

# Discussion: Critical Aspects of Census - The Study of Population Structure of Democratic People's Republic of Korea

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## Abstract

The Great Famine may have had a continued impact on the population structure of North Korea even after the crisis subsided ten years ago. However, there is a significant gap between what has been said about the country and what data indicates. This gap seems inevitable mainly because reliable data are seriously lacking and access is restricted for most scholars outside the country. Yet, it is only reasonable to question why most studies have failed to explain the causality between the Great Famine and accumulated changes in the population of North Korea. In this regard, a recent study conducted by Korean demographers (Jeon *et al.*, 2015) have several implications on the importance of accurate and reliable data when the study involves such rare and scarce information. This paper explores the changing trends of the population structure in North Korea providing a review of recent studies on demographic issues associated with North Korea and offers suggestions on understanding the post-famine effect on the overall changes in the population of North Korea.

Keywords: Famine, population structure, North Korea, demography.

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## 1. Introduction

Demography is the statistical study of human populations within a certain area, region or society (Weeks, 2011). Basic data used for demography are Population and Housing Census (henceforth referred to as census) and vital statistics. A census is the most basic data to understand population phenomenon. A census involves a complete enumeration of the population; therefore, knowing the number of households and number of housing of a nation at a certain point of time has the advantage of allowing a snapshot of a nation's overall situation as well as the simultaneous situation of smaller areas. A census can also estimate the projected population and is why most countries conduct a census to use as the foundation for the statistical architecture of a nation. The results of a census are used as resourceful data when making major national policies and conducting various research at research institutions. Census results also function as frames of national statistics in sample population surveys; therefore, most countries have been conducting census on a 5- or 10 year- interval due to the advantages and necessity of a census.

## 2. Importance of Census Data to North Korea

For various reasons, North Korea failed to regularly conduct a proper census despite the advantages and necessity of a census. First, the financial conditions of North Korea are inadequate to support

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the necessary cost to conduct a census. In South Korea, the 2010 census incurred approximately 250 billion won, which is 5,000 won per capita. In USA, the required cost for the census in 1990 had already reached \$10 per capita and is on a sharp rise surpassing the labor costs increase rate or inflation rate. In 2010, the average cost to obtain a household census response in person was \$56, while obtaining it via mail was possible at a minimum cost of 42 cents (The US Census Bureau, 2010). In the case of North Korea, it is impossible to directly substitute figures of required costs given its characteristic socialist economy. However, the required costs of conducting a regular census is can undoubtedly a grave burden to the government considering North Korea's financial. The censuses in 1993 and 2008 were both conducted at minimum costs and entirely supported by external financial support (*i.e.* United Nations). The second background to North Korea's lack of proper census is the burden of releasing data. If the nation's total population or regional population structure by age is released from a census, then the number of deaths from famine in the first part of 1990s or the number of soldiers will be released as well. These numbers are regarded critical data that can have a serious impact on North Korea's current national security system or its spirit of nationalism. For these reasons, it is suspected that North Korea is reluctant to conduct a census while making the best use of administrative data for internal purposes. The third problem associated with the lack of a census in North Korea is the governmental administrative capacity related to planning and implementing a census. In South Korea, a census is conducted every five years while surveying and counting methods are consistently upgraded to better handle various fast-changing social situations. In North Korea, however, periodic surveys are not performed by the Central Bureau of Statistics, DPR Korea that is exclusively responsible for a census. Hence, it might be unthinkable for the North Korean government to implement a census even after financial problems are cleared, unless there is sufficient support for human resource management and planning-administrative ability demanded for a large-scale survey.

Conducting a census for North Korea and understanding the population structure changes based on its results are indispensable for North Korea and South Korea, as well as international organizations such as the United Nations. It was against this backdrop that the UN funded a census in North Korea in 1993 and 2008. The 2008 census, in particular, was encouraging because the UN provided financial support as well as actively participated in planning, surveying, counting, and publishing. However, it is only natural to raise questions about the reliability of the data since the census of North Korea was conducted in the midst of problems previously mentioned.

### **3. Challenges for Studies on North Korean Population**

Reliable information and data sources on North Korea are scarce, a series of studies conducted by Korean Demographers (like Jeon *et al.*, 2015) are extremely relevant because they attempt to find answers body of the results from the censuses conducted twice in North Korea are reliable enough to understand the nation's population and for further estimation or analysis. It seems that the ultimate purpose of these studies conducted by South Koreans is to accurately reconstruct the population figure structure of North Korea by examining the proposed models that use available census data from North Korea. However, it is well known that resourceful data about the North Korean population are scarce. Therefore, it is inevitable for these scholars to develop and secure accurate and reliable information about the population of North Korea. In this respect, the study by Jeon *et al.* (2015) is meaningful as it made a significant contribution to narrowing the gap between currently available data and required information to prepare for the development of evidence based policy (EBP) for post-reunited Korea. As Jeon *et al.* (2015), propose in the study, the reunification of two Koreas may resolve certain aspects of social problems associated with demography such as aging or low fertility. Considering

such challenges from lack of pertinent resources and the anticipated advantages from broadening our understanding of North Korea, the strongest merit of this study is that it uses data drawn from census and vital statistics of the DPRK and indicates how other experts or novices in demography can reasonably use data to assess and estimate populations of the DPRK with limited resources. Thus, it is undeniable that this study has great statistical strengths and that the potential usefulness of the study results is a great contribution to peer conducted research and North Korea policy-makers. A few recommendations below are intended as encouragement and guidance to the authors and peer related researchers for future studies.

A more thorough review of the population estimates by Statistics Korea is recommended since the “1993–2055 Population Projection of North Korea” published in 2010 does not provide a specific method used to predict a future population structure. The authors made an argument against the reliability of the population projection report conducted by Statistics Korea but failed to provide any methodological reason or reference. They merely noted that the report is questionable that life expectancies of North Korea are 59.5 for male and 66.4 for female in 1998 even when the life expectancy was lowest due to the famine. The “1993–2055 Population Projection of North Korea” also reports an adjustment of the age-specific population using the survival rate from the life table without the allocation of the omitted military population. It extends the open end age of 2003 census from 80+ to 100+, by assuming that the mortality pattern of 2003 is the same as 1998. However, the life expectancy pattern in their study indicates that the authors asserted that the mortality pattern seems to have changed due to famine-related excess deaths. It would be more meaningful for the study to take into account and address the shortcomings of the previous governmental report.

Jeon *et al.* (2015), made important improvements to the previous official report. Statistics Korea (2010) noted that inconsistencies due to changes in the population structure may be related to the omission of the military population, but the previous report failed to note any further explanation for the adjustment of the discrepancy. Jeon *et al.* took into account that the estimate of younger age cohort should be based on the omitted military populations revealed in the previous research by Adlakha and West (1997) as well as Spoorenberg and Schwekendiek (2012). Central Bureau of Statistics of North Korea (2009) represented the age-sex-specific population for each age and 5 year age. However, in the total sum of 1 year age-specific population, 21,213,000, does not coincide with that of 5 year one, 20,522,000. In this study by Jeon *et al.* the difference between the two age-specific populations was stated as the textual remarks in the footnote of each table as individuals from military camps and adjusted the difference by adding the omitted military population. This represents a major contribution and improvement that the authors made over the previous findings.

Lastly, while recognizing the authors' effort to explain the finding, detailed explication is recommended with regard to the population change induced by the Great Famine in North Korean (approximately from 1995). It is remarkable that the number of deaths (casualties from the famine) among women was higher than men in any age cohort. This could be explained partly by the case of the younger generation, more males in the military and who were more likely to survive than females. Likewise, female seniors were less likely to survive from famine due to their lack of resources (food and medicine) when the system of income (and other resources) redistribution malfunctioned.

Future studies may want to develop research questions elaborated on what Jeon *et al.* (2015) found in their studies: 1) What are the consequences or prolonged effects of the Great Famine in North Korea? 2) What is the population structure like when age, gender and region are included? 3) When unification happens, how will the population structure of North Korea affect the overall population structure of a re-unified Korea in terms of labor force, internal migration, fertility and ageing?

#### 4. Conclusions

The population structure of a country is an important indicator of national competitiveness and growth. However, attempts to provide any demographic population analysis become extremely challenging when it comes to North Korea. It will be meaningless to draw certain conclusions or prospects on the future the “Hermit Kingdom” without any solid evidence, reliable data, and trustworthy information and expert knowledge. Nevertheless, trying to understanding the population structure of DPRK is important to prepare reunification and estimate the socio-economic cost for national welfare under a re-unified Korea. The study by Jeon *et al.* (2015) was to first validate and restructure and/or edit current North Korean census, but their achievements may bring far-reaching implications as the revised data set will better explain population change and structure in North Korea than previous comparable studies.

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