Census analysis series No.3

An Analysis of Agricultural Labor Force

Census analysis team of the project on the structure of the agricultural industry and rural regions

Continued Decline in the Agricultural Labor Force, as well as a Shift to a Decrease in Previously Rising Regular Employees, Directors, and Members

Japan's total agricultural labor force (measured in terms of the total number of days worked) continues to decline, with the total number of labor units (one labor unit equals 225 days worked) expected to drop to below 2 million in 2020 (Figure 1). This is largely attributed to the decline in the participation of farm household members in the agricultural labor force, which constitutes most of the agricultural labor force. From 2005 to 2020, the number of farm household members decreased by 44%, and concurrently, the total number of days worked in agriculture decreased by 40%. Aside from the agricultural labor force participation of farm households, the number of directors, members, and regular employees of agricultural cooperatives, which had been increasing until 2015, also started to decline. The number of temporary workers has decreased since 2010.

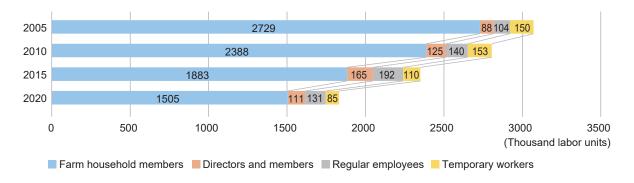


Figure 1. Changes in agricultural labor force by category (number of days worked in agriculture, national, and sexes combined)

Source: Census of Agriculture and Forestry

Note: 1) The number of days worked in agriculture is shown in labor units (225 days = 1 labor unit).

- 2) Farm households pertain to individual management entities. Directors and members pertain to agricultural cooperatives.
- 3) The number of days worked in 2020 pertains only to agricultural work.

The labor force participation of agricultural cooperatives increased until 2015, with a high proportion of regular employees as well as directors and members, and its share in total days worked also increased (from 5.9% in 2005 to 13.4% in 2015). By 2020, however, the decline in individual management entities with a large family farming labor force continued, and the percentage decrease in the collective farming labor force was even larger. As a result, the share of agricultural cooperatives in the total days worked deceased to 12.7%.

Regular employment experienced a significant shift. It has reversed from an increasing trend in terms of both the number of days employed and the number of employees to a substantial decline (from a 43% increase during 2010-15 to a 29% decrease during 2015-20). This fluctuation in the number of regular employees is primarily attributed to changes in the number of agricultural entities that provide employment.

It is important to note that during this period, the number of individuals employed in agriculture, as reported in the Population Census and Economic Census, continued to rise. This is consistent with previous trends. However, it is worth mentioning that the definition, target scope, time period, and methods used to analyze the data may vary.

Family Agricultural Labor Force Unable to Compensate for Manpower Shortage Resulting from Population Ageing

Farm household members (individual management entities), who constitute the majority of the agricultural labor force, have an age distribution that peaks in the 65-69 age group, both in terms of population and number of persons engaged in self-employed farming. In younger age groups, the number of individuals decreased as age decreased. The number of core persons mainly engaged in farming and full-time farmers, which are key labor indicators, is concentrated in the age group of 60 and above. They are particularly numerous in the 65-69 and 70-74 age groups (these two age groups account for 37.9% of the core persons mainly engaged in farming and 36.7% of full-time farmers). The number of male full-time farmers has increased, primarily in the 60-64 age group, which includes retires who have increased their days of farm work. However, from 2015 to 2020, there was a significant increase in the number of male full-time farmers in the 65-69 age group. This is likely influenced by the 2013 amendment to the Act on Stabilization of Employment of Older Adults, which requires employment until the age of 65 years.

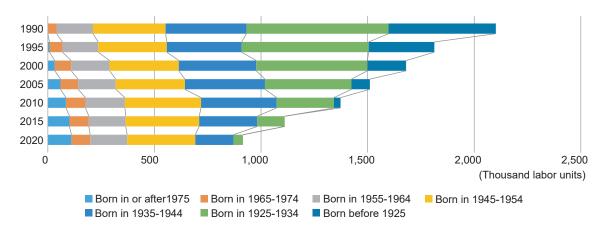


Figure 2. Changes in number of days worked by men across Japan

Note: 1) Until the year 2015, the data pertains to commercial farm households. However, for 2020, the data pertains to individual management entities.

- 2) Individuals born during the Taisho era were included in Showa Single Digit Generation in the 2015 and subsequent census analysis.
- 3) The total number of days worked were calculated and converted to labor units (1 labor unit = 225 days).

Further, if we look at generational changes in the number of days worked for men (Figure 2), it becomes evident that the decline in the number of days worked is largely attributed to a decline among older adults. On the other hand, there was a minimal increase in the number of days worked by younger generations, indicating that they were not able to compensate for the decline among older adults. Until 2005, the "Showa Single Digit Generation" (individuals born between 1925 and 1934) had the most number of days worked, which was surpassed by those born between 1945 and 1954. The number of days worked by this generation has remained relatively stable in the recent years. However, as the number of days worked by those born between 1935 and 1944 and the Showa Single Digit Generation decreased, the proportion of the total increased. Looking ahead, it is certain that the number of days worked by those born between 1945 and 1954 will also decrease because of aging, leading to a significant decline in the labor force participation of farm households.

(Analysis by Matsuhisa Tsutomu)