

IV Crops

Explanation

This section contains the statistics on crop production compiled from the results of the surveys regularly conducted by the Statistics Department of the Ministry of Agriculture, Forestry and Fisheries (hereafter MAFF), as well as relevant statistics from the MAFF Agricultural Production Bureau's "Survey on Production of Local Special Vegetables", "Specialty Fruit Tree Production Trend Survey", and the "Nationwide Survey on Crop Damage by Wild Birds and Animals".

Brief explanations for the respective statistics are as follows.

1 Rice, wheat, barley, sweet potatoes, pulses, miscellaneous cereals, and feed and forage crops

(1) Planted area

The planted area of paddy field rice was obtained by a sampling survey with actual measurement conducted in a sample unit area (sampling unit of cultivated land), data collection by relevant authorities, and an observation survey, as well as from the "Survey on Cultivated Land Area" (See. "III AGRICULTURAL LAND"). Data of crops other than paddy field rice were obtained by a mail survey sent to relevant bodies, and field observation surveys or information gathering.

The planted area refers to the area utilized for crop cultivation in the survey year. In the case of non-perennial crops, such area refers to the area utilized for crops in which seeds have been sown or seedlings have been planted where they have germinated or seedlings have taken root. The planted area also includes planted land outside dykes, in residential areas, and horticulture facilities in which crops are cultivated away from the ground.

(2) Production

For paddy-rice, the yield per 10 ares is estimated from the objective measurement survey (crop cutting or experimental digging harvest in a certain area) of sample plots which were selected from sample units of a field and from field observation surveys or information gathering based on standard lot surveys. Production was calculated by multiplying the estimated yield per 10 ares by the planted area mentioned above.

For other crops, the yield is calculated by mail surveys sent to relevant bodies and sample management entities.

Production refers to the quantity of grown and harvested crops that met a given quality standard.

Normal yield per 10 ares refers to the yield per 10 ares estimated on the basis of the trend of past production, taking into consideration the improvement in cultivation method and the variance in variety and planted area, on the assumption that weather conditions and crop damages are equal to those of normal years.

Productions of feed and forage crops in 2011 exclude those voluntarily not used as feed for livestock in the areas where the results of the radioactive material surveys of grass, etc. conducted by each prefecture were above the provisional permitted value, following the TEPCO Fukushima Dai-ichi Nuclear Power Plant accident.

2 Major vegetables, fruits and nuts, major industrial crops and flowers

Surveys on planted area (or fruiting area, growing area or harvested area) and the production of major vegetables, fruits and nuts and major industrial crops (excluding tea and leaf tobacco), and on planted (harvested) area of flowers were made through mail surveys sent to shipping bodies and sampled management entities, and through field observation surveys or information gathering.

Planted area (or fruiting area) and productions of major vegetables and major fruits and nuts in 2011 exclude those not harvested due to the impact of the TEPCO Fukushima Dai-ichi Nuclear Power Plant accident and those that were harvested but the shipments of which were restricted or voluntarily restrained in the areas affected by the accident. However, planted area (or fruiting area) includes those of crops which producers grew with the intention to harvest them.

The growing area of fruits and nuts, and tea was obtained by mail surveys sent to relevant bodies and field observation surveys or information gathering.

A production survey on tea was made by mail surveys sent to sample dried tea leaf factories.

As for productions of tea in 2011, productions of leaves include leaves that were picked to produce dried tea before taking measures of voluntary restraint or shipment restriction in the target prefectures in which the shipment of tea is restricted under the Act on Special Measures Concerning Nuclear Emergency Preparedness.

Among the industrial crops, the survey on planted area and production of rape seeds has been conducted since 2010.

Data on leaf tobacco was supplied by the Japan Tobacco, Inc.

Definitions of the statistical items appearing in this part are as follows:

- (1) Planted area refers to the total area utilized for the cultivation of plants, including the area for cultivation in conservatories (greenhouses, glass houses, etc.), along with those areas explained above 1-(1) 'Planted area' (as for the time reference of annual production of vegetables, fruits, and flowers, see (7) and (10) below).
- (2) Growing area refers to the area utilized for the cultivation of permanent crops (includes perennial crops), as of survey date, regardless of whether they were planted collectively or in a scattered manner.
- (3) Fruiting area refers to the fruited growing area in which farm operators intend to harvest during the crop year.
The relation between growing area and fruiting area is as follows: growing area \geq fruiting area.
The growing area is surveyed and estimated as of July 15, but it is not necessarily consistent with the year's total growing areas, because of deserted areas, which were cut down and deserted after the fruit harvest prior to the date of the survey.
- (4) Harvested area in the case of perennial crops for industrial use, refers to the area which is actually harvested during the crop year. Harvested area in the case of flowers (bulbous plants and potted flowers), refers to utilized area for growing harvested and shipped flowers, and does not include utilized area for growing bulbous plants.
- (5) Production refers to the quantity of crop harvested, which has met a given standard. Regarding vegetables, measurement of the production is made from the total weight of shipments.
- (6) For the following major vegetables, national total figures of planted area and production (excluding those produced in 2007 and 2010) are estimated:
"Japanese radishes", "carrots", "potatoes", "taros", "Chinese cabbages", "cabbages", "spinach", "lettuce", "welsh onions", "onions", "cucumbers", "eggplants", "tomatoes", and "sweet peppers".
For the following major vegetables, national total figures of planted area and production (excluding those produced in 2007 and 2010) are also estimated.
"Turnips", "edible burdocks", "lotus root", "yams", "komatsuna", "qing-geng-cai", "butterbur", "honewort", "garland chrysanthemum", "Potherb mustard", "celery", "asparagus", "cauliflower", "broccoli", "leeks", "garlic", "pumpkins and squashes", "sweet corn, green", "green beans", "peas, green pod", "broad beans", "soybeans, green", "ginger", "strawberries", "melons" and "watermelons".
For fruits (other than pineapple) and nuts, national total figures of fruiting area and production (excluding those produced in 2009) are estimated.
- (7) The time reference of annual production is in principle the calendar year (from January to December), but for the crops listed below, the time reference of annual production by harvesting and shipping period is as follows:

Japanese Radishes : from April to March next year

Turnips : from last September to August this year

Carrots : from April to March next year

Edible burdocks : //

Lotus root : //

Potatoes : //

Taros : //

Yams : //

Chinese cabbages : //

Cabbages : //

Spinaches : //

Cauliflower : //

Broccoli : //

Lettuce : from April to March next year

Welsh onions : //

Onions : //

Cucumbers : from last December to November this year.

Eggplants : "

Tomatoes : "

Sweet peppers : from last November to October this year

Peas, green pod : from last September to August this year

Gingers: from April to March next year

Strawberries : from last October to September this year

The time reference of annual production of fruits and nuts is in principle the calendar year (from January to December).

- (8) Data of other vegetables were compiled by the Agricultural Production Bureau of MAFF from the survey results conducted by prefectural governments about the production (planted area, production and sales quantity) of vegetables whose production have been growing as Japanese dietary patterns become diversified or are already relatively large (53 items), and which are not covered in the "Statistics on Production and Shipment of Vegetables" conducted by the Statistics Department of MAFF.
- (9) Survey data on other fruits and nuts, i.e. those fruits and nuts among the various fruits and nuts grown in the Prefectures which are not subject to the MAFF Statistics Department's "Statistics on Production and Shipment of Fruits and Nuts", was compiled by the MAFF Production Bureau via the Regional Agricultural Bureaus from surveys conducted by the prefectures on trends of growing areas, production, shipments, processessing, etc. per species, type and family.
- (10) The time reference of annual production of flowers is based on the calendar year (from January to December of the same year).
- (11) Survey results for the area of installed glass and vinyl houses for horticulture and the total area of cultivation includes data for those facilities growing vegetables, fruits and nuts, and flowers which are not tallied under the MAFF Statistic Department's surveys which were compiled by the MAFF Production Bureau via the Regional Agricultural Bureaus from surveys conducted by the prefectures.

3 Aggregate planted (growing) area of crops

This is the total planted (or growing) area of all plants, including crops not listed in this part.

Planted areas of crops which are planted more than twice in the same field, such as the second rice cultivation and vegetables in the same production year, are counted separately (double counted) to make up the total.

Total planted area is the sum of the planted area for each type of crop.

Green pulses and miscellaneous green cereals are included under "Vegetables".

4 Crop damage

- (1) There are two types of crop damage survey : one is the periodic survey conducted on paddy field rice at the time of the production survey. The other is the emergency survey made when serious crop damages occur. The methods of these surveys are both a sample survey (with actual measurement or estimation) and a field observation survey.

Statistics used here are the results of periodic surveys of damage of paddy rice at harvest time.

a Damaged quantity refers to the quantity of crops damaged or decreased due to abnormal meteorological, biological and other phenomena from the beginning of growing to the harvest time.

b Damaged area refers to the area of fields that have been damaged. Data is collected on the cause of the damage.

Total damaged area is the sum of all areas damaged due to causes. Accordingly, in the case where more than two sorts of damage occur in the same field, they are counted separately (double counted).

c Rate of damage refers to the percentage of damaged quantity as compared with the normal production of crops and expresses the degree of damage.

d The ratio of damaged area to planted area is calculated by dividing the damaged area by planted area.

(2) Data on crop damage by wild birds and animals was compiled by the MAFF Production Bureau from reports from the prefectures.

5 Rounding procedure of figures

Because of rounding, the total figures are not necessarily equal to the total of individual figures (See. "EXPLANATORY NOTES").