

## V Commodity Price Index of Agriculture

### Explanation

For statistics on price index of agricultural products and price index of materials for agricultural production, "Statistical Survey on Commodity prices in Agriculture" by the Statistics Department of MAFF is recorded in this part.

This is conducted to grasp prices to be connected with farming directly, and to measure the fluctuation in the prices of agricultural inputs and outputs.

In the revision for 2000 base, along with the discontinuation of the index numbers of materials for daily life, the "price index to measure the economic trends in rural areas and price level fluctuation" was replaced by the "price index to measure the price fluctuation in agricultural input and output," and "Index numbers of commodity prices in rural areas" was also revised as "Index numbers of commodity prices in agriculture." Index numbers of wages for temporary agricultural employees were discontinued in the revision for 2005 base.

The current indices are calculated by 2015 bases. The weight, which is used for calculating the index of the yearly national average price, is calculated by Laspeyres index using the national average per agricultural management entity of "Agricultural gross income" and of "Agricultural expenditures" which data provided by "Statistical survey on Farm management and Economic in 2015."

The base year price is the yearly national price in 2015 by "Statistics survey on Commodity Price in Agriculture."

For the price indices, indices (2015 = 100) of each commodity is calculated by the national average price by commodity, furthermore classification index, general index, etc. are weight-averaged to those indices by weight (ratio to agricultural gross income or agricultural expenditures).

When the revision of bases, price indices are doing linking process new and old indices for purpose of making it possible to time series analysis of long-term price changes.

Linking of new and old indices is carry out by covering the exponent of the old indices by ratio of the yearly national average price by new indices (new indices = 100) to one by old indices. In the actual calculation, the link coefficients are calculated by reciprocal number of the yearly average indices that are used to link to new indices, furthermore these are linked by dividing by old indices. This lining process was made separately for the general index and classification index.

Brief explanations for the price index of agricultural products and the price index of materials for agricultural production are as follows:

#### 1 Price Index of Agricultural Products

These indices are calculated by the producer prices on the agricultural products which were sold by agriculture management entities, and categorize into eleven types by similar products.

#### 2 Price Index of Materials for Agricultural Production

These indices are calculated by the retail prices of materials needed for agricultural production which were purchased by agricultural management entities, and categorize into twelve types by similar products.

Table on weights and number of items commodity price index of agriculture

Group of items	Weights	Number of items
Agricultural products	10,000	122
Rice	2,273	4
Wheat and barley	81	4
Miscellaneous cereals	14	1
Pulses	103	3
Potatoes and sweet potatoes	213	5
Vegetables	2,582	39
Fruits and nuts	1,097	22
Industrial crops	232	8
Flowers	502	17
Livestock products	2,900	18
Rice straw	3	1
Materials for agricultural Production	10,000	141
Seeds and seedlings	530	17
Livestock	588	11
Fertilizers	1,035	16
Feed	1,925	13
Agricultural chemicals	774	21
Miscellaneous materials	365	9
Light, heat and power	912	7
Agricultural implements	1,882	21
Automobiles and charges	530	4
Materials for building	375	8
Agricultural clothing	28	5
Rent and charges	1,056	9