INTRODUCTION AND POPULATION TRENDS

In 1721, the Tokugawa government decided to carry out a population survey throughout Japan, by collecting population reports that had been investigated by every local lord and magistrate in their respective administrative area. The second survey was conducted in 1726 and after that it was carried out every six years. The last survey was undertaken in 1846. Among these 22 surveys, 12 have the figures for each province (kuni), and 10 have the population in each province by sex.

This was the first national population survey in Japan for which there is an available record. However, as with almost all pre-modern statistics, the population records were not at all accurate. There are several weaknesses including the lack of the warrior class population, the lack of children in certain local domains, and the intentional reporting of incorrect data. The national population was recorded as stagnating between 24 and 28 million, however, we now know that this number is an underestimate by about 5 million. Still, these shortcomings can be ignored when we utilize it for drawing the population trends for each province or area.

Dividing Japan into three, according to the survey the population of the north-east part was in decline, the central part was stagnant, and the south-west part was increasing. [Fig. 8.1] When we look at Japan in detail, the population trends of the 14 districts were as follows. On the Pacific side of Ou, Kanto, Kinai and surrounding Kinki districts, population had decreased, and in the Hokuriku, Chugoku, Shikoku and Kyushu districts, population had increased. The decreases in Ou and northern Kanto were due to bad weather, the resulting poor harvests continued throughout the late eighteenth century. The decreases in southern Kanto, Kinai and surrounding Kinki districts was the result of the over-urbanization of these areas. In Kanto, Edo had a population of one million, and in Kinai, Kyoto’s and Osaka’s respective populations were 400 to 500 thousand. These “megalopolis” were the product of the developing economic activities that Tokugawa Japan experienced. But more importantly they also had their urban network, with the middle- and small-size urban communities that were located in the same area.
By pre-modern standards, such huge urban populations create an urban “graveyard” effect, or a negative feedback function between economic development and population growth in the area, so that population stagnated or even declined. Since the crowded urban conditions were very vulnerable to famine, epidemics and disasters, the natural growth rate for an urban population was negative before modern technology was adapted to urban living conditions. In the western part of Japan, on the contrary, where population growth was obvious, there were no huge cities and the urbanization ratio was low. There was no “graveyard.” The situation of the Ou district was similar to the western part, however, its population also declined. There must be some particular reason: the deterioration of the natural environment.

In the 1750s and 1780s, the climate of northern Japan was unusual. Both the summer temperature and the hours of sunlight were insufficient for rice cropping. In 1783, Mt. Asama erupted and the Kanto Plain was covered by volcanic ash. Agricultural production fell drastically, and coupled with the lack of food storage, ineffective administrative relief, and poor transportation led northern Japan to the great Tenmei famine. The severest ever recorded.

The author does not know if these unusual climatic conditions were peculiar to Japan or not. In the seventeenth century, when Europe was hit by a climatic crisis, Japan and North-east Asia enjoyed very high population growth which had never previously occurred. Perhaps the natural environment was suitable for such a development. The population of Japan increased from 12 million to 30 million and was accompanied by a huge amount of land reclamation for cultivation, which resulted in the extension of agricultural undertakings into marginal land.