BOOK REVIEW

Nakahara: Family Farming and Population in a Japanese Village, 1717–1830 by Thomas C. Smith, Stanford, Stanford University Press, 1977, xiii+183 pp.

Ι

In the countries of Western Europe, population growth during the several centuries preceding the start of industrialization remained at a low level due to a low fertility rate which was caused by the marital restraint that is known as the "European marriage pattern"; the mean age of first marriage for women being about twenty-five and the proportion of women never married at age fifty being about 15 per cent. The resulting rise in per capita income continued slowly but steadily, so that by the beginning of modernization income had already reached levels that could only with difficulty be considered "poverty levels" by global standards. The Japanese experience is identical to this, in that from the eighteenth century to the early half of the nineteenth century the Japanese population remained virtually stationary, and from the latter half of the nineteenth century on began remarkable industrialization. However, in Japan, remote both geographically and culturally from Europe, low population growth was not a result of marital restraint as it was in Europe. In Japan, women traditionally married young, and there were few women who never marry. If this is the case, why then did population growth stagnate as it did at the latter half of the Tokugawa era? Contemporary literature often allude on one hand to decline of population due to famines, and on the other to the practices of abortion and infanticide, but this is not confirmed by data. Thomas C. Smith attempts to elucidate this problem by analyzing the population registers of Nakahara Village from 1717 to 1830.

Nakahara (a pseudonym) was a small village of about fifty households situated on river-side polder land at the juncture of the Ibi and Makita rivers in the northwestern part of the Nōbi plain which surrounds Nagoya on all sides. It lay about five miles south of the castle town of Ogaki where the daimyo resided. From the geographic peculiarities of its location, Nakahara was on one hand a marshy, and therefore unhealthy environment, but on the other hand it benefited from the advantages of river transportation facilities. Nakahara seems to have been cultivated from the middle of the seventeenth century on, but permanent settlement there appears to have begun at the turn of the century. Being a new settlement, it was favored with a relatively low man / land ratio, and the population of Nakahara in the years 1717-70, when families were in the process of formation, grew annually at the high rate of 1.18 per cent per annum. Between 1770 and 1795, when damage from inundations caused by a rising river-bottom was severe, and during which a number of abnormally cold summers occurred, population stagnated completely. The period from 1795 to 1830 again recorded a remarkable population increase of 0.86 per cent per annum. The author infers that it was the completion in 1783 of the Unomori drainage that

brought Nakahara back to economic prosperity. Throughout the entire observed period Nakahara's population grew at an annual rate of 0.76 per cent, which, it must be said, was an unusually high rate for Japan at that time.

Mortality and fertility rates in Nakahara, after being adjusted for late registration of infant births, are roughly the same as recorded rates in other Japanese villages of the time, while compared to European rural parishes of the eighteenth century they are low to moderate. It is surmised that real income in Japan of the eighteenth century was lower than that of the countries of Western Europe; when we further reflect that, as already mentioned, the marshy Nakaharan environment was unhealthy, it comes as quite a surprise to find that Nakahara's mortality was so low. No information can be obtained that would rationally explain this phenomenon.

Age-specific marital fertility in Nakahara follows a convex curve. This suggests that the low registered fertility of Nakaharan women was not due to birth control methods. Were birth control widely practiced in Nakahara, families would concentrate births in the early years of their marriage, and once they had arrived at the desired small number of children, new births should cease. Therefore, were this the case, age-specific marital fertility in Nakahara would follow a concave curve of the type seen in European rural parishes.

The sex ratio of the 652 recorded births in Nakahara was 114. Compared with the normal ratio, this shows a slight favoring of males, but cannot be thought to be an unusually high value. When, however, we analyze the sex ratio of the births after the third birth in families that, at the time of the birth, were predominantly male (PM), were evenly represented male-female (M=F), and were predominantly female (PF), we find that the sex ratio of the after-third births in PM families was 67, in M=F families was 148, and in PF families was 200. We can interpret these results to suggest that Nakaharan families took the existing sex ratio of their children into account when they chose the sex of their next child born. The only way for Nakaharan families to not only limit the size of their families, but also to control the sex ratio of their children is, needless to say, infanticide.

The author's argument regarding fertility is extremely persuasive, and the author's attention to the sex ratio of families is truly commendable. My (the reviewer's) only misgiving concerns the validity of the sample, a point that I will touch upon again later in this review.

Let us now turn to the author's analysis of nuptiality. The author summarized his conclusions on this subject in six points (pp. 105-6). In the opinion of the reviewer, most of these conclusions regarding nuptiality held true in Japan until at least the 1930s as customary behavior or as commonly accepted ideas in traditional society and they only disappeared after World War II. For this reason the reader's assessment of the efforts made by the author in this field would probably be quite different, depending on whether he belongs to the old generation of Japanese (which group includes the reviewer) who are familiar with the social customs and accepted ideas that held sway until the 1930s, or on whether he does not belong to this group of readers. To the latter group of readers, the author's observations might seem very fresh and exciting, but to the former group of readers, they probably seem commonplace, self-evident clichés, which no one would think of taking the trouble to collect

data on and study. But the fact that we have neglected to relate to foreign readers even such common-place, taken-for-granted aspects of that society of the past forces one to reflect deeply on how greatly this neglect obstructs mutual understanding between nations.

Next, by examining the interrelationship between family and farming, the author attempts to uncover the planning criteria used in limiting family size and family composition through infanticide. But in the case of farming especially, the only usable data comes from the tax registers compiled roughly every decade from 1717 to 1823, and which only give information on the amount of land owned by each household; no information is given on the amount of land actually cultivated, much less on sources of nonagricultural income. Compared to the information available on the family, the information available on farming is distinctly insufficient.

Transfer of property among Nakaharan households was extremely frequent. No more than an average of 7 per cent of households retained the same size holding from one tax register to the next; these tax registers being compiled at average intervals of twelve years. Half of the households registered increased or decreased the size of their holding by more than 20 per cent. Family size followed these extreme changes in size of holding: There is a highly significant correlation between landholding and family size as measured eight times between 1717 and 1802. While it should be thought that this cause and effect relationship worked both directions, since land could be leased to match a family's working force, the cause and effect relationship was actually primarily in the direction of landholding on family size, in other words we can say that in fact Nakaharans adjusted the size of their family to that of their landholding.

In 1812 and 1823 the correlation between landholding and family size diminished. The author explains this in the following way: Damage from floods in the 1770s was very great in Nakahara; as a countermeasure work on the Unomori drainage was begun; the combination of flood damage and the expenses involved in the drainage project brought economic difficulties to Nakahara. As a result, after the year 1780, land was concentrated in the hands of the Maki family, the village headman, and most of the poorer families had become tenants of the Maki family. Therefore, since from this time on the separation between landholding and land use in Nakahara widened quickly, it only appears outwardly at first glance that the interrelationship between farming and family had disappeared.

One other alternative explanation is that opportunities for side jobs within Nakahara increased after 1800. Based on the fact that both the number of servants employed within Nakahara and the number of Nakaharans that left the village for outside employment decreased in the latter half of the eighteenth century and disappeared entirely from the records after 1800, the author believes that nonagricultural employment had decreased.

II

In both his analysis of fertility and that of the interrelationship between farming and family, which I have summarized above, the author presents very stimulating hypotheses.

But unfortunately the reviewer is unable to express complete approval of all of the author's very interesting theories. My points are as follows:

- (1) The author has pooled the records of 652 births spread out over the period 1717-1830, and has calculated age-specific marital fertility therewith in order to analyze their sex-ratio composition. The tacit assumption behind this is that these 652 births could be regarded as a homogeneous sample for the purposes of this analysis. As I have already stated, the population of Nakahara stagnated completely in the years 1770-95, while in the period of family formation from 1717 to 1770 Nakahara's population rose at the rapid annual rate of over 1 per cent. It is difficult to believe that limitations on family size, mainly by means of infanticide, took place in the same way, qualitatively and quantitatively, during these two periods. I am unable to offer proper substantiation for this view here, but it would seem that in the first period there would tend to be relatively light restrictions placed on the number of children born, and since there were many opportunities to form branch families, the tendency would be relatively great to favor males. For this reason, one would think that the 652 registered births lack homogeneity as a sample for the purposes of the author's analysis. It would be desirable for enough attention to be paid to the question of whether or not this is something important enough to influence the author's conclusions.
- (2) The reviewer's second point concerns the reasons behind the regeneration of population growth in the years 1795–1830. It also concerns the author's assertion that demand for agricultural labor was consistently a major factor in deciding family size in Nakahara. According to the author, with the completion of the Unomori drainage in 1783, harvests improved, and with this increased stability, Nakahara returned to economic prosperity. With the concentration of property ownership in the hands of the Maki family after 1780, a great number of formerly independent farmers became tenants, but this served rather to reduce the gap between the economically lower class and middle class families and did not hinder the economic welfare of the people of Nakahara. It was in this context that Nakaharans gradually relinquished outside nonagricultural employment and came increasingly to specialize in farming.

I have no objection to the author's inference that total farming output in Nakahara probably increased. But since a tenant farmer was required to hand over approximately one half of his harvest as farm rent to the landholder, one cannot immediately judge whether the income levels of lower and middle class families rose or not when land tenancy increased. At the very least, we can be almost certain that, however, temporary this may have been, periods of increasing landholding concentration were times of falling income levels.

When we look at Figure 7.1 (pp. 120–21), we see that one family that in 1746 had a holding of twenty-two koku, had lost it all by 1764. But the same family had increased its holding to sixteen koku in 1780 and to fifty-five koku in 1792. This means that in the period 1764–80 this family was increasing its holding at the rate of one koku per annum, and in the period 1780–92 was increasing its holding at a rate of over three koku per annum. Where could this family, which in 1764 held no land at all, have procured the money necessary to buy this amount of land? The only possible explanation is that this family had an adequate nonagricultural source of

income. Thus the records left by tax registers suggest that outside employment existed for at least one part of Nakahara's population.

Now if, as the author assumes, there were no significant opportunities for non-agricultural income in Nakahara, the concentration of landholding in the hands of the Maki family could not have failed to leave a trace of intra-village strife in Nakahara's records.

Nakahara was located only five miles from the castle town of Ōgaki. We can infer from its geographical location that river transportation was developed. These facts should have contributed in no small measure to the income of the Nakaharans.

According to a study by Hideo Hayashi, at the end of the eighteenth century a cotton weaving industry sprung up on the left bank of the Kiso River, mainly around Okoshi, in Nakajima County in the ancient province of Owari (now Aichi Prefecture). By the middle of the nineteenth century this had spread from Anpachi County to Yōrō County, both in the ancient province of Mino (now Gifu Prefecture). Nakahara, in Anpachi County, could not alone have been left untouched by the expansion of this weaving industry, conducted by subcontracting to women who did the weaving at home (debata). Since this weaving industry was operated this way throughout the nineteenth century, as an independent side job done at home by farming families, you cannot use the disappearance of servants from the Nakahara population registers as grounds to deny that independent nonagricultural employment existed at that time.

These phenomena are no more than indirect evidence, but they do substantiate the hypothesis that at the beginning of the nineteenth century nonagricultural employment expanded rapidly in the Nöbi region, which includes Nakahara. Of course the author will probably reject this point of view. But should he by any chance agree, it would occasion only minor revisions of a few pages of his text. (Mataji Umemura)