

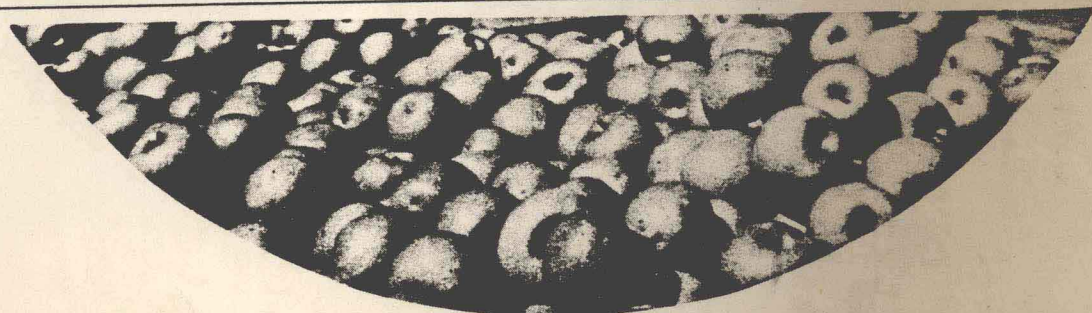
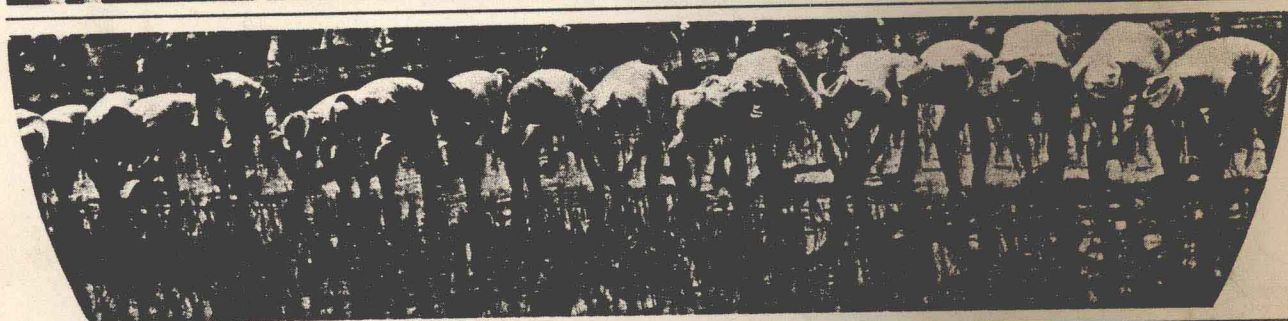
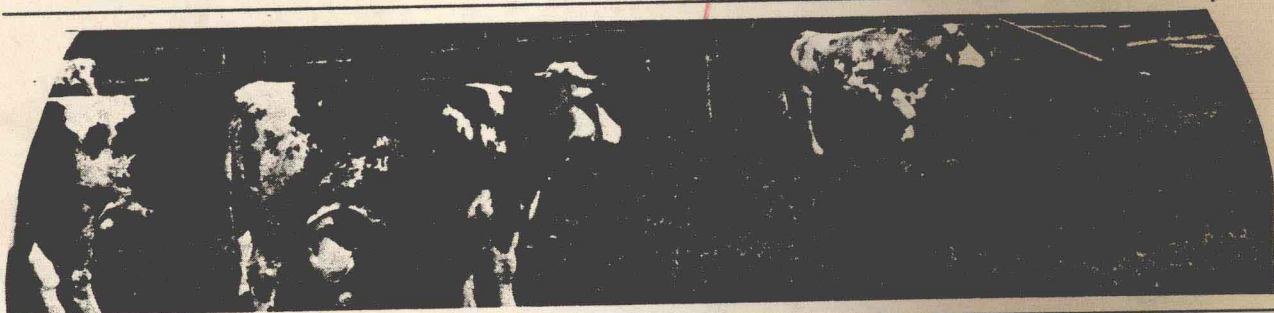
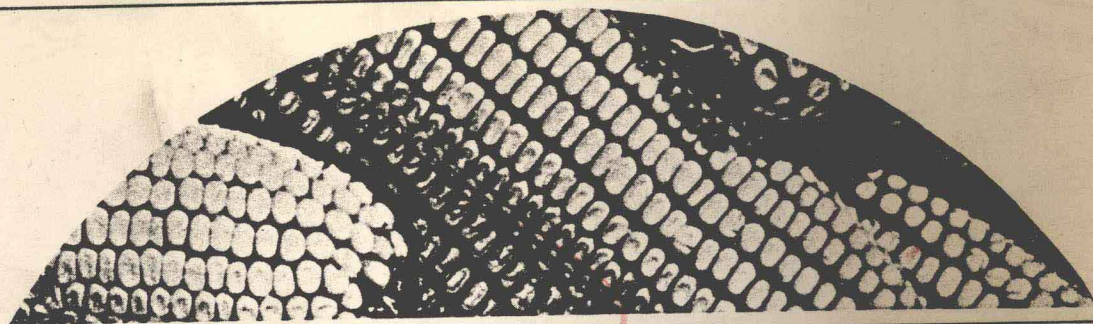


United States
Department of
Agriculture

Economic
Research
Service

Statistical
Bulletin
Number 669

World Indices of Agricultural and Food Production



FOREWORD

Annual indices of agricultural and food production in foreign countries are prepared as a part of a continuing assessment of the current world agricultural situation. They are measures of changes in annual and per capita production that are occurring over time.

The Agency for International Development (AID), U.S. Department of State, provides partial funding for the research and preparation of this publication. The results and information reported here are used for congressional reports and data files on countries receiving AID funds for assistance and agricultural development.

Primary commodities produced annually in each country are listed in 1,000 metric tons. The annual aggregated value of production is compared with the annual population by calculating a production index per capita to assist in analyzing changes in the relationship between agricultural growth and the country's population.

This statistical report combines for the first time four previously published regional bulletins with an additional world summary. Also, beginning with this issue, several major revisions have been made. The base period has been moved from the 1961-65 average to a 3-year average centered on 1970. This required changing all price weights and computing new aggregates and indices.

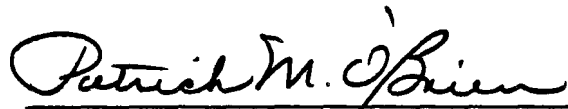
Five more countries have been added this year, bringing the total to 108. China and Vietnam, two remaining large agricultural producers, are excluded in this report as in past years due to the lack of adequate and comparable data. Modification of commodities was completed in several countries. More fruit and vegetable commodities were added to European countries. Meats were subdivided or added to many countries and other major products incorporated where it was appropriate.

In countries where commercial livestock feeding is significant, a new feed deduction ratio was derived. The feed deduction reduces the value of the total aggregates to compensate for the feed fed to poultry and livestock which are already accounted for in the production of those feeds.

The report was generated as part of the International Economics Division's program of outlook and situation analysis and reporting. The program's regularly scheduled publications include: the World Agricultural Situation and Outlook, published three times annually; regional reports on Asia, Africa and Middle East, China, Eastern Europe, the

Soviet Union, Western Europe, and the Western Hemisphere, published annually; Indices of World and Regional Agricultural Production, published annually; the Foreign Agricultural Trade of the United States, published bimonthly; the Food Aid Needs and Availabilities Report, published quarterly; and the Outlook for U.S. Agricultural Exports, published quarterly. Copies are available from Publications Unit, the Economic Research Service, Room 0054 South Building, U.S. Department of Agriculture, 14th and Independence Ave., S.W., Washington, D.C. 20250.

Boyd A. Chugg, agricultural economist, coordinated and prepared the publication. Country analysts in the Africa, Asia, East Europe, West Europe, Western Hemisphere, and North America and Oceania Branches of the International Economics Division contributed the production data. Charles Goode, economist; Lorraine Jamison; Harriet Barlowe; Gregory Acton; and Thelma Carpenter of the World Analysis Branch assisted in the preparation. Larry Otto and Mary Adams, Data Services Center, ERS, provided the programing and other computer assistance.



Patrick M. O'Brien, Assistant Director
International Economics Division
Economic Research Service
U.S. Department of Agriculture

CONTENTS

		<u>Page</u>
	Introduction.....	1
	Table	
<u>World</u>	Chart--World: Index of Production	5
1	Indices of Agricultural Production	6
2	Indices of Agricultural Production per Capita	9
3	Indices of Food Production	12
4	Indices of Food Production per Capita	15
<u>Western Hemisphere</u>	Chart--Latin America: Index of Production	18
5	Indices of Agricultural Production	19
6	Indices of Agricultural Production per Capita	20
7	Indices of Food Production	21
8	Indices of Food Production per Capita	22
9	Aggregates of Agricultural Production	23
10	Aggregates of Food Production	24
11	Argentina.....	25
12	Barbados	26
13	Bolivia	27
14	Brazil	28
15	Canada	29
16	Chile	30
17	Colombia	31
18	Costa Rica	32
19	Cuba	33
20	Dominican Republic	34
21	Ecuador	35
22	El Salvador	36
23	Guatemala	37
24	Guyana	38
25	Haiti	39
26	Honduras	40
27	Jamaica	41
28	Mexico	42
29	Nicaragua	43
30	Panama	44
31	Paraguay	45
32	Peru	46
33	Surinam	47
34	Trinidad and Tobago	48
35	United States	49
36	Uruguay	50
37	Venezuela	51

	Table	Page
<u>Western Europe</u>		
	Chart--Western Europe: Index of Production	52
38	Indices of Agricultural Production	53
39	Indices of Agricultural Production per Capita ..	54
40	Indices of Food Production	55
41	Indices of Food Production per Capita	56
42	Aggregates of Agricultural Production	57
43	Aggregates of Food Production	58
44	Austria	59
45	Belgium-Luxembourg	60
46	Denmark	61
47	Finland	62
48	France	63
49	Germany, Fed. Rep.	64
50	Greece	65
51	Ireland	66
52	Italy	67
53	Netherlands	68
54	Norway	69
55	Portugal	70
56	Spain	71
57	Sweden	72
58	Switzerland	73
59	United Kingdom	74
<u>Eastern Europe-</u>		
<u>U.S.S.R.</u>		
	Chart--Eastern Europe: Index of Production	75
60	Indices of Agricultural Production	76
61	Indices of Agricultural Production per Capita ..	76
62	Indices of Food Production	77
63	Indices of Food Production per Capita	77
64	Aggregates of Agricultural Production	78
65	Aggregates of Food Production	78
66	Bulgaria	79
67	Czechoslovakia	80
68	Germany, Dem. Rep.	81
69	Hungary	82
70	Poland	83
71	Romania	84
72	Yugoslavia	85
73	U.S.S.R.	86
<u>Asia-Oceania</u>		
	Chart--South and East Asia: Index of Production	87
74	Indices of Agricultural Production	88
75	Indices of Agricultural Production per Capita ..	89
76	Indices of Food Production	90
77	Indices of Food Production per Capita	91
78	Aggregates of Agricultural Production	92
79	Aggregates of Food Production	93

Table		Page
80	Afghanistan	94
81	Australia	95
82	Bangladesh	96
83	Burma	97
84	India	98
85	Indonesia	99
86	Japan	100
87	Korea, Rep. of	101
88	Malaysia, West	102
89	New Zealand	103
90	Pakistan	104
91	Philippines	105
92	Sri Lanka	106
93	Taiwan	107
94	Thailand	108
<u>West Asia (Near East)</u>	Chart--West Asia: Index of Production	109
95	Indices of Agricultural Production	110
96	Indices of Agricultural Production per Capita ..	110
97	Indices of Food Production	111
98	Indices of Food Production per Capita	111
99	Aggregates of Agricultural Production	112
100	Aggregates of Food Production	112
101	Cyprus	113
102	Iran	114
103	Iraq	115
104	Israel	116
105	Jordan	117
106	Lebanon	118
107	Saudi Arabia	119
108	Syria	120
109	Turkey	121
<u>Africa</u>	Chart--Africa: Index of Production	122
110	Indices of Agricultural Production	123
111	Indices of Agricultural Production per Capita ..	124
112	Indices of Food Production	125
113	Indices of Food Production per Capita	126
114	Aggregates of Agricultural Production	127
115	Aggregates of Food Production	128
116	Algeria	129
117	Angola	130
118	Benin	131
119	Burundi	132
120	Cameroon	133

Table		<u>Page</u>
121	Egypt	134
122	Ethiopia	135
123	Ghana	136
124	Guinea	137
125	Ivory Coast	138
126	Kenya	139
127	Liberia	140
128	Libya	141
129	Madagascar	142
130	Malawi	143
131	Mali	144
132	Morocco	145
133	Mozambique	146
134	Niger	147
135	Nigeria	148
136	Rwanda	149
137	Senegal	150
138	Sierra Leone	151
139	South Africa	152
140	Sudan	153
141	Tanzania	154
142	Togo	155
143	Tunisia	156
144	Uganda	157
145	Upper Volta	158
146	Zaire	159
147	Zambia	160
148	Zimbabwe	161

World Indices of Agricultural and Food Production

INTRODUCTION

This research report combines for the first time four previously published statistical bulletins with an additional world summary and supersedes all previous data and indices.

Country Indices

Country indices are calculated by Laspeyres' base-weighted aggregate formula. They are constructed from annual production data given in 1,000 metric tons multiplied by a price weight during a base period. The resulting annual sums or aggregates are divided by the values in the base period to calculate an index which represents the change in production.

Caution should be noted in using the aggregates. They are shown in "million dollars at constant prices," and are the annual sums of the quantity (1,000 metric tons) times the price (price weight) during the base period. The sum of those commodities listed in each country represents the current value of agriculture during the base period only. The sums of aggregates for other years are the values based on prices held constant at the 1969-71 average level. By holding prices constant, any change in the aggregate values can be attributed to a change in production. The aggregates do not represent gross sales by producers, or the agricultural component of the gross domestic product, although year-to-year changes in the aggregates or indices may be correlated with similar percentage changes in other such series.

Base Period Price Weights

The years 1969, 1970, and 1971 were selected as a 3-year average for the base year. During this period relative stability in both agricultural prices and production generally occurred throughout the world.

Price weights used for the base period are generally average annual prices received by producers for each commodity within their respective countries and in their local currencies. Conversion rates, published by the International Monetary Fund, part of the International Bank for Reconstruction and Development (World Bank), were used to convert local currencies to U.S. dollars as a uniform standard weight. However, rates for the Eastern European countries and the Soviet Union were derived from noncommercial, tourist, and other nonfixed (basic) rates, and more nearly reflect actual free (not official) currency

exchange rates, comparable with other free rates of exchange. Producer prices for the base period were obtained primarily from the Food and Agriculture Organization of the United Nations (FAO) with headquarters in Rome, Italy. Some price data were obtained from official reports of the countries concerned.

Regional Indices

The formula used in computing the indices for the geographic regions and economic groups is a weighted aggregative type, which is the sum of country aggregates in the group or region. World and regional indices are limited to include only those countries listed in this publication.

This method involves a bias favoring countries with relatively comprehensive commodity coverage or relatively high price weights, giving them more weight when aggregating countries into regions, but the bias is normally not significant enough to offset the advantages derived by combining countries into various alternative regions and subregions.

Feed Deduction

Some farm production such as corn, oilseeds, and other products used for livestock feed is accounted for in the indices as a grain, oilseed, etc., and also contribute to the production of livestock products. To eliminate this double counting of feed products, a livestock deduction was derived in countries where commercial feeding of livestock products is important. Grazing, pasture, hay, and other similar farm feeding are not accounted for in these indices and, therefore, is not used in calculating the feed deduction.

A fixed percentage deduction for feed was derived by dividing the value of feed for the 1969-71 base period by the gross value of livestock output in the same years. The feed value for the base period was calculated by applying to the grains, oilseeds, and other crops fed the prices received by farmers with no markup for transportation or storage costs.

For byproduct feeds, such as bran or oilcake, average prices paid by farmers were used. The feed deduction is a constant percentage of the annual value of livestock production and, thus, does not express year-to-year variations in feed actually fed.

Source and Reliability of Data

Official statistics of foreign governments are the primary sources of the production statistics used in this report. U.S. agricultural attaches, FAO, and other international organizations' commodity reports, and estimates made by country analysts in the International Economics Division

of the Economic Research Service, USDA, also were used, especially for current data. Data in the earlier years of this report for most of the developing countries are not as reliable as those in recent years. Sometimes adjustments in production statistics were made to complete the full series of years for comparability and reasonableness. Statistics on livestock products are generally not as dependable as those on the principal commercial crops.

Commodity Coverage

All agricultural production within a country is not accounted for in these indices. However, the major portion of the total and leading products are included and are used to measure the change in the annual production. These selected products seem to fairly represent and reflect each country's historical trends and changes in agriculture. Plantation or commercially grown crops are generally better reported than noncommercial crops. Crop coverage is usually better than that for livestock or fruits and vegetables. Products grown and consumed in home yards are not always included in a country's statistics and are, therefore, not included here.

Hay, pasture, silage, and grazing data are not included because of a lack of comparable worldwide measuring and reporting. Also, no accounting is made in meat production of changes derived from annual inventory numbers or changes in average weight. Meat data are on a carcass-weight basis, excluding offal and trimmed fat, and include both official and unofficial domestic slaughter where reported. Allowances are made in a few countries where a significant value in imports or exports of live animals occurs in a country's annual trade by adding the value of live animals exported to the aggregative value and subtracting the value of live animals imported.

Food and Per Capita Indices

Index numbers of food production are computed for all countries and regions. They are derived from the same production and price data as the agricultural index and differ only by the exclusion of inedible fiber products, such as cotton, hemp, kenaf, and wool; and noncaloric products, such as tobacco, coffee, tea, and spices.

The food products listed for each country do not comprise the total food supply grown by the country. Also, some output may be exported and not available for domestic use while other food may be imported and not accounted for in these indices.

Per capita indices are computed by dividing the agricultural or food index by the index of population in the same year.

Time Reference

Commodities are combined and shown for the calendar year in which the bulk of the harvest occurred. Where countries report some commodity production on an international marketing year, such as coffee, cocoa, and cotton, the reported production is included in the year shown as the beginning of the marketing or split year.

Comparing Data

Some of the statistics on production appearing here may differ from series published by other organizations or countries. Most countries continually review and revise their statistics and reporting systems. Discrepancies also occur in converting locally used units to metric measures or combining the harvest of two separate crops within a 12-month period. Production data can often be confusing when reported on a marketing, crop, or other split-year (1980/81) basis in determining in which calendar year the bulk of the harvest occurred.

Countries that customarily publish indices of the gross value of agricultural production select their own price weights, base years, and methodology. These factors plus differences in definition and measuring meat production, changes in livestock inventory and weights, and variations in commodity coverage are major reasons for deviations between the respective country indices and those appearing in this report. However, the percentage change from one year to another may not vary greatly between different published indices.

Data in this publication are those available to the International Economics Division, Economic Research Service, prior to March 10, 1981. This issue supersedes data and indices previously published in the following four issues of the old series.

1. Indices of Agricultural Production for Europe and U.S.S.R., Statistical Bulletin No. 635, June 1980
2. Indices of Agricultural Production for Asia and Oceania, Statistical Bulletin No. 636, June 1980
3. Indices of Agricultural Production for Africa and Near East, Statistical Bulletin No. 637, June 1980
4. Indices of Agricultural Production for the Western Hemisphere, Statistical Bulletin No. 639, July 1980.

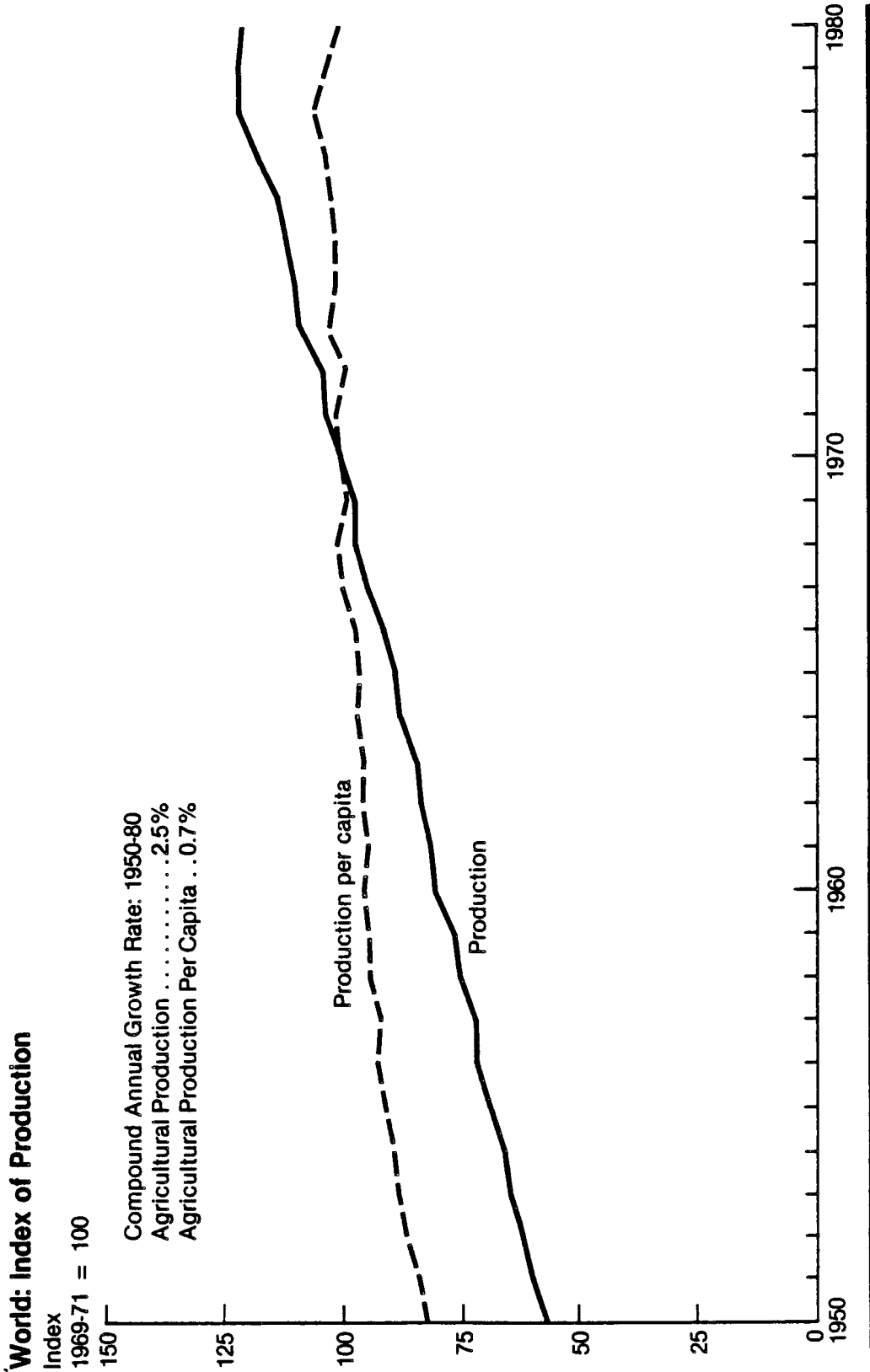


TABLE 1 --WORLD INDICES OF AGRICULTURAL PRODUCTION

COUNTRY/REGION	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
1969-71=100										
UNITED STATES.....	105	105	106	102	110	113	118	118	124	118
CANADA.....	106	99	101	93	104	113	117	120	113	117
JAPAN.....	93	99	99	99	103	97	106	105	104	94
REPUBLIC OF SOUTH AFRICA.....	109	113	96	120	110	113	122	125	123	126
OCEANIA.....	103	99	101	103	111	113	111	121	113	106
WESTERN EUROPE.....	103	102	107	111	109	107	109	115	118	123
DEVELOPED WORLD.....	103	103	105	106	108	109	112	116	119	117
SOUTH AND CENTRAL AMERICA.....	103	104	108	115	118	122	127	132	135	140
EAST ASIA (EX JAPAN).....	103	101	109	114	122	129	134	140	142	140
SOUTH ASIA.....	102	98	107	102	112	110	119	123	117	120
WEST ASIA.....	103	110	105	116	124	136	135	141	138	142
AFRICA (EX REP. SO.AFRICA).....	102	104	102	106	107	108	107	109	110	112
DEVELOPING WORLD.....	102	102	106	109	115	117	122	126	125	127
USSR.....	104	100	117	113	105	116	116	124	117	116
EASTERN EUROPE.....	104	111	114	119	117	121	121	126	124	120
CENTRALLY PLANNED.....	104	104	116	115	109	118	118	125	119	118
WORLD (EX. P. R. CHINA).....	103	103	108	109	111	114	117	121	121	120

TABLE 1 --WORLD INDICES OF AGRICULTURAL PRODUCTION

COUNTRY/REGION	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
1969-71=100										
UNITED STATES.....	85	86	90	90	92	92	96	97	98	97
CANADA.....	67	84	91	85	94	104	91	98	101	94
JAPAN.....	99	101	98	101	100	102	110	112	107	100
REPUBLIC OF SOUTH AFRICA.....	76	78	83	78	77	82	101	90	94	97
OCEANIA.....	75	81	84	88	83	92	87	100	99	98
WESTERN EUROPE.....	80	86	88	82	90	90	97	98	97	100
DEVELOPED WORLD.....	84	87	89	90	91	92	97	99	99	99
SOUTH AND CENTRAL AMERICA.....	78	79	82	82	90	89	93	93	97	100
EAST ASIA (EX JAPAN).....	73	76	77	83	84	89	87	91	97	101
SOUTH ASIA.....	80	80	83	84	81	80	88	93	97	101
WEST ASIA.....	76	79	82	84	86	90	96	99	98	99
AFRICA (EX REP. SO. AFRICA).....	76	82	83	85	87	86	88	91	98	99
DEVELOPING WORLD.....	78	80	82	84	85	85	90	93	97	100
USSR.....	73	75	73	82	82	91	93	98	94	103
EASTERN EUROPE.....	81	79	84	87	89	96	99	101	99	97
CENTRALLY PLANNED.....	76	76	76	84	84	93	95	99	96	101
WORLD (EX. P. R. CHINA).....	80	82	84	86	87	90	94	97	97	100

TABLE 1 ---WORLD INDICES OF AGRICULTURAL PRODUCTION

COUNTRY/REGION	1951	1952	1953	1954	1955	1956	1957	1958	1959	1960
1969=71=100										
UNITED STATES.....	70	72	74	75	77	79	77	81	82	85
CANADA.....	72	79	76	63	74	80	69	75	74	78
JAPAN.....	70	78	68	73	92	87	90	92	96	99
REPUBLIC OF SOUTH AFRICA.....	54	52	58	62	62	64	68	66	68	71
OCEANIA.....	51	59	60	61	65	65	62	73	71	73
WESTERN EUROPE.....	62	63	68	70	71	73	72	75	77	81
DEVELOPED WORLD.....	66	68	70	71	75	76	76	79	80	84
SOUTH AND CENTRAL AMERICA.....	54	57	58	61	63	66	68	72	73	72
EAST ASIA (EX JAPAN).....	51	51	57	60	61	61	63	67	68	71
SOUTH ASIA.....	58	59	65	65	66	68	69	71	73	77
WEST ASIA.....	51	58	63	62	62	69	70	74	75	73
AFRICA (EX REP. SO.AFRICA).....	61	63	64	66	67	70	70	73	75	79
DEVELOPING WORLD.....	56	58	62	64	65	67	68	71	73	75
USSR.....	44	49	50	52	56	65	63	70	71	72
EASTERN EUROPE.....	65	61	66	66	70	70	77	75	80	82
CENTRALLY PLANNED.....	51	53	55	57	61	66	68	72	74	75
WORLD (EX. P. R. CHINA).....	59	61	64	65	68	71	71	75	76	79

TABLE 2 --WORLD INDICES OF AGRICULTURAL PRODUCTION PER CAPITA

COUNTRY/REGION	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
1969-71=100										
UNITED STATES.....	104	103	103	99	105	107	111	111	115	109
CANADA.....	104	97	97	88	98	104	106	107	100	102
JAPAN.....	91	96	95	94	97	90	97	95	94	84
REPUBLIC OF SOUTH AFRICA.....	106	107	89	108	97	97	102	102	98	98
OCEANIA.....	101	96	96	97	102	102	99	106	99	91
WESTERN EUROPE.....	102	101	105	108	105	103	105	111	114	118
DEVELOPED WORLD.....	102	101	102	102	104	103	106	109	110	108
SOUTH AND CENTRAL AMERICA.....	100	98	99	103	104	104	105	107	107	107
EAST ASIA (EX JAPAN).....	100	97	102	103	109	113	114	117	116	112
SOUTH ASIA.....	99	94	100	93	100	96	102	104	96	96
WEST ASIA.....	100	104	96	105	108	116	112	113	108	108
AFRICA (EX REP. SO. AFRICA).....	100	98	93	95	93	92	87	88	86	85
DEVELOPING WORLD.....	100	97	98	98	102	101	103	104	100	100
USSR.....	103	98	114	109	100	110	109	115	108	106
EASTERN EUROPE.....	103	109	112	116	113	116	115	119	116	112
CENTRALLY PLANNED.....	103	102	113	111	105	112	111	117	111	108
WORLD (EX. P. R. CHINA).....	101	99	102	101	101	102	103	105	103	100

TABLE 2 --WORLD INDICES OF AGRICULTURAL PRODUCTION PER CAPITA

COUNTRY/REGION	1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
1969-71=100										
UNITED STATES.....	95	95	97	96	97	96	99	99	99	97
CANADA.....	79	96	102	93	102	110	95	100	102	94
JAPAN.....	109	110	105	108	106	107	114	115	108	100
REPUBLIC OF SOUTH AFRICA.....	97	97	100	91	88	92	110	95	97	97
OCEANIA.....	89	94	96	98	90	99	92	104	101	98
WESTERN EUROPE.....	86	92	92	92	93	93	99	100	97	100
DEVELOPED WORLD.....	92	95	96	95	96	96	100	101	100	99
SOUTH AND CENTRAL AMERICA.....	100	98	99	96	103	99	100	98	100	100
EAST ASIA (EX JAPAN).....	91	92	91	96	94	98	93	95	99	101
SOUTH ASIA.....	98	96	97	96	91	88	94	97	99	101
WEST ASIA.....	97	98	100	99	98	100	104	105	100	99
AFRICA (EX REP. SO. AFRICA).....	97	102	101	101	100	96	96	96	101	99
DEVELOPING WORLD.....	97	97	97	97	96	94	97	98	100	100
USSR.....	82	82	78	88	86	95	96	99	95	103
EASTERN EUROPE.....	86	84	88	91	92	98	101	102	100	97
CENTRALLY PLANNED.....	83	82	82	85	88	96	97	100	96	101
WORLD (EX. P. R. CHINA).....	94	95	95	97	96	97	100	101	99	100