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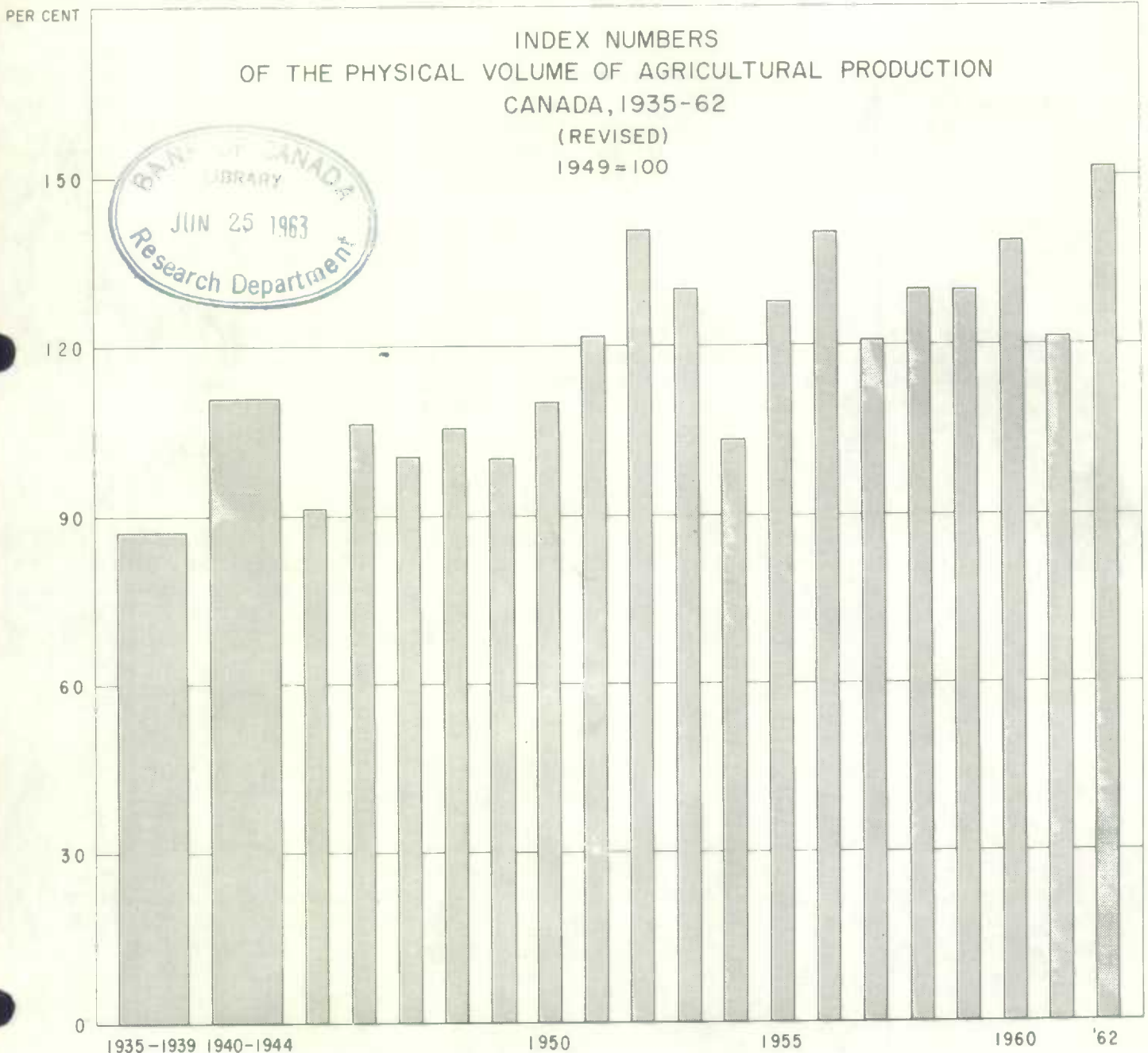
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## INDEX OF FARM PRODUCTION 1962 USING NEW BASE 1949=100

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INDEX NUMBERS OF PHYSICAL VOLUME OF AGRICULTURAL PRODUCTION, 1962(1)  
(Using New Base 1949=100)

This report presents the first large-scale revision of the Index of Farm Production since it was published in August 1949 on the time and weight base of 1935-39 = 100. The construction of this index was first started in 1948 to meet a long-felt need for a measure of change taking place in the total annual physical production of agriculture in each of the provinces (ex Newfoundland) and Canada; it is intended that the revised index will continue to serve this purpose. The revisions which have just been completed include: a change to a weight base of 1947-51 = 100 and a time base of 1949 = 100; the introduction of all revised data available since the establishment of the index; and, an increase in the number of commodities included.

The index has been designated as an index of unduplicated gross farm production and, in its construction, provision was made to avoid double-counting of farm output. Within a province, such double-counting occurs when feed grains, credited to field crop production, are fed to livestock, and appear later as livestock and livestock products. Interprovincially, this duplication occurs when feed grains produced in one province are fed in another, and when feeder cattle raised in one section of the country are shipped to another for finishing.

To avoid intraprovincial duplication, the quantities of farm products included in the index are limited to those representing sales by farmers except direct inter-farm sales, amounts consumed in farm homes on farms where produced, and amounts equal to changes in farm-held inventories of grains and livestock. Interprovincial duplication is largely eliminated by making adjustments for those cases where provincial agricultural production depends in part upon feed grains and feeder cattle from other provinces. This duplication is eliminated before the calculation of the index numbers by deducting from total provincial production, valued in terms of base year prices, the value of the contribution of the other provinces, also in terms of base year prices.

In rebasing the index, it was first reconstructed on a weight base of 1947-51 = 100 for the years 1947 to date and then converted to a time base of 1949 = 100. For the years 1935 to 1946 inclusive, the original index, on the base of 1935-39 = 100, was linked to the new index by applying to the index numbers for each of these early years a ratio of the average annual index numbers (1949 = 100) for the five years 1947-51 to the average of index numbers (1935-39 = 100) also for the five years 1947-51. The time base of 1949 = 100 was chosen first and was selected in order that the index of gross farm production could be compared directly with a proposed index of net farm production to be constructed also on a base of 1949 = 100. The choice of the five-year period, 1947-51, for the weight base was made to avoid any unusual production or price situations which might arise for any agricultural product as a result of selecting a single year as a weight base.

For the years 1947 to date, the agricultural products included in the index are, in so far as statistics are available, all commodities produced on farms for all sales except direct inter-farm sales, consumption in farm homes, or addition to farm inventories. This commodity content is in contrast with that for the original index which included only the major items of production. The commodity content of the original index was not changed, but the most up-to-date information pertaining

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(1) Excludes Newfoundland.

to this content was included in the index prior to linking it to the newly based index. Although the use of only the major items of agriculture production seemed to provide a fairly accurate measure of agricultural production during those years when the original index of production was in use, it was decided to increase coverage to as close to 100 per cent as possible in order that the basic information might also be used in the further development of a net index of farm production.

As in the case of the earlier series, the Laspeyre's formula was used in the preparation of the revised index of farm production. The resultant index expresses the current gross output of agricultural products as a percentage of the gross output in the base period. The formula is as follows:

$$I_1 = \frac{\sum Q_1 P_0}{\sum Q_0 P_0} \times 100$$

where  $I_1$  = index for year 1

$Q_0$  = average annual production during weight base period

$P_0$  = weighted average annual price during weight base period

$Q_1$  = production during year 1

$\sum$  = summation over all items.

In comparing the new index with the old it may be noted that relationships between years have changed. During the years 1935 to 1946 any such changes can be attributable to the introduction of more up-to-date information for this period. For the years 1947 to date any changes in relationship will be due not only to the introduction of the latest data but also to the increase in commodity coverage.

During the period 1935 to 1962 the output of agricultural products has trended upward. According to the revised data, farm production during the past ten years has averaged nearly 30 per cent above that for the base year 1949 and between 45 and 50 per cent above the average for the pre-war period, 1935 to 1939 inclusive. The importance of the items included in the index has gradually changed with livestock production increasing in importance until now its percentage contribution to total production is only slightly below that of the long-time leading contributor - grains. Although dairy production has increased over the years, the rate of increase has been less than that for many other important products with the result that its contribution to total production in percentage terms, is less than it was during the pre-war period. Production of poultry products has risen quite significantly in recent years and this is reflected in the greater proportional contribution of these commodities to total agricultural output.

The index for 1962 is estimated at 151.4, the highest recorded for this new series. This compares with the previous record high of 141.4 reached in 1942 and the high levels of 140.8 in 1952 and 140.3 in 1956. The record established in 1962 can be attributed to the coincidence of large grain crops in Western Canada and high-level outputs of livestock, poultry products and dairy products.

The estimates contained in this report are based on many sources. These include the Census of Agriculture; periodic Bureau surveys of production of crops, livestock and animal products; farm products marketing agencies; processors of agricultural products; and agricultural statistics arising out of administrative responsibilities of various government departments, both Federal and Provincial.



Index Numbers of Physical Volume of Agricultural Production - Canada(1) by Provinces 1935-1962

(1949=100)

	Canada	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.
1935 .....	83.3	58.8	124.8	71.4	90.4	86.6	57.9	86.5	90.7	65.3
1936 .....	73.5	66.4	123.5	80.0	95.1	77.8	57.6	63.2	72.1	68.1
1937 .....	74.2	64.7	131.1	80.2	98.4	89.5	93.5	25.3	85.0	72.2
1938 .....	94.2	66.3	126.2	72.0	92.6	90.0	90.6	82.5	133.8	74.4
1939 .....	111.2	68.6	122.8	76.9	102.7	94.0	102.5	137.3	134.7	78.7
1940 .....	111.9	67.9	116.2	85.5	106.1	88.6	107.1	127.9	156.1	82.7
1941 .....	89.7	61.7	104.3	73.4	90.3	87.4	102.6	84.1	104.5	69.6
1942 .....	141.4	79.7	123.4	85.1	106.6	102.6	138.9	197.3	192.8	80.5
1943 .....	94.0	67.7	115.9	100.9	100.5	77.8	115.6	99.5	100.4	79.6
1944 .....	117.3	77.6	134.8	102.7	110.2	95.5	112.2	148.9	129.9	96.8
1945 .....	91.3	76.9	96.6	79.7	86.4	85.6	91.0	97.8	99.7	89.2
1946 .....	106.3	75.1	118.0	88.4	90.9	93.7	111.9	115.5	129.3	104.1
1947 .....	100.5	80.5	101.4	90.6	97.5	90.3	102.8	101.9	123.5	94.0
1948 .....	105.4	83.7	103.0	94.5	103.6	95.8	115.8	107.2	122.6	92.3
1949 .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1950 .....	110.0	91.9	102.1	96.0	108.0	98.7	111.0	128.8	115.9	92.0
1951 .....	121.6	77.2	97.1	82.1	110.6	101.6	112.7	154.6	148.7	92.9
1952 .....	140.8	102.3	108.5	91.3	116.2	112.5	124.0	200.6	168.8	104.0
1953 .....	130.1	102.0	104.2	92.1	113.3	105.1	110.0	174.5	160.4	108.2
1954 .....	103.2	98.5	109.6	85.1	110.9	102.9	91.0	90.8	122.0	108.2
1955 .....	127.7	100.3	114.4	97.4	124.6	108.3	103.6	164.0	146.7	106.5
1956 .....	140.3	101.2	115.5	103.2	127.2	113.9	132.2	184.1	165.3	113.7
1957 .....	120.8	107.9	113.9	98.1	128.0	118.9	106.8	119.7	133.3	118.9
1958 .....	129.9	106.2	110.8	94.5	133.8	132.4	127.1	117.8	150.0	123.2
1959 .....	129.8	97.7	116.7	91.8	134.3	125.3	122.8	124.9	153.7	128.8
1960 .....	138.7	98.5	117.0	96.8	134.5	128.7	126.2	162.3	150.4	131.8
1961 .....	121.2	99.2	122.5	98.1	143.3	136.8	87.7	78.2	149.3	144.7
1962 .....	151.4	97.0	125.4	95.0	152.3	140.9	155.7	166.2	162.0	152.0

(1) Excludes Newfoundland.

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