

Agriculture in Hokkaido Japan

June 2020

Department of Agriculture
Hokkaido Government

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■ Characteristics of Agriculture in Hokkaido

- Hokkaido accounts for 25% of Japan's total cultivated land area, and has been developed predominantly for rice, field crops, and dairy farming.
- The cultivated land area per farm household in Hokkaido is about 13.0 times greater than that of any other prefecture. Business farm households account for 70.9% of the total prefectural farm households, compared with 19.2% in other prefectures. Farmers in Hokkaido run their businesses on a large-scale, full-time basis.

■ Share of Hokkaido Agriculture in Japan

| Classification | Unit | Hokkaido | Japan | Share | Year |
|------------------------------|---------------------|----------|---------|-------|------|
| Cultivated Land Area | Thousand ha | 1,144.0 | 4,397.0 | 26.0% | 2019 |
| Commercial Farmers | Thousand households | 35.1 | 1,130.1 | 3.1% | 2019 |
| Full-time Farmers | | 22.7 | 368.3 | 6.2% | |
| Part-time Farmers (Class I) | | 10.0 | 177.4 | 5.6% | |
| Part-time Farmers (Class II) | | 2.4 | 584.4 | 0.4% | |
| Agricultural Population | Thousand people | 87.9 | 1,681.1 | 5.2% | 2019 |
| Agricultural Output | Hundred million yen | 12,593 | 91,283 | 13.8% | 2018 |
| Crop farming | | 5,246 | 58,079 | 9.0% | |
| Livestock farming | | 7,347 | 32,589 | 22.5% | |

■ Farm Households in Hokkaido versus in Other Prefectures

| Classification | Unit | Hokkaido (a) | Other Prefectures (b) | a/b | Year |
|--|--------------|--------------|-----------------------|------|------|
| Cultivated Land Area Under Management per Household | ha | 28.5 | 2.2 | 13.0 | 2019 |
| Farmland Consolidated for Use by Farmers | % | 91.0 | 44.1 | 2.1 | 2018 |
| Percentage of Farmers under 65 Years Old (core agricultural workers) | % | 58.7 | 28.5 | 2.1 | 2019 |
| Percentage of Business Farms | % | 70.9 | 19.2 | 3.7 | 2019 |
| Number of Dairy Cows | head | 134.2 | 58.5 | 2.3 | 2019 |
| Number of Beef and Dairy Cows | | 761.6 | 232.7 | 3.3 | |
| Number of Beef-only Cattle (per household) | | 85.8 | 37.6 | 2.3 | |
| Agricultural Gross Income | Thousand yen | 35,035 | 5,403 | 6.5 | 2018 |
| Agricultural Income | | 9,507 | 1,510 | 6.3 | |
| Non-agricultural Income | % | 762 | 1,558 | 0.5 | 2018 |
| Agricultural Dependency (per household) | | 92.6 | 49.1 | 1.9 | |

■ No. of Commercial Farm Households by the Nation's Largest Sales Volume Sectors*

| Classification | Unit | Hokkaido | Japan | Year |
|--|---------------------|----------|-----------|------|
| Paddy Rice Farmers | Thousand households | 10,138 | 705,029 | 2019 |
| Upland Farmers (wheat, potato, beans, industrial crops) | | 8,481 | 67,616 | |
| Horticulture Farmers (outdoors, greenhouse, fruit, flower) | | 9,287 | 371,220 | |
| Livestock Farmers | | 5,981 | 15,297 | |
| Beef Cattle Farmers | | 1,335 | 32,895 | |
| Other (pig farm, chicken farm, sericulture, other) | | 1,522 | 16,876 | |
| Total | | 36,744 | 1,208,933 | |

■ Share of Food Manufacturers in All Manufacturing Businesses in Terms of Shipment Value

| Classification | Japan | Hokkaido |
|----------------|-------|----------|
| Share (2018) | 9.0% | 34.9% |

* The Census of Agriculture and Forestry

Source: "Census of Agriculture and Forestry", "Survey on Cultivated Land Area", "Survey of Movements in Agriculture Structure", "World Census of Agriculture and Forestry", "Statistics of Agricultural Income Produced", "Statistical Survey on Livestock", and "Statistical Survey on Farm Management and Economy" by the Ministry of Agriculture, Forestry and Fisheries; "Census of Manufactures" by the Ministry of Economy, Trade and Industry

- Note 1. The figure of "Agricultural Output" is a sum total across all prefectures. The country-wide estimated total of this figure in FY 2018 is 9.5580 trillion yen.
2. 'Business farm' indicates a farm household whose principal income source is agriculture and which contains a person under 65 years old who is engaged in farm work for 60 days or more in a year.
 3. Agricultural dependency' indicates agricultural income as a percentage of gross income (agricultural income + agricultural production related business income + nonagricultural income).
 4. The values for each prefecture in "Farmland Consolidated for Use by Farmers" are based on the FY 2018 preliminary calculations for the whole of Japan conducted by Hokkaido. A "farmer," as defined in this figure, is a licensed individual (or organization), a person meeting a series of designated requirements, a special farming group, or those either overseeing or participating in the agricultural enterprises of farm collectives.
 5. The figures of the upland farmers and horticulture farmers in the column of the No. of Commercial Farm Households by the Nation's Largest Sales Volume Sectors were determined based on the actual situation of agriculture in Hokkaido

■ Hokkaido's Food Self-Sufficiency Ratio

○ While the nation's calorie-based food self-sufficiency ratio hovered at a low 38% in FY 2017, Hokkaido's ratio was 206% in the same fiscal year. Other than Hokkaido, only five other prefectures, mainly in the Tohoku region, have ever reached a level of self-sufficiency over 100%

○ Hokkaido also has an output-based food self-sufficiency ratio of 204%, centering around the major sector of upland field crops. While there are other prefectures like Miyazaki that have higher output-based ratios than Hokkaido, they produce products with high profitability

○ Agriculture, forestry, and fisheries in Hokkaido supply approximately 20% of domestically-supplied calories, and significantly contribute to a stable food supply in Japan.

■ Food Self-Sufficiency Ratio of Hokkaido and Major Prefectures

The figures are current as of FY 2017 (estimate)

(Unit: %)

| | Self-Sufficiency Ratio | |
|-----------|------------------------|------------|
| | Calorie (A) | Output (B) |
| Japan | 38 (37) | 66 (66) |
| Hokkaido | 206 | 204 |
| Aomori | 117 | 235 |
| Iwate | 101 | 194 |
| Akita | 188 | 142 |
| Yamagata | 137 | 173 |
| Niigata | 103 | 104 |
| Miyazaki | 65 | 281 |
| Kagoshima | 82 | 268 |

Source:
"Supply and Demand of Food" Ministry of Agriculture, Forestry and Fisheries

* Parenthetical values in the "Japan" row are from FY 2018

■ Hokkaido's Contribution to Domestically-Supplied Calories

The figures are current as of FY 2017 (estimate)

(per capita per day)

| Total Calorie Supply | Domestic Calorie Supply | | |
|----------------------|-------------------------|-------------|---------------------------------------|
| | A. Japan | B. Hokkaido | C. Hokkaido's Contribution rate (B/A) |
| 2,439 kcal | 927 kcal | 211 kcal | 23 % |

Source:
"Supply and Demand of Food"
Ministry of Agriculture, Forestry and Fisheries
Department of Agriculture Hokkaido Government

The figures for "Domestic Calorie Supply," and "Hokkaido's Contribution Rate" are based on preliminary calculations conducted by the Hokkaido Government.

Calculations for "Domestic Calorie Supply"

A. Japan = "Total Calorie Supply" x "Countrywide Food Self-Sufficiency Ratio"

B. Hokkaido = ①Hokkaido-Produced Calorie Supply x ②Hokkaido Total Population ÷ ③Country Total Population

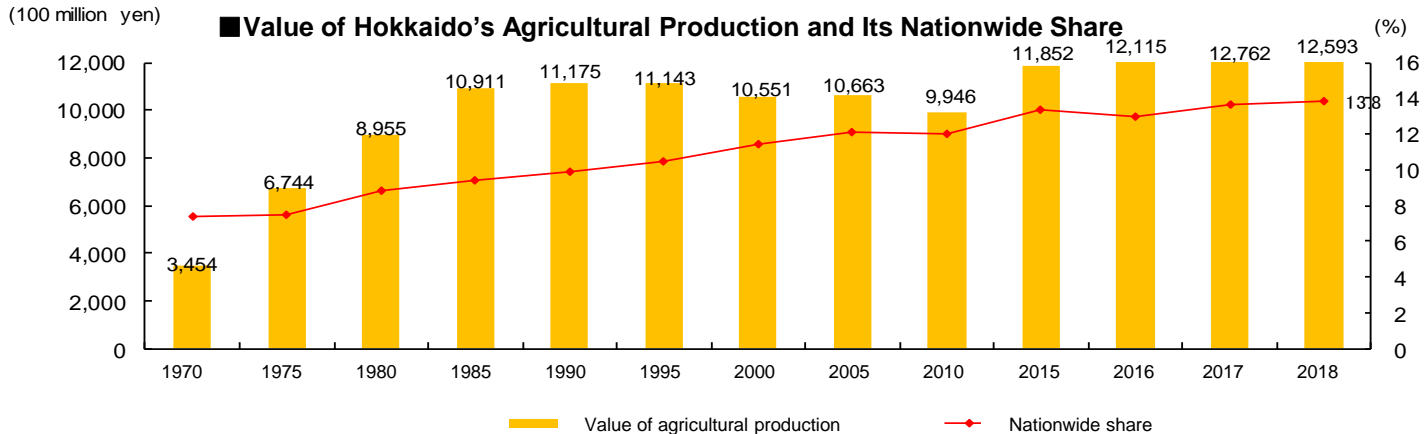
①: Total Calorie Supply x Hokkaido Self-Produced Calorie Ratio

②、③: Ministry of Internal Affairs and Communications "Population Figures" (Current as of October 1)

Value of Agricultural Production: Changes and Component Ratio

○ Hokkaido's agricultural output, valued at 1.259 trillion yen, comprises 13.8% of Japan's total output. The prefecture's total output has remained above 1 trillion yen since 1984, and reached a record high in 2016.

○ Hokkaido's component ratio of the value of production is greater for dairy cattle, vegetables, and field crops than other prefectures'.

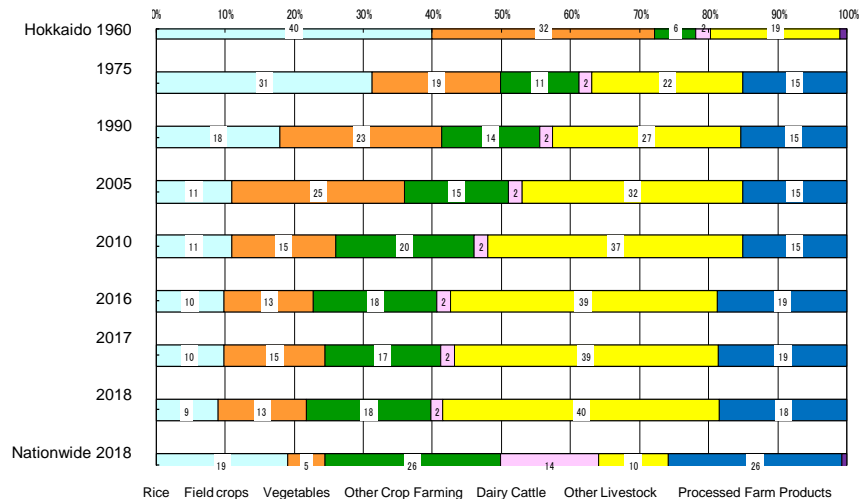


The Volume of Agricultural Products by Product (2018)

(Unit: Hundred million yen)

| Product | Hokkaido | Japan | Share (%) | Rank |
|---------------------------|---------------|---------------|-------------|----------|
| Rice | 1,122 | 17,513 | 6.4 | 2 |
| Wheat, and other grains | 261 | 508 | 51.4 | 1 |
| Beans | 304 | 637 | 47.7 | 1 |
| Potatos | 648 | 1,976 | 32.8 | 1 |
| Vegetable | 2,271 | 23,212 | 9.8 | 1 |
| Fruit | 54 | 8,406 | 0.6 | 36 |
| Flower | 131 | 3,327 | 3.9 | 8 |
| Other | 455 | 2,500 | — | — |
| Crop Subtotal | 5,246 | 58,079 | 9.0 | 1 |
| Dairy Cattle | 5,026 | 9,339 | 53.8 | 1 |
| Beef Cattle | 1,016 | 7,416 | 13.7 | 2 |
| Pig | 439 | 6,104 | 7.2 | 4 |
| Chicken | 357 | 8,999 | 4.0 | 7 |
| Other | 509 | 731 | — | — |
| Livestock Subtotal | 7,347 | 32,589 | 22.5 | 1 |
| Total | 12,593 | 91,283 | 13.8 | 1 |

Component Ratio of the Value of Agricultural Production



Note)

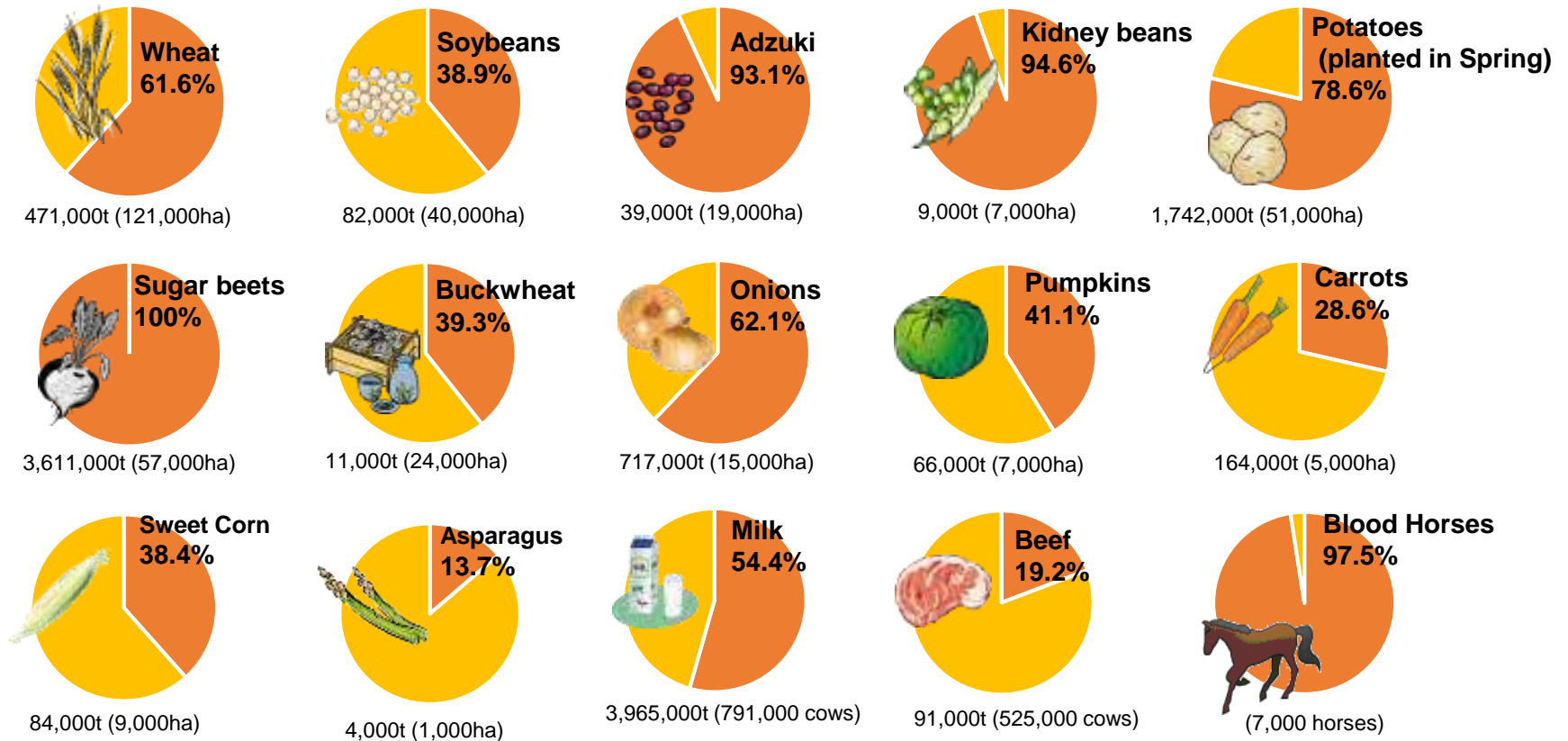
The policy for ensuring consistency in the operating income of rice paddies and field farming was introduced in 2007. This led to some of the grants that had been previously included in the value of production of wheat, soybeans, beets and potatoes for starch materials being given to management bodies in a lump sum as grants based on past records of production. They are not included in the value of production of the relevant crops. In the past, each municipality was considered to be a unit when estimating the figures. However, now, a prefecture is considered to be a unit when estimating the figures. For this reason, intermediate products that are sold/purchased between municipalities within the same prefecture are not included in the value of production.

■ Status of Agriculture in Hokkaido

○ Hokkaido makes significant contributions to a stable food supply in Japan, and produces the largest volume of products in many of the major agricultural and livestock sectors in Japan.

■ Major Agricultural and Livestock Products of which Hokkaido is the Largest Volume Producer in Japan (2018)

* Figures in () show either area of cultivation or number of livestock



Source: "Crop Survey", "Survey on Production of Milk and Milk Products", and "Statistical Survey on Livestock" and "Survey on Fishery Production and Aquaculture Production" by the Ministry of Agriculture, Forestry and Fisheries

Note: The volume of rice produced in Hokkaido accounts for 6.6% of the national volume, a total of 515,000t. The figure ranked second in the nation, following that of Niigata prefecture

Agricultural Characteristics in Each Area

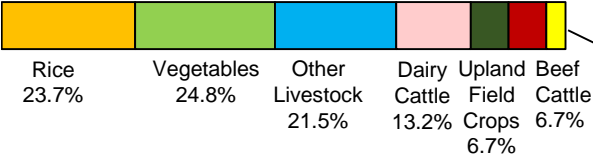
Hokkaido makes up a large area of Japan, and its weather and geographical conditions vary between regions. For this reason, many regions of Hokkaido have unique agricultural practices.

Central Hokkaido Area



Agriculture here is based mainly on rice cultivation, but each region makes use of its unique characteristics, with some growing vegetables and others raising beef cattle or blood horses.

Agricultural Output 417.7 billion yen (2018)

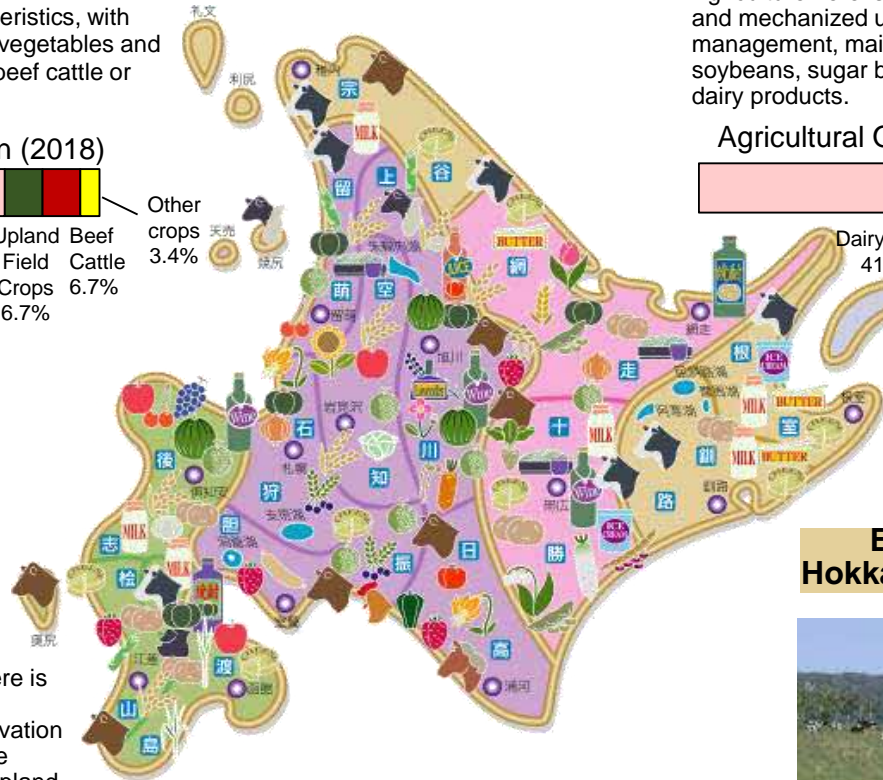
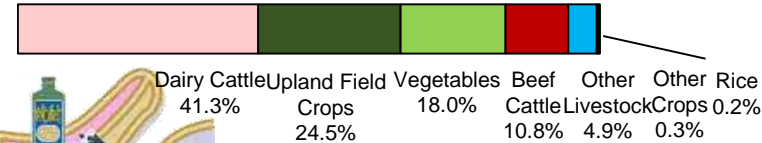


Eastern and Northern Hokkaido (upland farming) Area

Agriculture here is based on large-scale and mechanized upland farming management, mainly producing wheat, soybeans, sugar beets, potatoes, and dairy products.



Agricultural Output 502.7 billion yen (2018)

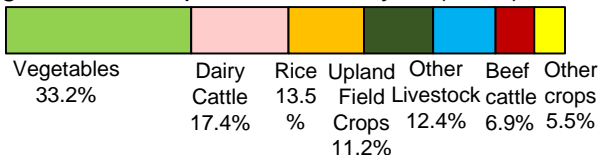


Southern Hokkaido Area



Agriculture here is based on the intensive cultivation of greenhouse horticulture, upland farms, and fruit, as well as rice cultivation.

Agricultural Output 91.6 billion yen (2018)



Eastern and Northern Hokkaido (dairy farming) Area



Agriculture here makes use of the vast meadow areas to conduct large-scale dairy farming at the EU level

Agricultural Output 247.7 billion yen (2018)

