external shocks.”¹³⁸

Antenatal care (ANC) coverage is known to be high in North Korea. According to a UNICEF and WHO survey targeting women who gave birth within two years in 2009, 93.5% of women had more than four ANC visits. Pyongyang had the highest rate at 98% and Ryanggang province showed the lowest coverage with 76%.¹³⁹ However, another survey conducted in South Korea of 110 North Korean women who had given birth in North Korea indicated that ANC coverage was only 61.8%. More than three-quarters of these women were from North Hamgyong Province.¹⁴⁰

137 Nicholas J. Kassebaum, Caitlyn Steiner, Christopher J.L. Murray, Alan D Lopez, Rafael Lozano et al., “Global, regional, and national levels of maternal mortality, 1990–2015: a systematic analysis for the Global Burden of Disease Study 2015,” *Lancet* 388 (2016): 1775–1812.

138 WHO, *WHO Country Cooperation Strategy: Democratic People’s Republic of Korea: 2014–2019* (New Delhi, India: 2016), 15. http://www.searo.who.int/dprkorea/documents/ccs_dprk_2014-2019.pdf.

139 UNICEF, “Antenatal care,” accessed July 31, 2018. <https://data.unicef.org/topic/maternal-health/antenatal-care/>.

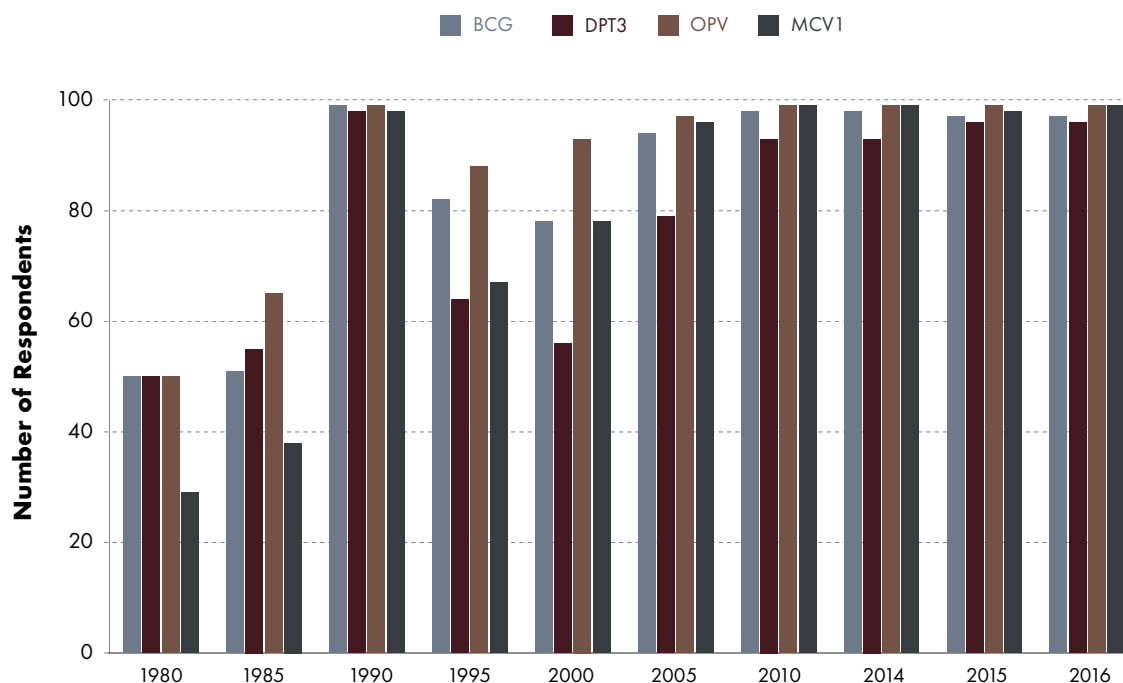
140 Hee-Sook Kim, “Bukanitaljumin seolmunjosareul tonghae bon Bukanui moseong-gwa sinsaenga moseong gwalli siltae” [Survey of North Korea’s Maternal and Newborn health Management through North Korean Defectors], *Journal of Korean Society of Maternal and Child Health* 19.1 (2015): 43–44.

Immunization

Consistent with the DPRK's constitutional commitment to free, universal health coverage, the Expanded Program on Immunization (EPI) was launched in 1980 and freely provided by a network of public health facilities at more than 12,000 immunization posts. This included 7,008 primary healthcare units, 433 county-level clinics and hospitals, and 130 central and provincial level hospitals and specialized hospitals.

As shown in Figure 7, immunization coverage rates for Diphtheria, Pertussis, and Tetanus-Haemophilus Influenza Type B-Hepatitis B (DPT3), Oral Polio Vaccine (OPV), Measles-Containing Vaccine First Dose (MCV1), and Bacillus Calmette-Guerin (BCG) climbed from around 50% in 1980 to nearly 100% in 1990.¹⁴¹ Again, the impact of the “Arduous March” can be seen in the declining coverage rates in 1995 and 2000, with rates returning to near-1990 levels by 2010. A coverage evaluation survey conducted in 2008 showed that immunization coverage in the five northeastern provinces was 3-5% below the national average. As a result, the North Korean government, with international support, made additional efforts to improve routine immunizations in these five provinces.

Figure 7. Vaccine Coverage in the DPRK, 1980–2016



Source: WHO/UNICEF estimates of national immunization coverage, July 2017.

Several respondents chronicled the period before the 1990s and the impact of reduced supply of vaccines, as well as shortages of medical supplies, leading to the re-use of syringes and other unsafe and unhygienic practices.

In the early 1990s, it was similar to the 1980s...we could go to local clinics when we were sick, received cough medicine when we caught cold, and in winter, the clinic gave us flu shots. In schools or in villages, vaccines for infectious diseases like TB, were also available. Of course, they didn't have all kinds of medication, but could handle emergency diseases at least.

(KII-SK-05)

141 The National Immunization Program includes the following vaccines: Bacillus Calmette - Guerin (BCG), Oral Polio Vaccine (OPV), DPT3 (DPT-Hib-Hepatitis B), and measles-containing-vaccine-first dose (MCV1).

The hospital staff came twice a year to the school. If there was a pandemic flu or something, they gave shots for free. They gave us shots but it was so painful that we couldn't use that arm for a week because of the pain. So we wanted to run away in order not to get those shots. Sometimes the needles would be used and taken out to be sterilized to be reused, but that wasn't done in the same place.
(IDI-SK-18)

I got vaccinations once or twice a year when I was in elementary school. But in middle and high school, I only got a few vaccinations. After injection, they cleaned the needle, and injected again. After a couple of students got injected in this way, the needle was changed. I was in third grade. Due to the germs of injection, many students were ill. In a worst case, the arm was decayed. One of my classmates had fever and he was sweating during the class after injection. And I questioned why. He answered that "my arm hurts." So I checked his arm and it was blackened.
(IDI-SK-26)

Communicable and Re-emerging Diseases

Increased incidence of infectious disease is now clearly understood as an outcome of natural and human-made disasters, which lead to weakened health and social infrastructures, and food shortages. This leads to malnutrition and poor water hygiene, which, in turn, increase the incidence and prevalence of infectious diseases. In the end, this increases mortality, particularly among young children.¹⁴² One of the key differences in the disease burden between South and North Korea is the highly disparate rates of infectious disease. In 2004, for example, the rate of disability-adjusted life years (DALYs) lost due to infectious diseases in North Korea in 2004 was 7,319 person-years per 100,000 population, which is more than 5 times higher than 1,452 person-years for South Korea.¹⁴³ We focus on two examples of infectious disease—malaria and tuberculosis (TB)—whose rates rose exponentially in the wake of the famine and multi-faceted crisis in the 1990s.

Malaria: Malaria was reportedly almost non-existent before it began to reappear in 1998, with a rough estimate of 100,000 cases, which rose to 204,473 in 2000 and peaked at 296,540 in 2001.¹⁴⁴ Many of those infected are thought to be living in counties close to the border between North and South Korea, including Kaesong, Jangpung, and Tosan. Also a risk factor are irrigation canals used for farming, which become breeding grounds for mosquitoes. In 2011, one report estimated that 40% of residents in North Korea were at risk of malarial infection.¹⁴⁵

Tuberculosis (TB): TB incidence in North Korea ranked seventh or eighth in the world in 2009, among the highest in the world outside of sub-Saharan Africa and nearly four times the rate in China or South Korea.¹⁴⁶ As Perry and colleagues note, "the TB epidemic in the DPRK has evolved ominously since the breakup of the Soviet Union and the famines of the 1990s."¹⁴⁷ The incidence in North Korea has steadily increased from 345 persons per 100,000 population in 2010 to 561 per 100,000 in 2015.¹⁴⁸ Due to natural disasters, food crises, economic collapse, and government mismanagement, there has been a rise of both multidrug-resistant TB (MDR-TB) and extensively drug-resistant TB (XDR-TB).¹⁴⁹

The Global Fund to Fight AIDS, Tuberculosis and Malaria, which had supported programs in North Korea valued at \$69 million for TB-related projects and \$34 million for malaria-related projects since 2010, announced on February 21, 2018 that it was ending its activities in the country.¹⁵⁰ Burki commented that "it will be extremely challenging for North Korea to maintain a high-quality tuberculosis programme without the Global Fund. Unless the nation can find a new source of drugs quickly, it will

142 Nami Hwang, "Tongildaebi Bukan jeonyeombyeong gwallireul wihan jeopgeunjeollyak" [Strategies of Communicable diseases Control to North Korea on the Preparation for Korean Reunification], *Health and Welfare Policy Forum* 180 (2011): 93.

143 Death and DALY estimates for 2004 by cause for WHO Member States are available from http://www.who.int/healthinfo/global_burden_disease/estimates_country/en/.

144 WHO, *Cooperation Strategy*.

145 Hwang, "Strategies of Communicable diseases Control," 86.

146 Sharon Perry, Louise Gresham, Heidi Linton, and Gary Schoolnik, "Engaging North Korea on Mutual Interests in Tuberculosis Control," *KEI Academic Paper Series* 6.2 (Feb. 2011).

147 Perry et al., "Engaging North Korea," 4.

148 UNICEF, *Situation analysis of children and women in the Democratic People's Republic of Korea – 2017* (Pyongyang: UNICEF, 2016). https://www.unicef.org/dprk/Situation_Analysis_of_Children_and_Women_in_DPR_Korea_UNICEF_2017.pdf.

149 Yeong-Jeon Shin, Moran Ki, and Nackmoon Sung, "A new strategy for tuberculosis control in North Korea," *Epidemiology and Health* 37 (2015).

150 Talha Burki, "North Korea and the Global Fund," *The Lancet Infectious Diseases* 18.5 (2018): 501.

face shortages.” Burki quoted Kee Park from Harvard Medical School, who said that “an explosion of drug-resistant tuberculosis is almost certain.”¹⁵¹

B. Physical and Mental Health of Refugees and Migrants in China

While the main reasons for escaping to China in the mid- to late-1990s was to seek food, some also migrated to China to buy medicine or get help for their illnesses. One respondent, describing a young female relative, said:

She got a kind of paratyphoid or typhus and had a severe fever. But she could neither obtain medicine nor be cured of the disease. Her older brother took her on his back to China as he heard that there was medicine in China. Finally she was cured in China. I heard that many died [in North Korea] due to high fever.
(KII-SK-01)

Key informants in China commonly reported that North Korean refugee and migrant children were short, small, and in poor health. Half of the key informants were church members or leaders and they mainly took care of unaccompanied children, such as *kotjebi*.¹⁵²

Kotjebi came to my church from 1996. They had weary clothes and had tanned faces. They were shorter than those of same aged Chinese, about the height of 5 years old, and shorter than their age.
(KII-CH-07).

Taking care of North Korean children in China is illegal, and the UN and international NGOs are not allowed to have an official presence. There is often limited local support provided by local groups and institutions. Nonetheless, the health conditions of North Korean children often improved after their arrival to China: “The boy was malnourished and skinny at the time he left North Korea. After he spent a year in China, he grew up fast” (KII-CH-02). The risk of arrest by Chinese police and forcible repatriation, however, was ever-present and carried health and other risks.

A boy was repatriated before he came to my house and was beaten almost to death. He ran away from the Disciplinary Labor Center [in North Korea] and came to China, but he was sick due to long-term malnutrition.
(KII-CH-07)

Children could receive some health care in China. The process of obtaining health care was unofficial because of their undocumented status, and often depended on personal or community contacts, timing, and location.

Medical service in China is okay. If someone’s sick, we can go to a pharmacy. If someone has a serious health problem, he can be hospitalized in Y_____ hospital with benefits. However, all these things are done secretly due to the Chinese government.
(KII-CH-09)

In 1999, a team of South Korean researchers conducted a study of 170 North Korean refugees and migrants in Yanbian Korean Autonomous Prefecture in Jilin province. These areas were the preferred destination of the majority of North Korean refugees and migrants in the 1990s due to their proximity to the border and the large population of Korean speakers among the local Korean-Chinese population. The respondents all reported experiencing one or more of 17 trauma events listed in the survey, with a mean of 12 events (± 4.0).

151 Burki, “Global Fund.”

152 The literal meaning of this word is “flower swallows.” It is used in North Korea to refer to displaced children who have become homeless due to a breakdown in family structures and social support. See Chapter 5 for a more detailed discussion.

The most frequently encountered event was lack of food and water (93%), followed by illness without access to medical care (89%), unnatural death of family or friend (85%), being close to death (85%), and brainwashing (84%). Fifty nine respondents (40%) reported being tortured, in most cases after having been apprehended by North Korean border patrols during border crossings. Various forms of torture (i.e., severe beating, sleep deprivation, starvation, maintaining a forced posture, and electric shock) were found to be prevalent.¹⁵³

The study found that symptoms indicative of post-traumatic stress disorder (PTSD) were widespread among respondents. This included being on guard (98%), feeling jumpy or easily startled (94%), and difficulty concentrating (94%). 56% of respondents showed an above-threshold average score for PTSD as derived by the Indochinese Psychiatry Clinic. About 90% of respondents were suspected of having clinically significant anxiety and 80% showed above-average symptom scores for depression.¹⁵⁴

In 2012, the National Human Rights Commission of Korea studied 100 North Korean children in Jilin, Liaoning, Heilongjiang, and Shandong Provinces.¹⁵⁵ The participants were all born in China to North Korean parent(s), with the exception of five who were born in North Korea. Of the children, 86 reported relatively good health status, while 14 had diseases such as nocturnal enuresis, dyspepsia, dermatitis, or nervous disorder. Some had severe diseases, including hepatitis, cerebral palsy, and congenital heart disease. Among these 14, only one saw a doctor on a regular basis.¹⁵⁶

C. Physical and Mental Health of North Korean Refugees in South Korea

As we discuss further in Chapter 7, more than 30,000 North Korean refugees and migrants were living in South Korea as of 2018. In that chapter, we focus on the numbers, demographic characteristics, and resettlement/integration policies and programs. Here, we discuss what is known about the physical and mental health of the North Korean refugee population. It should be noted that some studies seek to glean insights not only about their experience in South Korea, but also to learn about their experiences while still in North Korea.

Physical Health

Table 12 shows the prevalence of disease among a 2008 sample of 1,200 North Korean refugees who live in South Korea, compared to the low-income South Korean population and the general South Korean population.¹⁵⁷ The study found that the most common diseases among North Korean refugees in South Korea were chronic pain, such as arthritis, back pain, and sciatic pain (29.7%), followed by digestive system diseases, such as gastritis, gastric ulcer, and duodenal ulcer (27.7%). North Koreans also have higher rates of chronic hepatitis (4.3%) and tuberculosis (2.9%) than either the low-income or the general South Korean population. Overall, on virtually all disease conditions, North Korean refugees had higher prevalence rates than the general South Korean population. Only the low-income South Korean population had higher rates than North Korean refugees for chronic conditions like hypertension (13.0%), diabetes (5.6%), and stroke and cerebrovascular disease (1.9%), though later research shows that gap to be narrowing as well.

153 Yunwhan Lee, Myung-Ken Lee, Ki-Hong Chun, Yeon-Kyung Lee, and Soo-Jin Yoon, "Trauma Experience of North Korean Refugees in China." *American Journal of Preventive Medicine* 20.3 (2001): 225-229.

154 *Ibid.*, 226-227.

155 National Human Rights Commission of Korea, *Haeoecheryu Bukanitaljumin adong ingwonsanghwang siltajosa* [Situational Report of Human Rights of North Korean children who are living outside of Korean Peninsula] (Seoul, 2012).

156 *Ibid.*, 108-109.

157 Yoojin Yeo, Kye-yeon Kim, Ji-hyun Oh, Jae-dong Shin and Min-Hee Kim, *2008 nyeon hangukbokjipaeneol simcheung bunseok bogoseo: hangukbokjipaeneo-reul hwarionghan sahoejipyo bunseok* [An In-depth Study of 2008 Korea Welfare Panel Study: Analyzing Social Indicators] (Seoul: Korea Institute for Health and Social Affairs, 2009).

Table 12. Disease Prevalence among 1,200 North Korean Refugees Living in South Korea, 2008

Disease	Total population (%)	Low-income South Korean population (%)	General South Korean population (%)	North Korean refugees (%)
None	77.6	54.3	83.2	35.9
Arthritis/back pain/sciatic pain/hernia	3.7	9.0	2.4	29.7
Gastritis/gastric ulcer/duodenal ulcer	0.9	1.8	0.7	27.7
Other disease	3.7	5.6	3.2	13.7
Hypertension/hypotension	6.5	13.0	5.0	8.3
Fracture/dislocation	0.3	0.7	0.2	7.3
Chronic hepatitis/Liver cirrhosis	0.3	0.5	0.3	4.3
Chronic bronchitis	0.2	0.3	0.1	4.0
Osteoporosis	0.5	1.4	0.3	3.7
Thyroid disease	0.5	0.8	0.5	3.3
Asthma	0.3	1.0	0.2	3.0
Tuberculosis	0.1	0.2	0.1	2.9
Cancer (gastric, liver, lung)	0.5	1.2	0.4	2.7
Myocardial infarction, angina	0.9	1.7	0.7	2.7
Diabetes	2.7	5.6	2.0	1.7
Chronic renal failure	0.4	0.8	0.3	1.2
Cataract, glaucoma	0.1	0.3	0.1	1.2
Chronic otitis media	0.1	0.1	0.1	0.9
Stroke, cerebrovascular disease	0.8	1.9	0.5	0.8

Source: Korea Institute for Health and Social Affairs, 2008.

Infectious disease is an important concern among children and adolescents who are North Korean refugees. A survey by Hwang et al. between 2008 and 2010 targeted 524 symptomatic refugee children to diagnose their illnesses. Among them, 44 children (8.4%) had acute gastroenteritis, followed by 22 (4.2%) children with tuberculosis.¹⁵⁸ Vaccine-preventable diseases, such as measles and chickenpox, were reported in 18 (3.4%) and 16 (3.1%) children respectively.

A 2017 survey by South Korea's Ministry of Unification provides data on healthcare utilization and satisfaction among North Korean refugees. Among those diagnosed with an illness, 37.5% said they had received medical service for treatment, and, of these, 72.6% of medical service users said they were satisfied with their service, 23.4% mentioned it was average, and 4% were dissatisfied. 18.6% of respondents stated that there was an instance in which they were unable to access necessary medical care. The main reason for their inability to access medical care was financial (48.0%), followed by unavailability of time (36.5%). This indicates that although the quality of medical care in South Korea is fairly good, there is an economic barrier for North Korean

158 Nami Hwang, Samsik Lee and Sang-young Lee, *Bukanjumin-ui saenghwal-gwa bogeonbokji siltae: geongang mit chulsantpsyangyugeul jungsimuro* [The status of health, childbirth, and child rearing of North Koreans] (Seoul: Korea Institute for Health and Social Affairs, 2012).

refugees. If the patient has been hospitalized for more than three days, the government will support 50% of his or her expenses, but the government does not support costs for minor diseases with single out-patient clinic use.¹⁵⁹

In 2013, researchers from a number of academic institutions, including the Johns Hopkins School of Nursing, the Johns Hopkins Bloomberg School of Public Health, and Yonsei University School of Public Health, conducted a study of 329 North Korean refugees living in South Korea on their healthcare utilization patterns in North Korea.¹⁶⁰ About 33% said they or their family members had been ill or injured prior to leaving North Korea. 40% said in the year prior to leaving North Korea, they were in need of health care but unable to get help, with common reasons being: unable to get medications or treatment (47%); unable to afford medicines or treatment (42%); or other reasons such as lack of travel passes. After arriving in South Korea, North Korean refugees reported that, on average, they had visited a doctor's office 12 times in the previous 6 months. 20% said they were taking three or more medications, with the most common conditions being hypertension (19%), gastritis (14%), and arthritis (8%). When asked about barriers to health care access, some mentioned things like lack of personal resources, concern about health care costs, and unfamiliarity with the healthcare system in South Korea.¹⁶¹

Mental Health

Mental health problems have historically been viewed negatively in North Korea. The subject carries social stigma, and the range of mental disease is narrower than in other countries. For example, the range of mental disease is limited to severe psychosis with auditory hallucinations or delusions. Treatment for mental health is also different. Due to the economic crisis and the shortage of medicines, relatively new drugs such as serotonin uptake inhibitors and other psychotic drugs are not used. Benzodiazepine is sold informally in the *jangmadang* (local markets). The consultation method that is a common therapeutic approach for mental health problems is not used in North Korea.¹⁶² Rather, severely psychotic patients would be admitted to "Hospital 49" and treated with insulin coma therapy, which was commonly used in the 1950s.¹⁶³ As noted, the stigma against mental health is so large that the word "49" is used as an insult and to denigrate people.¹⁶⁴

Studies of mental health among North Korean refugees in South Korea are numerous, providing important insights into problems such as posttraumatic stress disorder (PTSD), anxiety disorder, and depression. A longitudinal study by Jeon et al. showed that as time goes by, the incidence of PTSD decreases, though new stressors appear as refugees adjust to a new environment.¹⁶⁵ After they come to South Korea, the most common stressors for North Koreans include "getting a new job," "arrival of family members from North Korea," and "getting married/starting life with a partner." For cultural issues, they reported "discrimination by South Koreans" as the most serious stressor. In addition, "lack of information about living in South Korea," "different value system and lifestyles," and "feeling inferior due to incompetency in vocational knowledge and skills" were mentioned.¹⁶⁶

Kirmayer et al. note factors related to migration that affect children's mental health. At the pre-emigration stage, disruption of education and separation from extended family and peer networks affect mental health. During migration, having a separation event from caregivers, exposure to violence, and exposure to harsh living conditions—such as a refugee camp—affect mental

159 Korea Hana Foundation, https://www.koreahana.or.kr/main_business/sub03.jsp.

160 H.R. Han, J.E. Lee, K. Kim, Y. Chung, M. Kim, C. Robinson and M. Lee, "Healthcare utilization among North Korean refugees in South Korea: a mixed methods study." *Public Health* 142 (2017): 116-120.

161 Ibid.

162 Seog-Ju Kim, "Tongire isseo jeongsinuihakjeong gwajewa junbi" [Task and Preparation of Psychiatric Field for Korean Reunification], *Journal of Korean Neuropsychiatric Association* 54.4 (2015): 360-364.

163 Earl S. Patterson, "Effectiveness of insulin coma in the treatment of schizophrenia: A control study," *AMA Archives of Neurology & Psychiatry* 79.4 (1958): 460-467.

164 Seog-Ju Kim, Young-Su Park, Hyewon Lee and Sang-Min Park, "Bukan uisadeuri baraboneun Bukanui jeongsinuihang hyeonhwang" [Current Situation of Psychiatry in North Korea: From the Viewpoint of North Korean Medical Doctors], *Korean Journal of Psychosomatic Medicine* 20.1 (2012): 32-39. See also Young-Su Park, Sang-Min Park, Jin-Yong Jun, and Seog-Ju Kim, "Psychiatry in Former Socialist Countries: Implications for North Korean Psychiatry," *Korean Neuropsychiatric Association* 11.4 (2014): 363-370.

165 Woo-Taek Jeon, Jin-Seop Eom, and Sung-Kil Min, "A 7-year follow-up study on the mental health of North Korean defectors in South Korea," *Journal of Traumatic Stress* 26.1 (2013): 158-164.

166 Ibid. For literature reviews on the mental health of North Korean refugees in South Korea, see Yeeun Lee, Minji Lee, and Subin Park, "Mental health status of North Korean refugees in South Korea and risk and protective factors: a 10-year review of the literature," *European Journal of Psychotraumatology* 8 (2017). See also Benjamin Eric Taylor, Eugene Chekaluk, and Joanne Bennett, "Post-Traumatic Stress Disorder, Depression, and Anxiety among North Korean Refugees: A Meta-Analysis," *Psychiatry Investigation* 14.5 (2017): 550-561.

health. After migration, stresses related to family adaptation, difficulties with education in a new language, acculturation, and discrimination and social exclusion at school or with peers are relevant factors.¹⁶⁷

A number of studies have focused on North Korean refugee children and adolescents. A 2010 study conducted to measure PTSD among refugees between the ages of 7 and 14 showed that 38.5% had mild levels, 40.4% had moderate levels, and 21.1% had severe levels.¹⁶⁸ Another study of 108 North Korean adolescent refugees in South Korea aged between 12 and 29 showed that 53.7% had mild anxiety and 22.2% were experiencing moderate anxiety. In addition, 36.1% showed mild depression, and 14.8% showed moderate depression. These findings suggest that adolescent North Korean refugees experience difficulties with adaptation in the first year of resettlement and are more likely to display higher levels of depression.¹⁶⁹

One study comparing 206 adolescent North Korean defectors with 618 matched South Korean adolescents found that North Korean adolescents reported higher rates of current smoking, current drinking, lifetime substance use, depression, and suicidal ideation than their South Korean counterparts. These trends, the authors suggest, arise “from difficulties in school, cultural difficulties, language problems, and the fact that the education that the North Korean defectors receive in South Korea does not often correspond to their actual ages.”¹⁷⁰

A more recent survey of 383 adult North Korean refugees in South Korea also specifically examines the mental health consequences of exposure to human rights violations in North Korea. The study found that elevated symptoms of anxiety (60.1%), depression (56.3%), and PTSD (22.8%) were significantly associated with exposures to human rights violations. According to the authors, this study “is the first to provide epidemiological evidence of systematic human rights violations in North Korea and the mental health consequences of the lifelong exposures to these violations.”¹⁷¹

167 Laurence J. Kirmayer, Lavanya Narasiah, Marie Munoz, Meb Rashid et al., “Common mental health problems in immigrants and refugees: general approach in primary care,” *Canadian Medical Association Journal* 183.12 (2011): E959-E967.

168 In-Sook Lee, Ho-Ran Park, Yoon-Soo Kim, and Hyun-Jeong Park, “Bukan ita! adong-ui sinche mit simnijeog geongang sangtae pyeongga” [Physical and psychological health status of North Korean defector children], *Journal of Korean Academy of Nursing* 17.1 (2011): 256-263.

169 Seul-Ki Choi, Seong-Joon Min, Myung-Sook Cho, Hyo-Jee Joung, and Sang-Min Park, “Anxiety and depression among North Korean young defectors in South Korea and their association with health-related quality of life,” *Yonsei Medical Journal* 52.3 (2011): 502-509.

170 Min-Joung Kim, Seon-Yeong Yu, Sunyoung Kim, Chang-Won Won, Hyunrim Choi, Byung-Sung Kim, “Health Behavior and Factors Associated with Depression in North Korean Adolescent Defectors in South Korea: The Korea Youth Risk Behavior Web-Based Survey, 2011-2014,” *Korean Journal of Family Medicine* 38.5 (2017): 256-262.

171 Jiho Cha, Pamela J. Surkan, Jaeshin Kim, Isabel A. Yoon, Courtland Robinson, Barbara Lopes Cardozo, and Hayoung Lee, “Human Rights as Political Determinants of Health: A Retrospective Study of North Korean Refugees,” *American Journal of Preventive Medicine* 55.2 (2018): 271-279.

CHAPTER 4.

EDUCATION

A. Overview

The North Korean state initiated comprehensive mandatory education in 1956, three years after the Korean War armistice. The government adopted a phased approach, beginning with the first four years of people's school (primary education). In 1958, it expanded to include three years of secondary education. By 1967, nine years of technical educational had become mandatory (four years of people's school and five years of middle school). In 1970, the government decided to extend mandatory education by one year to increase the total number of years to ten. In 1972, the age at which mandatory education began was lowered to five, resulting in the "comprehensive eleven-year mandatory education" system.^{172,173} However, in 2012, this was revised into a 5-6(3+3)-4 system by extending primary education and dividing secondary education into two levels.¹⁷⁴ In 2017, this was extended to a 6-6(3+3)-4 system.¹⁷⁵

North Korea defines mandatory education as the "education of the entire citizenry with a view to nurturing all members of society into communist human beings."¹⁷⁶ Through education, the North Korean state seeks to reinforce socialist education in both a political and ideological sense at an early age in order to maintain the communist/socialist structure.¹⁷⁷ The DPRK Constitution refers to the need to create steadfast, morally sound, and healthy revolutionaries who will fight for society and the people.¹⁷⁸ The core elements of education in North Korea are: a) ideology; b) scientific knowledge; and c) physical fitness. Ideology includes learning *juche* ideology, the policies of the Party, revolutionary tradition, and communism. During primary and secondary education, students learn about the Kim family's history. Approximately ten percent of the curriculum is devoted to this subject.¹⁷⁹

The public education system functioned efficiently until the mid-1990s, with free school uniforms and textbooks.¹⁸⁰ As was the case with other sectors in North Korea, the "Arduous March" had a disastrous impact.

172 Yonhap News, *North Korea Handbook* (London: Routledge, 2002).

173 Soon-Hee Lim, Jeong-Ah Cho, and Kyu-Chang Lee, *Bukanui adonggyoyukgwon siltaewa gwallyeon beomnyeong jejeong donghyang* [The legislative trends of law enactment related to children's rights to education in North Korea] (Seoul: Korea Institute for National Unification, 2012), 4.

174 Jeong-Ah Cho, Kyo-Duk Lee, Chae-Kwan Jung, and Hojye Kang, *Kim Jong-un sidae Bukanui gyoyukjeongchaek, gyoyukgwajeong, gyogwaseo* [Education curriculum, and textbooks in the Kim Jong-un era] (Seoul: Korea Institute for National Unification, 2012), 19.

175 Jin-Sook Kim, "Bukanui jeonbanjeog 12-nyeonje uimugyoyuk-e ttareun hakje-wa gyoyukgwajeong gaejeong donghyang" [Curriculum and Educational Course Revision according to North Korean 'Overall 12-year Compulsory Education'], *KDI Review of the North Korean Economy* (2016): 3-16.

176 Yonhap News, *North Korea Handbook*.

177 Ibid., 427.

178 Socialist Constitution of the Democratic People's Republic of Korea (Adopted Apr. 2009), Article 43.

179 Cho et al. *Education curriculum*, 5-6.

180 Il-Geon Yoon, "North Korea begins new 1-year curriculum next month," *Yonhap News*, Mar. 25, 2014. <http://www.yonhapnews.co.kr/politics/2014/03/25/0511000000AKR20140325140200014.HTML>.

B. Changes in the Education System Post-Famine

Our interviews confirm the findings from various UNICEF reports that document the negative impact of widespread shortages of textbooks and other learning materials on school performance.^{181, 182} Respondents commonly discussed how education used to be provided free of charge with school textbooks and uniforms given as gifts by the government. Supply shortages became widespread as a result of the “Arduous March.”

The government provided a school uniform when I was in elementary school. . . However, in middle school, we all had to buy a uniform by ourselves. I got a uniform from the government at middle school once, but it was too poor in quality to wear.
(IDI-SK-12)

Other respondents described how their circumstances changed as they transitioned through the various education levels.

In elementary school, I received all textbooks and in middle school I got textbooks, say for seven subjects out of ten subjects. We shared textbooks and some kids copied a friend’s textbook in every class. I received all textbooks for the revolutionary history and some of the other important subjects such as Korean, Math, English, Chemistry and Physics. For other textbooks, we had to buy them or just didn’t get them. Most of us somehow managed to study even without textbooks.
(IDI-SK-14)

Respondents also talked about how teachers often favored the brightest and wealthiest students, prioritizing them to receive new textbooks at no cost. The subjects that were studied more regularly, specifically Math and Korean, were distributed in a more equitable fashion. Respondents commonly discussed how the lack of access to course materials negatively impacted their academic performance, particularly if they were of low socioeconomic status.

We got textbooks, but I remember that in elementary school they didn’t give us new books. Kids got used books, I think we got all new ones in middle school. . . Math and Korean were the subjects we really studied a lot. Those textbooks were a bit rare, so kids who got the math [textbooks] might not get Korean, so [this happened] even among the high scoring kids. . . The kids who didn’t get the books had a hard time. They probably did their homework at school before they went home. They would read the textbook together.
(IDI-SK-16)

Respondents also described how the lack of textbooks led to students forgoing their homework altogether:

The school did give us the textbooks, but I think we had to pay for them. [The kids who did not have enough money to buy them] didn’t come to school. The kids who lived in the same apartments or neighborhood would gather together to do homework. Teachers gave out homework, but there were many kids who didn’t do it.
(IDI-SK-18)

Although sharing textbooks was a common practice, other respondents described how it was not possible due to the amount of homework assigned to them.

We could not have textbooks for all 15 to 16 subjects. We [usually] received around nine textbooks. But we couldn’t imagine sharing them due to the heavy amount of homework. We made a copy or bought them [on our own].
(IDI-SK-12)

181 UNICEF, *The Multiple Indicator Cluster Survey in the DPRK* (Pyongyang: UNICEF, 1998), 16.
182 UNICEF, *Report of the Second Multiple Indicator Cluster Survey in the DPRK* (Pyongyang: Central Bureau of Statistics, 2000), 14.

As evidenced throughout this chapter, this lack of resources worsened existing disparities between schools.

*Although I did not go to middle school, peers of my age continued attending school. Schools handed out textbooks, but we had to pay for them. While affluent students could buy them, I could not afford them so I could not study. When the teachers gave us homework, I hand-copied my friend's textbook and made my own. Consequently, poor students could not be good at their studies.
(IDI-SK-01)*

Items necessary to maintain an appropriate classroom environment—such as fuel, desks, and chalk—were also in short supply. Teachers required students to supply these materials, often favoring those who could bring more. As one respondent remarked: “A certain amount of firewood was assigned to each student. We had to submit wood for several months or pay money instead if you couldn’t” (IDI-SK-14). Due to inadequate fuel supplies, classrooms were often “extremely cold” during the winter.

*There was a heater in each classroom. The warm seats near the heater were either taken on a first-come-first-serve basis or assigned to kids whom the teacher favored. It was extremely cold in the winter. Our feet and hands were aching due to the chill weather. I had a hard time managing the cold. When it was freezing outside, I would not go to school. The school teacher came to my house and my mother told her how difficult it is for me to withstand cold. The teacher placed me next to the heater afterward.
(IDI-SK-22)*

Several respondents also discussed how those students who did not bring enough supplies to school were forced to pay. Those students who were unable to pay could not participate in educational activities.

*The heating was done with coal or wood. We had to get wood but in elementary school we were too young to do the work, so we just paid for it. We burned those and left-over inedible parts of the corn—burn that too. The seats were always fixed; you had your spot. People who got the warm seats always sat there. Others who got the window seats didn't like it, so they skipped school. In middle school, we would take food and wood to school by hand wagon... We would do that for days. If you couldn't participate, you had to pay money.
(IDI-SK-25)*

Our study also found geographical disparities in access to and quality of education. The economic crisis had a greater impact in rural areas than in urban areas. Many respondents who attended school in urban areas described how they still received free textbooks and were not forced to engage in chores related to school maintenance.

*I moved [from Hoeryong] to Pyongyang in the 3rd year [of middle school]. In the middle school in Pyongyang, textbooks were almost new. In my region we got used ones from our seniors, so the textbooks were not ours. We had to return them after using them.
(IDI-SK-16)*

Another respondent described a similar experience while in elementary school in an urban area.

*In elementary school, I didn't do the 'school decorations' myself. The city where I lived was relatively big. Parents came to school and did the school decoration instead. There was no after-school labor. We got textbooks and uniforms for free.
(IDI-SK-23)*

As noted above, the North Korean educational system places a heavy emphasis on ideological indoctrination. From an early age, students are taught about the life of political leaders, including Kim Il-sung, Kim Jong-il, and Kim Jung-sook—Kim Jong-il's mother. For example, one respondent noted that “When I was in kindergarten, I learned a lot about the childhood of Kim Il-sung, Kim Jong-il, and Kim Jung-sook” (IDI-CH-12). Another central topic is “socialist ethics,” which teaches Kim Jong-un's orders to all students to study well, live an ethical life, respect elders, practice good hygiene, be a good member in collective organizational life, and support the Korean People's Army.¹⁸³

183 Human Rights Watch, “Human Rights Watch submission on the Democratic People's Republic of Korea to the Committee on the Rights of the Child” (2017).

During the “Arduous March”, these topics were the most emphasized, as maintaining solid ideological education was critical to regime stability. For all other subjects, class time was reduced to increase the amount of time dedicated to compulsory labor. There were also no shortages in the textbooks used for ideological education. Several respondents described working on tasks with the purpose of showing “loyalty to the Great Leaders.”

In middle school, there was this thing from April until the end of the summer, the so-called ‘statue preservation project.’ We had to sweep and clean the surrounding areas. Since we had to go to school at 7:00 am, we had to wake up at 5:00 am or 6:00 am and participated in the statue preservation project, showing our loyalty to the Great Leaders.
(IDI-SK-14)

Respondents also described how they were forced to perform on national holidays, including the birthdays of Kim Il-sung and Kim Jong-il.

The teachers made us perform on national holidays, including the birthdays of Kim Il-sung and Kim Jong-il. There was really a lot of practice. It was difficult work, but I found it somewhat fun as a kid.
(IDI-SK-22)

Others described how, in kindergarten, they had to perform in mass games. As these political events were critical to ensuring loyalty to the government, teachers required flawless performance from students. For example, one key informant explained how his brother was punished for mistakes made during practice.

I had a younger brother who looked attractive. [His] kindergarten teacher put him in the dance class. He and my parents did not want that. He looked like a clumsy dancer. North Korean dance is somewhat of a group dance. One day, he didn’t perform well, so he was confined to the basement all day as punishment. I was in elementary school at that time. I went to his school to pick him up and I asked: ‘Where is my brother?’ Though he came out crying, he could not say that he wanted to quit the dance class.
(KII-SK-03)

C. Compulsory Labor as “an Extension of Learning”

The Socialist Labor Law of North Korea prohibits children under the age of 16 from working.¹⁸⁴ However, these children constitute a large portion of the country’s labor force. In addition to integrating labor into the education system, children also work on public agricultural and construction projects. Students serve as an imperative supplementary workforce; their labor was perceived as “an extension of school work.” Students were forced to work in the rice fields and on corn farms, performing a variety of tasks including weeding, picking up stones, and harvesting.

As noted above, teachers often made children collect firewood and herbs, and also care for rabbits and other small animals to earn money for the operation of their schools. After the “Arduous March,” the Public Distribution System (PDS) was discontinued in the marginalized northeastern regions of the country, including North Hamgyong province.¹⁸⁵ Thus, students were often mobilized to generate profits for their teachers, who were also facing economic difficulties.

There was a farm where we planted cabbage and radishes, but we didn’t get any products. Our teachers received rations from this farm. All students were mobilized to work in the farm. The work was quite intense. If you were working loosely, the teachers cursed us out. We all complained, among ourselves, ‘There’s nothing left for us. Why do they make us work this hard? They’re like landowners.’
(IDI-SK-13)

184 DPRK Socialist Labor Law (Adopted Apr. 18, 1978, revised Jun. 30, 2015), Article 15.
185 Marcus Noland, “Famine and Reform in North Korea,” *Asian Economic Papers* 3.2 (2006): 1-40.

In the poorest regions of North Korea, some teachers did not receive any salary at all. A male respondent interviewed in South Korea explained how teachers relied entirely on their students to harvest their crops.

Students worked to help the farms, so the teachers got many sponsors from the farms. There was no monthly wage to the teachers. Teachers harvested corn based on the students' labor, such as hanging corns and cleaning the places once or twice per week during the busy farming season.
(IDI-SK-20)

The intensity of the work increased as students advanced through the grade levels. "School labor was more intense for fourth, fifth and sixth graders than first, second, and third graders. Once in a week, we were mobilized for labor, weeding and harvesting at teachers' farms" (IDI-SK-09).

Children served as a critical source of labor for state-run farms throughout the year.¹⁸⁶ Wet rice farming is the most common rice farming method on the Korean peninsula. It is extremely labor-intensive, as the seeds are sown in small seedbeds and then transplanted one-by-one to paddy fields. The rice is then harvested and threshed by hand. Rice matures most rapidly in the summer months and weed control is particularly important, as agricultural weeds can hurt crop yields and increase costs.¹⁸⁷ Thus, students were required to work longer hours during the summer season. A male respondent interviewed in South Korea explained how his work requirements increased during the summer months, which he referred to as "continual mobilization."

During the winter, there was no labor mobilization at school. However, it was quite different during the summer when there was continual mobilization. After the end of the class, school labor continued from 3:00 p.m. or 4:00 p.m. to 7:00 p.m. or 8:00 p.m. every day. Up to the first and second year [of middle school], we were mobilized to tree nurseries where trees were grown to become a usable size. We went there and watered them. There was tree plantation assignment, so we went there to plant and water trees. From third grade, we were mobilized on the farms, where we harvested corn and weeded around them. It was very hard to do labor under the burning sun every afternoon.
(IDI-SK-14)

Work assignments also varied according to geographical areas. Students who resided in more urban areas engaged in tasks such as construction, public infrastructure, and cleaning military bases.

When I went to the middle school in an urban area where we didn't have a farm nearby, I worked on construction sites of the hospital or public bathhouse three or four times a week, for three or four hours without payment.
(IDI-SK-26)

In the summer, we had to spend most of our time on keeping the local roads clean and tidy by picking [up] and removing stones. We had to do this almost every day in middle school for two or three hours each time. We could not get home earlier than seven or eight in the evening.
(IDI-SK-22)

Many respondents also explained how their assignments varied according to the season. For example, one respondent identified "removing pebbles from the airfield runway" as his most hated task. This was particularly true in the winter due to the many hours spent "breaking and removing ice."

The activity I hated most was removing pebbles from the airfield runway. We had to move all those pebbles by hand, even in the scorching heat of the summer or the unbearable cold of the winter. In the wintertime, the school forced us to break and remove ice as well. The teacher assigned each of us to a section, and only the students who completed that section could go home. Breaking and removing ice took us about three hours, as we had to move all the pieces of ice by hand to and from the ice piles. This process of walking back and forth took us a lot longer than actually breaking ice itself.
(IDI-SK-22)

"Labor mobilization" (*no-ryeok dong-won*) is a term used in reference to forced labor in schools. There were two types: regular and long term. For regular mobilization, school finished early in the morning, and the students went to the farm for weeding or harvesting in the afternoon.

186
2009), 13.
187

Citizens' Alliance for North Korean Human Rights, *Child is King of the Country: Briefing Report on the Situation of the Rights of the Child in the DPRK* (Seoul, 2009), 13.
Asia for Educators, Columbia University, "Wet Rice Agriculture," accessed Jun. 15, 2018. http://afe.easia.columbia.edu/china/geog/wet_rce.html.

We did the rice planting in spring, weeding in summer, harvesting in autumn and collecting firewood in winter around three to six hours a day during middle school. I thought that the goal of school life was to work, not to study. It was difficult to manage the hours of labor. I could not concentrate on classes the next day. I worked in the afternoon again, so I felt that I went to school to keep working. And the school told us that this type of work is an extension of learning and part of the education system.

(IDI-SK-29)

The most common complaint was the strenuous nature of the work, particularly during the summer months. Respondents also commonly described how the nature and intensity of their work assignments changed with the seasons as well as their education level.

At school, we had classes in the morning and labored from 2:00 p.m. to 6:00 p.m. We were mobilized to assist farmers in the fields, to plant corn, and transplant rice seedlings with a hoe. In order to plaster walls, we were mobilized to dig mud and transport it by carrying a basin on our heads. We were put to work to the extent that we didn't die... We went to school for six days a week, from Monday to Saturday, and had Sunday off. No labor was assigned during exam weeks. In a typical week, we were forced to do three days of labor on average. In elementary school, students attended class in the morning and were mobilized to assist farmers in the fields in the afternoons. This happened in the spring—April and May. For the fall, it was September and October. But students in middle school and university were forced to pack up and do labor regardless of whether or not they had class.

(IDI-SK-08)

For long-term mobilization, the students were sent to rural farms in teams and remained there anywhere from several weeks up to a month. A long-term mobilization replaced a portion of school vacation.

Students were mobilized in April to help busy farming villages for a month, in September to pick acorns for a week, and in October to assist farmers in the fields for a month. Due to the work, the vacation was short: ten days for summer vacation and twenty days for winter vacation.

(IDI-SK-12)

Students worked, on average, eleven hours per day from 8:00 a.m. to 7:00 p.m. with only one day off each week. Several respondents described how they were often made to work until midnight, leaving them with little to no time to rest.

In fourth grade in middle school, we were mobilized for farming. We went to the farms for about 40 or 50 days. We began work at 8:00 a.m. and finished at 7:00 p.m. There were breaks at lunch time or inbetween after a two-hour work shift. I worked in the kitchen, cooking meals for the other students... Everyone wished to work in the kitchen because they did not want to get sunburned. But, in reality, it was harder than other duties. While other kids went to sleep after coming back from the fields, I had to wake up at 5:00 a.m. to prepare breakfast for everyone. After that, I had to prepare lunch from 9:30 am or 10:00 am. Then, I prepared dinner. I went to sleep at midnight and woke up at 5:00 a.m... That was really hard. Sometimes I had a break around 1:00 p.m. or 2:00 p.m. when I could take a nap, but that it rarely happened.

(IDI-SK-14)

A female respondent described a similar work schedule while being forced to work as a “kitchen maid” during a “rice-planting battle.”

[I was a kitchen maid] when the university student went to the “rice-planting battle” and worked from 5:00 am to midnight for a month. We, the kitchen maids, couldn't sleep because we had to prepare their meals not only in the morning before they went out at 5:00 a.m., but also at midnight when they came back from work. We also had to deliver their lunch and then collect it.

(IDI-SK-12)

During long-term mobilization, students often were made to live on-site in communal living arrangements and bring their own food supplies. As a female respondent interviewed in South Korea explained, “When we were sent for labor, we stayed in a communal setting. Students brought rice from home and sometimes farms provided vegetables and snacks” (IDI-SK-09). Similarly, a male respondent remarked that “No snacks were provided and there was one break time in the middle of the working hours” (IDI-SK-08). Students were also responsible for the treatment of their own injuries. “I saw a student get injured while gathering wood from the mountains. In the winter, we collected it to heat the classroom... A stone rolled over his arm and broke it. He was responsible for his own treatment” (IDI-SK-26).

Many explained how some students would escape and return to their families, only to be returned to their assigned work sites by their teachers. “Some fled to their family because the work was hard, but they were brought back to the farms by their teachers” (IDI-SK-14). The few respondents that described being “happy” during mobilization referred to the earlier years of their education, during elementary and middle school. As one respondent noted, “In middle school, students were mobilized for farming for a month in spring and fall. Students were happy and not bored” (IDI-SK-01). Another respondent echoed this sentiment when he explained how he enjoyed mobilization because he was able to spend time outdoors. “Once a year, I went to the farm work rally. Sometimes we worked hard there, but it was fun because we went to the farm work rally and played together with girls and boys” (IDI-SK-20).

These interviews suggest widespread inequality in terms of school labor, which is similar to the inequality with respect to the submission of school supplies. Those students who were better off offered bribes to teachers and were subsequently exempt from work assignments.

Students could skip the labor activity only by paying the class or bribing the teacher. If one did not have the excuses of skipping the mobilization exercises, he/she had to go, no matter what.
(IDI-SK-22)

During long-term mobilization, the more affluent students accompanied their classmates to the farms, but were not required to work.

So from 3:00 p.m., we went to the farms and did farming activities until the sun set. We went to weed during the summer, we had a very hard time... We also harvested corn in the fall. We also harvested rice in fall, but I didn't want to do it. So at our school, there was music and art club and the rich kids would just learn music and art instead of being forced to work... Poor kids could not join the club activities because they cost money, so they just went to the work sites.
(IDI-SK-16)

As noted above, students had to supply their own food during long-term mobilization. However, some did not have the means to do so. In these instances, wealthier students would purchase food for the other students in exchange for being exempt from their work duties. For example, one respondent remarked:

When we went to the farm work rally, we didn't bring rice, but we had to bring our own snacks. Many children could not even bring those snacks. And though the farms gave us corn meals, the amount was not sufficient. So the teachers told rich students to provide food instead of going to the work rally. In my case, I submitted a month's supply of corn and didn't go to work rally. I received formal permission to not attend the work rally.
(IDI-SK-26)

Self-Criticism Sessions

A “self-criticism session” (*saeng-hwal chong-hwa*) is “a gathering to review and reflect on one’s beliefs and actions according to the teachings of Kim Il-sung, Kim Jong-il, or Kim Jong-un.”¹⁸⁸ Every North Korean is required to attend these sessions on a weekly basis. It is one of the means of control used by the regime. During these sessions, children of all ages criticize each other for their mistakes, poor performance, and bad behavior. For example, on days when students were forced to work, some students simply did not show up for school. As punishment, they were criticized by their teachers and peers for their lack of loyalty to the regime.

In middle school, students were punished if they didn't come to work. Those who didn't come were punished by keeping them from going home after the school, giving extra cleaning work, or making them sit at the back of the classroom—the coldest seats in winter. Sometimes, they were forced to sit at a desk that faced the back of the classroom... Most students came, however, two or three in each class didn't attend regularly and they were humiliated in front of their friends.
(IDI-SK-02)

Those who just ran away [from school labor] were punished or insulted next day when they came to school, or had to participate in life-review session, or did the rest of cleaning. Life review sessions were tough, because we had to talk to

each other about “what you did wrong.” We did self-criticism every week. But once a month, we had to criticize each other. Due to the criticizing being in public, relationships among students became worse. Afterwards, we looked down upon others. (IDI-SK-29)

D. “Mini Assignments” (*Koma Gwaje*)

Respondents referred to the assignments given to students by the North Korean state through the school system as “mini assignments” (*koma gwaje*). This term emerged as the most frequent term used by respondents as identified via qualitative analysis.¹⁸⁹ Part of the state-run “Children’s Initiative,” students were required to contribute a wide range of supplies, materials, and goods (e.g. seeds, scrap metal, rubber, paper, and rabbit fur) at various points throughout the year.^{190, 191} As one respondent noted, “We had to submit [mini assignments]. For example, we had to submit rabbit skins twice a year. Once in the first semester, and once in the second semester” (IDI-SK-20). Analysis of the interview data identified, in descending order, rabbit skins, iron, and paper as the items most frequently mentioned by respondents when discussing mini assignments. Typically, these items were distributed to members of the North Korean state and military or sold to generate a profit for the school. Some respondents also discussed how these assignments sometimes replaced the teachers’ salaries.

Students were given mini assignments as early as elementary school. The type and frequency of assignments varied according to grade level as well as the season.

[We submitted] some rabbit skin each semester. Requirements differed by school year, so the younger kids got a lesser quota. When I entered middle school, I had to submit three leathers per semester. And they [teachers] told us to bring greens when it was the greens season. (IDI-SK-18)

If a student could not meet the required quota, which was very common, he or she would be required to pay cash instead.

The kids who could not submit them just paid money. In winter, we had to pay for the wood. I had no problem of paying money when I was younger. If we couldn’t pay, the teachers gathered everyone and called the names of the students who didn’t pay in front of everybody. It led to a lot of embarrassment. (IDI-CH-06)

To meet their quotas, respondents explained how students would forage for items on their walk home from school. They would also wander the streets and construction sites. However, because all students were foraging at the same time, they often found it difficult to meet their quotas.

During the mini-assignment season, students had to submit materials, such as used papers or metals to their schools. Children wandered in search of used metals in landfills or at worksites with abandoned machinery. Others stole them from steel mills. There were required amounts for the mini assignments. For example, we had to submit five or six kilograms of used metals. But if one submitted ten kilograms all at once, the school offset the next assignment for her. (IDI-SK-30)

Some respondents described how parents would complete the assignments for their children by either collecting the required materials or performing tasks around the school. “For those students who couldn’t submit wood, their parents came to the school and took turns making a fire” (IDI-SK-14). Several recalled being discriminated against and stigmatized by teachers and other students because of their family origins and their inability to complete assigned tasks.

189 Johnny Saldana, *The Coding Manual for Qualitative Researchers* (Thousand Oaks, CA: Sage Publications, 2016).
 190 People for Successful Corean Reunification, “UNCRC Alternative Report to the 5th Periodic Report for the Democratic People’s Republic of Korea” (2017). https://tbinternet.ohchr.org/Treaties/CRC/Shared%20Documents/PRK/INT_CRC_NGO_PRK_28906_E.pdf.
 191 Citizens’ Alliance, *Child is King of the Country*, 12.

We also had to submit rabbit skins, scrap rubber, scrap metals, scrap vinyl, and scrap paper to school regularly. The school collected rabbit leathers about four times a year, but most of us submitted all of our shares in a month. Kids who were on time could just submit three rabbit skins, while kids who were late had to submit more.
(IDI-CH-08)

If a student failed to meet the required quota for items to be collected, then he or she had to pay cash instead. If they could not afford to do so, they were scolded or humiliated by their teachers in front of their peers. Some were forced to work more than the typical eight to ten hours each day as punishment.

The school collected scrap paper and rubber monthly, I think. There were kids who failed to submit their portion of paper and rubber, so the teacher talked about it every month, naming the kids who failed to submit the materials and making them stand up. It could be humiliating.
(IDI-SK-22)

Students who repeatedly failed to submit assignments were resented by their peers, as they were made to complete the assignments on behalf of those unable to do so. As one respondent commented, “We also had to make up for those who couldn’t give anything” (IDI-SK-22). In addition to emotional abuse, some respondents also described experiences of physical punishment.

For iron, we had to submit 10 kilograms to school, but 50 kilograms to the workplace. So sometimes mother said that “don’t go to school.” but at that time if I didn’t attend school, next day when I attended, I was hit by the teacher and class leaders. And when students continually didn’t attend school, students got treated as an outcast.
(IDI-SK-30)

Not submitting an assignment indicated a lack of loyalty to the government and was reflected in the student’s “ethics” grade.

Studying well and doing a mini assignment well manifested patriotism for the nation and party. It was a part of the ethical category and was considered as a type of subject. If one student got a perfect score for every subject except ethics, it could not ensure top student status. So the parents tried hard to help their children to gain top student status [by helping with mini assignments]. So the excellent students did a good job of doing a mini assignment, such as submitting rabbit skins.
(IDI-SK-30)

E. School Attendance

To generate data on critical maternal and child health indicators, UNICEF implemented the Multiple Indicator Cluster Survey (MICS) in 1998, 2000, 2009, and 2017. This survey provides descriptive data on the educational activities of the North Korean population, including school enrollment and attendance among children aged seven to 16. The survey has shown near perfect enrollment (99.2%) and very low dropout rates in North Korea.¹⁹² For example, according to the 2000 MICS, 99.6% of primary school-aged children (aged seven to ten years) attended school and 100.0% of children aged 15 years and above were enrolled in or had graduated from senior middle school.¹⁹³ The 2009 and 2017 MICS also displayed similar results. In the 2009 report, 99.1% and 97.7% of children attended primary and secondary schools respectively.¹⁹⁴ The corresponding figures from the 2017 report are 96.7% and 96.1%.¹⁹⁵

It is certainly possible that North Korea has been able to achieve high levels of school attendance and low dropout rates. However, given the high value placed on ideological education and the way in which regular school attendance might be seen as yet another measure of population control, there is some evidence that not all schoolchildren have completed their mandated years of education. In a study conducted among North Korean refugees in China in 2004 and 2005, Haggard and Noland found that 53%

192 UNICEF, *DPRK Multiple Indicator Cluster Survey 1998* (Pyongyang: Central Bureau of Statistics, 1998), 16.

193 UNICEF, *DPRK Multiple Indicator Cluster Survey 2000* (Pyongyang: Central Bureau of Statistics, 2000), 14.

194 UNICEF, *DPRK Multiple Indicator Cluster Survey 2009* (Pyongyang: Central Bureau of Statistics, 2009), 4.

195 UNICEF, *DPRK Multiple Indicator Cluster Survey 2017* (Pyongyang: UNICEF DPRK, 2017), 114-115.

of their sample had completed a high school education, but 44% had only completed elementary school, which roughly equivalent to junior high school in the United States¹⁹⁶

The MICS data is not consistent with information collected from our interviews, which show that the burdens imposed by the mini assignments led to higher dropout and absence rates. Respondents who attended school in North Korea between 1995 and 2000 discussed how the burden became too much for some students to bear and they voluntarily dropped out. As described above, teachers also often publicly insulted those students unable to complete their mini assignments. Humiliated and discriminated against by their teachers and peers, some North Korean children stopped attending school in order to avoid shame. The quotations below are examples of dropout experiences shared by respondents:

The school demanded a lot from us. If you didn't submit the things that the school asked for, you got scolded by teachers or blamed by your fellow students. That's why they didn't come to school themselves. They went out and sold things with their father or mother, or they did house chores. So, they rarely came to school.
(IDI-SK-30)

Students who didn't complete a mini assignment were insulted in front of all students of the school, or in person. Therefore, they didn't attend school. Even after being insulted, they could not submit assignments. No rabbit skins and scrap iron in the house. So students didn't attend school and dropped out. In this kind of system, they were unable to attend school, though they wanted to.
(IDI-CH-15)

Others explained how North Korean students dropped out because they believed the school failed in its mission to impart knowledge and existed only to make children work and collect items for the government. Instead of attending school, some students worked to generate income for their households. One respondent explained how absence from school was a “result of poor living conditions.”

There were 49 students in one class of elementary school. About 25 to 30 students attended school. The others almost always didn't submit assignments because they didn't attend school as a result of poor living conditions. In other words, in my town, studying was not important. Many households got better living conditions by doing business rather than studying.
(IDI-SK-28)

F. Education for North Korean Refugees in China

Faced with the imminent threat of nutrition-related diseases and starvation in the mid-1990s, North Koreans adopted various survival mechanisms, including “distress migration” escaping and fleeing to China, South Korea, or another third country.¹⁹⁷

Children either migrated alone or with one or both of their parents or legal guardians.¹⁹⁸ Due to the Chinese government’s policy, they are considered economic migrants who have illegally crossed the border in search of work. Most have no formal identification or legal status and they live in constant fear of arrest and forcible repatriation. As one respondent explained, “Although I wanted to move around [in China], I couldn’t because I didn’t have any proof of identification. I was always afraid of being captured” (IDI-SK-14). Several respondents shared that such restrictions on freedom of movement impacted their ability to attend school.¹⁹⁹

196 Stephan Haggard and Marcus Noland, *Witness to Transformation: Refugee Insights into North Korea* (Washington, D.C.: Peterson Institute for International Economics, 2011), 21.

197 Frances D’Souza, “Famine: Social Security and an Analysis of Vulnerability” in *Famine*, 1, 11-47 (G.A. Harrison ed., 1988).

198 Andrei Lankov, “North Korean Refugees in Northeast China,” *Asian Survey* 44.6 (2004): 856-873.

199 Roberta Cohen, “China’s Forced Repatriation of North Korean Refugees Incurs United Nations Censure,” *Brookings Institution*, Jul. 7, 2014. <https://www.brookings.edu/opinions/chinas-forced-repatriation-of-north-korean-refugees-incurs-united-nations-censure/>.

In China, I attended a Korean-Chinese school for a year or two. When the surveillance was at its highest in 2000, we couldn't settle in one place. As we were being searched and we had to escape, I couldn't get a proper education... We moved around five to six times during our five-year stay in China.
(IDI-SK-03)

Another respondent was so fearful of being arrested and deported that she never even thought about attending school.

I didn't think about going to school or getting some sort of education. I stayed with them for two years. I wasn't caught in the crackdown by public security officers, but I would not dare go outside when there were any police officers on the street.
(IDI-SK-15)

In the past decade, widespread urbanization has resulted in a sharp decline in the number of children enrolled in schools in rural areas of China. Typically, Chinese schools only accept children who are registered in the government system and possess a household registration permit (*hukou*). However, in Yanbian, which has the highest number of North Koreans, some elementary or middle schools began to informally accept unregistered children to maintain a sufficient number of students. Many respondents held the belief that access to education was better in Yanbian relative to other areas in China. For example:

The worst thing about my life in China was that I had to work on the farm to survive. I couldn't study even though I wanted to... That was the worst thing. There weren't any Korean books to read, because I lived in the place where there were no Koreans. Maybe it would have been better if I lived near Yanbian. The kids from Yanbian were able to go to church with Korean pastors. But I couldn't even look at a single bit of Korean writing. Not even one book.
(IDI-SK-16)

Churches and other religious organizations commonly provide critical support for North Koreans in China. When North Koreans often crossed the border empty-handed, churches run by South Korean and American missionaries provided them with shelter.²⁰⁰ Many children outside of family care, including *kotjebi*, were cared for by church communities in China. Respondents commonly discussed how many *kotjebi* resided in church shelters and, in some instances, pastors' homes. Churches were often the only place where North Koreans were assisted with refuge, food, aid kits, and education. They taught the Bible and Chinese language to North Korean children, and some even provided fake Chinese identification cards.²⁰¹

From the late 1990s to the early 2000s, we changed the way of raising the children due to the Chinese government's crackdown [on North Korean refugees]. We built a shelter and raised them with some stability. Compared to the previous time, a similar amount of food was available, but the education environment was improved. We secretly taught the children the Bible, Chinese language, English, and art. The children could go outside in a group to do some physical exercise.
(KII-CH-07)

Some respondents discussed how educational opportunities at the shelters improved as the Chinese government intensified its efforts to crack down on North Korean refugees. One respondent discussed how North Korean children did not attend school in China as they were unable to go outside of the shelter due to their illegal status.

Some churches had houses to raise [North Korean] children secretly. The children had to stay home. They had meal three times a day but couldn't go outside, so many had a hard time emotionally. Since the church takes care of them, the children learned the Bible.
(KII-CH-10)

*Because my husband was a missionary, the pastor wanted us to take care of four *kotjebi* in my house. I heard that if we let them outside of the house, they are caught, so we kept them inside the house. For a month, they ate well, but one day they ran away. About 70 *kotjebi* came to the church and the church community concluded that keeping them in individuals' house is not an ultimate solution.*
(KII-CH-07)

As the children were sheltered in secret, individuals who provided housing to North Korean children were also at risk of arrest.

²⁰⁰ Sarah Eekhoff Zylstra, "China Kicks Out Korean Missionaries in 'Unprecedented' Numbers," *Christianity Today*, March 8, 2017. <http://www.christianitytoday.com/news/2017/march/china-kicks-out-korean-missionaries-south-north-thaad-jilin.html>.

²⁰¹ Jin-Heon Jung, "North Korean Refugees and the Politics of Evangelical Mission in the Sino-Korean Border Area," *Journal of Korean Religions* 4.2 (2013): 147-173.

We rented a house and took care of them, but one day, there was a crackdown [on North Korean refugees]. My pastor was arrested by the police and we had to let the children go, but another missionary took care of them secretly.
(KII-CH-07)

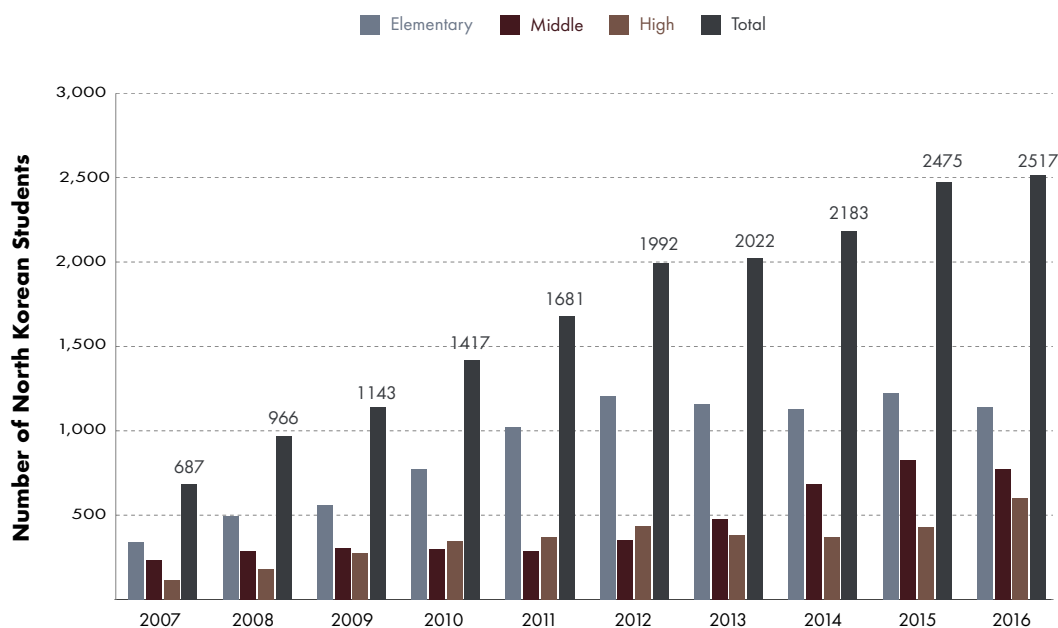
Although churches filled a critical gap in providing services for North Korean children, they also had limited resources.

The children in China need some special benefit from the government. All their mothers are deported or left for South Korea, and the children are left here [in China]. Their fathers are in prison or alcoholics. Or their aunts or other relatives receive subsidies under their names, but they use the subsidy [for themselves]. In these cases, I worry about the children's future. Churches try to do various missions, but we are short of donations. Although the children want to go to the private academy or after school classes, they can't...If there were free after-school classes and they could be educated without paying money, it would improve their lives a lot.
(KII-CH-07)

G. Educational Challenges in South Korea

Along with the steady increase in the number of North Korean arrivals in South Korea, the number of North Korean children has also increased (Figure 8).²⁰² Of the 1,397 North Koreans who defected to South Korea in 2014, sixteen percent (16.2%) were less than twenty years of age. Individuals aged 20 to 39 years comprised the largest age group (58.0%), followed by those aged 40 to 59 years (21.0%). Less than 4% were aged 60 years and older.²⁰³

Figure 8. Number of North Korean Students in South Korean Schools, 2007–2016



Source: Center for Supporting North Korean Refugee Adolescents.²⁰⁴

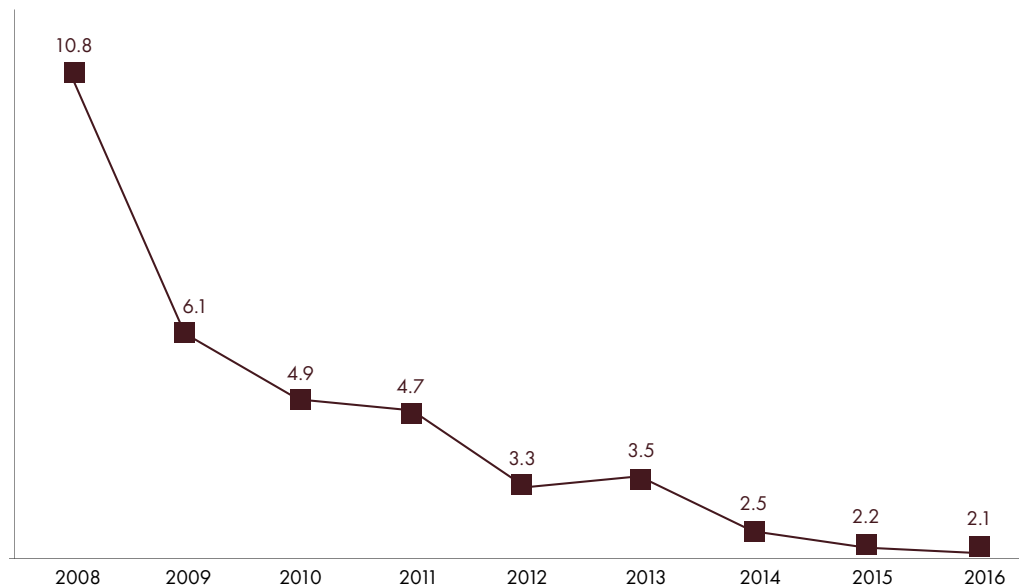
202 Center for Supporting North Korean Refugee Adolescents, “Trend in number of North Korean refugee students,” accessed Jun. 27, 2018. <https://www.hub4u.or.kr/hub/edu/status01.do>

203 Available at https://www.unikorea.go.kr/eng_unikorea/relations/statistics/defectors/.

204 Center for Supporting North Korean Refugee Adolescents, “Trend in number of North Korean refugee students,” accessed June 27, 2018. <https://www.hub4u.or.kr/hub/edu/status01.do>.

Under South Korea's Constitution, North Koreans are considered citizens of the Republic of Korea upon their arrival. Many North Koreans choose to resettle there because their children are legally allowed to attend school.²⁰⁵ As of 2016, 2,517 North Korean school-aged children were formally enrolled in South Korean schools.²⁰⁶ The dropout rate decreased from 10.8% in 2008 to 2% in 2017 (Figure 9), and 60% of enrolled children resided in and around Seoul (Seoul and Gyeonggi province).²⁰⁷ Research also suggests that these children's academic success differs according to family status. Children belonging to better-educated families, largely from Pyongyang and other urban areas, typically adjust better.²⁰⁸ It should be noted that this data includes children with parents who are refugees and children born in third countries.²⁰⁹

Figure 9: Dropout Rate among North Korean Children in South Korean Schools, 2008–2016



Note: Drop-out rates are expressed as a percent and include primary, middle and high-school students.

Source: Center for Supporting North Korean Refugee Adolescents.²¹⁰

To receive resettlement support from the South Korean government, North Korean refugees must complete a three-month education and assimilation program at the Hanawon Resettlement Support Center.²¹¹ The Ministry of Education and Human Resources Development also operates specialized schools for North Korean children who experience difficulties adjusting to the formal school system. Perhaps the best known of these schools is “Hankyoreh High School,” founded in 2006. It adheres to the national curriculum while also tailoring classes to meet the needs of individual students.

Although the school dropout rate among North Koreans in South Korea decreased over the past decade, a recent study found that 9.5% (n=267) of North Korean adolescents surveyed in South Korea transitioned to specialized schools.²¹² The South Korean government has also established after-school education programs, psychiatric counselling, and career counseling specifically for North Korean children.²¹³

205 Ibid.

206 Ibid.

207 Available at https://www.unikorea.go.kr/eng_unikorea/reasons/statistics/defectors/.

208 *Segye Ilbo*, Jun. 30, 2000, 16.

209 Center for Supporting North Korean Refugee Adolescents, “Trend in number of North Korean refugee students,” accessed June 27, 2018. <https://www.hub4u.or.kr/hub/edu/status01.do>.

210 Center for Supporting North Korean Refugee Adolescents, “Trend in number of North Korean refugee students,” accessed June 27, 2018. <https://www.hub4u.or.kr/hub/edu/status01.do>.

211 Cristina Couch, “The Psychological Trauma of Defecting from North Korea,” accessed Feb. 16, 2017. <https://www.pbs.org/wgbh/nova/article/north-korea-mental-health/>.

212 Center for Supporting North Korean Refugee Adolescents, “Statistics related to North Korean refugee students,” accessed Nov. 5, 2018. <https://www.hub4u.or.kr/hub/data/selectDataForm.do>.

213 Republic of Korea Ministry of Education, “Plans for supporting North Korean Refugee students, 2017,” accessed Jun. 27, 2018. <http://www.moe.go.kr/boardCnts/view.do?boardID=294&boardSeq=70825&lev=0&searchType=null&statusYN=C&page=6&cs=moe&m=0503&opType=N>.

Respondents described multiple challenges in adjusting to schools in South Korea. While language and cultural differences were relevant factors, stigmatization and discrimination; the age gap between North and South Korean students; lack of support from their peers, parents, teachers, and school also affected school adjustment.

Adolescent defectors from North Korea find it difficult to study in South Korea, especially studying English. We learned other subjects like mathematics in North Korea... We barely caught up with English and it is hard to study English in South Korea.
(IDI-SK-20)

Differences in the objectives of the North and South Korean education systems also serve as a major barrier to school adjustment. Many respondents discussed differences in teaching values as well as the material covered. They also discussed how even the structure of texts and textbook content was unfamiliar to them.

Everything was different [compared to North Korea]. Even the exams of mathematics and physics were related to worshipping the Kim family. It was not just about the numbers, but all those things are integrated, so we are brainwashed. In North Korea's education system, this is the biggest portion in my brain. I feel sorry for that. In other words, creativity and imagination were oppressed. Some people say that North Koreans speak well because they have weekly or monthly life-review sessions. But North Koreans are not logical.
(KII-SK-03)

The North Korean education system considers the history of the Kim family and the revolution as the most important subjects. In South Korea, this knowledge is completely irrelevant. Several respondents identified English as the most challenging subject to learn in South Korea. Until the mid-1990s, Russian was the primary foreign language in North Korean schools. The switch to English occurred around the turn of the 21st century. Many North Koreans escaped before learning English. Unfamiliarity with English and the lack of information regarding South Korea's education system discourage students from pursuing higher education.

South Korea is known for its competitive education system and emphasis on educational attainment.²¹⁴ North Korean students are not accustomed to the highly competitive culture, and many are unable to handle the pressure placed on them. Academic performance typically functions as the primary criteria for evaluating students in South Korea. As a result, North Korean children who perform poorly in school are discriminated against.

When I meet South Korean teachers in the schools where North Korean adolescents go to and ask them if the kids are doing well, teachers answered that North Korean children don't study well, and they are fools. They can't go to university, and are going to live hard lives. The criteria of adjustment are whether they study well or not. Teachers don't care about the children who are not tall, or handsome... I felt pity about the structure and system of [South] Korean education.
(KII-SK-03)

As a result of the South Korean government's policy, many North Korean children end up in grades two or three years younger than their age. According to the Ministry of Education, in 2004, less than five percent (4.8%) of school-aged North Koreans attended public schools with students the same age as they were and nearly three quarters differed by more than two years of age with their classmates. This made it difficult for North Korean children to form relationships with their peers, which played a role in their decisions to drop out. Another survey found that more than one-third (34%) of children described their relationship with their schoolmates as "bad."²¹⁵ This study confirms these findings, as the majority of respondents described how North Korean children were discriminated against and, at times, subjected to physical punishment by both their teachers and their peers.

I regretted coming to South Korea for the first three years because I had no friends and didn't have much money. As the government subsidy was not much and the housing conditions were poor, I initially felt adrift. I complained to my parents, "Why did you take me to South Korea?" I hung out with bad friends and made a lot of trouble. I came to and studied hard after three years.
(IDI-SK-10)

214 Elise Hu, "The All-Work, No-Play Culture of South Korean Education," *NPR*, Apr. 15, 2015. <https://www.npr.org/sections/parallels/2015/04/15/393939759/the-all-work-no-play-culture-of-south-korean-education>.

215 *Segye Ilbo*, Jun. 30, 2000, 16.

Seven decades of separation and political confrontation has also led to social discrimination against North Korean refugee children.²¹⁶ For example, some South Koreans suspect North Korean refugees of engaging in espionage. When concerns escalate about military conflict with the North, South Koreans' fear and aggravation can be transferred to North Korean refugees living in South Korea. This atmosphere directly impacts the school environment, and North Korean youth have tended not to disclose their North Korean origin.²¹⁷

Family separation also impacts North Korean children's ability to adjust to life in South Korea. Many North Korean children were separated from their caregivers, particularly their mothers, for long periods of time. In migrating from North Korea, women cross the border more easily and migrate to China. After arriving in China, they send their earnings back to North Korea and sometimes bring their children to China. Some mothers first escape alone to South Korea and bring their children from North Korea or China later on. Due to this process, many children experience long periods of family separation. The impact of separation persists after being reunited. Some key informants interviewed in South Korea indicated that family relationships are not close enough for North Korean children who were separated from their caregivers for long periods of time. In addition, some children suffered from traumatic events that they experienced in North Korea or South Korea, and these memories keep them from adjusting to the South Korean school system.

They [North Korean children] have more psychological problems than human rights. They were separated from their moms for a long time, so they don't have affiliation. Also, they came to a place where they don't know the language. They have a lot of anxiety so we [teachers] struggle a bit, for about one or two years. In the past, some children came here because their moms deceived them. They cried a lot because they wanted to go back. They often said: 'I don't like here. I want to go back to my friends.'
(IDI-SK-04).

Furthermore, some children are traumatized from past experiences. The trauma they suffered makes it even more difficult for them adjust to life in South Korea, particularly at school.

Children in South Korea need counseling because they are not familiar with South Korean culture and they might feel isolation. Also, they don't know the economic principles because they want to receive something. They need more independence.
(KII-CH-09)

Despite the challenges associated with integrating into South Korean society, research has also demonstrated that North Korean children remain hopeful that their lives will improve outside of North Korea due to the fact that they survived and escaped North Korea. In a study by the Korea Hana Foundation, many of the children interviewed felt confident in their ability to adapt to any situation, including life in South Korea, due to their past experiences. They anticipated living a successful and stable life in South Korea, often with their family members.²¹⁸ For example, a 22-year-old male respondent commented: "In the future, I will be with my pretty wife, working hard, sometimes having a rest. The first thing I want to do if I get a regular salary is to buy a car. I want to travel sometimes. I will be a person living an easy life. Being a normal person."

A recurring theme that emerges from the qualitative data is a strong sense of self-worth among North Korean children in South Korea. Although they recognized that South Korean children performed better in school, they also recognized their own unique strengths. This is exemplified in the following quotation from a male defector interviewed as part of the Korea Hana Foundation study:

*My strength is what I have experienced so far. South Korean students can study well, but I have my own life. I don't feel frustrated because they have been studying since they were young, and I have been living my own life which is different from theirs. I don't think they are too much different from me. If they are the best in terms of studying, I would say I am the best in terms of living. The experiences that I have gone through, and the difficulties that I have endured, is my best strength.*²¹⁹

216 Dong-Gi Jo, "Social Distance and Attitude toward Migrants' Citizenship in Korea," *Korean Journal of Population Studies* 33.3 (2010): 53-73.

217 Korea Hana Foundation, *Settlement Survey of North Korean Refugee Adolescents in South Korea 2016* (Seoul, 2016).

218 Sun-Hye Hong, *Haggyo-bakk talbugcheongsoneon gyoyug, jeogeung siltae* [A study on the status of education and adaptation for out-of-school North Korean migrant adolescents] (Seoul: Korea Hana Foundation, 2010), 24.

219 Ibid.

CHAPTER 5.

VULNERABLE SUB-GROUPS

A. Overview

This chapter focuses on the most vulnerable sub-groups of North Korean children in the period from the 1990s to the present, particularly “children outside of family care” and “children on the move.” Some sub-groups of children discussed here may fall within both of these broader terms.

Children Outside of Family Care

As defined by Muldoon, Stark, and Rinehart (2013), the term “children outside of family care” refers to “children living without at least one parent and without an adult, kin or otherwise, who is fulfilling parental roles and is permanently engaged in the child’s lifelong wellbeing.”²²⁰ But, as Stark et al. (2013) have noted:

While some of the children encompassed in this broad definition are assumed to be accessible (e.g., children in state-run residential care facilities), other sub-groups are likely hidden or hard-to-reach. These sub-populations may be composed of individuals who engage in behaviors that are sometimes illegal or stigmatizing (e.g., sex work), or they may be under the control of others (e.g., labor camps).²²¹

Given the complexities of access to specific sub-groups of vulnerable children, some researchers and practitioners have recommended using a “proxy definition” to measure sub-populations of children outside of family care, while noting that “a proxy definition is almost always imperfect.”²²² For example, Boothby et al. (2012) identify a number of vulnerability groups, some of which are overlapping, that fall under the rubric of “children outside of family care”, specifically: orphans, children in institutional care, child victims of sex or labor trafficking, child victims of forced labor, and unaccompanied and separated children.

Children on the Move

Others, including the UN and Save the Children, utilize the term “children on the move”, which refers to “those children moving voluntarily or involuntarily, within or between countries, with or without their parents or their primary caregivers, and whose movement might place them at risk (or at an increased risk) of economic or sexual exploitation, abuse, neglect, and violence.” Like the term “children outside of family care,” the term “children on the move” is an umbrella term that encompasses the following:

²²⁰ Katherine Muldoon, Lindsay Stark, and Robert Reinhart, *Expert Measurement Workshop: U.S. Government Action Plan on Children in Adversity Children Outside of Family Care* (Washington, D.C.: 2013).

²²¹ Lindsay Stark, Beth Rubenstein, Katherine Muldoon, and Les Roberts, *Guidelines for Implementing a National Strategy to Determine the Magnitude and Distribution of Children Outside of Family Care* (Washington, D.C.: USAID Center for Excellence on Children in Adversity, 2014).

²²² *Ibid.*, 4.

1. Children who have been trafficked;
2. Children who migrate (e.g. to pursue better life opportunities, look for work or education or to escape exploitative or abusive situations at home);
3. Children displaced by conflict and natural disasters; and
4. Children who live and work in the streets.²²³

This list also illustrates the high degree of overlap between the two terms. For example, street children who have migrated may end up in forced labor situations at their destination, and unaccompanied and separate children include children who live and work on the streets.²²⁴

Within the category of “children on the move” inside North Korea, we should emphasize the category of “internally displaced persons” (IDP), defined as “persons or groups of persons who have been forced or obliged to flee or to leave their homes or places of habitual residence, in particular as a result of or in order to avoid the effects of armed conflict, situations of generalized violence, *violations of human rights or natural or human-made disasters* [emphasis added], and who have not crossed an internationally recognized State border.”²²⁵ In a 2000 case study of internal displacement in North Korea, we identify a number of populations vulnerable to food insecurity and thus vulnerable to distress migration and internal displacement. These populations include urban dwellers, unemployed workers, women, “bad” political classes as well as residents of “9/27 camps” and *kotjebi* (children living and working on the streets).²²⁶

This chapter is organized into the following sub-groups of vulnerable children: orphans and institutionalized children (including children in orphanages and children in detention); child laborers; unaccompanied and separated children, including *kotjebi*.

B. Children in Orphanages

UNICEF (2008) and global partners define an orphan as “a child who has lost one or both parents.” This encompasses children who have lost both parents (double orphans), those who have lost a mother, but have a surviving father (maternal orphans), and those who have lost their father, but have a surviving mother (paternal orphans).²²⁷ This definition has been employed since the mid-1990s, when the AIDS pandemic led to the “death of millions of parents worldwide, leaving an ever-increasing number of children growing up without one or more parents.” Although not specified, the age of a child is typically assumed to be under 18 years. North Korea’s laws also state that children outside of care are under the protection of social security programs.²²⁸

Until the late 1980s, the number of North Korean children living in institutional care was low. However, following the “Arduous March,” the number of children living outside of family care increased drastically, and they could enter national protection facilities if the local authorities or villagers sent them to an orphanage.²²⁹ Under the direction of the Kim Jong-un regime, forty child protection facilities, including orphanages, elementary academies (*cho-deung hag-won*), and middle academies (*joong-deung hag-won*) underwent a modernization process, ensuring that they were equipped with learning tools and equipment of adequate quality and quantity.²³⁰ However, in 2017, the Committee on the Rights of the Child (CRC) raised concerns that a significant number of children continue to be placed in institutions, including orphanages.²³¹

223 Roberts et al. (2011).

224 Patricia Ray, Corinne Davey, and Paul Nolan, *Still on the Street: Still Short of Rights. Analysis of Policy and Programmes Related to Street Involved Children* (2011), accessed Oct. 29, 2018. https://www.ohchr.org/Documents/Issues/Children/Study/survey_report_2011_web2.pdf.

225 UNHCR, *Guiding Principles on Internal Displacement* (Jul. 22, 1998). <https://www.refworld.org/docid/3c3da07f7.html>.

226 Courtland Robinson, “Famine in Slow Motion: A Case Study of Internal Displacement in the Democratic People’s Republic of Korea,” *Refugee Survey Quarterly* 19.2 (2000): 113-127.

227 UNICEF, “Orphans,” accessed Nov. 4, 2018. <https://www.unicef.org/topics/orphans>.

228 DPRK Social Security Law (Adopted Jan. 9, 2008, revised Apr. 3, 2012), Article 2.

229 Citizens’ Alliance for North Korean Human Rights & The Asia Center for Human Rights, *Situation report on the rights of the child in the DPRK* (Seoul: 2008), 10.

230 Han Dong-Ho et al., *White Paper on Human Rights in North Korea 2018* (Seoul: Korea Institute for National Unification, 2018), 408.

231 UN Committee on the Rights of the Child, “Concluding observations on the fifth periodic report of the DPRK” (Oct. 23, 2017), 7.

Our interviews confirm the concerns raised by the CRC. One of the themes that emerges from the interviews was the sub-standard conditions in orphanages. Respondents commonly described how children residing in orphanages lacked adequate food, clothing, and/or shelter. As a result, many were malnourished and in poor physical condition.

There was something called “joong-deung hag-won” in our neighborhood, which was an orphanage. The government allocated rations and gifts to these orphaned kids, but the intermediaries would take away most of these in the process. The kids in the orphanage were thus left to starve. They [the orphans] were bony and weak. They had decent uniforms, but they gave away the fact that they lived in an orphanage. Some kids in the orphanage were not so thin. They were the ones who managed to escape whenever possible and steal from the marketplace. Kids who were restricted to the orphanage, specifically young kids, died from starvation.
(IDI-SK-22)

While living in orphanages, children often received only one meal a day. As a result, many resorted to other means to try to find more food. Respondents described how children would compete and fight for food while others ran away from the orphanage in order to survive.

Many children ran away from orphanages due to starvation. And, in some instances, brothers and sisters had to come [to the orphanage] together, because their parents and relatives all starved to death. So those orphans fought for food, and, if they got more, they often kept it for their siblings.
(IDI-SK-02)

One of them [the orphans] told us that, once a child died in the orphanage, the orphanage would not call a hearse or anything to collect the body instantly. Instead, the orphanage left the child’s corpse in a certain place, where there would be other bodies rotting, until a pre-arranged car arrived to collect those bodies at agreed upon times. The kid who told us about this said that this terrified and saddened him. He could smell death near that pile of dead kids’ bodies...So he thought his best chance of survival was out in the street...by stealing. He left the orphanage and stole food from here and there despite the beatings he often received as a result. I did not know orphanages were such horrendous places.
(IDI-SK-22)

In addition, children living in orphanages were often subjected to forced labor instead of attending school. Several respondents explained how children were forced to perform “simple work” (e.g. carrying stones) rather than being cared for and protected in orphanages.

One child told me that if he was caught by one of the individuals known as ‘teachers’ or ‘security agents’, he would be sent to an orphanage. In the orphanage, he said that the children work, rather than study—simple work, such as carrying stones. He was very hungry [while at the orphanage]. He was supposed to be given two meals [each day], but usually he only received one of them.
(IDI-SK-02)

Respondents also explained how children living in orphanages were unable to complete their homework assignments due to the burden of forced labor. The following quotation is from a respondent who described this phenomenon in reference to children in *joong-deung hag-won*.

I had not been to an orphanage, but there were two orphans in my class. They only attended school for about three months and then dropped out. What I heard about [was that] they were just ‘workers’ at the orphanages. They were forced to work. So, they couldn’t do the homework assigned by teachers.
(IDI-SK-15)

C. Children in Detention

There are different types of prisons in North Korea, such as *kyo-hwa-so* (long-term prison labor facilities), *ro-dong-dan-ryeon-dae* (labor training center/mobile labor brigades), *jip-kyeol-so* (short-term detention facilities), *ku-ryu-jang* (police interrogation and detention facilities), and *kwan-li-so* (political penal labor camps). *Kyo-hwa-so* and *kwan-li-so* are long-term imprisonment facilities, whereas *jip-kyeol-so* and *ku-ryu-jang* are short-term detention facilities.²³²

Kyo-hwa-so imprison detainees who were sentenced to correctional labor by a court. These camps are managed directly by the State Affairs Commission (*Gung-mu wi-won-hoe*). *Ro-dong-dan-ryeon-dae* imprison people who were sentenced to short-term disciplinary labor, and are managed by the local People's Council. *Jip-kyeol-so* are temporary detention facilities where the detainees are forced to perform labor.

People with confirmed prison sentences will be transferred from *jip-kyeol-so* to *kyo-hwa-so*. *Ku-ryu-jang* detain those who are under interrogation by the investigation agencies, including the Ministry of State Security or Ministry of People's Security. *Kwan-li-so* (political penal labor camps) are the detention facilities for those who have committed political crimes and their family members, who are punished under a policy of *yeon-jwa-je* (guilt-by-association).^{233, 234}

Some North Korean children are detained by the authorities, particularly those who attempt to cross the border or who were repatriated from China. However, a number of respondents reported that the government was relatively benign in its treatment of children. Some reported that the children were released quickly from the detention center, often within one or two days after the arrest. One key informant (KII-SK-05), a North Korean refugee, also experienced detention, but he was released after one night because of his young age.

Some children said that they were caught in North Korea because they were trying to go to China. They were released after one or two days by considering the circumstances.
(IDI-CH-07)

At first when I came to China, I was caught several times but I was released the next day because I was young
(IDI-CH-10)

At first [when I was sent back to North Korea], I stayed a night in a warehouse, rather than being sent to the Defense Security. We were suffering at that time, so the soldiers told us not to escape again, swore a bit, hit a bit, and then sent us home.
(KII-SK-05)

However, if a child is a repeat offender, he or she could be sent to the *ro-dong-dan-ryeon-dae*, where they are forced to perform labor without receiving enough food. One respondent was detained in a Chinese border prison before being repatriated. She reported that she was fed better at the Chinese prison (IDI-CH-02). Another respondent reported that he was sent to the *ro-dong-dan-ryeon-dae* at age 18, after being captured and released multiple times from a young age. He was forced to do labor and received only a small amount of food (IDI-CH-10).

In Article 37, the CRC states that “every child deprived of liberty shall be treated with humanity and respect for the inherent dignity of the human person.” Some children detained in the *ro-dong-dan-ryeon-dae*, however, said that was not the case (KII-SK-01). Many were severely beaten during interrogation. Physical torture, such as kneeling or sitting in the same position all day, was commonly reported (IDI-SK-26, IDI-SK-31).

Chinese border prison people swore a lot but gave us food so that we didn't starve. However, I paved roads in ro-dong-dan-ryeon-dae but they didn't give enough food. I cried several times because I was so hungry.
(IDI-CH-02)

232 David Hawk, *The Hidden Gulag: Exposing North Korea's Hidden Prison Camps* (Washington, D.C.: Committee for Human Rights in North Korea, 2003), 56.
233 Han et al., *White Paper on Human Rights in North Korea* 2018, 91.
234 National Human Rights Commission of Korea, *Korean-English Glossary of North Korean Human Rights Terms* (Seoul: 2016).

In 2002, it was different. There's ro-dong-dan-ryeon-dae in every army, and those who go there had to work a lot. I went there in winter and I had to move feces, cut wood, and collect the wood. They give three meals a day but the food is mixed corn rice with water. The amount was so small and you never alleviate hunger with that.
(IDI-CH-10)

Some girls who attended ro-dong-dan-ryeon-dae said that they worked at kitchens instead of farm fields. And there, even the adolescents had no freedom of going to the restrooms. They were forced to dig pits and defecated while squatting in front of others.
(KII-SK-01)

At the early stage that entered the detention center in North Korea, I think everybody was beaten. In ku-ryu-jang, I woke up at 6am and had to sit crossed-legged from 6:00 a.m. to 10:00 p.m. When eating, I could freely move. The meals were rubbish. Each meal consisted of a bowl of thick soup that was continually boiled with a chunk of hand-made corn noodles. Age did not matter when being beaten. State security agents must get some statement from us. Everybody does not need to tell the truth at the early stage of investigations. They thought that people under interrogation tell the truth after being beaten, and they stopped the beating after they got some information. I was sent to the Ministry of State Security [MSS] in North Korea after being caught in China. After being in the MSS for 20 to 30 days, I was sent to the local police. When beating, they kicked, punched, or hit our head against the wall, or hit us with a tree branch. Those who continually lied were beaten with this tree branch. This kind of experience I had four times, including in the kyo-hwa-so.
(IDI-SK-31)

When I was in the 5th grade of middle-high school, one of my friends didn't go to the ro-dong-dan-ryeon-dae, but had been to the MSS for 15 days because she was captured while fleeing to China. She told me that she was hit by some sort of board and she hit her head against the wall and kept kneeling. But she had to put a fingerprint [on a document] that said she would not tell anybody what had happened.
(IDI-SK-26)

Besides escaping North Korea and being deported from China, children were also detained for running illegal businesses. One respondent ran a smuggling business in North Korea. When he was young, he was detained for a short period, but as he grew up and was caught frequently, he was sent to higher-level detention facilities. Another respondent reported that bribing sometimes reduced the level of detention facilities they were sent to.

I was sent back to North Korea three times from Chinese prisons because of smuggling. In these cases, I was sent to prison for a month because I was young
(IDI-SK-31)

After buying coal at an illegal price, I sold those to a region about 40km away. Buying coal from the factory was illegal and difficult...I sold coal alone or with my mother and moved on buses or trolleys. It was so hard that I carried coal on my back to sell from door to door when I was about 11 or 12 years old. I did this for about four years. When caught by the police, they took away the bag and the coal inside it. After detention for 1 or 2 hours, they asked about my family situation. After listening to my tough story, they released me. Of course, if I resisted, I would be beaten. I resisted at first, but it was hard to live without coal for a day. I gave up begging because it seemed like begging would not work. Some of the police were new and some were experienced. While the new policemen tried to let me off lightly, the experienced police patrols were more vicious. They know that everything I have can be converted into money, and they can live with [that money].
(IDI-SK-31)

There were army agents to guard many grains of rice and wheat that came to North Korea through harbors. It was cold at night there. So when I gave them alcohol and food, they let me take grains of rice. One day, as I was doing this, I was arrested and sent to...a detention center for three days when I was 12. I just got slapped on the cheek 5 or 6 times and kicked once because I was young, but I didn't have to make any statements.
(IDI-SK-31)

Normally, people who were caught smuggling were sent to local police after the first investigation by the Border Security Command. So we had to get out before we were sent to MSS, otherwise the police officers would send us to the MSS, then definitely to the prison camps. However, the police sent us to the disciplinary labor center instead of the prison. So it is

better to get out of Border Security Command by giving them bribes...If they take bribes, in any case, they sent me out. And sometimes I was hit or punished all night long. In serious cases, they hit us with rifles...or steel sticks that are used to clean rifles.
(IDI-SK-30)

Those accused of political crimes and their family members are held at the *kwan-li-so*. The family members are often separated and sent to the “family sections” inside the *kwan-li-so*.²³⁵ One of the North Korean respondents knew someone who was imprisoned for 28 years from age 12 to 40 due to his parent’s crime. He said he spent his life as a slave laborer.

Some children went to the camps such as political prison camp no. 18 due to collective punishment. He said that he lived there for 28 years from 12 years old to 40 years old. He spent his childhood and adolescent years in the camp. He used to live in Pyongyang. He didn’t know why he was there. And those who were born in the camps were just like slave laborers...I think that this also happens now.
(KII-SK-01)

D. Child Labor

Despite being a signatory to several international conventions related to child labor and having enacted domestic laws against it, North Korea does not protect children against such harmful practices. North Korea has ratified a total of five treaties: 1) the Convention on the Rights of Persons with Disabilities (CRPD); 2) Convention on the Elimination of All Forms of Discrimination against Women (CEDAW); 3) Convention on the Rights of the Child (CRC); 4) International Covenant on Civil and Political Rights (ICCPR); 5) the International Covenant on Economic, Social and Cultural Rights (ICESCR); and an additional protocol that addresses children’s rights (Optional Protocol to the Convention on the Rights of the Child on the Sale of Children, Child Prostitution, and Child Pornography).²³⁶

Article 10 of the ICESCR, ratified by North Korea in 1981, states that children and young persons should be protected from economic and social exploitation, including the establishment of the legal age for paid employment and the punishment for the employment of children in work that is detrimental to their normal development. Similarly, Article 32 of the CRC, ratified by North Korea in 1990, requires member states to adopt special measures to protect children from work that interrupts their education and development as a whole:

1. States Parties recognize the right of the child to be protected from economic exploitation and from performing any work that is likely to be hazardous or to interfere with the child’s education, or to be harmful to the child’s health or physical, mental, spiritual, moral or social development.
2. States Parties shall take legislative, administrative, social, and educational measures to ensure the implementation of the present article. To this end, and having regard to the relevant provisions of other international instruments, States Parties shall in particular:
 - a. Provide for a minimum age or minimum ages for admissions to employment;
 - b. Provide for appropriate regulation of the hours and conditions of employment;
 - c. Provide for appropriate penalties or other sanctions to ensure the effective enforcement of the present article.

The CRC also highlights the connection between the right to education, guaranteed by CRC Article 28, and exploitation in child labor. As noted in Chapter 1, Article 28 requires states to “Take measures to encourage regular attendance at schools and the reduction of drop-out rates.”

235 David Hawk, *The Hidden Gulag: Second Edition* (Washington, D.C.: Committee for Human Rights in North Korea, 2012).

236 UN Human Rights: Office of the High Commissioner, “Ratification Status for the Democratic People’s Republic of Korea.” https://tbinternet.ohchr.org/_layouts/TreatyBodyExternal/Treaty.aspx?CountryID=47&Lang=EN.

In terms of domestic laws, Article 31 of the 2016 Constitution prohibits child labor while also establishing the minimum age to work at 16 years of age. Furthermore, Article 19 of the Children's Rights Protection Act of 2010 forbids child labor, including forced labor. However, the failure to implement and enforce such legislation has led to the widespread exploitation of North Korean children.

Our interviews suggest that the poorest households were the most vulnerable to child labor. As one respondent noted, "Among my friends, ten percent couldn't afford education and they worked instead" (IDI-SK-06). Another remarked, "Their house was in a bad area, so there were lots of kids who went to work with their parents" (IDI-SK-26). It was common for North Korean children to work alongside their family members.

We went to gather wood to prepare for winter. All together. We would pack lunch and go out in the morning to gather wood and we sometimes got chestnuts to take home. We went out every winter. And we would get coal from the mines. (IDI-SK-24).

Other respondents described how they worked separately from their family members, who relied on their income for survival.

In 2000, my mother got married with my stepfather and I lived together with them. While stepfather's son went to school, my brother and I went out to fetch firewood from the hills every day. At that time, we lived almost solely on money earned from selling firewood... While my peers wore bags going to school, I pulled a cart to fetch firewood from the hills. (IDI-SK-04).

Another respondent explained that "I made money by picking herbal plants (used for herbal medicine) and fruits from the mountains. I sent the money I earned to my family." Although less common, a few respondents noted how they received rice or other food items in exchange for their work. "My friend recommended a company, set up by a Chinese who came to North Korea to do business growing mushrooms. For my wage, they didn't pay me in cash but they gave me 25kg of rice per month, which I took home" (IDI-SK-26).

Some North Korean children were forced to take on their parents' work obligations if the parents were unable to (deceased or disabled). Although the minimum age for "work duties" was ten years, children aged 12 to 17 years most commonly fulfilled their parents' work obligations.

While those who attended school were forced to do labor at school, those who didn't had to take over their mother's work duties assigned by the neighborhood unit. The minimum age for the work duties is 10. When I went to the 'Storm Troops' instead of my mother, I did harvest work at farms for a month with other children, whose age ranged from 14 to 16. In addition, I had to attend the neighborhood unit meetings once a week instead of my mother. We were also mobilized to clean a landfill in the wee hours, make bricks to use in building a power plant and carry fertilizer sacks on our shoulder during the cold winter. I also planted trees for a day. At work, the equipment, meals, and other [supplies] were all at our own expense. In our neighborhood unit, 70% of the members were young children. The youngest was 12 years old. (IDI-SK-04)

Regardless of their work arrangements, all respondents who labored as children described how it was physically harmful to their development. For example, one respondent interviewed in South Korea explained how he was constantly bent over from carrying loads of coal that were too heavy: "I sold coal either alone or with my mother, and we moved by buses or trolleys. And it was so hard—I carried coal on my back to sell from door to door when I was about 11 or 12 years old" (IDI-SK-31).

Although not evidenced in our research, other studies have found that North Korean children are often made to work excessive hours without pay in paramilitary forced labor brigades (*dol-gyeok-dae*). This unique, military style of exploitation focuses specifically on labor in national construction projects. Children around the age of 16 or 17 are deployed to the *dol-gyeok-dae* after graduating from secondary school. They typically belong to the lowest *songhun* classification or are from the poorest families and are required to serve a period of ten years. *Dol-gyeok-dae* workers receive little to no pay. Unlike situations of debt bondage, where workers are forced to work to pay off their debts, these workers are forced to work out of a sense of loyalty to the regime.²³⁷

237 Open North Korea, "Contemporary Form of Slavery, in North Korea." https://tbinternet.ohchr.org/Treaties/CRC/Shared%20Documents/PRK/INT_CRC_NGO_PRK_26561_E.pdf.

E. Unaccompanied and Separated Children

In the *UN Guidelines for the Alternative Care of Children*, unaccompanied and separated children are defined as follows:

- **Unaccompanied children:** Those who have been separated from both parents and other relatives and are not being cared for by an adult who, by law or custom, is responsible for doing so.²³⁸
- **Separated children:** Those who are separated from both parents, or from their previous legal or customary primary caregiver, but not necessarily from other relatives.²³⁹ These may, therefore, include children accompanied by other adult family members.²⁴⁰

A widely accepted set of definitions, commonly attributed to UNICEF (2009), categorizes street children into two main sub-groups:

1. **Children on the street** are those engaged in some kind of economic activity, ranging from begging to vending. Most go home at the end of the day and contribute their earnings to their family. They may be attending school and retain a sense of belonging to a family.
2. **Children of the street** actually live on the street (or outside of a normal family environment). Family ties may exist but are tenuous and are maintained only casually or occasionally.²⁴¹

Kotjebi is a Korean-language term for street children, specifically those who lost their caregivers or were abandoned by their family.²⁴² The word literally means “flower swallow,” but it is sometimes translated as “wandering children.”²⁴³ There are many reasons children become *kotjebi*. Not all are orphans,²⁴⁴ but some were abandoned due to economic difficulties, and others had to escape from abusive family situations.²⁴⁵ *Kotjebi* are usually found at *jangmadang* (local markets) or in front of train stations where they can get food by begging or stealing (KII-CH-01, IDI-SK-03).

He was a kotjebi since he was around eight years old and lived by stealing and picking up food in jangmadang. After living like this for ten years, he miraculously made contact with his mother and came to South Korea. But he had plenty of resentment towards his mother.
(IDI-SK-03)

I moved to Chongjin at age seven... There were not many kotjebi at that time. When I was nine, there were more beggars and their level of stealing was aggravated. They snatched bags, honed chopsticks like awls and stabbed. They cut bags with knives and stole things. People couldn't say anything although they saw these scenes because they were afraid of revenge.
(IDI-CH-13)

Because *kotjebi* often stole wallets or food in the market, many citizens considered them as thieves and did not feel sympathy.

There were many kotjebi in front of the train station. There were about 15 pickpockets and kotjebi. They were of various ages, from 7 to 23. The orphanage personnel took them to the orphanage. Every morning the personnel took a morning patrol and took them away. Then the kids followed them or ran away... The kotjebi were told by the personnel that they were being territorial and kotjebi were all beaten up whatever their ages were.
(IDI-SK-05)

The kotjebi were thieves, they were really good at stealing things, so they couldn't be loved, and no one pitied them.
(IDI-SK-25)

238 International Committee of the Red Cross, *Inter-agency Guiding Principles on Unaccompanied and Separated Children* (Geneva: 2004), 13.

239 Ibid.

240 Ibid.

241 See http://www.unicef.org/evaldatabase/files/ZAM_01-009.

242 S. McPhee, “*Kotjebi*: North Korean children in China,” *Asian Affairs* 45.3 (2014): 484-489.

243 Heon-Ik Kwon and Byung-Ho Chung, *North Korea: Beyond Charismatic Politics* (Rowman & Littlefield, Lanham, Maryland: 2012), 167.

244 Han et al., *White Paper on Human Rights in North Korea 2018*, 407.

245 McPhee, “*Kotjebi*.”

On September 27, 1995, Kim Jong-il announced that local collection centers would be organized for “normalizing” society by managing homeless and vagrants. These centers came to be called “9/27 camps,” and sometimes “9/27 *kotjebi* camps” as they seemed designed to round up and detain street children and orphans whose parents had died in the famine.²⁴⁶ In 1999, just after the peak of the famine, Natsios estimated that between 63,000 and 315,000 people nationwide were housed in “9/27 camps,” with stays averaging several weeks to two months.²⁴⁷

Children who were in “9/27 camps” reported that they lived in cramped spaces without receiving sufficient food. They escaped the camps to avoid hunger and to survive.

In the 9/27 kotjebi camp, he didn't get sufficient food and got sick. When he woke up, he noticed that the child next to him had died. But he didn't tell anyone, because he wanted to eat the food that was for the dead child.
(IDI-SK-01)

When I participated in a seasonal program for North Korean youth, one participant didn't go to sleep and frequently went outside instead. At first, I could not understand the reason but after time went by, I figured out that he had claustrophobia...People become crazy in that case. (KII-SK-01)

They fled from the 9/27 kotjebi camp. He thought that it would be better to beg outside of camps since it seemed all were going to die in the camps. So, some of them died after escaping the camps. And sometimes they froze to death.
(KII-SK-01)

There was one room in the kotjebi camp. And there were ten people in that room, age ranging from 16 to 17...there were more men than women. The hygiene conditions were so bad. I used a toothbrush that was used by other people in the room. The restroom was normally located outside of the room. I was given meals that were kinds of mixed corn flour and looked like breadcrumbs. Typical children there didn't have their parents or relatives in North Korea. So, they had to leave [the kotjebi camp] and get a job when they become adults.
(IDI-SK-25)

The respondents reported that there were more boys than girls in *kotjebi* groups, and some girls, who could not beg or steal, provided sexual favors to the male leaders of the group to get food.

There [in kotjebi group] were a lot of variants. But strangely not many girls were kotjebi, they were mostly boys. Boys would go to the orphanages and escape from there. It must be harder to live in the orphanages than living on streets as beggars.
(IDI-SK-25)

She was, 14- or 15-years-old, in second or third grade in middle high school...she made a relationship in order to get something to eat and sleep, not for money. And in kotjebi groups, it was possible for her to live with the head of kotjebi by giving sexual favors. Some girls spoke of this, but not many, because girls hardly spoke about that. But she said that...for powerless girls in kotjebi groups, there was no way to live without giving sexual favors. In the case of the girl above, she had a four- or five-year-old younger brother and she could not go far away to find food while leaving her brother alone. So, she could not help but pretend to be his lover. There were several kotjebi groups in her neighborhood. Every head of kotjebi had two or three girls.
(KII-SK-02)

It is not clear if *kotjebi* still exist in China. It is presumed that there were more *kotjebi* in the 1990s and 2000s, but the number has likely decreased due to stricter border controls.²⁴⁸ Some *kotjebi* migrated to China by themselves, while others were orphaned or abandoned after crossing the border with their parents.²⁴⁹ Since the Chinese government does not protect this population, *kotjebi* are often supported by the local church communities.

246 See Kevin Sullivan and Mary Jordan, “Famine, Nuclear Threat Raise Stakes in Debate Over N. Korea,” *Washington Post Foreign Service*, Mar. 13, 1999. <https://www.washingtonpost.com/wp-srv/inatl/longterm/korea/stories/famine031399.htm>. See also UN Human Rights Council, *Report of the detailed findings of the commission of inquiry on human rights in the Democratic People's Republic of Korea*.

247 Natsios, *The Great North Korean Famine*.

248 Han et al., *White Paper on Human Rights in North Korea 2018*, 477.

249 McPhee, “*Kotjebi*.”

Kotjebi came to my church from 1996. They had weary clothes and had brown faces. They were shorter than Chinese children of the same age... Since my husband was a missionary, the pastor wanted us to take care of four of them in my house. I heard that if we let them outside of the house, they are caught, so we kept them inside the house. For a month, they ate well, but one day they ran away. About 70 kotjebi came to the church and the church community concluded that keeping them in individuals' house is not an ultimate solution. We rented a house and took care of them but one day there was a crackdown. My pastor was caught by the police, we had to let the children go, however, another missionary took care of them secretly.

(KII-CH-07)

In 1998, one missionary I know had about 30 kotjebi in his [church] cell. They couldn't go to school or left school within the first two years. They experienced family separation, and they were malnourished. [They were] short with bloated stomachs, fought with each other a lot, and lied constantly. They pretend to be good in front of others but had their own ways when not in front of others. They stole others' money, stole things in the cell and bought food in the market. Sometimes they stole old ladies' money in the market. Some of them were caught by police and repatriated.

(KII-CH-09)

I was interested in North Korean children since 1998. When the Arduous March started in 1996, many kotjebi came to Yanbian. As a church, we had a commitment to take care of North Koreans. We started to help anybody—adults or children. At first, children came in a group. They came to churches, received money at there, kept the money and took some back to North Korea. Some of them spent money like the rich during the day and then came to church to ask for more money at night.

(KII-CH-10)

CHAPTER 6.

NORTH KOREAN REFUGEES AND MIGRANTS IN CHINA

A. Introduction

Beginning in 1996, significant numbers of North Koreans began moving toward and across the Chinese border in search of food for themselves and their families. Some North Koreans waited at the border and sent appeals for help to friends and family on the Chinese side. Others crossed the border legally for short periods of time to buy, barter, or beg for food. Most who crossed the border did so surreptitiously, seeking either temporary aid or permanent escape from the rigors of life in North Korea. It was estimated that, as of 1998, between 50,000 and 150,000 North Koreans were in China, principally in Yanbian.²⁵⁰

During the food crisis, an informal network of community-based aid groups evolved in Yanbian to assist North Koreans with various types of aid, including food, shelter, clothing and cash. Various reports at the time, including a 1998 report by the Korean Buddhist Sharing Movement, suggested that a significant number of North Korean migrants and asylum-seekers were in China and that it might be possible to interview them there.

This chapter focuses on six studies that the Johns Hopkins Bloomberg School of Public Health, Center for Humanitarian Health (formerly the Center for Refugee and Disaster Response) conducted in northeast China, particularly Yanbian Korean Autonomous Prefecture in Jilin Province, but also in neighboring Liaoning and Heilongjiang Provinces from 1998 to 2014. These studies explored famine migration, trafficking of North Korean women into forced marriage, durable solutions for North Korean children, monitoring of migration patterns and vulnerability, and population estimates of North Koreans in China, North Korean women, and children born to North Korean women and Chinese men.

B. Famine Displacement and Migration

Study Design and Methodology

In March 1998, the Johns Hopkins study team sent a questionnaire to about 200 community-based organizations in Yanbian Korean Autonomous Prefecture, asking about their assistance to North Koreans. Of the 102 organizations that responded, 57 reported that they assisted North Korean migrants.²⁵¹ Average monthly arrivals at each site in the previous 12 months ranged

²⁵⁰ “Famine driving North Koreans to China,” *International Herald Tribune*, Dec. 23, 1998.

²⁵¹ Chief among the aid networks in Yanbian in 1998 were some 80 Protestant churches. Of the 55 churches who responded to our 1998 survey (two additional sites were non-religious, making the total 57), the average congregational size was 84 (range: 10-500), about 35% of whom had relatives in North Korea. Each church was serving an average of 22 North Korean migrants per month (range: 0-400). An excerpted interview with a local pastor, conducted on Jun. 7, 1998, provides an example of one local site’s activities and insights regarding the North Korean famine migration in its earliest stages:

from 1 to 400, with the median site receiving about 22 migrants per month. From the 57 active sites, we drew a stratified sample of 18 sites, selecting three sites at random from each of the five border counties in Yanbian Korean Autonomous Prefecture—Yanji, Hunchun, Ryongjung, Tumen, and Hwaryong—and one site from each of the three interior counties—Ando, Dunwha, and Wangchung. These were later reduced to 15 sites.

During the interview, respondents provided information on births, deaths, and migration patterns in their household in North Korea between 1994 and 1998 as well as information about their own migration experience. The study received ethical clearance from Institutional Review Boards in Baltimore and Yanbian.²⁵²

Study Results

The average distance traveled from home to a destination in China was 257 kilometers, much of which was covered on foot. The majority (72%) had left their homes within 30 days of being interviewed. Most (66%) had been in China for fewer than 10 days, and 78% traveled alone. Migration into China, thus, could be characterized as short-term movements by a single member of a household whose other members remained in North Korea. For 67% (294) of respondents, the main reason for going to China was to get food, while 15% (67) said their intent was to earn money. Asked about their future intentions, 42% (183) said they would return to North Korea, and 6% (28) said they did not know. Although about half indicated no plans to do so, our evidence over time indicated that most North Korean refugees and migrants eventually did return home, not necessarily by choice but either because life in China became too difficult or because they were deported.

Building on the framework of the 1998 survey and on the network of community-based aid sites that participated in the earlier study, a 1999–2000 study tracked North Korean arrivals during a 12-month period from July 1999 to June 2000. Of the 15 sites that participated in the 1998 survey, nine sites were selected within Yanbian Korean Autonomous Prefecture. This included sites along or near the border that assisted anywhere from 25 to 100 arrivals per month.

From July 1999 to June 2000, interviews were conducted with a total of 2,692 North Korean arrivals at nine sites along the China-North Korea border. These sites, all of which had participated in the 1998 study, were selected based on their willingness to participate for another year and on the presence of at least moderate levels of cross-border arrivals. All North Korean respondents gave verbal consent to be interviewed and were assured that the interview was voluntary and confidential. Only migrants who were 17 or older were interviewed and only one member of a family or household unit travelling together was interviewed. No incentives were given to respondents, although the interviewers received a monthly stipend. It is estimated that 80-90% of all arrivals at the nine sites were interviewed during the 12-month period with a non-response rate of under 5%.

Household members totaled 9,958 as of the beginning of 1995 in 2,692 households. From the beginning of 1995 to the end of 1998, all household births, deaths, and in-migrations and out-migrations of one month or more in duration were recorded. Respondents were asked about their migration experience and their household food situation in North Korea. The study was approved by Institutional Review Boards at Johns Hopkins Bloomberg School of Public Health and in Yanbian.

"Last year, we went to North Korea six times. Every time, we take about 8,000-10,000 Yuan (about \$1,000-1,200) along with clothes and food. Two or three people go each time to help about 30 to 40 people on the other side. We get some support from South Korean churches but after the economic crisis there, we have not gotten anything. This year, we went only one time, in January...This church helps about 20 to 30 people per month on average. The heaviest flow is during the winter, from mid-November to mid-April, when as many as 150 people cross per month...When NK people arrive, usually they take some money from us and leave within one day. Others may stay 20-30 days. In the past, we tried to give each person 300 Yuan. Now we can only give 100 Yuan. On average, I would say that most people go back to North Korea after staying 2 or 3 days. Some go looking for family members in China. About 30% of the refugees have family in China but only about 10% want to find them...Most people cross the border alone, because a bigger group is more dangerous. At most, two people come together, like two brothers for example. The North Koreans who come here are 70% male and 30% female. Their ages range from 9 to 68, but usually they are in their 20s to 30s...Sometimes, people come back more than once because there is no food in North Korea. They will either come back themselves or they will tell other relatives or friends. About 20 to 30% are repeaters while 80% are new arrivals. Before May, most people wanted to go back to North Korea. Now I would say that 60% do not want to go back. The people who return live close by the border. The people crossing from far away do not want to go back. It takes a long time to come here and they do not know by the time they get here if their family is alive or dead. They say, 'I just want to survive myself. I cannot help my family anymore.' Also, people who are not married want to stay here because they have no spouse or family...About 70% come from North Hamgyong province, and 20% come from Ryanggang province. The other 10% come from other provinces."

²⁵² W. Courtland Robinson, Myung-Ken Lee, Kenneth Hill, and Gilbert Burnham, "Mortality in North Korean Households," *Lancet* 354:9175 (1999): 291-295.

Age and Gender of Respondents

Consistent with the 1998 study and with most other observations about the North Korean migrant population in China in the early years, though this would change over time, a majority (1,528 or 56.8%) of respondents were male, while 1,164 (43.2%) were female. The mean age of respondents was 33.4, which is slightly higher than the estimated mean age of 31 for the total North Korean migrant population in China. This is due, at least in part, to the fact that the sample did not include any respondent under the age of 17. The fact that the estimated mean age of North Korean migrants was around 31, compared to the mean age of the North Korean population of 27 in 1993, speaks to the relatively small number of children—especially children under 10—in the migrant population.

Migration Within and Outside of North Korea

North Korean respondents were asked to report any movement of people into or out of the household for a duration of one month or more. For each in-migrant or out-migrant, respondents were asked to give their age, gender, year of move, reason for move, and the approximate amount of time they spent in or out of the household between the date of the move and the end of the interval. As Table 13 indicates, both the total number of people migrating increased in step-wise fashion from 1995 to 1998 and the rate of net out-migration (calculated as a residual of out-migration minus in-migration) increased nearly four-fold from 14.5 per 1,000 in 1995 to 57.8 per 1,000 in 1998.

Table 13. Sample Population: Net Migration Rates, 1995–1998

Year	Number of In-Migrants (>1 Month)	Number of Out-Migrants (>1 Month)	Net Migration	Mid-Year Population	Net-Migration Rate (per 1000)
1995	86	230	144	9,946	14.5
1996	169	374	205	9,855	20.8
1997	167	556	389	9,616	40.4
1998	141	677	536	9,268	57.8
Total	563	1,837	1,274	9,777 (end 1996)	32.6

Of the 560 in-migrants during the four-year period for whom age and gender was reported, 63% were female and 37% were male. Only 9% (50) were under 20 while 20% (112) were over 55. Of in-migrants under the age of 20, 58% (29) were male, while over the age of 55, 84% (94) of all in-migrants were female. Respondents said that about 28% of all in-migrants moved into the household primarily to obtain food.

Of the 1,811 out-migrants for whom age and gender was reported, 53% were male and 47% were female. More than 16% of out-migrants were under the age of 20, while only 6% were over the age of 55. Of out-migrants under the age of 20, 64% were male, a gender disparity that is starkest among those from 10- to 19-years-old. For out-migrants over the age of 55, females comprised 57% of the total. Respondents said that about 34% of all out-migrants left the household primarily to obtain food.

Discussion

Although our sample was skewed towards residents from North and South Hamgyong provinces, and was not representative of the country as a whole, the rising rate of net out-migration in the context of famine and severe food insecurity suggested that, from 1995 to 1998, increasing numbers of North Koreans were moving within and outside their country. Lack of food was the primary reason for moving. However, as unauthorized movements for almost any reason were violations of North Korean travel and security regulations, many famine migrants risked not only punishment by state security agencies, but also exposure to harsh travel conditions and exploitation by those who sought to profit from their misery.

C. Trafficking of North Korean Women into Forced Marriage

Study Design and Methodology

In 2006, the People's Republic of China was described as “a source, transit and destination country for women, men, and children trafficked for purposes of sexual exploitation and forced labor. The majority of trafficking in China is internal, but there is also international trafficking of Chinese citizens to Africa, Asia, Europe, Latin America, the Middle East and North America... Women and children are trafficked into China from Mongolia, Burma, North Korea, Russia, and Vietnam for forced labor, marriage and sexual slavery.”²⁵³ In 2006, China was on the U.S. State Department's Tier 2 Watch List, meaning that its government did not fully comply with the Trafficking Victims Protection Act of 2000 (TVPA), but was making “significant efforts” to bring itself into compliance and that “the absolute number of victims of severe forms of trafficking is very significant or is significantly increasing; or there is a failure to provide evidence of increasing efforts to combat severe forms of trafficking.” That same year, North Korea was described as “a source country for men, women and children trafficked for purposes of forced labor and sexual exploitation.”

*Many North Koreans seeking to escape the dire conditions in the country attempt to leave by crossing the border into northeast China, where an estimated tens of thousands of North Koreans may reside illegally. There are no completely reliable estimates on the number of these North Koreans, more than half of whom appear to [be] women victims of trafficking. The illegal status of North Koreans in China and other countries increases their vulnerability to trafficking schemes and sexual and physical abuse. In the most common form of trafficking, North Korean women and children already in China are picked up by trafficking rings and sold as brides to Korean-Chinese men or placed in forced labor. In a less common form of trafficking, some North Koreans are lured from the DPRK into China with promises of freedom and employment, only to be forced into prostitution, marriage, or exploitative labor arrangements. The scale of the problem is blurred by the operation of ‘professional border crossers’ who help North Koreans voluntarily enter China. North Koreans forcibly returned from China may be subject to hard labor in prison camps operated by the government.*²⁵⁴

While some of the above estimates were subject to debate, our ongoing monitoring of cross-border movements by North Korean migrants and asylum-seekers since 1998 suggested that the overall picture presented above was generally accurate, though questions remained. Some additional points to consider regarding the movement patterns and characteristics of North Korean irregular migrants—asylum-seekers as well as those without documentation—are as follows:

- Recent movements of North Koreans into Yanbian Korean Autonomous Prefecture probably began in 1996 in the wake of the famine in North Korea, but likely did not peak until 1998. It was in 1999 that the largest estimate of North Koreans

253 U.S. Department of State, *2006 Trafficking in Persons Report*, 91.
254 *Ibid.*, 194.

in China—approximately 300,000—was made.²⁵⁵ The same organization, a South Korean activist NGO now called Good Friends, that estimated that there were 300,000 North Koreans in China also estimated that, as of 1999, approximately 75% of North Koreans in China were female. Our own estimates, however, suggested that the 300,000 figure was likely too high. We have used a peak figure of 150,000 for 1999. In addition, our evidence—particularly the famine migration studies referenced above—suggests that from 1998 to 1999, there was a roughly 50:50 split between males and females in Yanbian, even though percentages may have varied across regions in China. Overall, the proportion of females did increase dramatically over time.

- From 1998 to 2006, our border surveillance data suggested that the number of new North Korean arrivals declined by about 66%, indicating both that fewer people were crossing the border into China and that the number of North Korean refugees and migrants in Yanbian had declined. During this time, however, the proportion of females had risen, both with the development of a “marriage market” in China, and with the rise in South Korea-bound migration, which was about 66% female by 2006. As of 2006, we estimate that between 60% and 70% of North Korean refugees and migrants in Yanbian are female.
- North Koreans in China increasingly fell into two groups.²⁵⁶ The first consists of short-term arrivals, predominantly men, who crossed over to seek aid or to perform seasonal or short-term labor and then return either spontaneously or through deportation. The second consists of those, predominantly women, who came to China with the intention to stay indefinitely or to migrate onward to another country.

This last point may have over-simplified a complex mix of migration patterns and motivations. It also does not include children and unaccompanied minors who deserve a separate analysis. Nevertheless, it highlights a population of North Korean women who were significant not just for their disproportionate numbers and duration of stay in China, but also for their disproportionate vulnerability. What made the issue especially complex, both in terms of understanding the problem and in developing interventions, is that the same characteristics that gave North Korean women some ability to seek security in China—namely being female, single, and young—also rendered them vulnerable. To maximize their chances of staying in China, North Korean women had to marry or felt compelled to marry. To marry, they risked being trafficked.

In 2006, the Hopkins study team, in conjunction with a local NGO, conducted interviews with 101 North Korean women, aged 18–50 years, residing in Yanbian Korean Autonomous Prefecture. Local NGO staff helped recruit participants from local communities and conduct the interviews with North Korean women in urban and rural areas. Questions focused on personal and migration history, living conditions in China and North Korea, and selected health outcomes. To protect privacy and confidentiality, no names, detailed locations of residence, or personal identifiers were recorded. The study was approved by the Institutional Review Board at Johns Hopkins Bloomberg School of Public Health and in Yanbian.

Study Results

Of the 101 respondents, 80.2% were from North Hamgyong province, with another 8% from South Hamgyong. With 56% from urban areas and 44% from rural areas in North Korea, 77% had finished middle-high school, with another 13% completing a one- to three-year vocational college, and 5% completing a four-year college. About 5% had only an elementary school education and 99% said they were literate in Korean. 41% of women reported their primary occupation as manual laborer, while nearly 60% said they had some kind of secondary occupation, typically involving small business or petty trading. In all of these respects, they both matched the profiles from other surveys of North Korean migrants and asylum-seekers and were similar to the general female population in North Korea, or at least in North Hamgyong province.

Of the women surveyed, 46% said they were single when they left North Korea, 22% were married, 17% were widowed, and 16% were divorced. Of the 55 ever-married women, 36 had given birth to a total of 60 children in North Korea. This consists of 36 boys and 24 girls, with evidence of a preference for sons at parities of two or higher. Of the 16 divorced women, only 5 had ever borne children, suggesting that divorce may be correlated with inability or unwillingness to conceive. The proportion of North Korean migrant women who were either widowed or divorced was significantly higher than in national-level data, suggesting that one motivating factor for migration might have been the loss of a husband through death, separation, or divorce.

255 Good Friends, *Human Rights in North Korea and the Food Crisis* (Seoul: Good Friends, 2004), 7.

256 This excludes those who enter with proper documentation to visit family members, engage in trade, or conduct official business. The Center for International Cooperation for North Korean Development at Kyungnam University reported that in 2005, 240,000 Chinese traveled to North Korea while 125,000 North Koreans traveled legally to China (“Chinese Products Dominate DPRK Markets,” *NK Brief No. 06-9-6-1*, <http://ifes.kyungnam.ac.kr>).

Migration and Trafficking into Forced Marriage

Of the 101 respondents, 48 had made only one trip to China, 43 had made two trips, and ten had made three or more trips. There were 55 women who had made their first trip in either 1997 or 1998, during and just after the worst period of the North Korean famine. Out of the 101 women, 34 first came in 1998, providing further support that this was the peak year for North Korean irregular migration to China. Respondents were asked a series of more detailed questions about their most recent migration to China, including if they had ever been deceived by anyone or if anyone had coerced or forced them to do anything they did not want to do. In all, 27 women reported that they had been sold, deceived, or coerced into marriage.²⁵⁷ None reported being forced into sex work, while two reported being forced into other forms of sexual exploitation. Nearly 30% of women reported that they knew of someone who had been forced into sex work or other form of sexual exploitation. Two reported being forced into labor, and more than 20% reported knowing someone else forced into labor.

We concluded that most of the trafficking of North Korean women involved forced marriage. Our finding that 27% of women were trafficked into forced marriage might be seen as a conservative estimate in that women who made more than one trip could have been trafficked previously, but did not report being trafficked during their most recent trip. Similarly, a woman who was not currently married—but had been married previously to a Chinese man—might not have reported that she had been trafficked into a forced marriage. Those that have been trafficked into forced labor, sex work, or other forms of sexual exploitation outside of marriage would raise trafficking prevalence even higher, though our evidence suggests that trafficking into forced marriage is the most common form of trafficking involving North Korean women in China.

²⁵⁷ We used two sets of questions that allowed us to identify elements related to trafficking. The first set of questions directly asked about whether a woman was either deceived or coerced into marriage. The second set of questions inquired into the circumstances of the marriage if they did not provide consent, asking about whether they were forced, sold, had an arranged marriage, etc. If a woman indicated that she was coerced or deceived on either set of questions, she was considered to be trafficked. If a woman stated that she was sold on this second set of questions, she was also regarded to be trafficked.

Table 14. Characteristics of Trafficked and Non-Trafficked North Korean Women

Characteristics	Total (n=101)	Trafficked into Marriage (n=27)	Not Trafficked (n=74)
Current Age, mean years	33.4	31.2	34.2
Current age, no. (%) , in years			
18-19	2	1 (3.7)	1 (1.4)
20-29	33	12 (44.4)	21 (28.4)
30-39	52	11 (40.7)	41 (55.4)
40-49+	14	3 (11.1)	11 (14.9)
Education, No. (%)			
Elementary school	5	3 (11.1)	2 (2.7)
Middle/high-school	78	19 (70.4)	59 (79.7)
Vocational college/university	18	5 (18.5)	13 (17.6)
Residential area			
Rural	44	10 (37)	34 (45.9)
Urban	57	17 (63)	40 (54.1)
Marital status in North Korea			
Single (never married)	46	17 (63.0)	29 (39.2)
Married	22	7 (25.9)	15 (20.3)
Widowed	17	3 (11.1)	14 (18.9)
Divorced	16	0 (00.0)	16 (21.6)
Age at first migration	28.1	24.9	29.2
Year of first migration			
1998 or before	53	20 (74.1)	33 (44.6)
After 1998	48	7 (25.9)	41 (55.4)
Reasons for leaving North Korea (most recent trip)			
Earn money	42	14 (51.9)	28 (37.8)
Find food	20	5 (18.5)	15 (20.3)
Join family in China	10	1 (3.7)	9 (12.2)
Find relatives for help	8	2 (7.4)	6 (8.1)
Find security/better environment	8	4 (14.8)	4 (5.4)
Other	13	1 (3.7)	12 (16.2)
Main source of migration help			
Migration broker	35	11 (40.7)	24 (32.4)
Self	26	7 (25.9)	19 (25.7)
Family	14	4 (14.8)	10 (13.5)
Friends and neighbors	8	1 (3.7)	7 (11.8)
Other	5	1 (3.7)	4 (5.4)
How much money did you pay? (RMB)	235.9	152.5	262.1
How much money did others pay? (RMB)	1,706	2,945	1,057
Did those who helped you make a profit?			
Yes	37	15 (55.6)	22 (29.7)
No	61	10 (37.0)	51 (68.9)
Don't Know	3	2 (7.4)	1 (1.4)

Further analysis focuses on the phenomenon of North Korean women being trafficked into marriage, comparing their characteristics with women who were not trafficked, or at least had not been trafficked on their most recent trip to China.

Trafficked women were somewhat younger than those who were not: 31.2-years-old on average, compared to 34.2-years-old for non-trafficked women.²⁵⁸ More than three-quarters of women had completed at least middle or high school, and a majority had come from urban areas in North Korea. A higher proportion of trafficked women were from urban areas compared to rural areas. In terms of marital status, 63% of trafficked women were single when they left North Korea compared to 39% of non-trafficked women. Conversely, more than 40% of non-trafficked women were widowed or divorced at the time they left North Korea, compared to 11% of trafficked women.

Unmarried status and younger age seem to be associated with a higher likelihood of being trafficked into marriage. At the time of their first trip to China, trafficked women averaged just under 25 years of age, compared to over 29 years of age on average for non-trafficked women. Interestingly, nearly 75% of all trafficked women had first come to China in 1998 or earlier, compared to only about 45% of non-trafficked women. More than 50% of trafficked women said they had come to China to earn money, with another 18.5% saying they were hoping to find food, and nearly 15% said they were seeking greater security and a better living environment. For non-trafficked women, about 38% said they left North Korea in order to earn money, 20% wanted to find food, and more than 12% said they were joining family in China.

In terms of where they received help in migrating to China, the answers were fairly similar between trafficked and non-trafficked women. Somewhat higher percentages of trafficked women (41.7%) reported using a “migration broker,” any one of a number of individuals and organizations that have facilitated cross-border travel for a fee, compared to non-trafficked women (32.4%). Trafficked women, on average, appeared to have paid less themselves (152 Chinese Renminbi or RMB) compared to non-trafficked women (262 RMB). This typically involved bribes to North Korean border guards and payments for transportation. The amounts paid by others varied considerably, with trafficked women reporting an average of 2,945 RMB (about \$350) being paid, compared to 1,057 RMB (about \$130) for non-trafficked women. Also clearly different was the percentage of trafficked women (55.6%) who reported that those who helped them made a profit, compared to 29.7% of non-trafficked women.

Trafficking and Health

The respondents were asked a variety of questions related to their marital situation in China, their experience with sexual violence, or other intimate partner violence in either North Korea or China, and their health history, including reproductive health. As Table 15 indicates, trafficked women were at greater risk, relative to non-trafficked women, of a variety of poor health outcomes.

²⁵⁸ For the sake of simplicity, this study refers to trafficked and non-trafficked women, though it should be noted that the focus is on women trafficked into forced marriage, rather than forced labor, commercial sex, etc. It has already been noted that we asked women to describe only their most recent trip to China. Some of the women who did not report being trafficked on their most recent trip, but who had made more than one trip to China, could have been trafficked during a previous trip.

Table 15. Health Risks of Trafficked and Non-Trafficked North Korean Women

Characteristics	Trafficked			Relative Risk
	Total (n=101)	into Marriage* (n=27)	Not Trafficked (n=74)	
First sex was forced (n=99)	20	11 (42.3)	9 (12.3)	3.44
Forced sex in China (n=99)	14	10 (38.5)	4 (5.5)	7.00
Intimate partner violence (n=98)				
Verbal abuse	42	17 (63.0)	25 (35.2)	1.37
Pushed, slapped, held down	24	10 (37.0)	14 (19.7)	1.88
Punched	17	6 (22.2)	11 (15.5)	1.43
Kicked	16	7 (25.9)	9 (12.7)	2.04
No. of RTI Symptoms** (n=98)				
0	32	6 (22.2)	26 (35.1)	0.63
1-2	29	5 (18.5)	24 (32.4)	0.57
3 or more	40	16 (59.2)	24 (32.4)	2.64

* Two North Korean women who indicated they had been sold or coerced into marriage in China reported having North Korean husbands.

** RTI = Reproductive Tract Infection (including genital discharge, pain during sex, lower abdominal pain, and frequent urination).

Regarding forced sex and intimate partner violence, trafficked women were 3.4 times more likely than non-trafficked women to report that the first time they had sex was forced. They were 7 times more likely than non-trafficked women to have experienced forced sex in China, and they were between 1.4 and 2 times more likely than non-trafficked women to have experienced some form of intimate partner violence, including verbal abuse; being pushed, slapped, or held down; being punched; or being kicked. Trafficked women were also more than 2.6 times more likely than non-trafficked women to report three or more symptoms of a reproductive tract infection (RTI). Particularly significant was the much greater risk for trafficked women to report having experienced pain during sex.

Discussion

As Tyldum and Brunovskis note:

Research in the field of human trafficking is difficult for many reasons. Perhaps the most challenging is that most of the populations relevant to the study of human trafficking, such as prostitutes, traffickers, victims/survivors, or illegal immigrants, constitute so-called hidden populations. A hidden population is a group of individuals for whom the size and boundaries are unknown, and for whom no sampling frame exists. Furthermore, membership in hidden populations often involves stigmatized or illegal behavior, leading individuals to refuse to cooperate, or give unreliable answers to protect their privacy.²⁵⁹

259 Tyldum G and Brunovskis, A, "Describing the Unobserved: Methodological Challenges in Empirical Studies on Human Trafficking," in Laczko, F. and Gozdzia, E., eds., *Data and Research on Human Trafficking: A Global Survey*. Offprint of the Special Issue of *International Migration* 43.1/2 (2005).

All North Korean irregular migrants in China are members of a hidden population. Trafficked women are further hidden not only by their illegal migration status, but also because of what may be seen as stigmatized behavior, and still further by the fact that some of the traffickers are involved in other criminal activities. Trafficked North Korean women in China are at risk of arrest and deportation by police and other security officials. They risk reprisal at the hands of their traffickers, and, if married, may face punishment at the hands of their husbands if they speak about their situation. Our study supports the findings of Muico, who writes:

The majority of North Korean women who are trafficked find themselves forced into marriage. The phenomenon of forced marriage in China has been brought on by the country's growing shortage of women due to its one-child policy and a cultural preference for boys. Many men have difficulty finding a wife and shortage of women in rural areas is further exacerbated by the increased migration of Chinese women into cities. In rural towns and villages, the male to female imbalance is estimated to be as high as 13 to 10...[North Korean] women are mostly sold to Chinese farmers who are considered undesirable to Chinese women because of their poverty, age, previous marital status or disability.²⁶⁰

One respondent, who was 20 years of age and came from Musan in North Hamgyong province, attended school in North Korea for only three years due to her family's poverty. She went to China in November 2003, saying that:

I heard that people can eat rice as much as they want to in China and the Chinese were very well off. So I came to China to earn money...A North Korean asked me to come to China with him. He told me that I could make money easily here and could go back home whenever I want to. I followed him to China with other three people. It was 21 November 2003 when we crossed the river to China. He sold me to my current husband after they told me that they would find a job for me. I don't know the exact amount of the money my husband's family paid for me. My husband is a Han-Chinese and he is the same age with me. But he only has the mentality of a 7-year-old child. He always plays games with the children in our village. We do sleep together but never have had a sexual relationship. My father-in-law manages everything for us. I do farm work with my parents-in-law and they offer me food and clothes. They treat me very well. When I had a kidney operation in February 2004, they paid all the expenses for me. My husband can't have a baby although I want it so much. The local government charges me 500 RMB annually on the pretext of protecting us. But I saw some North Korean people were arrested even though they paid the money. I hope to go back home. I don't want to stay in China even for one day. I will go back to North Korea as soon as I have some money.

In this case, trafficking occurred because the woman was deceived with promises of a job and was instead sold into marriage, purchased by a family seeking a partner for their mentally disabled son. She had stayed in the marriage partly, it would seem, because "they treat [her] very well," and partly because it helped her evade detection and arrest. Her intent, eventually, was to go back to North Korea as soon as she was able to earn some money, which was her reason for going to China in the first place.

Gushulak and MacPherson have documented the range of health issues associated with human trafficking, including increased prevalence of communicable diseases, organic disorders, violence, sexual abuse, psychosocial illness, poverty, and isolation.²⁶¹ A 28-year-old woman from Chongjin, North Hamgyong province who went to China in April 1998 said that a variety of illnesses in her family, coupled with their poverty, persuaded her to come to China:

We crossed the river at 5:00 a.m. When we reached the riverbank, there was someone already waiting for us. We went into their house. The next day, we got on a bus heading to Yanji. However, there was a checkpoint on the road. I don't remember the location but I remember exactly what happened. I thought my aunt and I were the only North Koreans, but there were two other North Korean women on the bus. The police inspectors took those two women off the bus. I thought I could evade arrest, but the police officers came back and spoke to us in Chinese. I couldn't understand, so they took us away. We were taken to a house but these inspectors pitied us so gave us some food. The other women said they were going to restrooms and escaped. They locked me in a different room from my aunt. They asked me, "You don't look like you starved, why did you come to China?" So I answered, "I came to earn money."

People at that house brought me to my husband, and later I found out that I had been sold for 3,500 RMB. However, we didn't sleep together because I decided that I could not sleep with a man before getting married. After a few days, I agreed to marry the man and we got wed. Two North Korean friends came to celebrate my wedding. My husband kept on giving drinks to my friends but since both of them were unable to drink much, I took all those drinks. My husband was

260 Muico NK, "An Absence of Choice: The sexual exploitation of North Korean women in China," *Anti-Slavery International* (2005).
261 BD Gushulak and DW MacPherson, "Health Issues Associated with the Smuggling and Trafficking of Migrants," *Journal of Immigrant Health* 2.2 (2000).

very angry to see me get drunk. We got into a quarrel because of that but I tried not to let him win. Since that time until now, we quarrel fiercely. My husband often swears at me and beats me harshly. In the worst cases, he grabs everything from a knife to a scythe and beats me. Once, he tried to strangle me. As time goes by, I feel like I am only a victim in this marriage. Now, I keep my temper down, but he gets worse. However, I will have to endure all this pain because of my child. My daughter is 7 years old and we paid 200 RMB to register her [on the hukou or household registration].

Given the continued hardships of life in North Korea and the continued “market” for brides in northeastern China, irregular migration of North Korean women has continued. Many have chosen to move on to third countries, particularly South Korea. For those who stay, marriage to Chinese men offers North Korean women the best option of finding security in China though it also renders them vulnerable to trafficking into forced marriage, domestic violence, sexual abuse, and infection.²⁶²

In 2017, China was a Tier 3 country in the U.S. State Department’s Trafficking in Persons Report, meaning that the PRC “does not fully meet the minimum standards for the elimination of trafficking and is not making significant efforts to do so.”²⁶³ The report also stated:

North Korean women are subjected to forced prostitution, forced marriage, and forced labor in agriculture, domestic service, and factories. According to media and a 2015 UN report, North Korean citizens are subjected to forced labor in China by the North Korean government, possibly with the knowledge of Chinese officials. . . . The Chinese government’s birth limitation policy and a cultural preference for sons created a skewed sex ratio of 117 boys to 100 girls in China, which observers assert increases the demand for prostitution and for foreign women as brides for Chinese men—both of which may be procured by force or coercion. Women and girls are kidnapped or recruited through marriage brokers and transported to China, where some are subjected to commercial sex or forced labor.

In 2014, the UN COI found that “Violations of the right to food and to freedom of movement have resulted in women and girls becoming vulnerable to trafficking and to increased engagement in transactional sex and prostitution.” The report continued:

*Many women are trafficked by force or deception from the [DPRK] into or within China for the purposes of exploitation in forced marriage or concubinage, or prostitution under coercive circumstances. An estimated 20,000 children born to women from the [DPRK] are currently in China. These children are deprived of their rights to birth registration, nationality, education and health care because their birth cannot be registered without exposing the mother to risk of refoulement by China.*²⁶⁴

Our own research at the border in the mid-2000s, bolstered by collaboration with local NGOs and aid networks assisting North Korean refugees and migrants in China, documented the situation of children born to North Korean women. In the early years of displacement and migration, most of the North Korean children had been born in North Korea to parents who were also both North Korean. Increasingly, however, it became clear that more of the children born to North Korean women living in China were being born in China, and their fathers were not North Korean but Chinese. To which country did they belong—China, North Korea, or a third country? What prospects for a durable solution did they have to settle on any of them, and what solution was in their best interest?

²⁶² See also Hae-Young Lee, *Lives for Sale: Personal Accounts of Women Fleeing North Korea to China*. (Washington, D.C.: Committee for Human Rights in North Korea, 2009).

²⁶³ U.S. Department of State. 2017. *Trafficking in Persons Report*. Washington, D.C.: U.S. Department of State. [https://www.state.gov/j/tip/rls/tiprpt/countries/2017/271165.htm].

²⁶⁴ UN Human Rights Council, *Report on the commission of inquiry on human rights in the Democratic People’s Republic of Korea*, UN Doc. A/HRC/25/63 (Feb. 7, 2014), par. 36, 44.

D. Durable Solutions for North Korean Children in China

Study Design and Methodology

In 2007, the Johns Hopkins study team conducted a qualitative assessment of North Korean children in Yanbian Korean Autonomous Prefecture, focusing on durable solutions.²⁶⁵ The main objective was to develop a deeper understanding of the current situation and perspectives of North Korean children in China through interviews with children born in North Korea and China; parents and caregivers; community leaders; and local program staff. The focus of the study was on exploring local perspectives on durable solutions regarding two groups of children in particular: 1) unaccompanied minors, that is, North Korean children under 18, whose circumstances have left them orphaned, abandoned, or separated from parents or guardians and 2) children born to North Korean women and Chinese men.

The second objective was to develop policy options and recommendations for these children, consistent with best local practices and international guidelines to target immediate protection and assistance efforts, and to identify future durable solutions for voluntary repatriation, settlement in place, or third-country resettlement.

The study design incorporated qualitative research methods—including over 60 in-depth interviews with children, parents and guardians, community leaders, and program staff of a local NGO—with expert analysis of legal and regulatory frameworks in China, North Korea, South Korea, and other countries, including the United States.²⁶⁶ In its various program interventions in and around Yanbian, the local NGO provided services to approximately 300 North Korean children in 25 shelters, and had registered more than 200 North Korean children who were living with family.

The study team interviewed a total of 29 children aged between seven and 19, seeking to identify a mix of unaccompanied and accompanied children, male and female, older and younger, and rural and urban. Two interviews were dropped for incomplete information, leaving 27 interviews for analysis. The semi-structured interview form included five main themes for discussion, with follow-up and probe questions in italics for the interviewers. The questions for children were as follows:

1. Tell me about your family. (*past/ present, alive/deceased, are you in contact with them, future plans to meet*)
2. Tell me about your life before coming to this place. (*personal background, place of prior residence and for how long, brief educational history*)
3. Tell me how you came to this place. (*reason for coming to the shelter or other type of residence, duration of stay*)
4. Tell me about your daily living situation. (*health, education, living space, identification, security, food*)
5. What would you like to be doing in the future? (*Have you heard about children staying in China, going to another country, and going back to North Korea? What do you think about that?*)

The study team also interviewed a total of 25 parents and guardians, seeking to identify a mix of mothers, fathers, grandparents and guardians. All 25 were included in the analysis. The questions for parents and guardians were as follows:

1. Tell me about your life and family. (*birth place, ID, health, education, security, background characteristics, migration history*)
2. Tell me about the child/children you are taking care of? (*birth place, ID, physical and mental health, education, security, personality, migration history*)
3. Tell me about living conditions here. (*health, access to education, living space, food, security, ID, social activities*)
4. What do you think your child/children needs the most right now?
5. What do you think are the best solutions for you and your child/children? (*return to North Korea, stay in China, go to a 3rd country*)

²⁶⁵ We use the term “North Korean children in China” as a short-hand reference to children born to at least one North Korean parent and living in China. We do not intend that it means all such children necessarily have North Korean nationality.

²⁶⁶ For reasons of space, we focus our discussion primarily on the findings from our interviews with North Korean children and their parents or guardians.

All interviews were conducted in Korean, primarily by Korean-Chinese interviewers. Only one interviewer was a South Korean. Following the interview, notes were written by the interviewer in Korean. These were reviewed by the research coordinator and research analyst. Following acceptance of the interview as a complete record, the Korean notes were translated into English. For analysis of interview content, both Korean and English transcripts were reviewed and compared. The study was approved by Institutional Review Boards at Johns Hopkins Bloomberg School of Public Health and in Yanbian.

General Characteristics of Children

Of the 27 North Korean children, the majority (77.8%) of children were between the ages of seven and ten, with 11.1% between the ages of 11 and 14, and 11.1% between the ages of 15 and 17. Of the children between the ages of 7 and 10 (n=21), an overwhelming majority (95.2%) were born in China. By contrast, all children between the ages of 11 and 19 were born in North Korea. There was a nearly equal distribution between males (51.8%) and females (48.1%).

Birthplace. Of the 27 children, 74.1% (n=20) were born in China, while 25.9% (n=7) were born in North Korea. The characteristics of these two groups of children are given in Table 16.

Living Situation. Of the children born in China, 60% were living with family as compared to less than 30% of children born in North Korea who were living with family. Conversely, more than two-thirds of children born in North Korea were living in shelters, school dormitories, or homeless. It is also important to note that although the majority of children born in China were living with family—and this is supported by other program data and general observations—a significant proportion have left their families and are living in shelters and other locations. They may have also been abandoned or separated due to deportation and other circumstances.

Area of Residence. The distribution from the key informant interviews reflects what is seen to be a broader trend, namely that children born in North Korea are mainly living in cities and urban areas in Yanbian, while the children born to North Korean women and Chinese men are more evenly distributed between urban and rural areas.

Table 16. Birthplace of Children

		Born in China (n=20)	Born in North Korea (n=7)
Living Situation in China	Living with family	12 (60%)	2 (28.6%)
	Living in shelter	7 (35%)	3 (42.8%)
	Living in school dormitory	1 (5%)	1 (14.3%)
	Homeless	0	1 (14.3%)
Area of Residence	City	10 (50%)	6 (85.7%)
	County	10 (50%)	1 (14.3%)
Status	Accompanied	13 (65%)	2 (28.6%)
	Unaccompanied	7 (35%)	5 (71.4%)
Household Registration (Hukou)	No	9 (45%)	6 (85.7%)
	Yes	6 (30%)	1 (14.3%)
	Unknown	5 (25%)	0
Access to Education	Attending School	20 (100%)	5 (71.4%)
	Not Attending School	0	2 (28.6%)

Status. For the purposes of this study, we used the UN *Inter-Agency Guidelines* definition of “unaccompanied” children as those “who have been separated from both parents and other relatives and are not being cared for by an adult who, by law or custom, is responsible for doing so.” We then defined “accompanied” children as those who are living with at least one parent or are being cared for by an adult who, by law or custom, is responsible for doing so.

Of the children born in China, about two-thirds were accompanied, compared to less than one-third of the children born in North Korea. Again, although this was not a random sample, the risk of being unaccompanied is more clearly associated with being born in North Korea. Children born in North Korea may either cross the border unaccompanied by a parent or guardian, or they frequently become separated from their North Korean parents or guardians due to arrest and deportation. There is also the difficulty of staying together as a household or family unit with undocumented status.

Household Registration (hukou). Of the 20 children born in China, 45% did not have *hukou*, 30% had *hukou*, and 20% were not sure. This compares to the more than 85% of North Korea-born children who were lacking *hukou*.

Access to Education. All of the children born in China were attending school, compared to 71.4% of children born in North Korea. Having or lacking *hukou* and being accompanied or unaccompanied did not seem to affect access to education as much as birthplace. Having a Chinese father seemed to provide a child with the best access to education in China.

Future Durable Solutions. One of the main objectives was to explore perspectives on future durable solutions for North Korean children in China. All 27 children were asked if they preferred to return to North Korea, remain in China, or resettle in a third country. Their responses, shown in Table 17, are categorized according to their accompanied/unaccompanied status, birthplace, and age group.

Table 17. Future Durable Solutions Preferred by Children

Future Durable Solutions	Accompanied (n=15)		Unaccompanied (n=12)	
	Return	0	1 (8.3%)	
Remain	9 (60%)		7 (58.3%)	
Resettle	3 (20%)		4 (33.3%)	
Not Sure	3 (20%)		0	

	Born in China (n=20)		Born in N. Korea (n=7)	
	Return	0	1 (14.3%)	
Remain	12 (60%)		4 (57.1%)	
Resettle	5 (25%)		2 (28.6%)	
Not Sure	3 (15%)		0	

	Age 7-10 (n=21)		Age 11-19 (n=6)	
	Return	0	1 (16.7%)	
Remain	11 (52.4%)		4 (66.7%)	
Resettle	7 (33.3%)		1 (16.7%)	
Not Sure	3 (14.3%)		0	

Accompanied/Unaccompanied Status. A majority of both accompanied (60%) and unaccompanied (58.3%) children voiced their preference to remain in China. Fewer than one-third preferred resettlement in another country and only one—an unaccompanied child born in North Korea—wished to return to North Korea.

Birthplace. Disaggregating by place of birth, it was also found that a majority of children born in China (60%) and children born in North Korea (57.1%) preferred to remain in China. Fewer than one-third preferred resettlement.

Age. Breaking the population down by age, it can be seen that virtually all children between the ages of 7 and 10 were born in China while all of those aged 11 to 19 were born in North Korea. Here, two-thirds of older children expressed a preference to remain in China, compared to a slight majority of younger children.

When asked about their future, a majority of children—unaccompanied and accompanied, born in China or born in North Korea, older and younger—expressed a preference to remain in China. One nine-year-old boy born in China, living with his North Korean mother and Han Chinese father, expressed his desire to stay in China:

I want to be a president of a company or a scientist when I grow up. But in order to fulfill my dream, I have to continue to study hard. I want to visit my maternal grandmother, but I cannot go to North Korea right now so I will go when I grow up. I would like to continue to live in China because I think it is the best life for me.
(Interview 13M-CH)

Another child, a 17-year-old boy born in North Korea who crossed the border with his parents in 2006, explained his reasons for wanting to remain in China:

My father suffered a lot and was never rewarded because all of our relatives went to South Korea. He could not be promoted at his job because all of our family members defected to South Korea which was very stressful for my father. I heard from my aunt who went to South Korea that it is hard to live in South Korea because they work long hours, so I do not think that my father can survive in South Korea. If possible, I want to get a hukou, go to college, and live comfortably. Living in China is easier than living in South Korea, so that is why I would like to live in China.
(Interview 7M-CH)

There were also children who wished to resettle in a third country, whether they went there with other family members or alone. Most spoke of a wish to resettle in South Korea, though one child expressed an interest in resettling in the United States:

I want to live in South Korea with my parents because my mother has told me great things about South Korea. I heard that there are many job opportunities in South Korea so I would like to go even if it means going alone.
(Interview, 21M-CH)

I want to go to the U.S. with my family because I heard that it is a great place to live. If I cannot go to the U.S., I would like to go somewhere else abroad. I have never thought about going back to North Korea. I would like to travel there and help others who are in need, but I do not want to live in North Korea.
(Interview, 4F-CH)

General Characteristics of Parents and Guardians

Of the 25 parent and guardian respondents, 18 (72%) were female, while 7 (28%) were male. 64% (n=16) of the participants were mothers or stepmothers, 28% (n=7) were fathers, and 8% (n=2) were paternal grandmothers. All of the mothers were North Korean, more than three-quarters of whom had entered China between 1998 and 2000, following the peak years of the famine.²⁶⁷ Of the nine fathers or guardians interviewed, 5 (55.6%) were Han-Chinese, 3 (33.3%) were Korean-Chinese, and one was North Korean. Of the 25 participants, 18 (72%) lived in counties, generally in towns and villages, and 7 (25%) lived in cities.

Current Situation. Parents and guardians were asked about different aspects of their child's life, including household economic status, access to education for their child, and current health status.

²⁶⁷ Some women shared during the interview that they had entered and left China on more than one occasion due to either spontaneous return to North Korea or involuntary return after arrest and deportation.

Table 18. Household Economic Status, Access to Education, and Health Status

As Reported by Parent or Guardian		Number (Percent)
Economic Situation	Poor	11 (44%)
	Fair	6 (24%)
	Good	8 (32%)
Access to Education for Children	No	2 (8%)
	Yes	23 (92%)
Current Health Status of Children	Poor	8 (32%)
	Fair/Good	17 (68%)

Although the interviews were semi-structured, we felt it was possible to construct rough groupings of answers into categories of Poor, Fair, and Good, relative to the household economic situation and current health status. Access to education was reported as whether or not a child was attending school.

Household Economic Status. In grouping interview responses, “Poor” economic status was defined as having lack of income to purchase anything beyond essentials such as food and household necessities. “Fair” economic situation was defined as having enough income to purchase items beyond the essentials once in a while such as meat, toys, and new clothing. “Good” economic situation was defined as owning their home, eating meat frequently, and being able to provide their child with toys and clothing as well as having electronic goods, such as a refrigerator, TV, and a washing machine. Of the six parents and guardians who lived in the city, the majority (66.7%) reported their economic situation as relatively “Good,” whereas the majority (57.9%) of those who lived in counties reported their economic situation as “Poor.”

Access to Education. Access to education was categorized according to the parents’ or guardians’ response to whether their child was able to attend school or not. In some cases, parents expressed dissatisfaction with the quality of education available locally and wanted to send their child to an alternate location, but were unable to do so due to cost, distance, or security concerns.

Current Health Status. Poor health status was categorized by reports of a child being disabled, frequently or chronically ill, malnourished, and other signs of poor health. Fair or Good health status was categorized by reports of only minor health conditions, such as having a cold, by reports of good health, or by no reports of ill health.

When asked about the immediate needs of their child, many parents and guardians voiced a need for money to obtain *hukou* and to provide for their child’s education as well as other basic necessities. A North Korean mother with a 17-year-old son who was born in North Korea expressed her great desire for him to obtain *hukou* so that he could attend school:

I want so much for my son, but his most urgent need is gaining Chinese citizenship so that he can attend school. My son wants to be a professional soccer player or a musician, but none of this is possible without an education. At this point, the only way for my son to get Chinese citizenship is if we have a large sum of money, but that is not an option right now because we don’t have that kind of money. Because my son is not able to go to school, he has not been able to make friends so he frequently asks me if he will ever be able to make friends and play with them before he dies, which is heartbreaking for me to hear as a parent.
(Interview 4F-PG)

Another North Korean mother living with her eight-year-old son, born in China, and Korean-Chinese husband shared her difficult financial situation:

We have always struggled financially so I doubt that this will ever change. My husband wants to work in South Korea because he thinks that he can make more money in South Korea, but it has been extremely difficult for him to get a work visa so I am not hopeful that he will be able to go to South Korea any time soon. Right now, he is working with his brother in a rural area doing farm work and we are barely making ends meet. I thought about working part-time, but my husband has forbidden me to work because he is afraid that I'll get arrested so I have no choice but to stay home and take care of my son and be frugal... The other issue is that we don't have enough money to go to the hospital so we only go in urgent situations and even then we try to stick it out because it costs too much money to see a doctor.
(Interview 17F-PG)

Future Durable Solutions. All 25 parents and guardians were asked if they preferred that their child return to North Korea, remain in China, or resettle in a third country.

Table 19. Future Durable Solutions for Children Preferred by Parents or Guardians

	Mother (n=16)	Father (n=7)	Guardian (n=2)
Return	0 (0%)	0 (0%)	0 (0%)
Remain	8 (50%)	7 (100%)	1 (50%)
Resettle	8 (50%)	0 (0%)	1 (50%)

Of the 16 North Korean mothers, 8 (50%) thought their child should remain in China, while the remaining 8 (50%) thought it would be best for their child to resettle in South Korea. Of the seven Korean-Chinese and Han Chinese fathers, all stated that their preferred durable solution for their child was that he or she remain in China. Of the two guardians, both of whom were Korean-Chinese grandmothers, one grandmother thought that her grandchild should remain in China with her family, while the other grandmother said that it would be in the best interest of her disabled grandchild to resettle in South Korea in order to receive medical treatment.

A 41-year-old Han-Chinese father living with his North Korean wife and nine-year-old son conveyed that he wanted his son to remain in China with his family:

My son will eventually live wherever he wants but for right now, he cannot live without his parents because he is too young and I think it is important for children to be with their parents when they are young. I do not want my son to go to South Korea and I told him that 'if you are a good person, you should work for your country because you can only make a little bit of money working in other countries. Besides, you are helping foreigners and not Chinese.' Maybe I am too patriotic, but I want my son to remain in China.
(Interview 5M-PG)

Unlike the fathers, the responses of the North Korean mothers were mixed. Of the mothers interviewed, half wanted their children to remain in China and half preferred that they resettle in another country (all references were to South Korea). One mother said:

If my son is able to obtain a hukou, I would like for him to stay in China, but who knows if that will ever be a possibility. I do not want to go to South Korea even if we had the option to go there because I have heard terrible things about living in South Korea. The cost of living in South Korea is extremely high so I do not know that life in South

Korea would be better for my son. I want my son to get a hukou so that he can go to school and create a life for himself here in China so that I don't have to worry about him getting arrested. I think it would best for him to stay in China.
(Interview 4F-PG)

Similarly, a mother living with her nine-year-old daughter thought that it would be in the child's best interest to remain in China:

I think it would be best for my daughter to stay in China, especially if she is granted a hukou. Other North Korean women have tried to convince me to take my daughter to South Korea, but I do not think it is worth all the trouble and she would have to adjust to a new environment. I do not think that my daughter wants to move to South Korea, so I would rather that we stay together as a family. My daughter might be open to the idea of going to South Korea without her father, but I think they need to work on mending their broken relationship.
(Interview 7F-PG)

For other North Korean mothers, resettlement in South Korea was the preferred solution:

I wish we could all resettle in South Korea so that I can make more money. My pay is less than those who have a hukou. Because I am North Korean, I have to live quietly and not cause any trouble, but I would not have to worry about this in South Korea. I feel as though I am not living my life here freely because I am North Korean, so I think it would be best for us to go to South Korea.
(Interview 18F-PG)

One mother with a disabled child indicated a preference for going to the United States:

I learned from watching TV that America gives preferential treatment towards those who are disabled, so I want my son to live in America. But I can't speak English, which is a problem...I would like to meet other parents who have disabled children so that I can learn from them. I am worried that I am not able to take good care of my disabled son in China.
(Interview, 12F-PG)

Discussion

It was fairly clear that for those respondents who were Chinese nationals—the Chinese fathers and grandmothers of the children born in China—the best interest of the child was served by remaining in China with Chinese family members. The only exception was the grandmother who felt that her grandchild could get better medical treatment in another country. For the North Korean mothers—who did not have citizenship in China and who felt hampered by the lack of freedom to move about and to work, and who felt threatened by the risk of arrest and deportation—the question of what is in the best interest of their children was more challenging. Should the mother stay in China for the sake of the child, thereby risking her own safety? Should she take the child to South Korea and risk possibly breaking up the family and separating the child from the father?

Although respondents, fathers and mothers alike, were reluctant to discuss the issue, the fact that all Chinese fathers preferred their children to stay in China while only half of North Korean mothers felt the same way suggested that, in many households, the parents were in disagreement about what is in their children's best interest, where they should be living, and perhaps even what nationality they are or should be. Children, perhaps taking after their mothers, expressed mixed views about whether it was better to stay in China or resettle in a third country. Only one child expressed a desire to return to North Korea.

The Preamble to the UN Convention on the Rights of the Child—to which China, North Korea, and South Korea are States Parties—recognizes the family “as the fundamental group of society and the natural environment for the growth and well-being of all its members and particularly children” and, thus, “should be afforded the necessary protection and assistance so that it can fully assume its responsibilities within the community.” For North Korean women coming to China, marriage has often been a means of survival rather than a relationship entered into on the basis of mutual respect, affection, and autonomy. In considering the best interest of a child born of such a relationship, the fundamental question is: who decides? How is it possible to protect and assist the family, including *all* of its individual members, when that family may be divided against itself?

If there were internal pressures dividing families from within, the external pressures dividing them from one another were even more powerful. This includes the pull of resettlement in South Korea and other countries as well as the persistent risk of arrest and deportation in the face of continued migration from North Korea. Whether they were born in North Korea or in China, children born of North Korean women who were in China without legal status or protection faced present-day risks and future uncertainty. They could not return to North Korea voluntarily in safety and dignity, and they faced severe punishment if they were returned involuntarily. If they sought resettlement in a third country, it had to be done through clandestine means and for children born in China, it may mean leaving their father behind. Local integration was available through informal arrangements, but it came in the form of a local commodity to be purchased or negotiated rather than as a right that was bestowed. As additional studies would come to show, North Korea-born children would eventually disappear from China, while the number of children born to North Korean mothers and Chinese fathers would rise dramatically.

E. Monitoring Migration and Vulnerability

Methodology

From 1999 to 2008, Johns Hopkins worked with a local partner organization which maintained a network of ten “sentinel surveillance sites” in Yanbian Korean Autonomous Prefecture to monitor, on a monthly basis, arrivals, departures, and general estimates of the size of North Korean border crossers at these local sites.²⁶⁸ From September 1999 to September 2008, community-based monitors at ten sites in northeast China tracked arrivals and departures of North Koreans in their area (a defined village or urban neighborhood) on a monthly basis, including some demographic estimates (North Korean population estimates, and movements in and out) and arrest or deportation events. The results are reported in Figures 10 and 11.

In addition to aggregate site-level estimates, local monitors interviewed a select number of North Korean new arrivals, long-stayers, and North Korean women and their children. The primary focus of these monitoring reports was to inform local program decision-making, regional, and international stakeholders in the humanitarian community about North Korean cross-border movements and protection concerns.

Community-based Korean-Chinese monitors at the ten sites were asked to monitor five key population trends in their area utilizing their contacts in the North Korean community and knowledge of local conditions: 1) estimated population of North Koreans in their area at the beginning of the month; 2) North Korean arrivals into the area during the month; 3) arrests in the area during the month, including details on age, gender, and cause of arrest if known; 4) departures from the area during the month; and 5) estimated population of North Koreans in the area at the end of the month. Using these numbers, we estimate a monthly arrest rate as the number of arrests divided by the mid-month estimate of North Koreans in the area.

²⁶⁸ Departures include voluntary returns as well as arrests and deportations.

Figure 10. North Korean Arrivals at 10 Sites in Northeast China, 1999–2008

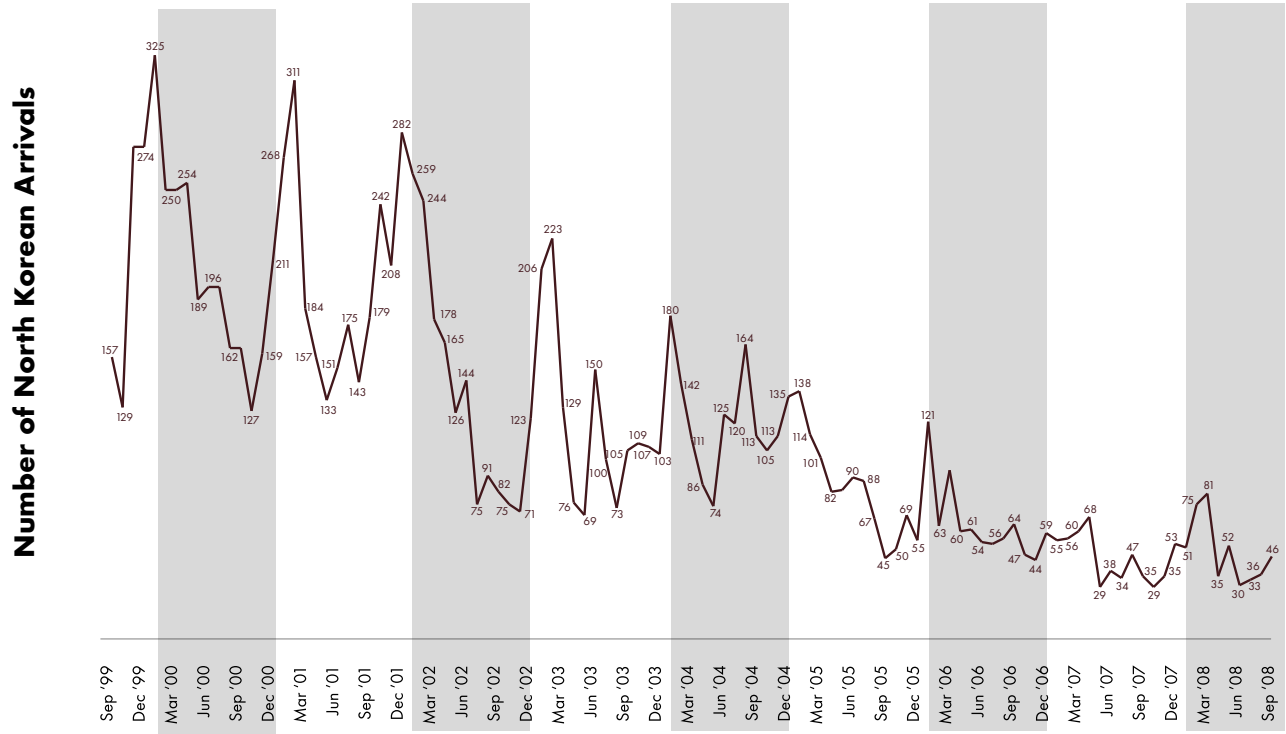
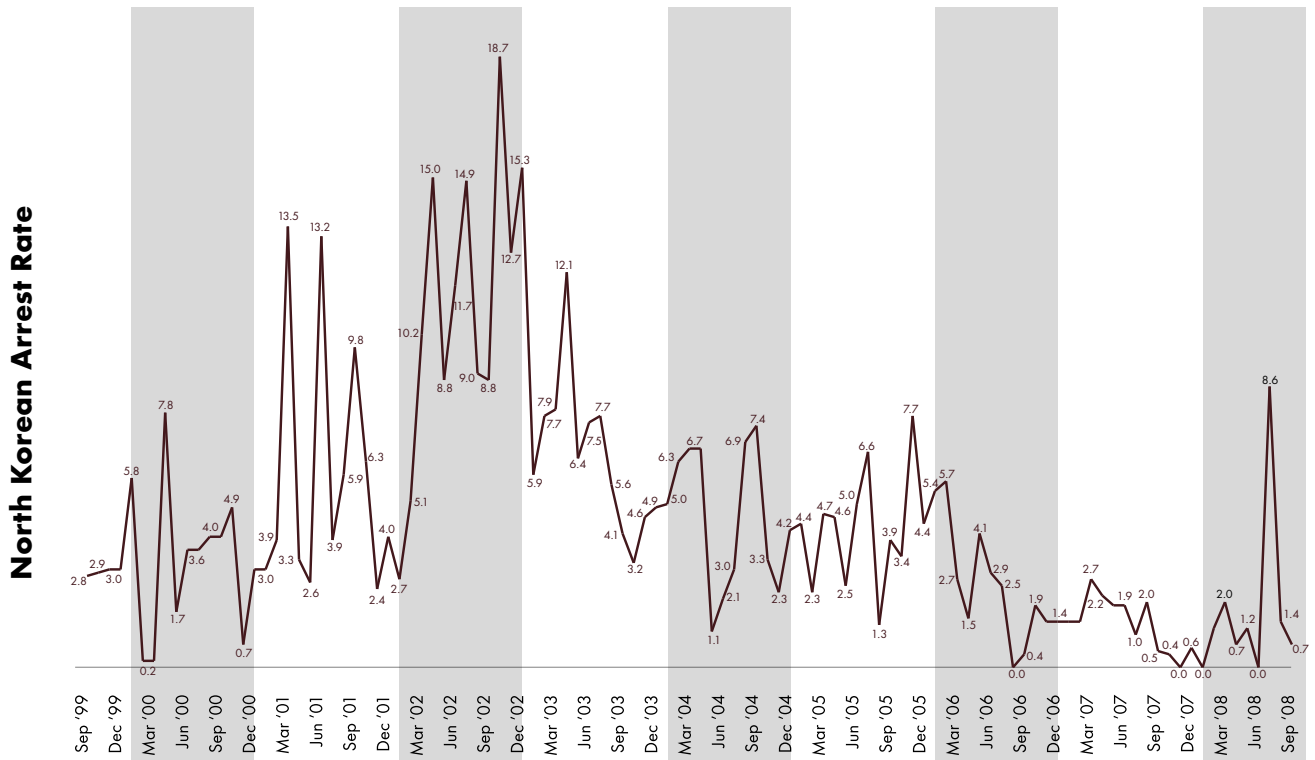


Figure 11. North Korean Arrest Rates at 10 Sites in Northeast China, 1999–2008



Results

While sentinel site surveillance cannot provide reliable total estimates of North Korean arrivals in Northeast China, it can provide reasonably reliable estimates of trends, assuming that site monitors maintain consistent methods of monitoring and reporting local population events. Key trends over the ten-year period included a clear, seasonal spike in arrivals during the winter months. This was likely due to food and fuel scarcity in North Korea, and looser security on both sides of the border. There was also an overall decline in the number of arrivals from 1999 to 2008.

In terms of arrests and deportations, there were also two clear trends. First, arrest and deportation rates tended to be highest in the summer months, when more international aid and advocacy groups were especially active in China and border security was, perhaps, correspondingly tightened. Second, the highest arrest rate was 18.7% in March 2002, when a group of 25 North Korean asylum-seekers pushed their way inside the Spanish Embassy in Beijing and sought international protection. This event precipitated many more such entries into foreign embassies, consulates, and even foreign-run schools in Beijing and other large cities in China. It also prompted an immediate and sustained crackdown by Chinese authorities on North Korean refugees and asylum-seekers, and on foreign groups that provided assistance. Cross-border arrivals declined dramatically and never returned to 1998–1999 levels, despite continued food insecurity, economic hardship, and ongoing human rights abuses in North Korea. Rates of arrest and deportation declined somewhat for several years, but spiked again in the months just before and after the 2008 Summer Olympics in Beijing. This, ultimately, proved to be the end of the sentinel site surveillance project, as authorities cracked down on organizations aiding or documenting issues related to North Koreans in China.

In late 2008, in one of the very last monthly monitoring reports, site monitors reported only 24 new arrivals across all sites. Of the North Korean populations in their area, they estimated that more than 90% were women, most of whom were married to Chinese men. Some were reported to be living in relative obscurity and safety, though the risk of arrest and deportation was ever-present. Of the two arrests that month, local program staff reported:

...the case of a 35-year-old woman from North Hamgyong Province who was sold to a Han-Chinese man four years ago for 10,000 RMB. She was beaten and tortured a great deal before she became pregnant and gave birth to twins. After three months, she succeeded in running away but she was captured by another trafficker and sold to another Chinese man for 23,000 RMB. According to her, she was sold nine times and the total amount was around 150,000 RMB. She finally was lucky to be sold to a 41-year-old Han-Chinese man who is kind to her not like other Chinese men. She said to him she had a son in North Korea and he agreed she could bring him to China. She succeeded in crossing and returning to China with her nine-year-old son. Her son looked like he was six-years-old and was very skinny. He was fed by his grandmother, but after class, he always went to the market to eat food abandoned by others. Now mother and son are planning to go to Liaoning Province where her current husband lives because she feels comfortable living with him. She does not think of going to a third country but wants to live with her current husband. Her current husband promised her he will buy a hukou for her child and send 10,000 RMB to her family member in North Korea. She and her son hope or dream that they can live in China both with plenty of food to eat and with a hukou; these two things are all they want now to live in China...According to many local observers getting a hukou...and an education for children are the most critical issues to live in China.

After the program was shut down in 2008 due to security concerns, it was started again and ran intermittently from 2009 to 2014 with selected sites in northeast China, but with reporting on a quarterly basis. Following the death of Kim Jong-il on December 17, 2011, border security on both sides tightened considerably. Initially, cross-border movements consisted mostly of legal North Korean visitors returning to participate in state-mandated mourning activities. In the longer term, our monitoring team projected that border security would remain tight, particularly on the North Korean side, and that the movement of North Korean migrants, refugees, and asylum-seekers into China would decline. Indeed, our monthly monitoring report for the first three months of 2012 documented:

...the virtual lack of cross-border movement during the period. Only one new North Korean arrival was reported in the ten sites in the three-month period and only one deportation was reported. No movements were reported to third countries, a trend supported by the decline in arrivals from North Korea to South Korea in the first four months of 2012...It is virtually certain that this decline in cross-border movements is associated with the death of Kim Jong-il in December, 2011 and the intensification of border security and control of population movements in North Korea that followed as Kim Jong-un assumed power.

Discussion

The tightening of border security in late 2011 and early 2012 was the third inflection point in a decade since the post-March 2002 crackdown on North Korean migrants and refugees and the subsequent crackdown in late 2008, which also forced out many aid and advocacy organizations operating in northeast China. Humanitarian access to and documentation of cross-border movements on the China-North Korea border has been highly constrained for many years. The information that is available, however, suggests that movement is limited and the threat of arrest and deportation remains very real.

In 2014, the UN COI found that:

Despite the gross human rights violations awaiting repatriated persons, China pursues a rigorous policy of forcibly repatriating citizens of the [DPRK] who cross the border illegally. China does so in pursuance of its view that these persons are economic (and illegal) migrants. However, many such nationals of the [DPRK] should be recognized as refugees fleeing persecution or refugees sur place. They are thereby entitled to international protection. In forcibly returning nationals of the [DPRK], China violates its obligations to respect the principle of non-refoulement under international refugee and human rights law.²⁶⁹

In September 2017, Human Rights Watch (HRW) reported that a total of 41 North Korean refugees had been apprehended by Chinese authorities in July and August 2017, a steep increase from the 51 North Koreans that HRW estimated had been caught between July 2016 and June 2017. Starting in July 2017, HRW said that “China appears to have intensified its crackdown on groups of North Koreans trying to move through China in search of protection in a third country, and the networks of people that facilitate their escape.” It further estimated that more than half of the 91 people caught since June 2016 had been forcibly repatriated to North Korea, while the rest remained in Chinese custody.²⁷⁰

F. Population Estimates of Children Born in China to North Korean Mothers

Estimates of North Korean refugee and migrant numbers, population characteristics, and migration trends over time have proved logistically difficult and politically sensitive. The only point on which refugee advocates and critics seem to be able to agree is that North Koreans in China have been difficult to count. As noted in a 2007 Congressional Research Service report,

There is little reliable information on the size and composition of the North Korean population located in China. Estimates range from as low as 10,000 (the official Chinese estimate) to 300,000 or more. Press reports commonly cite a figure of 100,000 to 300,000. In 2006, the State Department estimated the numbers to be between 30,000 and 50,000, down from the 75,000 to 125,000 range it projected in 2000. UNHCR also uses the 2006 range (30,000 to 50,000) as a working figure. UNHCR has not been given access to conduct a systematic survey. Estimating the numbers is made more difficult because most North Koreans are in hiding, some move back and forth across the border—either voluntarily to bring food and/or hard currency from China to North Korea—or because they are forcibly repatriated... Clearly, the refugees’ need to avoid detection, coupled with a lack of access by international organizations, make it difficult to assess the full scope of the refugee problem.²⁷⁰

269 UN Human Rights Council, *Report of the commission of inquiry on human rights*, UN Doc. A/HRC/25/63, par. 43.

270 Phil Robertson, “North Korean Refugees Trapped by China’s Expanding Dragnet,” *Human Rights Watch*, Sep. 17, 2017. <https://www.hrw.org/news/2017/09/18/north-korean-refugees-trapped-chinas-expanding-dragnet>.

Study Design and Methodology

In 2007, the Johns Hopkins study team, in collaboration with local partners, undertook an estimation of the population of North Korean refugees and irregular migrants in Yanbian Korean Autonomous Prefecture, where the majority of the North Korean population in China was believed to be residing. The study aimed to estimate North Korean refugee population trends in Yanbian during the past ten years—including arrivals, internal migration, departures, and changes in demographic characteristics—using key informant interviews with community contacts in a geographically randomized selection of sites.

Given the undocumented status of most North Korean migrants and asylum-seekers in China and the fact that they are either transient or hidden to evade detection and deportation, it was not possible to employ a sampling strategy based on known numbers of North Koreans in Yanbian or elsewhere in China. Also, given that one of the key questions of interest was the size and distribution of North Koreans in Yanbian, it would not be a particularly robust approach to focus sampling in areas where North Koreans were known or believed to be present.

The approach we developed was to first randomly select forty sites in Yanbian, stratified by city or county districts to capture a broad geographic distribution of locations. We then interviewed 3-5 key community informants at each site to obtain local, community-based estimates of North Korean population size, demographic characteristics, and trends over time. We label this approach Community Key Informant Estimation (CKIE).

Building on that initial methodology, we felt that information about North Koreans in the surrounding provinces outside of Yanbian was needed to provide a more comprehensive understanding of this population's presence throughout the northeastern region as well as their potential humanitarian needs. In 2009, Johns Hopkins and local partners conducted an estimation of the population of North Koreans in three provinces in Northeast China: Jilin (excluding Yanbian), Heilongjiang, and Liaoning. To obtain information about the population of North Koreans and children born to North Korean women in China, we conducted semi-structured interviews with three community key informants from each of 36 geographically randomized sites selected in each of the three provinces in this study, totaling 108 interviews in all.

Each of these sites was visited by a trained team of two local interviewers to identify key informants who were willing to provide information about North Korean populations living at the site. Additionally, if there were any parents or guardians of children born to North Korean women, the team asked to interview them to identify population estimates as well as household characteristics and the current living situation of their children. When deemed safe and appropriate, the team also asked these parents or guardians for permission to interview one of the children about their current living situation. The study thus incorporated two basic components: a population estimation component and a household composition component.

Finally, in 2012–2013, the Johns Hopkins study team combined all these geographic areas and updated its estimates of the total population of North Korean refugees and migrants in selected areas in Heilongjiang, Jilin, and Liaoning provinces, including the estimated number of children who were born to North Korean women and Chinese men in China. Semi-structured interviews were conducted with key informants from 48 geographically randomized sites selected in Heilongjiang, 36 randomized sites in Liaoning, and 36 randomized sites in Jilin—including 12 sites in Yanbian. Each site was visited by trained local interviewers to identify key informants who might provide information about the North Korean populations living at the site. Questions were asked of a total of 360 adult key informants across 120 sites with topics including the following:

- Total current population of North Koreans in the area
- Estimated current number of North Korea-born adult males and females
- Estimated current number of women married to Chinese men
- Estimated current number of North Korea-born children
- Estimated current number of North Korea-born male children
- Estimated current number of North Korea-born female children
- Estimated current number of children born in China to North Korean mothers
- Estimated current number of male children born in China to North Korean mothers
- Estimated current number of female children born in China to North Korean mothers
- Total population of North Koreans in the area in 1998, 2002, and 2009
- Estimated female proportion in 1998, 2002, and 2009
- Total population of children born to NK mothers in 1998, 2002, and 2009

In each of the three provinces of northeast China, questions about household composition were asked of 30 parents or guardians of children born to a North Korean parent in China. These questions focused on such topics as:

- **Parent/guardian information:** age, gender, nationality, ethnicity, education, occupation, time at current residence, relationship to children born to the North Korean woman, current household composition, and status of parent(s) if not living in the household.
- **General household characteristics:** number of people in the household, number of births in the last year, number of deaths in the last year, number of in-migrations and out-migrations in the last year, and household average monthly income.
- **Children born in China to a North Korean mother:** age; gender; out-migrations; household registration status, education, and major issues or problems faced.

All studies were reviewed and approved by the Institutional Review Board at Johns Hopkins University and by a local community review board in China.

Population Estimates

Table 20 presents our Low, Medium (Average), and High population estimates for 1998, 2002, 2009, and 2012–2013 for the total population of North Korean refugees and migrants, the population of North Korean women, and the population of children born to North Korean women and Chinese men. The Low, Medium, and High estimates for a particular site, which were then aggregated to the district or prefecture-level and then extrapolated to the province-level, simply counted the lowest figure provided by community key informants as the Low estimate, the highest figure provided by community key informants as the High estimate, and the average of all community key informant estimates per site as the Medium estimate.

North Korean Population Estimates. Overall, for the three provinces, the 2012–2013 study estimates indicate that the 1998 population of North Korean refugees and migrants ranged between 50,000 and 139,100, with a mid-range estimate of around 90,000. For 2002, the year that China launched the first of its major crackdowns at the border, our three-province study estimated a total North Korean population with a low of 47,500, a high of 110,800 and a mid-range estimate of 74,100. By 2009, a year after the 2008 crackdown on North Korean refugees and aid organizations at the border, the population of North Koreans in northeast China fell dramatically as new arrivals declined and movement to South Korea accelerated. Our estimates for that year range from a low of 8,000 to a high of 20,900, with a mid-range estimate of 13,800. As of 2013, our latest survey findings estimated that the total North Korean refugee and migrant population in northeast China had declined to around 10,400, with a range of 5,300 to 15,300.

The other pattern evident from these estimates over 15 years was the shift in the population away from Yanbian and other areas proximate to the border and towards Heilongjiang province and other areas farther from the border. In 1998, our estimates showed that 43% (38,600) of the mid-range estimate of 90,000 North Koreans in northeast China were living in Yanbian. As border crackdowns occurred and life near the border seemed more precarious, more North Koreans moved to inner areas like Heilongjiang and northern Liaoning province—particularly in and around Shenyang. As of 2013, more than 87% of the remaining North Koreans lived outside of Yanbian and Jilin province.

Table 20: Estimates of Total North Korean Population, North Korean Women, and Children Born to North Korean Women in northeast China: 1998, 2002, 2009, and 2013

		North Korean Population Total			North Korean Women			China-born Children		
		Low Est.	Avg. Est.	High Est.	Low Est.	Avg. Est.	High Est.	Low Est.	Avg. Est.	High Est.
1998										
Heilongjiang Province	35,822,646	12,773	16,842	21,108	6,359	9,823	14,209	850	1,542	2,380
Jilin Province	24,473,170	3,537	4,890	6,112	3,078	4,105	5,480	66	240	393
Yanbian Prefecture*	2,197,272	15,698	38,571	74,273	9,434	23,181	44,638	1,719	4,224	8,133
Liaoning Province	41,440,464	18,035	27,776	35,653	13,415	21,097	25,800	4,536	7,515	10,131
Total NE China Population		50,043	90,077	139,144	34,284	60,204	92,125	9,169	15,519	23,035
2002										
Heilongjiang Province	36,652,506	17,187	22,035	28,670	12,023	16,836	23,909	1,604	3,040	4,762
Jilin Province	24,658,299	2,532	3,450	4,694	2,298	3,100	4,105	742	1,113	1,594
Yanbian Prefecture*	2,222,020	13,543	24,286	40,644	8,776	15,737	26,337	1,501	2,691	4,503
Liaoning Province	42,208,360	14,277	24,352	36,738	11,996	20,567	31,005	6,818	10,214	12,719
Total NE China Population		47,489	74,123	110,836	35,093	56,240	84,356	10,655	17,058	23,578
2009										
Heilongjiang Province	38,104,759	3,661	5,224	7,105	3,479	5,060	7,105	5,851	7,524	9,326
Jilin Province	25,190,697	1,027	1,748	2,491	984	1,639	2,338	655	1,005	1,420
Yanbian Prefecture*	2,271,600	775	1,038	1,376	752	1,022	1,376	865	1,151	1,466
Liaoning Province	43,746,323	2,561	5,819	9,884	2,394	5,151	8,464	6,013	8,687	11,471
Total NE China Population		8,024	13,829	20,856	7,609	12,872	19,283	13,384	18,367	23,683
2013										
Heilongjiang Province	38,519,689	3,047	4,326	5,542	3,014	4,240	5,575	10,770	12,735	14,427
Jilin Province	25,313,272	306	764	1,332	306	764	1,332	524	873	1,332
Yanbian Prefecture*	2,284,320	383	602	865	376	587	850	602	925	1,339
Liaoning Province	44,147,914	1,586	4,732	7,515	1,559	4,620	7,820	5,316	7,570	10,214
Total NE China Population		5,322	10,424	15,254	5,255	10,211	15,577	17,212	22,053	27,312

*Note: We are using results from the 2007 study of Yanbian Prefecture for population estimates for 1998 and 2002. That study sampled in 40 sites as opposed to only 12 sites in Yanbian for the 2012–2013 study and we feel provide more reliable estimates. We continue to use the 2012–2013 study data for Yanbian population estimates since the 2007 results would not apply.

North Korean Women. One of the clearest findings of the 2012–2013 study, which is also supported by our 2009 study and the 2007 study in Yanbian, is that the proportion of North Korean women in China has been steadily increasing to the point that it has reached well over 95% in all of the provinces studied. In 1998, the estimates of North Korean women ranged from a low of 34,300 to a high of 92,100, with a mid-range estimate of 60,200. This corresponds to the North Korean women comprising approximately two-thirds of the total estimated North Korean population, with proportions including 58% in Heilongjiang, 60% in Yanbian, 76% in Liaoning, and 84% in areas of Jilin excluding Yanbian. As of 2002, the number of North Korean women was at a mid-range estimate of 56,200, or about 77% of the total population. For 2009, the number of North Korean women ranged from a low of 7,600 to a high of 19,300, with a mid-range estimate of 12,900. As of 2013, the number of North Korean women in northeast China ranged from a low estimate of 5,300 to a high of 15,600, with a mid-range estimate of 10,200, close to 99% of the North Korea-born population remaining in China.

Children Born in China to North Korean Women. Despite the overall decline in the number of North Korean women in northeast China, the estimated number of children born in China to North Korean women and Chinese men has grown and is now more than twice that of the estimated number of North Korean women. In the 2012–2013 study results, we estimated that the number of children born in China in 1998 ranged from a low of 9,200 to a high of 23,000, with a mid-range estimate of 15,500. As of 2002, we estimated a mid-range population of 17,000 children born to North Korean mothers in China. By 2009, we estimated the China-born population of children ranged from a low of 13,400 to a high of 23,700, with a mid-range of

18,400. As of 2013, the number appears to have increased again, to a low of 17,200, a high of 27,300, and a mid-range estimate of 22,100.

In Heilongjiang, we had found that the mid-range estimate of children born in China had increased from 7,500 in 2009 to 12,700 in 2013. We initially assessed that this was not due to in-migration from other parts of China or to changes in fertility rates. Instead, as the children aged and began to engage in more public activities like attending school and community events, key informant estimates of the number of these children may have increased. In other words, these children simply became more visible as they aged. This could account for some of the increase, but our analysis of the Jilin and Liaoning data leads us to conclude that there was also a decline of around 1,500 children born in China in these areas between 2009 and 2013. Some of this could be due to migration to South Korea and other third-country destinations, but some could also be out-migration to other parts of China, including Heilongjiang. Overall, however, the estimated number of children born in China to North Korean mothers appears to have increased between 1998 and 2013, despite the fact that the number of women has declined and the emigration of these children to South Korea and other destinations has continued.

It should be emphasized that the estimates we provide present ranges and not definitive point estimates. Moreover, they are based on community key informant estimation methods, not any official data or population-based surveys. Nevertheless, our estimates present estimates based on random selection of geographically stratified sites and range calculations and extrapolations grounded in accepted demographic methods. Furthermore, the picture they present is a plausible one, borne out by media and NGO reporting, indicating a gradual but dramatic decline in the number of North Koreans living in northeast China.²⁷¹

With the rise in the proportion of North Korean women—whose most common coping mechanism of marrying a Chinese man may be both a means of survival and a source of risk—comes a corresponding rise in the number of children born to North Korean women and Chinese men. If there were only around 10,000 North Korean women in China and perhaps 22,000 children, then either each woman is living with 2.2 children or many, perhaps most, are living without a mother. As data from our interviews with parents and guardians of these children suggest, the great majority are living with only their father or with neither parent.

Household Composition

Combining the results from the 30 interviews with parents or guardians of children born in China to a North Korean parent in Heilongjiang with the 60 additional interviews carried out with parents or guardians in Jilin (including Yanbian) and Liaoning, we can make several observations:

The top three problems are “poverty,” “living without parents,” and “education.” Asked to name the most important problem that children born in China to a North Korean parent face in their lives, parent and guardian respondents stressed these three issues (Table 21). It is interesting how frequently the parents and guardians mentioned education since, in all 90 cases, children were reported to be in school; it is not *lack* of education that is a problem. Rather, according to anecdotal information from interviews conducted by our research team over many years, it is the costs associated with attending school—including fees, transportation, and uniforms—that pose a problem for low-income families. Another frequently raised issue was the difficulty that children have in school, including with coursework, homework, and sometimes behavioral problems. The last of these issues is perhaps the reason that mental health problems were cited by 20 respondents.

271 The number passing through to South Korea and other third countries is another matter, as discussed in Chapter 7.

Table 21. Top Three Problems Facing Children Born in China to North Korean Mothers: Heilongjiang, Yanbian, Jilin, and Liaoning

Problem/Issue	Ranked First	Ranked Second	Ranked Third	Top Three (Total)
Poverty	35	34	10	79
Living Without Parents	29	14	17	57
Education	20	29	33	82
Mental Health	2	9	9	20
Physical Health	2	4	14	20
Lack of Hukou	2	0	1	3
Lack of Nationality	1	0	0	1

North Korean mothers have been deported or moved away from nearly 90% of households. Out of 90 households, 26 North Korean mothers of children born in China have been deported, 28 have moved to South Korea, and another 24 have moved elsewhere—possibly to other places in China, to third countries, or back to North Korea (Table 22). Children born in China to these women may be living in low-income families. However, they have *hukou*, they are in school, and they have valid claims to Chinese nationality, which are being given at least *de facto* local recognition. North Korean women in China have been systematically denied protection under Chinese or international law, including the right to seek asylum as well as the right to family unity. It is this lack of rights that remains the most fundamental protection problem facing North Koreans in China. As much as any other factor, this problem has contributed to the steady decline in the number of North Korean women in China.

Table 22. Circumstances of Parent Departure from Household

Outcome	Heilongjiang	Yanbian	Jilin	Liaoning	Total
Mother deported	8	11	3	4	26
Mother to SK	6	10	8	4	28
Mother left household	12	7	3	2	24
Mother died	1	1	0	0	2
Father to SK	6	4	3	2	15
Father left household	1	5	3	4	13
Father died	2	2	1	0	5
Both parents remain	5	5	1	0	11

Parental separation is the norm. As noted above, “living without parents” was cited by 57 of 90 respondents. Only eight households out of 90 reported that children born in China to a North Korean parent are living with both parents, and another three reported that the child or children were living with their mother only (Table 23). This means that the mother is present in only about 10% of households. In over 41% of the households, children are living with only a father. Moreover, in nearly 47% of households, children are living with neither parent. Roughly speaking, almost half of the children born in China to North Korean mothers could be categorized as separated children.²⁷² The proportion who are unaccompanied is harder to measure, as would be the proportion who may be defined as orphans. Data from an NGO working with this population in northeast China suggests that 11.5% are living in foster care situations or with no family, and that 13.7% are orphans.²⁷³

Table 23. Parental Status of Children Born in China to a North Korean Parent

Parental Status of Child(ren)	Heilong-jiang	Yanbian	Jilin	Liaoning	Total	Percent
Living with both parents	2	5	1	0	8	8.9
Living with mother only	2	1	0	0	3	3.3
Living with father only	10	18	5	4	37	41.1
Living with neither parent	16	11	9	6	42	46.7

If our population estimations are correct, there are more than 22,000 children born in China to a North Korean woman. There are also nearly 10,000 North Korean women still present in northeast China. Applying a proportion of 47% to those children who are not living with either parent, then about 10,300 children are separated from both parents. If 11.5% of children are living in foster care situations or with no family, then perhaps 2,500 might be considered unaccompanied. The fundamental lack of protection and rights for the mothers of these children creates a double jeopardy not only for the women who face deportation, but also for the children they leave behind.

272 International Committee of the Red Cross, *Inter-agency Guiding Principles on Unaccompanied and Separated Children* (2004), 13.

273 The definition of “orphan” in a Chinese context is problematic. Xiaoyuan Shang, recognized as a leading researcher on vulnerable children in China, suggests that the term orphan (*gu'er*, *gu* meaning solitary, isolated, or alone) in China should be thought of loosely as referring to “children who are no longer cared for by their parents.” High, A.J., “China’s Orphan Welfare System: Laws, Policies and Filled Gaps,” *U. of Pennsylvania East Asia Law Review* 8 (2012): 126-175.

CHAPTER 7.

NORTH KOREAN REFUGEES AND MIGRANTS IN THIRD COUNTRIES

This chapter examines the migration of North Korean refugees and migrants to South Korea and the United States. The focus is on migration routes, demographic characteristics of the population, and issues in asylum-seeking and resettlement. Physical and mental health issues of these populations are explored in Chapter 3, and the education of refugee and migrant children is discussed in Chapter 4.

A. North Koreans in South Korea

While the initial wave of North Korean migration and displacement to China occurred during the period of the “Arduous March,” when most people were moving for food and survival, the movement out from China—primarily to South Korea—did not begin to escalate until around 2004. As security in China deteriorated for North Korean refugees and police crackdowns led to increased deportation, North Koreans began to look for other destinations. They primarily chose to migrate to South Korea, where they could speak the language, obtain citizenship and permanent residence, find work, educate their children, and receive resettlement support from the government and South Korean civil society.

Most of the refugees we interviewed traveled to South Korea from China. As North Korean refugees they reported difficulties with obtaining resident permits (*hukou*) for themselves and family members in China, they could not work legally or move freely. They also earned lower wages than Chinese workers, and their children did not have the same opportunities for education.

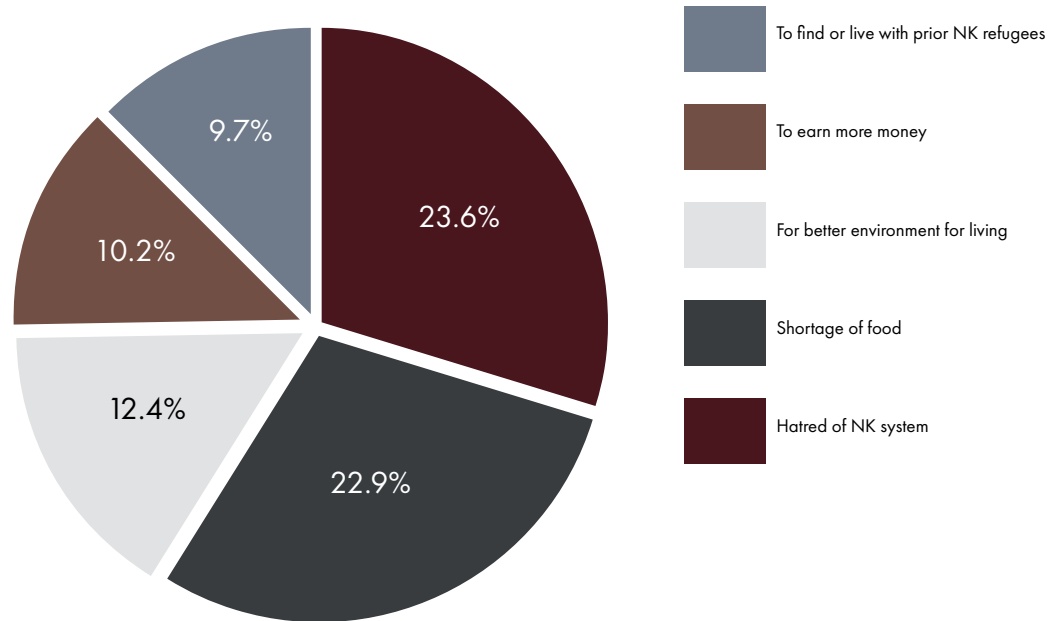
China is very dangerous because you don't know when you will be caught. Always anxious and have to be very careful. There are limitations to what you can do, including studying, because you don't have an ID. There is no freedom except eating. At one point, many of the people I met in China came to South Korea and they contacted me... “If you come to South Korea, you can study, and there are more good things.” So they helped me to come to South Korea. At that time, all North Korean refugees would agree, there won't be any more anxiety if you go to South Korea. And personally... I wanted to graduate elementary, middle, and high school. I had that desire.
(IDI-SK-05)

I worked in a Korean restaurant. I was a waitress, and the job itself wasn't too difficult for me, but it was stressful... I was always afraid that [the manager] might report me to the authorities, which was why I decided to flee to South Korea. Whenever there were public security officers on crackdown somewhere nearby, I could not dare go outside because I was terrified.
(IDI-SK-22)

I once worked in a restaurant in China. In order to work in China, registration is required but I was unable to register because I didn't have hukou. One day, I was caught by the Chinese police. Fortunately, the restaurant owner knew some of the authorities and bribed them so I was released after 24 hours. After that incident, I had nightmares of being chased and felt constantly insecure. So, I made a decision to flee to South Korea.
(IDI-SK-04)

A 2017 report by the Korea Hana Foundation surveyed 26,430 North Korean refugees in South Korea who arrived between 1997 and 2016. In terms of reasons for leaving North Korea, 23.6% said that the primary reason was hatred for the North Korean system (Figure 12). This was followed by shortage of food (22.9%), pursuit of a better life (12.4%), earning more money (10.2%), and finding family members who had previously migrated (9.7%).²⁷⁴

Figure 12. Reasons for Defecting to South Korea, 1997–2017 (N=26,430)



Source: Korea Hana Foundation, 2018.

Routes for Entering South Korea

Prior to 1994, North Koreans who could enter South Korea did so by defecting individually while they were in a foreign country or by crossing the Demilitarized Zone.²⁷⁵ Following the onset of famine and into the early 2000s, as the number of refugees increased, modes and routes of migration out of China began to diversify. Beginning in 2001, through the work of many NGOs and missionary groups operating in China, various migration networks were established. Some of these routes still operate today, though at a much smaller scale. Below are some of the main routes, as described in a 2015 study.²⁷⁶

1. **China → South Korea:** From China, there are three ways to enter South Korea. The first method is to go to embassies in China, including the South Korean Embassy, and request to go to South Korea. However, this method is dangerous as there are many guards in front of embassies, and it also takes one to two years to be allowed an exit permit by the Chinese government. Another method has been to use the UN and other international organizations, who have been able to use their good offices, on a case-by-case basis, to negotiate an exit to South Korea. Finally, North Koreans may use human smuggling operations to obtain forged passports to enter South Korea by airplane or ship transport. Costs for the air route can cost 10 million South Korean Won (around \$10,000) and 5 million South Korean Won by ship. Air routes, though more expensive, are preferred as safer and more reliable.

274 Kyung-Bin Ko, *2017 Bukan ital jumin jeongchak siltae josa* [2017 Report for North Korean refugees Settling down in South Korea] (Seoul: Korea Hana Foundation, 2018), 43.

275 Yeo-Sang Yoon, “North Korean Defectors’ Process of Migration and Adaptation to Society,” in Kyo-Shik Min and Myung Ken Lee, eds., *Paving the Future of Multicultural Asia* (Seoul: Global Together, 2014).

276 Jahee Cho, “Bukan i-tal jumin hangug ipgung gwajeong mit hangugeseo-ui jeongchakgwajeong-e daehan i-hae” [Process of entering South Korea and understanding settlement among North Korean refugees] (Daegu Hana Center, 2015), 4-8.

2. **China → Mongolia → South Korea:** About 20% of North Korean refugees entering South Korea use routes passing through Mongolia. One characteristic of this route is that people who serve as migration brokers or guides do not accompany the North Koreans given the hazards of the journey, which involve passing through remote desert areas beyond the Chinese province of Inner Mongolia. Instead, the North Koreans are instructed to cross into Mongolia in groups of four to 12 and present themselves to border guards, who generally will direct them to a safe house in Ulaanbaatar supported by the South Korean government. After staying for two to three months, they go to South Korea. The route is also greatly affected by climate. Due to the extremely cold winters, refugees tend to use southern routes through Cambodia or Thailand rather than the Mongolian route.
3. **Russia → South Korea:** The North Korean government has maintained contracts with companies in the Russian Far East, particularly with logging companies. For many years, North Korean workers at these companies have escaped the harsh and often exploitative working conditions and tried to move to third countries. In the past, there were reports that Russian police would repatriate those caught leaving their workplaces. With greater awareness of the harsh punishment the deportees faced and under international diplomatic pressure, the policy generally has been to detain the refugees for a few days and release them. If the North Koreans can find their way to a South Korean embassy or consulate or an international organization's office to request asylum, they can be provided onward travel to Incheon.
4. **China → Vietnam → Cambodia → South Korea:** Before 2005, the South Korean Embassy in Vietnam had also given protection and sent refugees and migrants onward to South Korea. After 468 refugees who were living in Vietnam came to South Korea in July 2004, problems developed between South Korea, North Korea, and the Vietnamese government. From then on, North Korean refugees in Vietnam could not be sent directly to South Korea. Instead, they went overland into Cambodia to come to South Korea after spending one to three months in Phnom Penh, staying with aid organizations trusted by the South Korean government.
5. **China → Laos → South Korea:** Because of friendly relations between the Lao People's Democratic Republic and North Korea, there have been reports over the years of Laotian police deporting North Korean refugees to China or even turning them over to the North Korean Embassy. More recently, however, as aid organizations, often run by South Korean churches, have developed local relations, the approach taken by the authorities is to contact the South Korean Embassy, who then place them in a safe house or transit shelter until they can be sent to South Korea, usually within 1 to 3 months.
6. **China → Laos → Thailand → South Korea:** In recent years, this southern route has become the one used most frequently by North Korean refugees. This is due to a combination of factors: warmer weather year-round; a generally accommodating attitude by the Thai government, which is aware that North Koreans will be accepted by South Korea or another country of resettlement; the presence of aid networks and safe houses; and proximity to UNHCR, the U.S. embassy, and other foreign embassies in Bangkok. When North Korean refugees enter Thailand, they surrender to the police, pay a fine and are released, or are taken into custody and placed in the Immigration Detention Center in Suan Phlu. After staying there for one to three months, they are sent to South Korea.

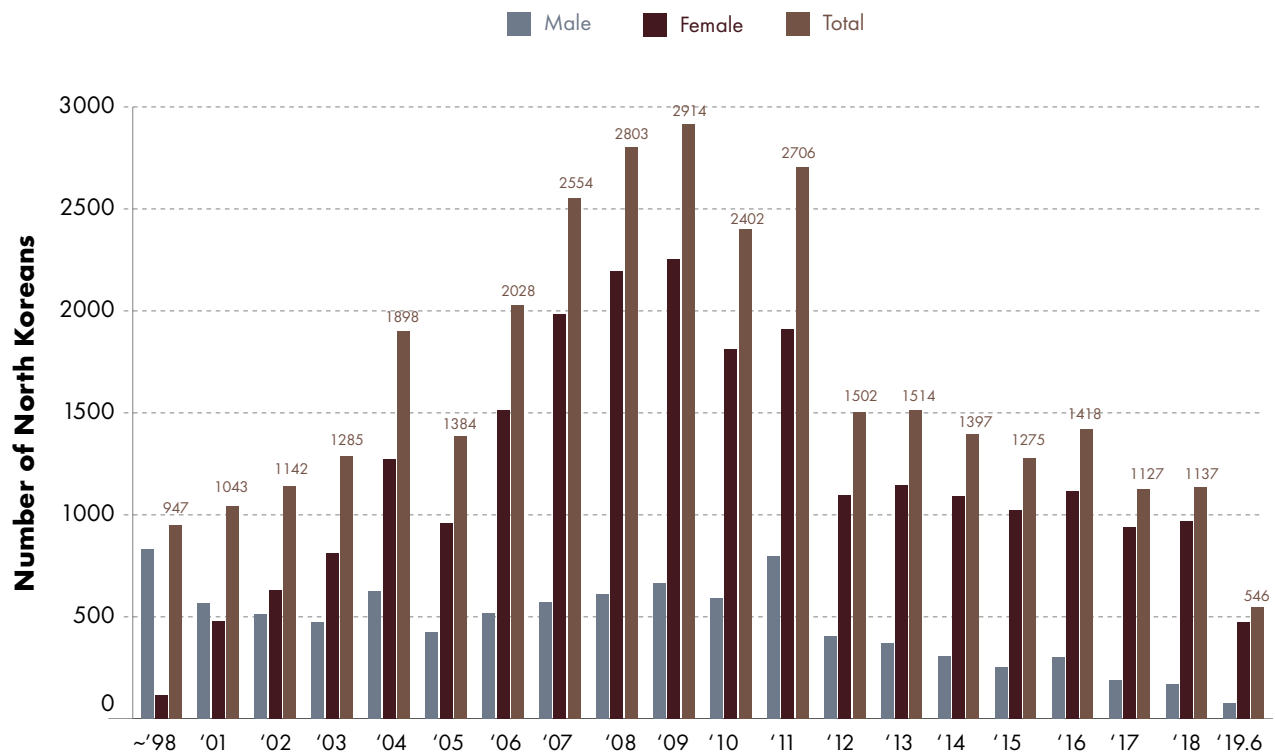
Demographic Characteristics

As of June 2019, 33,022 North Korean refugees were living in South Korea.²⁷⁷ Figure 13 shows the annual trends from pre-1998 to 2019. Movement patterns to South Korea rose steadily from 1998 to 2004, then peaked from 2004 to 2011, when arrivals in South Korea averaged 2,400 per year. In 2011, however, with the death of Kim Jong-il and the succession of Kim Jong-un, border security on the North Korean side tightened considerably. Refugee and migrant flows to South Korea dropped to an average of 1,200 per year. As a North Korean refugee, who arrived in China in 2014, told us:

Since 2013, Kim Jong-un has implemented new policies and [border areas] are subject to special inspection. That is, he authorized the security department to arrest all North Koreans who try to go to China or South Korea. Moreover, he promised guards to enroll them as a member of the Korean Worker's Party if they arrest three or more North Korean defectors, so they are patrolling day and night. Therefore, there are many North Koreans who want to cross the river but can not make it out of North Korea. In the market, most people say that they want to go to South Korea if they have connections there.

²⁷⁷ Republic of Korea Ministry of Unification, "Key Statistics," accessed Sep. 25, 2019. https://www.unikorea.go.kr/eng_unikorea/relations/statistics/defectors/.

Figure 13. North Koreans Migrating to South Korea, 1998–2019



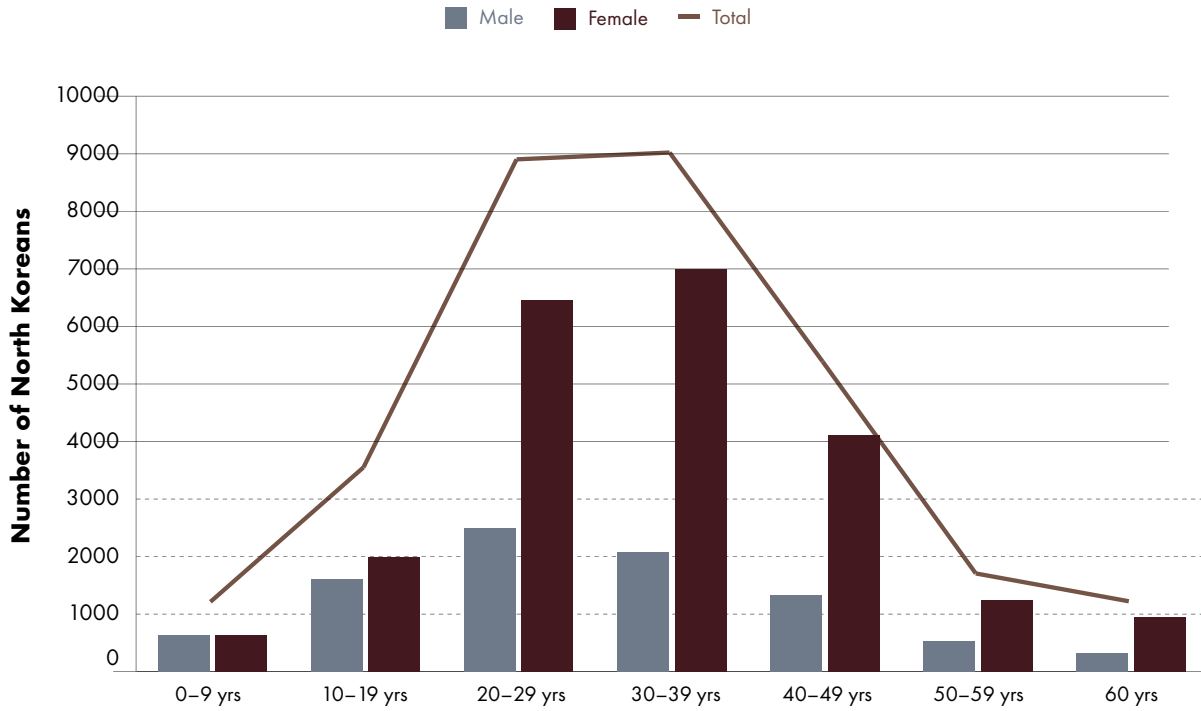
Source: Ministry of Unification, 2019.

Trends also show a clear increase in the proportion of North Korean refugees and migrants to South Korea who are female. The proportion of women rose to 83% of the annual flow in 2017.²⁷⁸ From the beginning of the North Korean exodus to China, North Korean refugee and migrant women have found a coping mechanism through marriage to or an informal union with a Chinese man. However, these relations often involve force and coercion, if not outright trafficking. They can also come apart under pressures that North Korean women face in China, as they are marginalized by poverty, lack of documentation, and isolation. As these women began to flee China and settle in South Korea, they began to build networks to link friends and family inside North Korea or in China to promote onward migration to South Korea.

Figures 14 and 15 present data from the Ministry of Unification, showing breakdowns not only by gender, but also by age at time of arrival and in ten-year intervals. Altogether, since 1994, a total of 1,262 (4.0%) of North Koreans were aged zero to nine, and 3,599 (11.5%) were ten to 19, meaning that 15.5% were aged zero to 19 and 44.1% were under the age of 30.²⁷⁹ The majority of the population (57.5%) were 20 to 39, where the female proportion was also particularly high.

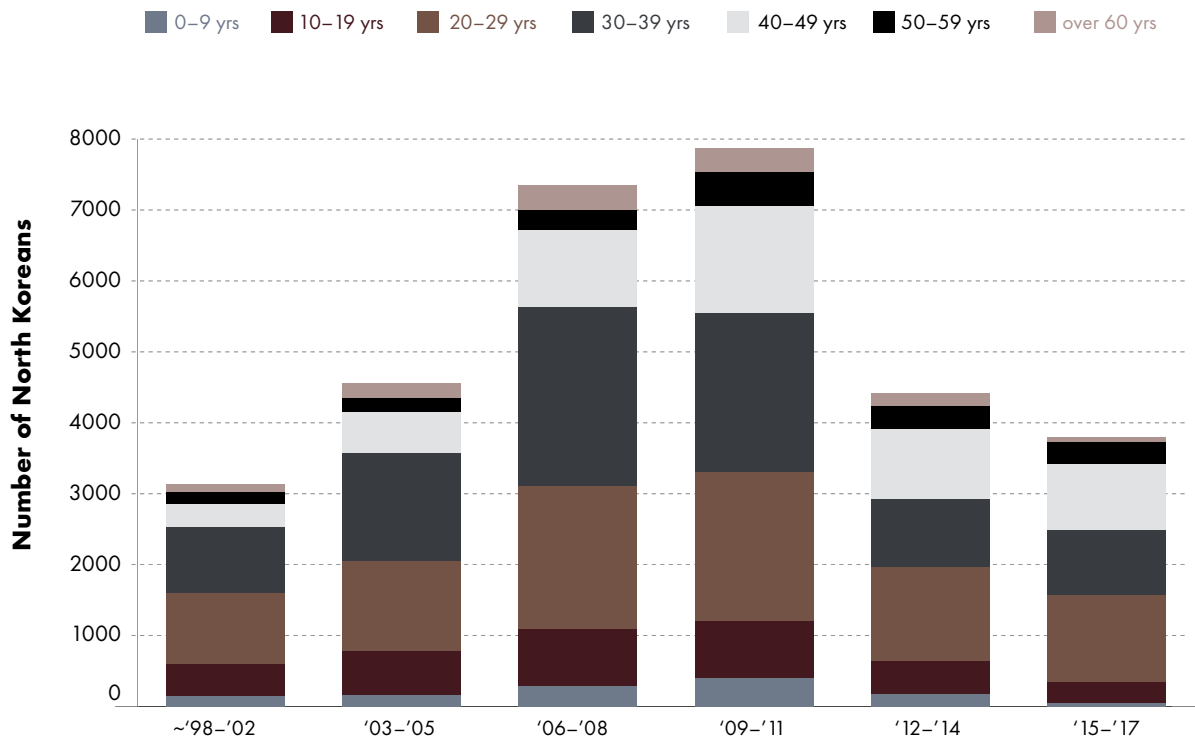
278 Republic of Korea Ministry of Unification, “Policy on North Korean Defectors,” accessed Sep. 5, 2018. http://www.unikorea.go.kr/eng_unikorea/relations/statistics/defectors/.
 279 Ibid.

Figure 14. North Koreans in South Korea by Age at Arrival (as of March 2018)



Source: Ministry of Unification, 2018.

Figure 15. Age Distribution of North Korean Refugees by Year of Arrival, 1994–2017



Source: Ministry of Unification, 2017

Resettlement Policies for North Korean Refugees and Migrants in South Korea

For the purposes of this report, South Korea's legal framework is examined primarily to identify issues of citizenship and protection, not only for the children born in North Korea, but also for children born in China between North Korean women and Chinese men, should they resettle in South Korea.

Article 3 of the South Korean Constitution states that "The territory of the Republic of Korea shall consist of the Korean Peninsula and its adjacent islands." The Act for the Protection and Resettlement of Defected North Korean Residents was established in 1997 to recognize the spirit of the above-mentioned Constitution.²⁸⁰ Article 1 of this Act states that its purpose is to promote "protection and support necessary to help North Korean escapees from the area north of the Military Demarcation Line (hereinafter referred to as 'North Korea') and desiring protection from the Republic of Korea, as swiftly as possible in order to adapt and stabilize, all spheres of their lives, including political, economic, social and cultural."

When a North Korean escapee who does not fall under exclusion clauses for protection enters South Korea, the processes of citizenship acquisition and personal identification registry are completed during his or stay at Hanawon, a government-run adaptation facility.²⁸¹ The nationality of defecting North Korean residents in South Korea is given according to Article 2 (Acquisition of Nationality by Birth) of the Nationality Act.

Therefore, a child born between North Korean parents in China is recognized as a South Korean national and is able to receive protection and settlement support just as any other defected North Korean residents. Children of a North Korean national and a Chinese national, however, are subject to different legal status. These children can apply for South Korean nationality after their North Korean parents are issued a registration of personal identification at a social adaptation facility.²⁸²

Until 2001, the ROK Nationality Act had been based on *jus sanguinis*, following only the paternal line.²⁸³ However, on August 31, 2000 the Constitutional Court declared that such a provision was unconstitutional and the Nationality Act was revised (Act No. 6523) to recognize both parental lines.²⁸⁴ As a result, a North Korean woman, regardless of her channel of entry into South Korea, can receive legal status as a South Korean national following her entry. Moreover, children of North Korean women born in North Korea can acquire nationality and settlement support from the South Korean government, similar to other North Korean defectors in South Korea.

In the case of a North Korean woman who gives birth in China, the process of acquiring South Korean nationality for the child is different according to the nationality of the father. If the father is North Korean, then the child is recognized as a defecting North Korean resident and is entitled to protection and settlement support by the South Korean government. On the other

280 Act No. 5259, Jan. 13, 1997, Amended by Act No. 5681, Jan. 21, 1999, Act No. 6056, Dec. 28, 1999, Act No. 6474, May 24, 2000, Act No. 8269, Jan. 26, 2007, Act No. 8435, May 17, 2007, Act No. 8541, Jul. 23, 2007. The term "defected North Korean residents" means persons who have their residence, lineal ascendants and descendants, spouses, workplaces, and so on in North Korea, and who have not acquired any foreign nationality after escaping from North Korea. (Article 2-1).

281 Based on Article 9 (Criteria for Protection Decision, amended by Act No. 8269, Jan. 26, 2007), "persons prescribed in any of the following subparagraphs may not be determined as persons subject to protection:

1. International criminal offenders involved in aircraft hijacking, drug trafficking, terrorism or genocide, etc.;

2. Offenders of nonpolitical, serious crimes such as murder, etc.;

3. Suspects of disguised escape;

4. Persons who have earned their living for not less than ten years in their respective countries of sojourn; and

5. Such other persons as prescribed by Presidential Decree as unfit for designation as persons subject to protection.

282 Article 3 (Acquisition of Nationality by Acknowledgement) of the Nationality Act stipulates that "(1) Where a person who is not a national of the Republic of Korea (hereinafter referred to as a 'foreigner') is acknowledged by his father or mother who is a national of the Republic of Korea and meets each requirement of following subparagraphs, the person may acquire the nationality of the Republic of Korea after reporting to the Minister of Justice:

1. The person shall be a minor pursuant to the Civil Act of the Republic of Korea; and

2. At the time of the person's birth, the father or mother is a national of the Republic of Korea."

283 Nationality of a child was determined only by the nationality of father. Therefore, a child born between a South Korean mother and a foreign father could not acquire South Korean nationality.

284 Article 2 (Acquisition of Nationality by Birth) of the amended Nationality Act states that:

"(1) A person falling under one of the following sub-paragraphs shall be a national of the Republic of Korea at the time of his or her birth:

1. A person whose father or mother is a national of the Republic of Korea at the time of his or her birth;

2. A person whose father was a national of the Republic of Korea at the time of his death, where his father died before his or her birth; and

3. A person who is born in the Republic of Korea, where both of parents are unknown or have no nationality.

(2) An abandoned child found in the Republic of Korea shall be recognized as born in the Republic of Korea."

hand, if a child is born between a North Korean woman and a Chinese man, the child can apply for South Korean nationality subsequent to his or her North Korean parent completing the registration of personal identification and nationality process in South Korea. For this process, some certification is required to ascertain the birthplace and parents of the child. Even if the child obtains South Korean nationality, he or she would not be entitled to protection and settlement support in the same way that would be available to populations born in North Korea.

Prior to 2001, the only means of bringing such children was through adoption after filing an international marriage license with a Chinese man. However, this complicated process took more than a year and required significant documentation, including affidavits of support. Given the difficulties of bringing a child to South Korea, most North Korean women defectors choose to leave their children behind and try to provide financial support to the father or guardian of their child in China.

As the migration of North Korean women to South Korea continues, the issue of children born in China to North Korean women remains an issue of great concern. As discussed above, the 2001 changes in the ROK Nationality Act now provide for South Korean nationality to be granted to children with North Korean mothers and Chinese fathers. As a result, there has been an increase in the number of North Korean women either arriving in South Korea with their China-born children or sending for them afterwards. Children whose parents are both North Korean defectors gain access to basic welfare support, free educational support from elementary to middle school, and financial support for high school and college. Children of North Korean mothers and Chinese fathers are eligible for education support at elementary and middle school, but not for high school or college.²⁸⁵

Overall, since 1962, the government of South Korea has enacted a series of policies to support the settlement of North Korean refugees and migrants in South Korea. These can be roughly divided into five periods.^{286, 287}

1. 1953–1961: There was no specific legislation for supporting resettlement. Defectors were accepted as a matter of state security.
2. 1962–1978: When the 1962 law “National Merit and Protection of North Korean defectors” was enacted, the first systematic support for refugees was established. The law included refugees as persons of national merit, receiving benefits corresponding to military veterans.
3. 1979–1992: In 1978, as various regulations were merged into a “Special Law for Rewarding North Korean Defectors,” more comprehensive and systematic support policies and programs were implemented. Benefits included settlement allowances, free housing, job assistance, education support, and medical aid for refugees and their families.
4. 1993–1996: With the increased flow of North Korean refugees and migrants to South Korea, some benefits were reconsidered in light of equity issues for people of low income in South Korea, and in light of budget concerns about the increased number of North Korean refugees. As a result, the law was revised. Benefits for North Korean refugees were reduced, and the administration of programs for North Korean refugees and migrants moved from the Ministry of Patriots and Veterans Affairs to the Ministry of Health.
5. 1997–Present: Criticism began to mount that settlement policies were not responding efficiently to the rapidly growing influx. As a result, new legislation that emphasized long-term stabilization and self support of refugees was enacted. While these regulations were not fundamentally different from previous ones in terms of providing general services, there was a new focus on social adaptation training as well as job training to help North Koreans achieve self-sufficiency more rapidly in South Korean society.

The current policy for supporting North Korean defectors in South Korea includes training for social adaptation at the Hanawon Reception Center for 12 weeks, settlement benefits of 7 million South Korean Won (\$6,500) and a housing subsidy of 13 million Won (\$12,000) per person.²⁸⁸ In addition, vocational training as well as medical care for adults and educational support for children and adolescents are provided. Middle and high school students and students who are registered in national and public universities can get tuition waivers, and students at private universities can get a 50% tuition grant. As generous as these subsidies may seem, considering the high cost of living in South Korea and the difficulties North Koreans face in finding work and integrating into South Korea society, it is perhaps not surprising that only 61.2% of North Korean refugees in South Korea

285 Courtland Robinson, Seongeun Chun, Taeyoung Kim, Keumsoon Lee, *Durable Solutions for North Korean Children in Yanbian Korean Autonomous Prefecture Jilin Province, China*. (Baltimore: Johns Hopkins Bloomberg School of Public Health, Center for Refugee and Disaster Response, 2008).

286 Republic of Korea Ministry of Unification, “Key Statistics,” accessed Jun. 4, 2018. <https://www.unikorea.go.kr/unikorea/business/statistics/>.

287 Sunhwa Kim, *Bukan i-tal jum-in-ui geoji-jeongchakjiwon hwalseonghwa bangan* [Method for stabilizing settlement of North Korean refugees in South Korea] (Seoul: Korea Hana Foundation, 2010), 24-26.

288 Republic of Korea Ministry of Unification, “Settlement Support for North Korean Defectors,” accessed June 4, 2018. https://unikorea.go.kr/eng_unikorea/whatwedo/support/.

are participating in economic activities and the employment rate was 56.9% in 2017.²⁸⁹ Below is a quote from a respondent expressing some of the challenges he faced as a young North Korean coming to South Korea:

I regretted coming to South Korea for the first three years because I had no friends and didn't have much money. As the government subsidy was not much and the housing conditions were poor, I initially felt adrift. I complained to my parents, "Why did you take me to South Korea?" I hung out with bad friends and made a lot of trouble. I came to and studied hard after three years.
(IDI-SK-10)

B. North Koreans in the United States

Although the overwhelming majority of North Koreans who leave their country and migrate beyond China end up in South Korea, perhaps 1,000 or more have managed to find their way to Western nations, including the United States.²⁹⁰ The United States has been a leader for many decades in offering permanent resettlement to refugees from countries around the world, but it has been criticized by some members of Congress as well as some North Korean refugee and human rights activist groups for failing to do more for North Korean refugees.

In October 2004, President George W. Bush signed into law the North Korean Human Rights Act (NKHRA) of 2004, to put pressure on the North Korea government to end human rights abuses and to provide help to North Korean refugees who wanted to migrate to the United States. Key aspects of the legislation include:

- Authorizing up to \$20 million for each of the fiscal years 2005 to 2008 for assistance to North Korean refugees; \$2 million to promote human rights and democracy in North Korea; and \$2 million to promote freedom of information inside North Korea.
- Clarifying that "North Koreans are not barred from eligibility for refugee status or asylum in the United States on account of any legal right to citizenship they may enjoy under the Constitution of the Republic of Korea" and encouraging the Secretary of State "to facilitate the submission of applications under section 207 of the Immigration and Nationality Act... by citizens of North Korea seeking protection as refugees."
- Requiring the President to appoint a Special Envoy on Human Rights for North Korea "to coordinate and promote efforts to improve respect for the fundamental human rights of the people of North Korea."
- Calling upon the United States, other UNHCR donor governments, and UNHCR to "persistently and at the highest levels continue to urge the Government of China to abide by its previous commitments to allow UNHCR unimpeded access to North Korean refugees inside China."²⁹¹

Shortly after the bill was enacted, an assessment of the NKHRA by the Nautilus Institute for Security and Sustainability suggested that "despite the drafters' sincere intentions, the actual impact of the bill on refugee admissions is likely to be minor."²⁹² This assessment proved prophetic. It was not until 2006 that the United States admitted the first North Korean refugees, a group of six, including four women who said they were victims of forced marriage in China.²⁹³

289 Republic of Korea Ministry of Unification, "Key Statistics," accessed Jun. 4, 2018. <https://www.unikorea.go.kr/unikorea/business/statistics/>.

290 Global or regional numbers of North Korean refugees and asylum-seekers are difficult to document accurately. In June 2015, the European Alliance for Human Rights in North Korea (EAHRNK) published a report entitled "A Case for Clarification: European Asylum Policy and North Korean Refugees," citing a figure of 1,400 North Korean refugees in Europe, including communities in Belgium, Denmark, Finland, France, Germany, Luxembourg, the Netherlands, Norway, Sweden and the United Kingdom (<https://www.ecre.org/eahrnk-north-korean-asylum-seekers-deserve-protection-in-europe>). A website for EAHRNK notes that the organization closed in 2018. In April 2018, *Tonhap News* reported that 820 North Koreans had been granted citizenship in the European Union from 2007 to 2016, primarily in Germany and the UK (<https://en.yna.co.kr/view/AEN20180410003200315>). In 2016, the Canada Federation of North Korean Defectors cited statistics from the Refugee Law Office in Toronto, that 332 refugee claims were made by North Korean asylum-seekers in 2011–2012, of whom about 90% were accepted. In 2014, only 22 North Koreans made refugee claims and the acceptance rate dropped from 90% to 0% (https://sencanada.ca/content/sen/committee/421/RIIDR/Briefs/CanadianFederationNorthKoreanDefectors_e.pdf).

291 The text of the bill is available at <https://www.congress.gov/bill/108th-congress/house-bill/4011/text?overview=closed>.

292 Karin J. Lee, "Policy Forum 04-39A: The North Korean Human Rights Act and Other Congressional Agendas," *NAPSNet Policy Forum* (2004). https://nautilus.org/napsnet/napsnet-policy-forum/0439a_lee.html/.

293 "US accepts six North Korean refugees," *BBC News*, May 7, 2006. <http://news.bbc.co.uk/2/hi/asia-pacific/4981294.stm>.

By 2011, only 122 North Korean refugees had been admitted via overseas processing for resettlement and another 25 had received political asylum.²⁹⁴ In an analysis for *38 North*, Roberta Cohen cited three obstacles. The first was an attitude, certainly widely held in South Korea, that North Korean refugees “belong in South Korea.” The second was legal, namely that under the South Korean Constitution, North Koreans had a right to citizenship and, thus, could be deemed ineligible for refugee status in the United States. The third was the long delays, ranging from six months to two years, in processing refugee claims.²⁹⁵

According to a qualitative study conducted by the Bush Institute of 16 North Korean refugees living in the United States, interviews revealed “the conflicting feelings of gratitude for the new opportunities the United States presents and frustrations that come with assimilating to a new country.”²⁹⁶ The report mentioned several areas of concern for the refugees, including English language training and acquisition, self-empowerment, and health care and health insurance. Below are excerpts from some of the interviews.

*My attitude towards America changed while I was living in China for two years. When it comes to America, Chinese people are like ‘mei guo mei guo.’ [America! America!]. It’s a dream for them. A place of a lot of opportunities, big, and a lot of money. I thought, ‘Wow, America must be rich and powerful.’ So I felt a little torn...I wanted to go to a bigger country. But then I was also scared because I suffered so much learning Chinese and now I had to learn English. I wanted to finally comfortably speak Korean now. But on one hand, I learned through the internet that [North Korean] people in South Korea were living difficult lives because of discrimination. They were fighting and being discriminated against by their own people. So I thought I would rather go to America. The pastor said that in America there were many different ethnicities so we wouldn’t face discrimination. And you are still young in your 20s, so if you just learn English you will have more opportunities than in South Korea. While I thought what he said made sense, I was still scared so I waited till the last 10 minutes to change my mind.*²⁹⁷

*[Most difficult part of life in America]. To be honest, the language and then my family that I left behind. I can’t express that in words. But for daily life, it’s the language that’s difficult...without English there’s no way to do anything but work in a restaurant.*²⁹⁸

*The most difficult thing for North Koreans is insurance. Because North Koreans lived in North Korea with barely any food, they are physically unwell and live with a lot of diseases. Because they don’t have health insurance they do not go to the hospital. When North Koreans first come to the U.S., even though they have insurance, they don’t know how to even use it. By the time they realize how to take advantage of the insurance the allotted eight months is over and they don’t have access. After the fact, people realize that they have a disease and with no insurance they can’t [be] treated and suffer a lot. Everything in the U.S. is based on insurance. I think it is necessary that the government takes care of refugees’ health conditions with health insurance by extending the coverage from eight months to a longer period. Just until the refugee is fully settled and able to take advantage of the coverage...I tried to enroll in Obamacare but compared to how much I make in a month I could not afford to pay 300 USD a month for the coverage. Insurance is such a difficult thing. Even if I am sick because of no insurance I can’t get help.*²⁹⁹

In 2017, Lindsay Lloyd of the Bush Institute estimated that there were 225 North Korean refugees who were resettled directly to the United States, having escaped through China and then gone through refugee processing in Southeast Asia. Another 250 North Koreans arrived as legal immigrants after having spent months or years in South Korea. Lloyd estimated that there were fewer than 1,000 North Koreans who arrived in the United States as undocumented immigrants, though Lloyd acknowledged the numbers were “all over the map.”³⁰⁰

294 Roberta Cohen, “Admitting North Korean Refugees to the United States: Obstacles and Opportunities,” *38 North*, Sep. 20, 2011. <https://www.brookings.edu/opinions/admitting-north-korean-refugees-to-the-united-states-obstacles-and-opportunities/>. See also U.S. Government Accounting Office, *Humanitarian Assistance: Status of North Korean Refugee Resettlement and Asylum in the United States* (Washington, D.C.: GAO, Jun. 2010).

295 Cohen, “Admitting North Korean Refugees to the United States.”

296 The Bush Institute, “U.S.-Based North Korean Refugees: A Qualitative Study – October 2014” (Dallas: 2014), 9.

297 Female, 33, North Hamgyong province. Left North Korea in 2004, Arrived in U.S. in 2006.

298 Female, 55, North Hamgyong province. Left North Korea in 1998, Arrived in U.S. in 2008.

299 Female, 37, North Hamgyong province. Left North Korea in 1998, Arrived in U.S. in 2012.

300 Shachar Peder, “North Korean defectors, resettled in the US, torn as tensions escalate.” *CNN*, Sep. 17, 2017. <https://www.cnn.com/2017/09/17/us/north-koreans-defectors-us/index.html>.

The NKHRA was most recently reauthorized in 2017. In her 2011 *38 North* article, Cohen wrote that the Act not only faced obstacles but also provided opportunities, if the political will existed, to do more to promote resettlement of North Korean refugees. As small as the North Korean refugee numbers are in the United States, annual arrivals declined to single digits in the first two years of the Trump Administration. No North Koreans were admitted in 2017 and, as of mid-2018, only two had been admitted. “There needs to be a reconciliation of our view of North Korea and its human rights record, and what we do about that when it comes to entry to the United States,” Cohen told *The Wall Street Journal*. “It does seem to me to get a little bit shameful not closing that gap.”³⁰¹

301 Louise Radnofsky, “White House’s Hard Line on Refugees Reduces Number of North Korean Defectors,” *The Wall Street Journal*, Jun. 8, 2018. <https://www.wsj.com/articles/white-houses-hard-line-on-refugees-reduces-number-of-north-korean-defectors-1528450200>.

CHAPTER 8.

CONCLUSIONS AND RECOMMENDATIONS

A. Overview

In *North Korea: Beyond Charismatic Politics*, Kwon and Chung (2012) state that “it is...fairly certain that the year 1994 was a historic threshold for North Korea and that it will be recorded as such by future historians.”³⁰² The death of Kim Il-sung on July 8, 1994, called the “Great National Bereavement,” marked the beginning of a period in the mid-1990s of systemic dysfunction and economic collapse, leading to famine, hardship, and widespread loss of life.³⁰³ Kwon and Chung suggest that the North Korean leadership revived the name “Arduous March” for this period as a way to recall the earlier “Arduous March” of 1938–1939, when Kim Il-sung led his militia on a 100-day march in the harsh winters of northeastern China while fighting and fleeing the Japanese. The term was meant to invoke past military glories and founding political mythologies while calling on the North Korean people to bond together again in “comradely love” and to sacrifice anew for a military-first partisan state.

By creating an analogy between a historical episode of partisan survival and a more recent “crisis of hunger,” Kwon and Chung suggest, “the political narrative of the “Arduous March” confronts a critical inner contradiction.”³⁰⁴ The main contradiction was that:

*[The] art of survival in partisan warfare...is not an option available to a partisan state. The partisan state is a territorially bound entity, unlike classical partisans, and it has no place to go other than the place it keeps. Moreover, its survival depends on the survival of civil society as much as on that of the army.*³⁰⁵

Yet another element of this contradiction was that:

*the military-first era North Korea is a proud partisan state but a failed family state. It has failed because the state violated the most elementary normative principle of any viable family organization, political or social: the protection of the subsistence of its dependents...It is not certain how, or even if, this gross failure can be rectified.*³⁰⁶

There is yet another contradiction to note. The 1990s usage of the term “Arduous March” encouraged the North Korean citizenry to fight a new enemy—hunger and economic hardship—with the old weapons of revolutionary zeal, vigilance, and personal sacrifice. The problem was that the enemy this time was not external but internal. Indeed, the primary cause of the hunger and hardship was the state itself and its preferences for ideological conformity over pragmatic reforms. The state not only failed to protect its citizenry from hunger and hardship, but also punished many basic survival mechanisms, including movement within and outside the country, informal employment, and trade. Such actions were deemed contrary to the state’s primary interest in security and population control.

Based on the evidence we have gathered through our own research and the analysis of other accumulated research and reporting, we conclude that the North Korean state’s gross failure to protect the basic health, welfare, and well-being of the population

302 Kwon and Chung, *North Korea: Beyond Charismatic Politics*, 162-163.

303 Ibid., 21.

304 Ibid., 175.

305 Ibid., 176.

306 Ibid., 177.

constitutes more than a violation of elementary normative principles. It is a violation of core international human rights treaty obligations. We endorse and support the principal findings of the UN COI that “widespread and gross human rights violations have been and are being committed by the Democratic People’s Republic of Korea.”³⁰⁷ The victims of these violations include children, particularly unaccompanied and separated children, child laborers, child prisoners, child migrants and refugees, children born to North Korean women in China, and others.

Below is a summary of our findings and conclusions about the status of North Korean children during the period of 1990 to 2018, expressed in terms of rights: the right to food; the right to health; the right to education; the right to freedom from child labor; the right to freedom from arbitrary detention; the right to freedom of movement; and the rights of migrants, refugees, and asylum-seekers to leave from and return to their own country, to seek and enjoy asylum, and not to be returned to a country where their life or freedoms would be in jeopardy.

B. Conclusions

Right to Food

In 1991, the government launched a belt-tightening, “Let’s eat two meals a day” campaign. In December 1993, it admitted for the first time that its Third Seven-Year Plan was failing.³⁰⁸ The heavy rains and high tidal waves of July 30 to August 18, 1995 caused serious flooding and extensive crop destruction and persuaded the North Korean government to ask for international assistance. As the humanitarian community was taking stock of North Korea, the country was hit with another round of floods in July 1996. Though they were not as destructive as in the previous year, the FAO and WFP estimated that the 1996 floods resulted in the loss of 300,000 tons of grain.³⁰⁹

In 1995 and 1996, international food aid averaged around 500,000 metric tons per year, with Japan contributing nearly half of that total in the first two years. In 1997, international food aid increased to over 900,000 metric tons. Between 1997 and 2005, annual contributions averaged more than one million metric tons, peaking at 1.5 million metric tons in 2000. While some food assistance went to North Korea through private, non-profit organizations, the bulk of the food aid was sent through either multilateral channels (primarily through the WFP) or bilateral channels, which were preferred by donors like China and South Korea. U.S. contributions to WFP appeals for North Korea totaled 2.1 million metric tons between 1996 and 2004. The WFP estimates suggest that China contributed 3.25 million metric tons of food aid from 1996 to 2012, exceeded only slightly by South Korea’s contribution of 3.3 million over the same period of time.³¹⁰

A 2005 study by the Johns Hopkins Bloomberg School of Public Health of North Korean migrants in China supported the perception that international food aid, regardless of its origin and means of delivery, was viewed as a commodity to be bought, sold, bartered, or used to leverage gain. It was not often freely given. It also rarely seemed to reach the most vulnerable groups—schoolchildren, pregnant and nursing women, and the elderly—for whom it was specifically intended.

The UN COI asserted that the North Korean government “has used food as a means of control over the population” and that its “decisions, actions, and omissions...caused the death of at least hundreds of thousands of people and inflicted permanent physical and psychological injuries on those who survived.” By “knowingly causing prolonged starvation” of the North Korean population, the report charged that the state had committed *crimes against humanity*.³¹¹ A September 2017 report submitted by the

307 UN Human Rights Council, *Report of the commission of inquiry on human rights in the Democratic People’s Republic of Korea*, UN Doc. A/HRC/25/63, par. 24.

308 Samuel S. Kim, “North Korea in 1995: The Crucible of ‘Our Style Socialism,’” *Asian Survey* 36.1 (1996): 64.

309 FAO Global Information and Early Warning System on Food and Agriculture, *Special Report—FAO/WFP Crop and Food Supply Assessment Mission to the Democratic People’s Republic of Korea* (Dec. 6, 1996).

310 WFP/INTERFAIS, 2012.

311 UN Human Rights Council, *Report of the commission of inquiry on human rights in the Democratic People’s Republic of Korea*, UN Doc. A/HRC/25/63, par. 53, 76.

UN Special Rapporteur for human rights in North Korea, Tomás Ojea Quintana, found that the DPRK “remains especially vulnerable to food insecurity,” citing a number of reasons.

*Chronic deficiencies in the Public Distribution System, a legacy of the 1990s famine, have aggravated food insecurity and pushed the population to adopt new coping mechanisms, using the large and growing informal sector. The situation seems to be especially difficult in the northern provinces that have been affected by cycles of severe drought and flooding in the past few years. . . . Recent reports regarding the Public Distribution System depict a policy of discriminatory and unequal access to food, with many people either left out of the system or given irregular rations.*³¹²

Right to Health

During the 1990s, North Korea’s healthcare system, which once promised free or at least highly subsidized primary and preventive care, began to break down. Primary healthcare facilities in rural (*ri*) and city (*si*) areas were unable to carry out basic functions due to lack of finances and the loosening of state management and control. In the 2000s, the promotion of *jangmadang* (local markets) brought elements of privatization to the healthcare system. The Kim Jong-un era of the 2010s has emphasized modernizing secondary and tertiary hospitals, including the launch of telemedicine initiatives. However, the priority has gone to urban populations and the political elite, particularly the residents of Pyongyang.³¹³ The result has been rising inequality and continued rural disadvantage and poverty, as evidenced by persistent malnourishment and illness.

The 2017 MICS Survey Findings Report for the DPRK showed, for example, that stunting—impaired growth and development among children due to poor nutrition and repeat infections—had declined nationally from 28% in 2012 (and 64% in 1998) to 19% in 2017. This masked stark regional disparities: 10% of children in Pyongyang were affected by stunting, compared to 38% in Ryanggang Province.³¹⁴ Medicines, if available at all, must be purchased either in hospitals, in the markets, or across the border in China.

Though some key indicators of population health—including the infant mortality rate, the under-five mortality rate, and the maternal mortality rate—have shown some positive trends in the last two decades, the burden of disease attributable to non-communicable diseases (NCDs) is rising. Two-thirds of all deaths in North Korea are attributable to NCDs. Infectious disease remains a concern, including tuberculosis in particular. The underlying problem of chronic malnutrition persists, despite sustained infusions of international food aid.³¹⁵ According to a 2016 estimate by the WFP, 70% of the North Korean population is food insecure.

Right to Education

North Korea has been formally committed to a mandatory 11-year free education system since 1975.³¹⁶ In 2012, the law was revised to make education compulsory for 12 years. But the public education system, like the healthcare system, was deeply strained by the decade of crisis in the 1990s. School authorities began to pass education costs on to children and their parents in the form of “mini assignments” (*koma gwaje*).³¹⁷ Particularly in poorer rural areas, teachers ask children to bring materials from home—including scrap iron, paper, even rabbit skins—which they would use to supplement their salaries or support the school by selling or trading other goods. Failing to submit these assignments is seen as a sign of disloyalty to the regime and results

312 UN General Assembly, “Situation of human rights in the Democratic People’s Republic of Korea—Note by the Secretary General,” UN Doc. A/72/394 (Sep. 18, 2017). On the allegation of “discriminatory and unequal access to food,” the report cited the Korea Institute for National Unification’s 2016 *White Paper on Human Rights in North Korea*, 261-270.

313 Heeyoung Shin, Haewon Lee, Kyeongsu An and Jieun Jeon. (2016). “North Korea’s Trends on Healthcare System in the Kim Jong Un Era: Concentrated on Healthcare Delivery and Organizational System.” *Journal of peace and unification studies*, 8(2): 181-211.

314 Central Bureau of Statistics of the DPR Korea and UNICEF, *DPR Korea Multiple Indicator Cluster Survey 2017, Survey Findings Report* (Pyongyang: Central Bureau of Statistics and UNICEF, 2017).

315 Yo-Han Lee, Seok-Jun Yoon, Young-Ae Kim, Ji-Won Yeom, and In-Hwan Oh, “Overview of the Burden of Diseases in North Korea,” *J Prev. Med. Public Health* 46 (2013): 111-117. See also Grundy, “History, International Relations and Public Health.”

316 Lim, Cho, and Lee, “The legislative trends of law enactment related to children’s rights to education in North Korea.”

317 Citizens’ Alliance, *Child is King of the Country*, 12.

in failing grades or physical or emotional punishment. Students may be scolded or humiliated in front of others. Ultimately, the burdens of submitting mini assignments have increased absenteeism and drop-out rates.

The 2017 MICS Survey showed high levels of gender equity in terms of primary school attendance and completion. Roughly 97% of girls and boys attend primary school and 100% of both sexes reportedly complete. But educational development and children's potential remains stunted by a curriculum that prioritizes political indoctrination and unswerving loyalty to the regime, and the punishment of those who deviate.³¹⁸

Freedom from Child Labor

Article 10 of the ICESCR, ratified by North Korea in 1981, states that children and young persons should be protected from economic and social exploitation, including the establishment of the legal age for paid employment and the punishment of employment of children in work that is detrimental to their normal development. Similarly, Article 32 (Child Labor) of the CRC, ratified by North Korea in 1990, requires member states to adopt special measures to protect children from work that interrupts their education and development as a whole. This includes regulations of work hours and conditions.

In terms of domestic legislation, Article 31 of the North Korean Constitution of 2016 prohibits child labor and establishes the minimum age for work at 16 years. Furthermore, Article 19 of the Children's Rights Protection Act of 2010 forbids child labor, including forced labor. However, failure to implement and enforce such legislation has led to the widespread exploitation of North Korean children.

Findings from our interviews suggest that the poorest households were the most vulnerable to child labor. Other respondents described how they worked separately from their family members, who relied on their income for survival. Some North Korean children were forced to take on their parents' work obligations if the parents were unable to. Although the minimum age for "work duties" was ten-years-old, children aged 12 to 17 years most commonly fulfilled their parents' work obligations. Regardless of their work arrangements, all respondents who labored as children described how it was physically harmful to their development. For example, one respondent interviewed in South Korea explained how he was constantly bent over from carrying loads of coal that were too heavy.

Freedom from Arbitrary Detention; Freedom of Movement

On September 27, 1995, Kim Jong-il announced that local collection centers would be organized for "normalizing" society by managing the homeless and vagrants. These centers came to be called "9/27 camps," and sometimes "9/27 *kotjebi* camps," as they seemed designed particularly to round up and detain street children and orphans whose parents had died in the famine.³¹⁹ Children who were in "9/27 *kotjebi* camps" reported that they lived in cramped spaces without receiving sufficient food. Children escaped the camp to avoid hunger and to survive. Female respondents reported that there were more boys than girls in *kotjebi* groups, and that some girls who could not beg or steal provided sexual favors to the male leaders of the group in order to obtain food.

North Korean children who attempted to cross the border or return from China were at risk of being detained and punished. Some children were released quickly, but if a child is a repeat offender, he or she could be sent to the *ro-dong-dan-ryeon-dae*, where they were forced to perform labor without receiving sufficient food. One respondent reported that he was sent to the *ro-dong-dan-ryeon-dae* at age 18, after being captured and released multiple times from a young age. He was forced to do labor and received only a small amount of food.

318 Tom Papain, "The Convention on the Rights of the Child: How North Korea is Violating a Child's Right to a Quality Education," *City University of Hong Kong Law Review* 3 (2011): 65-88.

319 See Kevin Sullivan and Mary Jordan, "Famine, Nuclear Threat Raise Stakes in Debate Over N. Korea," *Washington Post Foreign Service*, Mar. 13, 1999. <https://www.washingtonpost.com/wp-srv/inatl/longterm/korea/stories/famine031399.htm>. See also UN Human Rights Council, *Report of the detailed findings of the commission of inquiry*.

Besides escaping North Korea and being deported from China, children were also detained because they were running illegal businesses. One respondent actively ran a smuggling business in North Korea. He was only detained for a short period when he was young, but as he grew up and was caught frequently, he was sent to higher-level detention facilities.

Rights of Migrants, Refugees, and Asylum-Seekers

Starting from 1994 to 1995, North Koreans began moving across the Chinese border in search of temporary aid and shelter or more permanent escape from their country. By 1998–1999, following at least two years of severe famine and hardship, North Korean displacement and migration to China peaked at around 100,000 per year. The numbers remaining in China began to decline significantly in 2004 due both to a security crackdown at the China-North Korea border and to an increase in onward migration to South Korea and other countries of resettlement. As of mid-2018, North Korean migrants and refugees in South Korea totaled 31,500, among whom 72% were female, 11.5% were under the age of 20, and 44.1% were under the age of 30.³²⁰

Movement patterns to South Korea rose steadily from 1998 to 2004 and peaked from 2004 to 2011, when arrivals in South Korea averaged 2,400 per year. In 2011, however, with the death of Kim Jong-il and the succession of Kim Jong-un, border security on the North Korean side tightened considerably. Refugee flows to South Korea fell to an average of 1,200 per year.

The security crackdown in North Korean border areas has been reciprocated on the Chinese side, leading to increased rates of arrest—even as the total number of North Korean refugees, migrants, and asylum-seekers has fallen.³²¹ Arrest in China typically leads to forcible repatriation, which often leads to significant punishment, ranging from detention in *ro-dong dan-ryeon-dae* and *jip-kyol-so* to long-term imprisonment or even death for multiple “offenders.” Conditions in North Korean detention centers and prisons, even the lower-level detention facilities, can be harsh, with limited food and medicine, lengthy indoctrination sessions, forced labor, and beatings by guards.

The constraints on internal and external movement coupled with the lack of protections as refugees and migrants in China expose North Korean refugees and asylum-seekers to the risks of trafficking and exploitation. Over the years, the proportion of North Korean defectors who are female has increased, as evidenced by the 72% of North Korean defectors in South Korea who are female. Some of these women and girls move as quickly as possible through China, while others seek to remain in China for longer periods of time. For those who stay in China, the most common form of survival is through marriage to or informal union with a Chinese man.

With the rise in the proportion of North Korean women married to Chinese men has come a corresponding rise in the number of children born to North Korean women and Chinese men. Estimates as of 2014 suggest that there were around 10,000 North Korean women in northeast China and, perhaps, 22,000 children born to North Korean women and Chinese men. Our study of these children suggests that as many as 90% of them are living in a household without their mother. Roughly one-third of the North Korean mothers have been deported, one-third have moved to South Korea, and one-third have moved elsewhere in China or to another country.

C. Recommendations

Below are recommendations to the governments of the DPRK, the People’s Republic of China, the Republic of Korea, and the United States of America as well as to the international community at large. They propose concrete steps to address human rights violations and support humanitarian aid and protection of vulnerable populations, inside and outside of North Korea.

320 Republic of Korea Ministry of Unification, “Policy on North Korean Defectors,” accessed Sep. 5, 2018. http://www.unikorea.go.kr/eng_unikorea/reasons/statistics/defectors/.

321 Since 1982, China has been a state party to the 1951 Convention relating to the Status of Refugees and the 1967 Protocol, but it does not provide asylum or refugee status determination to North Koreans.

1. To the DPRK:

- Ensure equal and transparent access to adequate food and nutrition, especially to vulnerable and disadvantaged populations, and proper monitoring of humanitarian food aid.
- Commit to rebuilding the public health and primary healthcare infrastructure, including the health workforce. In doing so, prioritize marginalized populations, including the poor, people living with disabilities, people in detention, mothers, children—including children living outside of family care—and older adults.
- Commit to supporting teachers' salaries and ending demands for children and their families to subsidize public education through the collection of unauthorized fees and assignments.
- Commit to increasing investment and resources in agricultural production to provide greater food security for the population.
- End excessive political indoctrination in the school curriculum and the physical or psychological punishment of students.
- Acknowledge the right of all North Korean citizens to leave and return to their country without penalty, and to freely to choose their place of residence and employment
- Amend the Criminal Code, specifically Article 62, which bans citizens from traveling to another country without State permission, and remove restrictions on internal travel.
- Ratify the (Palermo) Protocol to Prevent, Suppress and Punish Trafficking in Persons, Especially Women and Children, supplementing the UN Convention against Transnational Organized Crime.
- Ratify the 1951 Convention relating to the Status of Refugees and its 1967 Protocol, the 1954 Convention relating to the Status of Stateless Persons, and the 1961 Convention on the Reduction of Statelessness.
- Immediately grant access to the Office of the UN High Commissioner for Refugees and the UN Special Rapporteur on human rights in the DPRK to monitor the human rights of North Korean deportees from China.
- Immediately grant access to the Office of the UN High Commissioner for Human Rights and the UN Special Rapporteur on human rights in the DPRK as well as the International Committee of the Red Cross to monitor North Koreans in detention. Children and family members detained with prisoners should be released.
- End the practice of deportation of North Koreans in China, and release from detention and waive all penalties for those who have been deported from China or caught trying to return.

2. To the People's Republic of China:

- Immediately grant access to the Office of the UN High Commissioner for Refugees and the Office of the UN High Commissioner for Human Rights to monitor and protect the rights of North Korean asylum-seekers in China.
- Immediately grant access to the International Organization for Migration (IOM) and other relevant international organizations to monitor the status of vulnerable migrants and persons at risk of human trafficking.
- End the practice of deporting North Koreans from China, and release from detention and waive all penalties for those who have been arrested simply for crossing the border without documentation.
- Clarify that Article 4 of the Nationality Law—"Any person born in China...one of whose parents is a Chinese national shall have Chinese nationality"—applies to children born in China to North Korean women and Chinese men and will be applied without discrimination or penalties against the non-Chinese national parent regardless of his or her nationality or immigration status. To provide for adjustment of nationality status of the North Korean mothers, should they seek it, Article 7 of the Nationality Law allows foreign nationals, or stateless persons who are "near relatives of Chinese nationals," or those who "have settled in China" to become naturalized Chinese citizens.
- To facilitate registration of marriages between North Korean women and Chinese men, issue temporary residence permits for North Korean women, thereby enabling them to meet one of the provisions for the registration of marriage between Chinese citizens and foreigners. Registration of marriages would also clear the way to registration of births, issuance of *hukou* to children and their mothers, and access to education for the children.
- For children in China who are born in North Korea or are unaccompanied, China's 1992 Adoption Law provides for the adoption of minors under the age of 14 whose parents are deceased, who are abandoned, whose parents cannot be ascertained or found, or "whose parents are unable to rear them due to unusual difficulties." By applying this law, such children can be legally adopted and obtain Chinese nationality. For North Korea-born children over the age of 14, Article 7 of the Nationality Law could be applied to give them Chinese nationality, after which local foster family placement should be arranged.

- While North Korean children are in China, whether born there or not, they should have access to primary and secondary education, basic health care, and other community services at levels comparable to those available for Chinese nationals and consistent with international standards and best practices. As children and adolescents spend much time in school, enacting policies which could help North Korean refugee students adjust to school life, such as providing consultation services, are crucial.
- The option of resettlement directly from China to a third country should be available, on a case-by-case basis, to North Korean children in China for whom such resettlement is deemed appropriate for purposes of promoting family reunification, or necessitated by extenuating circumstances including an insecure family environment, special medical needs, or evidence of other special vulnerabilities. In all cases involving resettlement of a minor child, the views of the parents or guardians and the child should be sought and consensus promoted. In cases where consensus cannot be achieved, a local arbitration panel should be established to determine what is in the best interests of the child.
- The option of returning to North Korea should not be promoted until there are conditions that enable such return to be carried out voluntarily, in safety and in dignity. Such conditions do not exist at present.

3. To the Republic of Korea:

- Restore adequate funding for monitoring North Korean human rights. A budget bill put forward by President Moon Jae-in makes dramatic cuts in the budget for South Korean organizations focused on human rights in North Korea. Engagement with the North Korean government and support for humanitarian and development aid should not come at the expense of the monitoring of and advocacy for North Korean human rights.³²²
- Support improved integration of North Korean refugees, including children and adolescents, through increased interaction with South Korean peers in school and community settings and enhanced mental health and counseling services. In 2010, the Ministry of Unification amended legislation to designate professional counselors for North Koreans at the 32 Hana Centers (resettlement centers) in South Korea. This is a positive step, but these counselors have many duties and only a small number are registered mental health care providers.³²³
- Increase resettlement support and social services for children born to North Korean mothers and Chinese fathers who resettle in South Korea. As of November 2018, South Korean government data showed 1,530 children of North Korean mothers and Chinese fathers enrolled in South Korean schools. These children are provided with citizenship, a vital form of protection, but have only limited access to other forms of government support, such as free health care, college tuition, and subsidized housing. According to Reverend Chun Ki-Won of the Durihana International School in Seoul, “these children are more disadvantaged than North Korean defectors.”³²⁴

4. To the United States of America:

- U.S. sanctions on North Korea must not prohibit humanitarian aid, and the U.S. government should not restrict travel by American aid workers. In October 2018, a group of U.S.-based NGOs sent a letter to President Trump, asking him to “modify sanctions regulations” and ease travel bans “to allow timely delivery of humanitarian aid and other NGO engagement” in North Korea.³²⁵ The U.S. Special Representative for North Korea, Stephen Biegun, committed to meet with American aid groups in early 2019 “to discuss how we can better ensure the delivery of appropriate assistance.”³²⁶ Such talks need to take place quickly and a solution found to break the year-long impasse on U.S. humanitarian aid

322 Julian Ryall, “South Korea slashes North Korea human rights budget, raises regime aid.” *DW*, Sep. 3, 2018. <https://www.dw.com/en/south-korea-slashes-north-korea-human-rights-budget-raises-regime-aid/a-45331031>.

323 Jee-A Yang, “Struggles of resettlement: North Koreans in South Korea,” Sep. 2018, *Psychology International*. <https://www.apa.org/international/pi/2018/09/north-koreans-resettlement.aspx>.

324 Choe Sang-Hun, “Children of North Korean Mothers Find More Hardship in the South,” *The New York Times*, Nov. 25, 2018. <https://www.nytimes.com/2018/11/25/world/asia/north-korean-children-defectors.html>.

325 Christy Lee, “Washington Under Pressure to Ease North Korean Sanctions” *VOA News*, Nov. 17, 2018. <https://www.voanews.com/a/washington-under-pressure-to-ease-north-korean-sanctions/4662705.html>. See also Edward Hong, “U.S. Bars American Aid Groups from Traveling to North Korea,” *The New York Times*, Oct. 17, 2018. <https://www.nytimes.com/2018/10/17/world/asia/north-korea-trump-administration-ban.html>.

326 Louis Casiano, “U.S. will try to speed humanitarian aid to North Korea amid stalled nuclear talks, envoy says,” *Fox News*, Dec. 19, 2018. <https://www.foxnews.com/politics/u-s-to-try-and-expedite-humanitarian-aid-to-north-korea-as-stalled-talks-over-nuclear-program-continues>.

to North Korea. The United States and other bilateral donors, should support prioritization of aid to reach the most vulnerable populations, including children living in poverty, children living outside of family care, and children in detention.

- The United States and other international donor nations should respond to the March 2018 call for \$111 million in humanitarian aid to the DPRK, which would help meet the food, health and sanitation needs of 6 million vulnerable people, including 1.7 million children under five and more than 340,000 pregnant and lactating women. As of October 2018, only 20.6% of the appeal had been met, with donations coming from only five countries—Switzerland, Sweden, Canada, France, and Russia.³²⁷
- The United States should renew its commitment to resettle North Korean refugees. Since 2004, when Congress first passed the North Korean Human Rights Act, the United States has resettled around 220 North Korean refugees. While this number is far lower than many supporters of the Act had hoped for, they were at least in double digits until 2016. In 2017, only one North Korean refugee was resettled, and only five were resettled in 2018. North Korea is one of 11 countries singled out for travel bans and “extreme vetting” by U.S. officials. One North Korean woman, recently resettled in Salt Lake City, Utah, said she spent two “very hard and long” years in an immigration detention facility in Bangkok, Thailand before she could leave for the United States.³²⁸
- The United States should seek re-election to the UN Human Rights Council in 2019. In June 2018, citing the Council’s frequent criticism of Israel and the fact that some members of the Council have poor human rights records, the Trump Administration withdrew from the UN Human Rights Council. Joining ten other NGOs, HRNK signed a letter to U.S. Secretary of State Mike Pompeo, stating that “Forfeiting the U.S. seat on the UN Human Rights Council only serves to empower actors on the Council, like Russia and China, that do not share American values on the preeminence of universal human rights... [W]ithout strategic U.S. engagement at the Council as a member, the U.S. loses a platform to influence the course of human rights globally for the better and the victims of human rights abuse globally will fall prey to the machinations of governments that will take advantage of this strategic vacuum.”³²⁹

5. To the International Community:

- Support the 2018 UN appeal for \$111 million in humanitarian aid to the DPRK. As part of this, support the recommendation by the UN Special Rapporteur on human rights in North Korea that humanitarian agencies should seek to reach all vulnerable groups, including “persons in detention.”³³⁰
- Promote access on the part of the Office of the UN High Commissioner for Refugees and the Office of the UN High Commissioner for Human Rights to monitor and protect the rights of North Korean asylum-seekers in China as well as deportees and returnees to North Korea.
- Promote further access to, and appropriate durable solutions for, North Korean children living in China, particularly children born in China to North Korean mothers and Chinese fathers. This could include settlement in place with Chinese nationality and household registration, resettlement in another country—such as South Korea or the United States—or voluntary and safe return to family in North Korea.
- Support a return to North Korea of The Global Fund to Fight AIDS, Tuberculosis and Malaria and press the North Korean government to provide necessary transparency and accountability for the proper allocation of medical supplies and grants. In February 2018, The Global Fund announced that it was ending its activities in North Korea. A Global Fund official stated this was necessary “because the unique operating environment in the DPRK prevents us from being able to provide our Board with the required level of assurance and risk management around the deployment of resources.” Funds for the 2017–2020 funding cycle appear to be available. Without these resources, the gains in TB control could be reversed and, as one public health expert stated, “an explosion of drug-resistant tuberculosis is almost certain.”³³¹
- Support improved monitoring of North Korean refugees and asylum-seekers worldwide, including access to temporary protection and status determination procedures as well as effective health and social services for those granted temporary leave to remain or permanent residence.

327 Kee B. Park and Eliana E. Kim, “The Case for Funding the UN’s Request for Humanitarian Assistance to the DPRK,” *38 North*, Oct. 23, 2018. <https://www.38north.org/2018/10/kparkekim102318/>.

328 Miriam Jordan, “U.S. Admission of North Korean Defectors Has Slowed to a Trickle,” *The New York Times*, Oct. 25, 2018. <https://www.nytimes.com/2018/10/25/us/north-korea-refugees-defectors-usa-utah.html>.

329 Mark Leon Goldberg, “The United States is Quitting the UN Human Rights Council. Here’s Why That’s a Bad Idea” *UN Dispatch*, Jun. 19, 2018. <https://www.undispatch.com/the-united-states-is-quitting-the-un-human-rights-council-heres-why-thats-a-bad-idea/>.

330 Roberta Cohen, “A New UN Approach to Human Rights in North Korea: The 2017 Special Rapporteur’s Report,” *38 North*, Dec. 7, 2017. <https://www.38north.org/2017/12/rcohen120717/>.

331 Talha Burki, “North Korea and the Global Fund,” *The Lancet: Infectious Diseases*, 18.5 (2018).

APPENDIX 1.

METHODOLOGY

A. Overview

The study analyzes the health and human rights of North Korean children from 1990 to 2018, with a focus on population demography, health and mental health, nutrition and the right to food, education, and vulnerable sub-groups of children (including children in detention and child laborers), unaccompanied and separated children (including street children), and refugee and migrant children (including children born in China to North Korean mothers).

Our study methodology employs three approaches:

1. **Structured Literature Review:** The literature review applied best practice approaches to conduct a structured literature review of all peer-reviewed literature published in English or Korean since 1990, supplemented by a “grey literature” review of NGO and UN reports, books, and newspaper articles.
2. **In-Depth Interviews (IDI) and Key Informant Interviews (KIIs):** This involved a total of 61 interviews, including: 1) 46 semi-structured in-depth interviews with North Korean adults, aged 18–35, in China and South Korea to explore both personal narratives as well as perspectives on broader historical patterns and current situations of children in and outside of North Korea and 2) 15 key informant interviews with service providers in China and South Korea who have worked with North Korean children as well as service or relief providers who have experience working in North Korea.
3. **Re-analysis and Summary of Border Research:** Over the past two decades, we conducted more than a dozen studies along the China-North Korea border, ranging from a 1999–2000 study of famine-related morbidity, mortality, and migration to a 2013 study to estimate the number of North Koreans in China, including the number of children born to North Korean women in China. Data from seven of these studies have been re-analyzed and summarized, with a focus on findings pertaining to the status of children inside and outside of North Korea.

B. Literature Review

The scope of this review includes articles, reports, and documents in English or Korean that have been published or produced since 1975 and are relevant to an understanding of the living conditions, and particularly human rights, of children in North Korea. Types of publication include, but are not limited to: non-governmental research reports and other materials (e.g. field assessments, site visits); reports and studies by foreign governments and international organizations (e.g., UNICEF, WFP, UN High Commissioner for Refugees, International Organization for Migration); the UN COI report and other human right reports; and peer-reviewed academic journal articles.

The literature review methodology combined a structured search of peer-reviewed journal article databases and manual searching of the following resources:

1. Structured search of journal article databases in English (PubMed, SCOPUS, ERIC, EMBASE, WHO Global Health Library, and POPLINE) and Korean (RISS);
2. Search of organizational and agency websites;
3. Review of articles identified from the reference list of reviewed articles;

4. Structured Google and Google Scholar searches; and
5. Consultations with experts in the field on key publications and materials.

The search was limited to English- and Korean-language publications. At both the title and full-text review phases, publications were reviewed for inclusion according to a predetermined criterion outlined in a standardized review form developed by the research team. The criteria for inclusion and exclusion are specified in Table A.1.

Table A.1: Summary of Inclusion and Exclusion Criteria

<i>Inclusion Criteria</i>	<i>Exclusion Criteria</i>
<ul style="list-style-type: none"> • Published from January 1, 1975 through December 31, 2017 • Published in English or Korean • Included focus on children (younger than 18 years of age) or adolescents • Included discussion of topics of interest (health and mental health, nutrition/right to food, education, vulnerable sub-groups, migration/displacement) • Included focus on North Korea and/or neighboring countries 	<ul style="list-style-type: none"> • Published before January 1, 1975 • Published in languages other than English or Korean • No focus on children (younger than 18 years of age) or adolescents • No discussion of topics of interest (health and mental health, nutrition/right to food, education, vulnerable sub-groups, migration/displacement) • No focus on North Korea and/or neighboring countries

The initial English-language search terms consisted of two core concepts related to the study’s research question: 1) North Korea and 2) children (less than 18 years of age). We later included 3) Adolescents, defined by the World Health Organization as “young people between the ages of 10 and 19 years.”³³² Given that children are considered age one at birth in North Korea, we expanded the definition of adolescent in the context of North Korea to include young people aged up to 20.

Both free text and controlled vocabulary of subject heading and keyword searches related to these concepts were used to identify peer-reviewed journal articles and grey literature via the six electronic databases noted previously and Google and Google Scholar. The English-language search of databases identified a total of 1,046 articles. Following a title and abstract review, we decided that 92 English-language publications met the eligibility criteria for full-text review. A hand search of references, websites, and Google Scholar yielded an additional 126 titles for full-text review. The total number of English language publications for review was 218.

The Korean-language search terms consisted of three core concepts: 1) North Korea; 2) children; and 3) human rights. This last concept was adopted since Korean-language publications are voluminous and a tighter focus was needed to narrow down the search. The structured search used the Research Information Sharing Service (RISS) and yielded an initial list of 7,435 articles, including master’s and doctoral theses, journal articles, books and publications, and research reports. A title review narrowed the list down to 540, and an abstract review further narrowed down the list to 33 Korean-language publications for full-text review.³³³

To place this literature review in a human rights framework, we reviewed and classified each publication into one or more categories of human rights violations, based on the core international human rights treaties, including: the Universal Declaration of Human Rights (UDHR); the Convention on the Rights of the Child (CRC); the 1951 Convention Relating to the Status of Refugees; the International Covenant on Civil and Political Rights (ICCPR); the International Covenant on Economic, Social and Cultural Rights (ICESCR); and the Convention on the Elimination of all Forms of Discrimination against Women (CEDAW).

332 WHO, “Adolescent Health.” http://www.who.int/topics/adolescent_health/en/.

333 We note that a number of articles in Korean were also published in English-language journals and reports. These are not listed twice but are included in the English-language publication listings.

Table A.2: English Language Publications by Human Rights Category (n=218)

Human Rights Category					Total	
	N	%	N	%	N	%
General / Cross-cutting	63	28.9	2	0.6	65	29.8
Physical and mental health	60	27.5	11	3.5	71	32.6
Food security / nutrition	55	25.2	12	3.8	67	30.7
Asylum, freedom of movement, and refugee status	13	6.0	25	7.9	38	17.4
Child labor / human trafficking	9	4.1	4	1.3	13	6.0
Education / access to information	7	3.2	1	0.3	8	3.7
Protection from all forms of violence, abuse and neglect / freedom from torture and deprivation of liberty	7	3.2	7	2.2	14	6.4
Name, nationality and family	3	1.4	1	0.3	4	1.8
Other	1	0.5	12	3.8	13	6.0

Table A.3: Korean Language Publications by Human Rights Category (n=33)

Human Rights Category	Primary		Secondary		Total	
	N	%	N	%	N	%
Education / access to information	11	33.3	3	9.1	13	39.4
Physical and mental health	8	24.2	11	33.3	19	57.6
General / cross-cutting	6	18.2	2	6.1	8	24.2
Food security / nutrition	5	15.2	0	0.0	4	12.1
Asylum, freedom of movement, and refugee status	3	9.1	11	33.3	14	42.4

In terms of the English-language literature, articles that provided a general or cross-cutting perspective on human rights of North Korean children were the most numerous (n=63, 28.9% based on their primary focus), followed closely by physical and mental health (n=60, 27.5%), then food security or nutrition (n=55, 25.2%). This likely reflects a focus by the broader humanitarian and human rights research and practitioner community on the health and nutritional impacts of the 1996–1997 food crisis and its ongoing impacts on children. The Korean-language literature on human rights of North Korean children focused more on education (n=11, 33.3%) and physical and mental health (n=8, 24.2%), reflecting more of a focus on North Korean refugee and migrant children in South Korea.

C. Key Informant Interviews and In-Depth Interviews

In-Depth Interviews (n=46). This study explores the life of North Korean children and youth. However, given that it covers the period of 1990 to 2018, our in-depth interviews focused on North Korean-born adults aged 18 to 35 at the time of the interview. This age interval was selected so that the older respondents would have experiences as children in North Korea dating to the 1990s, while the younger age groups would have more recent experiences as children in North Korea, China, or South Korea. The in-depth interviewees in China were recruited in the provinces of Heilongjiang and Jilin—including Yanbian Korean Autonomous Prefecture, where our studies show that more than 50-60% of all North Korea-born individuals live in China. The

in-depth interviewees in South Korea were recruited in Seoul and in areas surrounding Gyeonggi Province (Inchon, Ansan, Suwon, and Seongnam), where the majority of all North Koreans settled in South Korea live. All interviews were conducted in Korean.

Key Informant Interviews (n=15). To gain insights into North Korean children by people who have experience working with them—whether in North Korea, China or South Korea—we conducted key informant interviews with schoolteachers, program managers as well as NGO and UN officials with knowledge of North Korean children’s issues from 1990 to 2015. All respondents were adults and were interviewed in Korean or English. To obtain their personal opinions and insights, we agreed that their names and institutional affiliations would not be identified.

In all, as noted above, 61 interviews were conducted: 36 (59.0%) in China and 25 (41.0%) in South Korea. Of the total, 43 (70.5%) were female and 18 (29.5%) were male (Table A.4). The breakdown by gender, however, differed by country. In China, 20 of 25 interviews (80.0%) were with females, compared to South Korea, where 23 of 36 interviews (63.9%) were with females. Much of this difference is due to the very high percentage of in-depth interviewees who were female (34 of 46, or 73.9%). North Korean females outnumber males in both China and South Korea; the difference is more pronounced in China.

Table A.4: Breakdown of Interviews, by Country, Type, and Gender

Country of Interview	Males	Females	Total
China	5	20	25
South Korea	13	23	36
Total	18	43	61
Interview Type	South Korea	China	Total
In-Depth Interviews	31	15	46
Key Informant Interviews	5	10	15
Total	36	25	61
Interview Type	Males	Females	Total
In-Depth Interviews	12	34	46
Key Informant Interviews	6	9	15
Total	18	43	61

Table A.5: IDI and KII Respondent Categories

Occupation of In-depth Interviewees	Total IDIs
Student	30
Housewife	6
Unemployed	6
Business Owner	1
Temporary Job	1
Waitress	2
Total	46
Occupation of Key Informant Interviewees	Total KIIs
Community leader	3
Church member	5
NGO staff	2
Social worker	1
Teacher	4
Total	15

In terms of occupations, 30 (65.2%) of the 46 IDIs were students, with 6 (13.0%) housewives, 6 (13.0%) unemployed, and 4 employed in various occupations. For the key informant interviewees, as can be seen in Table A.4, occupations included community leader (3), church member (5), NGO staff (2), social worker (1), and teacher (4). Almost all were in some kind of “helping profession” and were selected partly due to availability and willingness to be interviewed, but also because we sought to interview people who had insights into the lived experiences of North Korean children, whether within or outside of North Korea.

All interviews were conducted in Korean. Each interviewer read through the transcripts of their own interviews to identify specific passages related to the topic under study. These were then sorted using a Microsoft Excel spreadsheet along with the respondent’s demographic details, including age, sex, country of residence, occupation, education, and migration history. The interviewers then re-read the quotations and identified key concepts that emerged across the interviews. The Korean quotations were then translated to English so that they could be analyzed by the full study team. The initial examination of the texts produced a large set of “provisional and tentative” codes.³³⁴ Through iterative analysis and discussion, the study team continued to review the quotations to determine similarities, differences, and patterns among the codes that emerged from the initial open-coding process.

The study team developed a codebook, which listed a total of 35 codes and their definitions by five thematic areas. Textual data analysis was then completed by the study team using this codebook and the qualitative data analysis software NVivo (QSR International, 2012).³³⁵ Examples of codes included under the “vulnerable groups” theme included child laborers, prisoners, ill or disabled, refugees and migrants, and unaccompanied and separated children. By coding the qualitative data in this way, the study team could more readily and systematically identify quotations according to their themes or, more specifically, their assigned codes and domains for use in the different chapters of the report.

D. Studies on the China-North Korean Border

Between 1998 and 2016, the Johns Hopkins Bloomberg School of Public Health, working with a variety of local partners and supported by a variety of donors, conducted over a dozen studies on North Korean humanitarian and human rights issues, including mortality related to famine and food insecurity, durable solutions for children, trafficking of women, psychosocial needs assessments, population estimation, and monitoring of border trends and protection issues. Some reports were published, while others were for internal reporting to partners, donors, and key stakeholders.³³⁶

While some of this research has been published elsewhere, some are presented here for the first time. Our approach in reporting these findings is not to present each study separately, but, rather, to incorporate the results into the various chapters of the report. Thus, data on child mortality during the famine years of 1995–1998, can be found in Chapter 1. Data on *koljebi* or “street children” can be found in Chapter 5. Most of the studies, however, can be found in Chapter 6.

1. Survey of North Korean Refugees and Migrants in China (1998): In July–September 1998, we interviewed 440 North Koreans at a stratified sample of 18 sites in eight counties in Yanbian prefecture. Respondents under 17 years of age were excluded. No more than one member of a family traveling together was interviewed. During the interview, respondents provided information on births, deaths, and migration patterns in their household in North Korea between 1994 and 1998 and information about their own migration experience. The study received ethical clearance from Institutional Review Boards in Baltimore and Yanbian.³³⁷
2. Survey of North Korean Refugees and Migrants in China (1999–2000): Building on the framework of the 1998 survey and on the network of community-based aid sites that participated in the earlier study, this study tracked North Korean arrivals at nine border sites from July 1999 to June 2000. Interviewers conducted a demographic survey of all arrivals, interviewing one adult member 17 years of age or over for every household unit that came to the site. The study received

334 J.E. Boychuk Duhscher, D. Morgan, “Grounded theory: Reflections on the emergence vs. forcing debate,” *Journal of Advanced Nursing* 48.6 (2004): 605-612.

335 QSR International, NVivo qualitative data analysis software (2012). Doncaster: QSR International Pty Ltd.

336 Published materials, wherever possible, acknowledged both donors and implementing partners. For discussions of our internal reporting, we have refrained from naming these donors and partners, given that research conducted in China on North Korean displacement and migration, trafficking, status of children, and other topics remains quite sensitive.

337 Courtland Robinson, Myung Ken Lee, Kenneth Hill, and Gilbert Burnham, “Mortality in North Korean Households,” *Lancet* 354.9175 (1999): 291-295.

ethical clearance from Institutional Review Boards in Baltimore and Yanbian.³³⁸ The questionnaire included the following modules:

- a. *Household Information.* The questions in this module focused on obtaining information about household location; household assets; household membership; births, deaths (including date, age at death, and cause), and migration in the household; and family class background.
 - b. *Food Situation.* The focus of this module was to identify the amount of food that the respondent had actually received in government food rations since 1995 and also to identify the household's primary source of food from 1995 to 1998. The questions also sought to identify the particular strategies that the household may have employed to cope with food shortages.
 - c. *Migration.* The migration module asked respondents to describe their most recent trip to China, including main reason for coming to China, length of time in migration, distance traveled (one way) from home to the location of the interview, and the total number of trips taken to China since 1995.
4. Survey of North Korean Women in China (2005): We conducted interviews with 101 North Korean women, aged 18–50, living in Yanbian Korean Autonomous Prefecture. Staff from local partner organizations helped recruit participants from local communities and conduct the interviews with North Korean women in urban and rural areas. Questions focused on personal and migration history, living conditions in China and North Korea, and selected health outcomes. Using questions about marriage to Chinese men—including motives and intentions; freedom of choice; evidence of coercion, deceit or sale; and other factors—we constructed a variable for human trafficking, including trafficking into forced marriage. The study received ethical clearance from Institutional Review Boards in Baltimore and Yanbian.³³⁹
 5. Study of Durable Solutions for North Korean Children in China (2008): We and a local NGO partner undertook a qualitative assessment of North Korean children in Yanbian Korean Autonomous Prefecture.³⁴⁰ The focus of the study was on exploring local perspectives on durable solutions regarding two groups of children:
 - a. *Unaccompanied and separated children:* Children under 18 years of age whose circumstances have left them orphaned, abandoned, or separated from parents or guardians, and
 - b. *Children born in China to North Korean women and Chinese men:* Given that these children are not generally characterized as unaccompanied and stateless children, the focus of the assessment was on access to basic services and acquisition of nationality.

The study design incorporated qualitative research methods, including over 60 in-depth interviews with children, parents and guardians, community leaders, and local program staff, with expert analysis of legal and regulatory frameworks in China, North Korea, South Korea and other countries—including the U.S.—to identify patterns of local response and to examine if those responses and perspectives could be framed in the context of humane and durable solutions. The study received ethical clearance from Institutional Review Boards in Baltimore and Yanbian.³⁴¹

6. Assessment of Factors Affecting Well-being of Children and Families in Northeast China (2010): We worked with a local program partner in Yanbian to examine community perspectives on the psychosocial well-being of children and their families in China, particularly those with North Korean mothers and Chinese fathers. The primary objectives of this research were to determine the major issues of psychosocial well-being of families of children born to a North Korean mother in China, and to identify the important elements of healthy functioning and resiliency, according to local perceptions. Qualitative methods included the following.
 - a. *Free-list Interviews:* Free-list Interviews involved asking local children and their families four questions: 1) “what are the characteristics of a happy child?”; 2) “what are the characteristics of a happy family?”; 3) “what tasks and responsibilities does a child have as part of a family?”; and 4) “what tasks and responsibilities do parents/care-givers have to take care of their children?” A total of 32 free-list interviews were conducted with the children and family members in selected communities in Yanbian.

338 Courtland Robinson, Myung-Ken Lee, Kenneth Hill, Edward Hsu, and Gilbert Burnham, “Demographic Methods to Assess Food Insecurity: A North Korean Case Study,” *Prehospital and Disaster Medicine* 16.6 (2001). See also Courtland Robinson, “Famine in Slow Motion: A Case Study of Internal Displacement in the Democratic People’s Republic of Korea,” *Refugee Survey Quarterly* 19.2 (2000).

339 Courtland Robinson and Jane Park, *Trafficking of North Korean Women: Results from a Survey of 101 North Korean Women in China*. Unpublished manuscript.

340 We use the term “North Korean children in China” as a short-hand reference to children born to at least one North Korean parent and living in China. We do not intend that it means all such children necessarily have North Korean nationality, or would seek to claim it if they did.

341 Courtland Robinson, Seoungun Chun, Taeyoung Kim, Keumsoon Lee, *Durable Solutions for North Korean Children in Yanbian Korean Autonomous Prefecture, Jilin Province, China* (2008). Internal report.

- b. *Key Informant Interviews*: During the free-list interviews, respondents were asked to identify people they knew in the community who were particularly knowledgeable about issues of well-being and child and family relationships and who people go to regarding these issues. These persons were asked particularly about issues brought up in the free-list interviews. A total of 25 key informant interviews were conducted.

The study received ethical clearance from Institutional Review Boards in Baltimore and Yanbian.³⁴²

7. Monitoring of North Korean Migration and Vulnerability in China (1998–2014): From 1998 to 2008, we worked with a local partner organization that maintained a network of ten “sentinel surveillance sites” in Yanbian Korean Autonomous Prefecture to monitor, on a monthly basis, arrivals, departures (including repatriation), and general estimates of the number of North Korean border crossers at these sites. After the program was shut down in 2008 due to security concerns, it was started again and run intermittently from 2009 to 2014 with selected sites in Jilin, Liaoning, and Heilongjiang provinces with reporting on a quarterly basis. In addition to aggregate site-level estimates, local monitors interviewed a selected number of North Korean new arrivals, long-stayers as well as North Korean women and their children.³⁴³
8. Population Estimation of North Korean Refugees and Migrants and Children Born to North Korean Women in Northeast China: From 2009 to 2013, we worked with a local NGO partner and, in one study, with a South Korean research institute, to estimate the total population of North Korean refugees and irregular migrants in selected areas in three provinces of Northeastern China (Heilongjiang, Jilin, and Liaoning), including the estimated number of children in these provinces who were born to North Korean women and Chinese men in China.

The secondary objective was to identify key demographic characteristics of this population, including household size and composition, migration patterns, and the current living conditions and basic needs of children born to North Korean women and Chinese men in China. To obtain information about this population, semi-structured interviews were conducted with key informants from 48 geographically randomized sites selected in Heilongjiang province, 36 randomized sites in Liaoning, and 36 randomized sites in Jilin—including 24 sites in Yanbian.

Each of these sites was visited by trained local interviewers to identify key informants who were willing to provide information about North Korean populations living in the site. Questions were asked of a total of 360 adult key informants in a total of 120 sites, with topics including the following: total current population of North Koreans (as of 2012–13); estimated number of North Korea-born population that are adults; estimated number of North Korea-born adult males and females; estimated number of women married to Chinese men; estimated number of North Korea-born children; estimated number of children born in China to North Korean mothers. For previous years: total population of North Koreans at Spring Festival in 1998, 2002, 2009; estimated proportion female in 1998, 2002, 2009; and total population of children born to North Korean mothers in 1998, 2002, and 2009. The study received ethical clearance from Institutional Review Boards in Baltimore and Yanbian.³⁴⁴

342 Courtland Robinson, Shieun Yu, *Psychosocial Program Assessment of Vulnerable Children and Families in Northeast China* (2010). Internal report.

343 The primary focus of these monitoring reports was to inform local program decision-making and also to inform humanitarian actors in China and internationally about North Korean cross-border movements and protection concerns. Some of the aggregated monthly data were eventually published. See Courtland Robinson, “North Korea: Migration Patterns and Prospects,” Report prepared for *The Korea Project: Planning for the Future*, Center for Strategic and International Studies (CSIS) and the University of Southern California, Korean Studies Institute (2010). See also Courtland Robinson, “Intractability and Change in Crisis Migrations: North Koreans in China and Burmese in Thailand,” *Humanitarian Crises and Migration: Causes, Consequences and Responses* (Routledge, 2014).

344 Courtland Robinson, Taeyoung Kim, Jiho Cha, and Keumsoon Lee, *Population Estimation of North Korean Refugees and Migrants and Children Born to North Korean Women in Northeast China: Results from a Study in Heilongjiang Province* (2013). Submitted to the Korea Institute for National Unification.

APPENDIX 2.

REFERENCES

- Adlakha, A. and West, L. *Analysis of Democratic People's Republic of Korea 1993 population census data and population projections*. International Programs Center, Population Division, U.S. Bureau of the Census, 1997.
- Amnesty International. *The Crumbling State of Health Care in North Korea*. London: 2010.
- Asia for Educators, Columbia University, "Wet Rice Agriculture," http://afe.easia.columbia.edu/china/geog/wet_rce.html. Accessed Jun. 15, 2018.
- Bahk, J, Ezzati, M, & Khang, YO. "The life expectancy gap between North and South Korea from 1993 to 2008." *European Journal of Public Health* 28.5 (2018): 830-835.
- Boychuk-Duchscher, JE, & Morgan, D. "Grounded theory: reflections on the emergence vs. forcing debate." *Journal of Advanced Nursing* 48.6 (2004): 605–12.
- Burki, T. "North Korea and the Global Fund," *The Lancet Infectious Diseases* 18.5 (2018).
- Casiano, L. "U.S. will try to speed humanitarian aid to North Korea amid stalled nuclear talks, envoy says." *Fox News*, Dec. 29, 2018.
- Center for Disease Control and Prevention. "Status of public health in the Democratic People's Republic of Korea." *MMWR* 46.24 (Aug. 1997).
- Center for Supporting North Korean Refugee Adolescents. "Statistics related to North Korean refugee students." Accessed Nov. 5, 2018. <https://www.hub4u.or.kr/hub/data/selectDataForm.do>.
- . "Trend in number of North Korean refugee students." Accessed Jun. 27, 2018. <https://www.hub4u.or.kr/hub/edu/status01.do>.
- Central Bureau of Statistics of the DPR Korea and UNICEF. *DPR Korea Multiple Indicator Cluster Survey 2017, Survey Findings Report*. Pyongyang: Central Bureau of Statistics and UNICEF, 2017.
- Cha, J, Surkan, P, Kim, J, Isabel A. Yoon, Courtland Robinson, Barbara Lopes Cardozo, and Hayoung Lee. "Human Rights as Political Determinants of Health: A Retrospective Study of North Korean Refugees." *American Journal of Preventive Medicine* 55.2 (2018): 271–79.
- Chang, Y, Haggard, S, & Noland, M. *Migration Experiences of North Korean Refugees: Survey Evidence from China*. Working Paper. Washington, D.C.: Peterson Institute for International Economics, Mar. 2008.
- Charney, J. *Acts of Betrayal: The Challenge of Protecting North Koreans in China*. Washington, D.C.: Refugees International, 2005.
- Chaudhury, R, & Rafei, UM. *Traditional Medicine in Asia*. New Delhi: World Health Organization, 2001.
- Cho, J. "Bukan i-tal jumin hangug ipgung gwajeong mit hangugeseo-ui jeongchakgwajeong-e daehan i-hae" [Process of entering South Korea and understanding settlement among North Korean refugees]. Daegu Hana Center, 2015.
- Cho, Jeong-Ah et al. *Kim Jong-un sidae Bukanui gyoyukjeongchaek, gyoyukgwajeong, gyogwaseo* [Education curriculum, and textbooks in the Kim Jong-un era]. Seoul: Korea Institute for National Unification, 2012.
- Choi, SC. *Human Rights and North Korea*. Seoul: Hanyang University Institute of Unification Policy, 1999.
- Choi, SK, Min, SJ, Cho, MS, Joung, H, and Park, SM. "Anxiety and depression among North Korean young defectors in South Korea and their association with health-related quality of life." *Yonsei Medical Journal* 52.3 (2011): 502-509.
- Choi, SK, Park, SM, & Joung H. "Still life with less. North Korean young adult defectors in South Korea show continued poor nutrition and physique." *Nutr. Res. Pract.* 4 (2010): 136-141.
- Citizens' Alliance for North Korean Human Rights. *Child is King of the Country: Briefing Report on the Situation of the Rights of the Child in the DPRK*. Seoul: 2009.
- Citizens' Alliance for North Korean Human Rights & The Asia Center for Human Rights. *Situation report on the rights of the child in the DPRK*. Seoul: 2008.
- Cohen, R. "Admitting North Korean Refugees to the United States: Obstacles and Opportunities." *Brookings Institution*, Sep. 20, 2011.
- . "China's Forced Repatriation of North Korean Refugees Incurs UN Censure." *Brookings Institution*, Jul. 7, 2014.
- . "A New UN Approach to Human Rights in North Korea: The 2017 Special Rapporteur's Report." *38 North*, Dec. 7, 2017.

- Commonwealth of Australia. "DPRK-Country Information, November 2000." http://www.dfat.gov.au/geo/dprk/dprk_brief_historical.html.
- Couch, Cristina. "The Psychological Trauma of Defecting from North Korea." <https://www.pbs.org/wgbh/nova/article/north-korea-mental-health/>. Accessed Feb. 16, 2017.
- Criminal Law of People's Republic of China. Adopted Jul. 1, 1979, amended Mar. 14, 1997. <https://www.fmprc.gov.cn/ce/cgyienna/eng/dbtyw/jdwt/crimelaw/t209043.htm>.
- D'Souza, F. "Famine: Social Security and an Analysis of Vulnerability," in *Famine*, G.A. Harrison ed., 1988.
- Davis, K. "Brides, bruises and the border: The trafficking of North Korean women into China." *SAIS Review of International Affairs* 26.1 (2006): 131-141.
- DPRK Central Bureau of Statistics and UN Population Fund. *DPRK Socio-Economic, Demographic and Health Survey*. Pyongyang: 2014.
- DPRK Central Bureau of Statistics. *DPR Korea 2008 Population Census National Report*. Pyongyang: Central Bureau of Statistics, 2009.
- . *Tabulation of the Population Census of the Democratic People's Republic of Korea, December 31, 1993*. 1995.
- . *Tabulation on the 1993 population census of the DPRK*. Pyongyang: Central Bureau of Statistics, 1993.
- DPRK Population Center. *Analysis of 1993 Population Census Data, DPRK*. Pyongyang: Population Center, 1996.
- Eberstadt, N. *The North Korean Economy: Between Crisis and Catastrophe*. New Brunswick: Transaction Publishers, 2007.
- Eberstadt, N and Banister, J. *The Population of North Korea*. Berkeley: Institute of East Asian Studies, 1992.
- Eckhoff Zylstra, S. "China Kicks Out Korean Missionaries in 'Unprecedented' Numbers." *Christianity Today*, Mar. 8, 2017.
- European Union, UNICEF and World Food Programme. *Nutrition survey of the Democratic People's Republic of Korea*. New York: UNICEF, 1998.
- Fahy, S. "Mapping a Hidden Disaster: Personal Histories of Hunger in North Korea." *Natural Hazards Observer* (Sep. 2015): 22-27. <https://hazdoc.colorado.edu/bitstream/handle/10590/5438/C024508.pdf>.
- "Famine driving North Koreans to China." *International Herald Tribune*, Dec. 23, 1998.
- FAO Global Information and Early Warning System on Food and Agriculture, Special Report—FAO/WFP crop and food supply assessment mission to the Democratic People's Republic of Korea: Dec. 22, 1995; Nov. 12, 1998; Nov. 25, 1997; Dec. 6, 1996.
- FAO/WFP. *Crop and food supply assessment mission to the DPRK: Special report* (FAO, Dec. 1995).
- Gibson, M and Mace, R. "Strong Mothers Bear More Sons in Ethiopia." *Proceedings of the Royal Society of London*, 2003.
- Goldberg, ML. "The United States is Quitting the UN Human Rights Council. Here's Why That's a Bad Idea," *UN Dispatch*, Jun. 19, 2018.
- Good Friends. *Human rights in North Korea and the food crisis*. Seoul: Good Friends, 2004.
- Goodkind, D, & West, L. "The North Korean Famine and its Demographic Impact." *Population and Development Review* 27.2 (2001): 219-238.
- Goodkind, D, West, L, & Johnson, P. "A Reassessment of mortality in North Korea, 1993–2008." Population Division, U.S. Census Bureau. March 2011.
- Grundy, J. "History, International Relations and Public Health – the case of the Democratic People's Republic of Korea 1953–2015." *Korea's Economy* 31 (2017): 51-60.
- Gushulak, B, and MacPherson, DW. "Health Issues Associated with the Smuggling and Trafficking of Migrants." *Journal of Immigrant Health* 2.2 (2000).
- Gustavson, KR, & Lee-Rudolph, J. "Political and Economic Human Rights Violations in North Korea," In *North Korea After Kim Il-sung: Continuity or Change?* eds., Thomas H. Henriksen and Jongryn Mo. Stanford: Hoover Institution Press, 1997.
- Haggard, S and Noland, M. *Hunger and Human Rights: The Politics of Famine in North Korea*. Washington, D.C.: Committee for Human Rights in North Korea, 2005.
- . *The North Korean Refugee Crisis: Human Rights and International Response*. Washington, D.C.: U.S. Committee for Human Rights in North Korea, 2006.
- . *Famine in North Korea: Markets, Aid and Reform*. New York: Columbia University Press, 2007.
- . *Witness to Transformation: Refugee Insights into North Korea*. Washington, D.C.: Peterson Institute for International Economics, 2011.
- Han Dong-Ho et al. *White Paper on Human Rights in North Korea 2018*. Seoul: Korea Institute for National Unification, 2018.

- Han, HR, Lee, JE, Kim, K, Chung, Y, Kim, M, Robinson, C, & Lee, M. "Healthcare utilization among North Korean refugees in South Korea: A mixed methods study." *Public Health* 142 (2017): 116-120.
- Hawk, D. *The Hidden Gulag: Exposing North Korea's Hidden Prison Camps*. Washington, D.C.: Committee for Human Rights in North Korea, 2003.
- High, A. J. "China's orphan welfare system: Laws, policies and filled gaps." *U. of Pennsylvania East Asia Law Review* 8 (2012): 126-175.
- Hoffman, D. & Lee, SK. "The prevalence of wasting, but not stunting, has improved in the Democratic People's Republic of Korea." *Community and International Nutrition* 135 (2005): 452-456.
- Hong, E. "U.S. Bars American Aid Groups from Traveling to North Korea." *The New York Times*, Oct. 17, 2018.
- Hong, Sun-Hye. *Haggyo-bakk talbugheongsonyeon gyoyug, jeogeung siltae* [A study on the status of education and adaptation for out-of-school North Korean migrant adolescents]. Seoul: Korea Hana Foundation, 2010.
- Hu, E. "The All-Work, No-Play Culture of South Korean Education." *NPR*, Apr. 15, 2015.
- Human Rights Watch. "Human Rights Watch submission on the Democratic People's Republic of Korea to the Committee on the Rights of the Child." 2017.
- Hwang, N. "Tongildaebi Bukan jeonyeombyeong gwallireul wihan jeopgeunjeollyak" [Strategies of Communicable diseases Control to North Korea on the Preparation for Korean Reunification]. *Health and Welfare Policy Forum* 180 (2011).
- Hwang, N, Lee, S, & Lee, SY. *Bukanjumin-ui saenghwal-gwa bogeonbokji siltae: geongang mit chulsanpshyangyugeul jungsimneuro* [The status of health, childbirth, and child rearing of North Koreans]. Seoul: KOREA INSTITUTE FOR HEALTH AND SOCIAL AFFAIRS, 2012.
- International Committee of the Red Cross. *Inter-agency guiding principles on unaccompanied and separated children*. Geneva: 2004.
- Jeon, S, Kim, SE, and Park, Y. "A Study on the Population Structure of Democratic People's Republic of Korea." *Communications for Statistical Applications and Methods* 22.1 (2015): 1-10.
- Jeon, Woo-Taek, Jin-Seop Eom and Sung-Kil Min. "A 7-year follow-up study on the mental health of North Korean defectors in South Korea," *Journal of Traumatic Stress* 26.1 (2013): 158-164.
- Jiang, Q, Li, S, & Feldman, MW. "Demographic consequences of gender discrimination in China: simulation analysis of policy options." *Population Research and Policy Review* 30.4 (2011): 619-638.
- Jo, DG. "Social Distance and attitude toward migrants' citizenship in Korea," *Korean Journal of Population Studies* 33.3 (2010): 53-73.
- Jordan, M. "U.S. Admission of North Korean Defectors Has Slowed to a Trickle." *The New York Times*, Oct. 25, 2018.
- Jung, JH. "North Korean Refugees and the Politics of Evangelical Mission in the Sino-Korean Border Area." *Journal of Korean Religions* 4.2 (2013): 147-173.
- Katona-Apte, J. & Mokdad, A. "Malnutrition of Children in the Democratic People's Republic of North Korea." *Journal of Nutrition* 128 (1998).
- Kim Woon-Keun, Lee Hyun-Ok, and Daniel A. Sumner. "Assessing the Food Situation in North Korea." *Economic Development and Social Change* 46.3 (1998).
- Kim, DR. "Bukan-ui hanbang bogeon uiryo hyeonhwang" [The Present Situation of Oriental Health Care in North Korea]. *Journal of Korean Medicine* 19.2 (1998): 153-176.
- Kim, Eun-Ji. "North Korean Escapees were excessively taking drugs prior to arrival in South Korea" [Talbukja-deul, hangook ipguk jeon yangmul gwada bogyong]. *VOA News*, Jul. 29, 2009.
- Kim, HS. "Bukanitaljumin seolmunjosareul tonghae bon Bukanui moseong-gwa sinsaenga moseong gwalli siltae" [Survey of North Korea's Maternal and Newborn health Management through North Korean Defectors]. *Journal of Korean Society of Maternal and Child Health* 19.1 (2015): 43-44.
- Kim, JE. "Nutritional State of Children in the Democratic People's Republic of Korea (DPRK): Based on the DPRK Final Report of the National Nutrition Survey 2012." *Pediatric Gastroenterology, Hepatology and Nutrition* 17.3 (2014): 135-139.
- Kim, JS. "Bukanui 'jeonbanjeog 12-nyeonge uimgyoyuk-e ttareun hakje-wa gyoyukgwajeong gaejeong donghyang'" [Curriculum and Educational Course Revision according to North Korean 'Overall 12-year Compulsory Education']. *KDI Review of the North Korean Economy* (2016): 3-16.
- Kim, M. *Escaping North Korea: Defiance and hope in the world's most repressive country*. Plymouth, UK: Rowman & Littlefield Publishers, 2010.
- Kim, MJ, Yu, SY, Kim, S, Won, C, Hyunrim Choi, Byung-Sung Kim. "Health Behavior and Factors Associated with Depression in North Korean Adolescent Defectors in South Korea: The Korea Youth Risk Behavior Web-Based Survey, 2011-2014." *Korean Journal of Family Medicine* 38.5 (2017): 256-262.
- Kim, S. "North Korea in 1995: The Crucible of 'Our Style Socialism.'" *Asian Survey* 36.1 (1996).
- Kim, Sun-Hwa. *Bukan i-tal jumin-ui geoji jeongchakjwon hwalseonghwa bangan* [Method for stabilizing settlement of North Korean refugees in South Korea]. Seoul: Korea Hana Foundation, 2010.

- Kim, Su-Am et al. *Bukanjuminui salm-ui jil: siltae-wa insik* [Quality of Life for North Korean Residents: Situation and Perception]. Seoul: Korea Institute for National Unification, 2011.
- Kim, SJ. “Tongire isseo jeongsinuihakjeong gwajewa junbi” [Task and Preparation of Psychiatric Field for Korean Reunification]. *Journal of Korean Neuropsychiatric Association* 54.4 (2015): 360-364.
- Kim, SJ, Lee, WJ, Park, SM, Lee, H, & Choi, H. “Bukanjumin-ui jilbyeongwan-gwa jilbyeong haengtae” [Illness model and illness behavior of North Korean people]. Seoul: Seoul National University Press, 2016.
- Kim, SJ, Park, YS, Lee, H, & Park, SM. “Bukan uisadeuri baraboneun Bukanui jeongsinuihang hyeonhwang” [Current Situation of Psychiatry in North Korea: From the Viewpoint of North Korean Medical Doctors]. *Korean Journal of Psychosomatic Medicine* 20.1 (2012): 32-39.
- Kirmayer, IJ, Narasiah, L, Munoz, M, Rashi, M, et al. “Common mental health problems in immigrants and refugees: general approach in primary care.” *Canadian Medical Association Journal* 183.12 (2011): E959-E967.
- Ko, Kyung-Bin. *2017 Bukan ital jumin jeongchak siltae josa* [2017 Report for North Korean refugees Settling down in South Korea]. Seoul: Korea Hana Foundation, 2018.
- Korea Hana Foundation. *Settlement survey of North Korean refugee adolescents in South Korea 2016*. Seoul: 2016.
- “Housing Supply Rate in NK Tallied at 56-63 Pct.” *Korea Times*, Sep. 21, 2001.
- Korean Buddhist Sharing Movement. *The Food Crisis of North Korea Witnessed by 1,019 Food Refugees*. Seoul: 1998.
- Kwon, H, and Chung, BH. *North Korea: Beyond Charismatic Politics*. Rowman & Littlefield, Lanham, Maryland: 2012.
- Lankov, A. “North Korean Refugees in Northeast China.” *Asian Survey* 44.6 (2004): 856-873.
- Lee, C. “Washington Under Pressure to Ease North Korean Sanctions.” *VOA News*, Nov. 17, 2018.
- Lee, Hae-Young. *Lives for Sale: Personal Accounts of Women Fleeing North Korea to China*. Washington, D.C.: Committee for Human Rights in North Korea, 2009.
- Lee, KJ. “Policy Forum 04-39A: The North Korean Human Rights Act and Other Congressional Agendas.” *NAPSNet Policy Forum* (2004). https://nautilus.org/napsnet/napsnet-policy-forum/0439a_lee-html/.
- Lee, IS, Park, HS, Kim, YS, & Park, HJ. “Bukan ital adong-ui sinche mit simnijeog geongang sangtae pyeongga” [Physical and psychological health status of North Korean defector children]. *Journal of Korean Academy of Nursing* 17.1 (2011): 256-263.
- Lee, SK. “North Korean children: nutrition and growth.” *Annals of Pediatric Endocrinology & Metabolism* 22 (2017): 231-239.
- Lee, SK, SY Nam, D Hoffman. “Changes in nutritional status among displaced North Korean children living in South Korea” *Ann Hum Biol.* 42 (2015): 581-584.
- Lee, S. “The DPRK Famine of 1994-2000: Existence and Impact.” *Korea Institute of National Unification Studies Series* 05-06 (2005).
- Lee, Y, Lee, M, & Park, S. “Mental health status of North Korean refugees in South Korea and risk and protective factors: a 10-year review of the literature.” *European Journal of Psychotraumatology* 8 (2017).
- Lee, Y, Lee, M. K., Chun, K. H., Lee, Y. K., & Yoon, S. J. “Trauma experience of North Korean refugees in China.” *American Journal of Preventive Medicine* 20.3 (2001): 225-229.
- Lee, YH, Yoon, SJ, Young, AK, & Yeom, JW. In-Hwan Oh. “Overview of the Burden of Diseases in North Korea.” *J Prev. Med. Public Health* 46 (2013): 111-117.
- Lim, Soon-Hee. *Chosun Nyeosung Bunsok* [Analysis of *Chosun Nyeosung*]. Seoul: Korea Institute for National Unification, 2009.
- Lim, Soon-Hee, Cho Jeong-Ah, and Lee Kyu-Chang. *Bukanui adonggyoyukgwon siltae-wa gwallyeon beomnyeong jejeong donghyang* [The legislative trends of law enactment related to children’s rights to education in North Korea. Seoul: Korea Institute for National Unification, 2012.
- Loy, I. “Donors lose appetite for North Korean food aid.” *IRIN News*, Jan. 9, 2018.
- MacIntyre, K. “Famine and the Female Mortality Advantage.” In *Famine Demography*, edited by Tim Dyson and Cormac O Grada. Oxford University Press. 2002.
- Manyin, ME. “Foreign Assistance to North Korea.” *Congressional Research Service Report for Congress*. May 26, 2005.
- Manyin, ME and Nikitin, MB. “Foreign assistance to North Korea.” *Congressional Research Service Report for Congress*. Apr. 2, 2014.
- Margesson, R, Chanlett-Avery, E, and Bruno A. “North Korean Refugees in China and Human Rights Issues: International Response and U.S. Policy Options.” *Congressional Research Service Report for Congress*. Sep. 26, 2007.
- McPhee, S. “Kotjebi: North Korean children in China.” *Asian Affairs* 45.3 (2014): 484-489.

- MEASURE Evaluation. "Maternal mortality ratio (MMR)." Accessed Nov. 5, 2018. https://www.measureevaluation.org/prh/rh_indicators/womens-health/sm/maternal-mortality-ratio-mmr.
- Muico, NK. "An Absence of Choice: The sexual exploitation of North Korean women in China." *Anti-Slavery International* (2005).
- Muldoon, K, Stark, L, and Reinhart, R. *Expert Measurement Workshop: U.S. Government Action Plan on Children in Adversity Children Outside of Family Care*. Washington, D.C.: 2013.
- Natsios, A. *The Politics of Famine in North Korea*. Washington, D.C.: United States Institute of Peace, 1999.
- National Human Rights Commission of Korea. *Korean-English Glossary of North Korean Human Rights Terms*. Seoul, 2016.
- . *Haeoecheryu Bukanitaljumin adong ingwonsanghwang sillaejosa* [Situational Report of Human Rights of North Korean children who are living outside of Korean Peninsula]. Seoul, 2012.
- Natsios, Andrew. *The Great North Korean Famine: Famine, Politics and Foreign Policy*. Washington, D.C.: United States Institute of Peace Press, 2001.
- Noland, M, Robinson, S, & Wang, T. *Famine in North Korea: Causes and Cures*. Washington, D.C.: Institute for International Economics, 1999.
- Noland, M. "Famine and Reform in North Korea." *Asian Economic Papers* 3.2 (2006): 1-40.
- Norton, R, & Wallace, J. "Special Supplement to the RNIS Report: The Democratic People's Republic of Korea (DPRK)." Nov. 29, 1997.
- Nossal Institute for Global Health. *University of Melbourne Evaluation of Women's and Children's Health Program*. 2008.
- Oberdorfer, D. *The Two Koreas: A Contemporary History*. Basic Books, 1997.
- Open North Korea. "Contemporary Form of Slavery, in North Korea." https://tbinternet.ohchr.org/Treaties/CRC/Shared%20Documents/PRK/INT_CRC_NGO_PRK_26561_E.pdf.
- Pak, S. "The growth status of North Korean refugee children and adolescents from 6-19 years of age." *Econ. Hum. Biol.* 8 (2010): 385-395.
- Papain, T. "The Convention on the Rights of the Child: How North Korea is Violating a Child's Right to a Quality Education." *City University of Hong Kong Law Review* 3 (2011): 65-88.
- Park, KB, & Kim, EE. "The Case for Funding the UN's Request for Humanitarian Assistance to the DPRK." *38 North*, Oct. 23, 2018.
- Park, YS, Park, SM, Jin, YJ, & Kim, SJ. "Psychiatry in Former Socialist Countries: Implications for North Korean Psychiatry." *Korean Neuropsychiatric Association* 11.4 (2014): 363-370.
- Patterson, E. "Effectiveness of insulin coma in the treatment of schizophrenia: A control study." *AMA Archives of Neurology & Psychiatry* 79.4 (1958): 460-67.
- Peder, S. "North Korean defectors, resettled in the US, torn as tensions escalate." *CNN*, Sep. 17, 2017.
- People for Successful Korean Reunification. "UNCRC Alternative Report to the 5th Periodic Report for the Democratic People's Republic of Korea." 2017.
- Perry, S, Gresham, L, Linton, H, & Schoolnik, G. "Engaging North Korea on Mutual Interests in Tuberculosis Control." *KEI Academic Paper Series* 6.2 (Feb. 2011).
- QSR International. NVivo qualitative data analysis software. Doncaster: QSR International Pty Ltd. 2012.
- Radnofsky, L. "White House's Hard Line on Refugees Reduces Number of North Korean Defectors." *The Wall Street Journal*, Jun. 8, 2018.
- Ray, P, Davey, C, & Nolan, P. Still on the Street: *Still Short of Rights. Analysis of Policy and Programmes Related to Street Involved Children*. Accessed October 29, 2018. https://www.ohchr.org/Documents/Issues/Children/Study/survey_report_2011_web2.pdf.
- Republic of Korea Ministry of Education. "Plans for supporting North Korean Refugee students, 2017." Accessed Jun. 27, 2018. <http://www.moe.go.kr/boardCnts/view.do?boardID=294&boardSeq=70825&lev=0&searchType=null&statusYN=C&page=6&s=moe&m=0503&opType=N>.
- Republic of Korea Ministry of Unification, "Key Statistics," accessed Sep. 25, 2019. https://www.unikorea.go.kr/eng_unikorea/relation/statistics/defectors/.
- . "Policy on North Korean Defectors" Accessed Sep. 5, 2018. http://www.unikorea.go.kr/eng_unikorea/relation/statistics/defectors/.
- . "Settlement Support for North Korean Defectors." Accessed Jun. 4, 2018. https://unikorea.go.kr/eng_unikorea/whatwedo/support/.
- Robinson, C. "Famine in slow motion: A case study of internal displacement in the Democratic People's Republic of Korea." *Refugee Survey Quarterly* 19.2 (2000).
- . "North Korea: Migration Patterns and Prospects." Report prepared for The Korea Project: Planning for the Future. Center for Strategic and International Studies (CSIS) and the University of Southern California, Korean Studies Institute. 2010.

- . “Intractability and change in crisis migrations: North Koreans in China and Burmese in Thailand.” *In Humanitarian Crises and Migration: Causes, Consequences and Responses*. Routledge, 2014.
- Robinson, C, Kim, T, Cha, J, & Lee, K. Population estimation of North Korean refugees and migrants and children born to North Korean Women in Northeast China: Results from a study in Heilongjiang Province. Submitted to the Korean Institute for National Unification. 2013.
- Robinson, C, Lee, MK, Hill, K, & Burnham, G. “Mortality in North Korean Households.” *Lancet* 354.9175 (Jul. 24, 1999): 291-295.
- Robinson, C, Lee, MK, Hill, K, Hsu, E, & Burnham G. “Demographic methods to assess food insecurity: A North Korean case study.” *Prehospital and Disaster Medicine* 16.6 (2001).
- Ryall, J. “South Korea slashes North Korea human rights budget, raises regime aid.” *DW*, Sep. 3, 2018.
- Saldana, J. *The Coding Manual for Qualitative Researchers*. Thousand Oaks, CA: Sage Publications, 2016.
- Sang-Hun, Choe. “Children of North Korean Mothers Find More Hardship in the South.” *The New York Times*, Nov. 25, 2018.
- Schewekendiek, D. “Determinants of well-being in North Korea: Evidence from the post-famine period.” *Economics and Human Biology* 6 (2008): 446-454.
- . “Regional Variations in Living Conditions During the North Korean Food Crisis of the 1990s.” *Asia-Pacific Journal of Public Health* 22.4 (2010): 460-476.
- Schwekendiek, D and Pak, S. “Recent growth of children in the two Koreas: A meta-analysis.” *Economics and Human Biology* 7 (2009): 109-112.
- Seok, YH. *Bukan-ui uiryosillae* [Situation of North Korean Healthcare System]. Seoul: Korea Institute for National Unification, 2003.
- Seung, Changho. *Inmin bogeon saeop gyeongheom: juche sasang-ui gichi mite sae sahoe geonseleseu irukan gyeongheom* [Experience on Peoples’ Public Health Policy: Experience of building new society under the banner of Juche ideology]. Pyongyang: Korean Workers’ Party, 1965.
- Shim, E. “More than 30 percent of North Koreans use meth, opium.” *United Press International*, Dec. 1, 2016.
- Shin, H, Lee, H, Lee, K & Jeon, J. “North Korea’s trends on healthcare system in the Kim Jong Un era: Concentrated on healthcare delivery and organizational system.” *Journal of Peace and Unification Studies* 8.2 (2016): 181-211.
- Shin, YJ, Moran, K, & Sung, N. “A new strategy for tuberculosis control in North Korea.” *Epidemiology and Health* 37 (2015).
- Song, J. “Twenty Years’ Evolution of North Korean Migration, 1994–2014: A Human Security Perspective.” *Asia & the Pacific Policy Studies* 2.2 (2015): 399–415.
- Spezza, G, Zadeh-Cummings, N. “North Korea’s silent health crisis.” *The New Humanitarian*, Feb. 2019.
- Spoorenberg, T and Schewekendiek, D. “Demographic Changes in North Korea: 1993–2008.” *Population and Development Review* 38.1 (2012): 133-158.
- Spoorenberg, T. “Fertility Levels and Trends in North Korea.” *Population* 4.3 (2014): 433-445.
- Stark, L, Rubenstein, B, Muldoon, K & Roberts, L. *Guidelines for Implementing a National Strategy to Determine the Magnitude and Distribution of Children Outside of Family Care*. Washington, D.C.: USAID Center for Excellence on Children in Adversity, 2014.
- Sullivan, K and Jordan, M. “Famine, Nuclear Threat Raise Stakes in Debate Over N. Korea.” *Washington Post Foreign Service*, Mar. 13, 1999.
- Taylor, BT, Chekaluk, E, and Bennett, J. “Post-Traumatic Stress Disorder, Depression, and Anxiety among North Korean Refugees: A Meta-Analysis.” *Psychiatry Investigation* 14.5 (2017): 550-561.
- The Bush Institute. “U.S.-Based North Korean Refugees: A Qualitative Study – October 2014.” Dallas: George W. Bush Presidential Center, 2014.
- Tyldum G and Brunovskis, A. “Describing the Unobserved: Methodological Challenges in Empirical Studies on Human Trafficking.” In Laczko, F. and Gozdziaik, E., eds., *Data and Research on Human Trafficking: A Global Survey*. Offprint of the Special Issue of International Migration 43.1/2 (2005).
- “US accepts six North Korean refugees,” *BBC News*, May 7, 2006. <http://news.bbc.co.uk/2/hi/asia-pacific/4981294.stm>.
- U.S. Central Intelligence Agency. *World Factbook*, 2017. <https://www.cia.gov/library/publications/the-world-factbook/geos/kn.html>.
- U.S. Department of State. *2006 Trafficking in Persons Report*.
- . *2017 Trafficking in Persons Report*.
- U.S. Government Accounting Office. *Report to Congressional Requesters. Humanitarian Assistance: Status of North Korean Refugee Resettlement and Asylum in the United States*. Washington, D.C., Jun. 2010.
- UNICEF. “Antenatal care.” Accessed Jul. 31, 2018. <https://data.unicef.org/topic/maternal-health/antenatal-care/>.
- . *DPRK Multiple Indicator Cluster Survey 2017*. Pyongyang: UNICEF DPRK, 2017.

- . *Report of the Second Multiple Indicator Cluster Survey in the DPRK*. Pyongyang: Central Bureau of Statistics, 2000.
- . *Situation analysis of children and women in the Democratic People's Republic of Korea – 2017*. Pyongyang: UNICEF, 2016. https://www.unicef.org/dprk/Situation_Analysis_of_Children_and_Women_in_DPR_Korea_UNICEF_2017.pdf.
- . *The State of the World's Children 1998: Focus on Nutrition*. New York: Oxford University Press, 1998.
- . *The State of the World's Children 1999*. New York: UNICEF, 1999.
- . “Maternal mortality.” Accessed Jul. 31, 2018. <https://data.unicef.org/topic/maternal-health/maternal-mortality/>
- UN Committee on the Rights of the Child. “Concluding observations on the fifth periodic report of the DPRK” Oct. 23, 2017.
- UN Department of Economic and Social Affairs. *1996 Demographic Yearbook*. New York: 1998.
- UN General Assembly. “Situation of human rights in the Democratic People's Republic of Korea—Note by the Secretary General.” UN Doc. A/72/394. Sep. 18, 2017.
- UN High Commissioner for Refugees. “Guiding Principles on Internal Displacement,” Jul. 22, 1998. <https://www.refworld.org/docid/3c3da07f7.html>.
- UN Human Rights Council. *Report of the commission of inquiry on human rights in the Democratic People's Republic of Korea*. UN Doc. A/HRC/25/63. Feb. 7, 2014.
- UN Inter-Agency Group for Child Mortality Estimation. *Levels and Trends in Child Mortality: Report 2017*. UNICEF, New York: 2017.
- UN Office of the High Commissioner for Human Rights. “Ratification Status for the Democratic People's Republic of Korea.” https://tbinternet.ohchr.org/_layouts/TreatyBodyExternal/Treaty.aspx?CountryID=47&Lang=EN.
- Woo-Cummings, M. “Research Paper 31: The Political Ecology of Famine: The North Korean Catastrophe and Its Lessons.” Tokyo, Jan. 2002.
- World Bank. “Democratic People's Republic of Korea - Fertility rate, total (births per woman).” Accessed Jul. 31, 2018. <https://data.worldbank.org/indicator/SP.DYN.TFRT.IN?locations=KP>
- WFP. “Food Aid Deliveries to Democratic People's Republic of Korea from 1995 to 2003.” International Food Aid Information System, 2003.
- . “On the knife edge of a major famine.” Rome: Apr. 18, 1997.
- WHO. “Death and DALY estimates for 2004 by cause for WHO Member States.” http://www.who.int/healthinfo/global_burden_disease/estimates_country/en/.
- . *WHO Country Cooperation Strategy: Democratic People's Republic of Korea: 2014-2019*. New Delhi: 2016. http://www.searo.who.int/dprkorea/documents/ccs_dprk_2014-2019.pdf.
- . *Nutritional Landscape Information System Country Profile Indicators: Interpretation Guide*. Geneva: 2010. http://www.who.int/nutrition/nlis_interpretation_guide.pdf.
- . Adolescent Health. http://www.who.int/topics/adolescent_health/en/.
- . International Classification of Diseases for Mortality and Morbidity Statistics. <http://www.who.int/classifications/icd/en/>.
- World Vision. “North Korea Food Questionnaire.” Federal Way, Washington: 1997.
- Yang, J. “Struggles of resettlement: North Koreans in South Korea.” *Psychology International* (Sep. 2018). <https://www.apa.org/international/pi/2018/09/north-koreans-resettlement.aspx>.
- Yeo, Y, Kim, KY, Oh, JH, Shin, JD, and Kim, MH. *2008 nyeon hangukbokjipaeoneol simcheung bunseok bogoseo: hangukbokjipaeoneol hwaryonghan sahojijpyo bunseok* [An In-depth Study of 2008 Korea Welfare Panel Study: Analyzing Social Indicators]. Seoul: Korea Institute for Health and Social Affairs, 2009.
- Yoon, Il-Geon. “North Korea begins new 1-year curriculum next month.” *Yonhap News*, Mar. 25, 2014.
- Yoon, Y. “North Korean Defectors’ Process of Migration and Adaptation to Society.” In Kyo-Shik Min and Myung Ken Lee, eds., *Paving the Future of Multicultural Asia*. Seoul: Global Together, 2014.
- Yonhap News. *North Korea Handbook*. London: Routledge, 2002.

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