

## Beef

World beef production is expected to increase about 1.5 percent per year through 2005. China is expected to have the fastest rate of growth in beef demand, encouraging expansion by domestic producers. Increased demand in the Former Soviet Union and Brazil is also expected to help stimulate production. Although U.S. production is expected to remain below 1996 levels through 2005, production in the United States is expected to increase in the latter part of the projection period. However, declining production in the EU as beef consumption falls and stocks remain high will dampen the global rate of expansion.

Global per capita consumption of beef is projected to increase through 2005 as meat demand in countries with transition or rapidly industrializing economies will increase with income growth. Gains in per capita consumption are expected in most Asian countries. China, South Korea, and Japan will experience consumption gains in excess of population growth, but consumption in other countries in the region will be about equal to population growth. Some growth is expected in Latin America, but gains in per capita consumption in Mexico and Brazil will be offset by declines in Argentina's per capita beef consumption.

Per capita demand in the United States will decline as beef production rises less rapidly than population growth and relative prices favor consumption of other meats. As a result of continuing concerns over BSE, it is expected that demand for beef in the European Union will decline through the forecast period.

Although per capita beef consumption is expected to increase in a number of CEE countries, those countries which have delayed liberalizing their economies face a longer period of decline before income growth stimulates

beef demand. Russia is also expected to see gradual increases in demand for beef, but because of the availability of relatively cheaper pork and poultry, demand for those meats is expected to increase more rapidly.

Traded beef, although growing in importance, remains a relatively small portion of global consumption. However, for a number of countries, especially those with increasing incomes and limited resources, imports' share of consumption has become extremely important. Increasing import demand in the Pacific Rim and Russia, for example, where production has been adjusting to market forces, will mean growth opportunities for exporters. The major exporters will continue to increase production for export, while domestic production in the major importing countries is projected to stagnate, mainly because of the relatively lower cost of imported beef.

Growth in beef exports is projected to slow as subsidized exports by the EU will fall in keeping with their commitments under the WTO. The EU, however, is the only major exporter that is expected to show a decline in exports. The United States, Australia, and Argentina are projected to continue to increase export volume through 2005. U.S. exports are expected to grow most rapidly because the countries that are projected to have the greatest import growth are markets (Japan, South Korea, and Mexico, for instance) which tend to demand grain-fed beef.

### Highlights for Major Importers

Most of the growth in beef and veal imports will come from the Pacific Rim countries where increasing incomes and lower trade barriers will raise consumption beyond that which can be satisfied by their production base. Increases in imports are also expected in Mexico and Russia, where income growth later in the period is

Figure 31

#### Beef: Historical and projected real prices

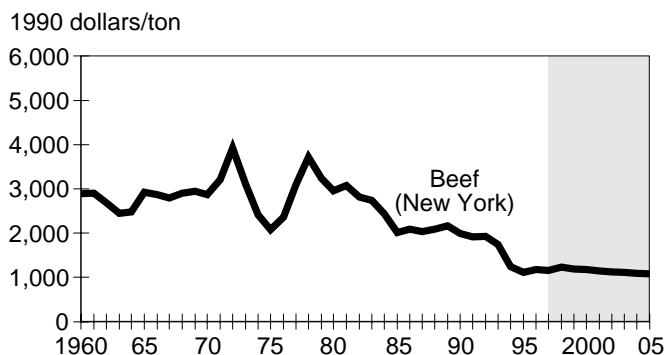


Figure 32

#### Beef: Historical and projected price ratios

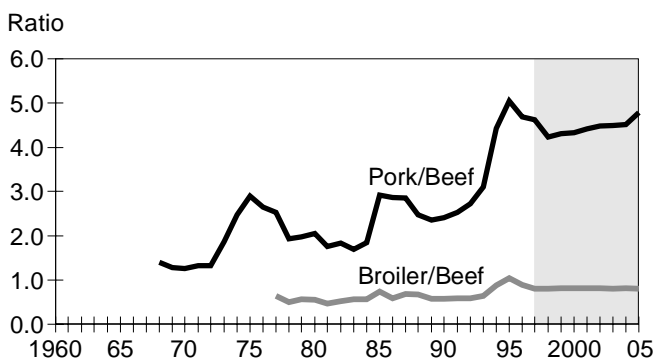


Table 32—Beef trade projections

	1992	1993	1994	1995	1996	1997	1993-97 avg.	1999	2000	2001	2002	2003	2004	2005
	<i>1,000 tons</i>													
<b>Exporters</b>														
United States	601	578	731	826	894	1,010	808	1,054	1,106	1,148	1,190	1,237	1,280	1,339
Argentina	296	280	376	513	450	480	420	475	473	482	490	506	516	527
Australia	1,191	1,169	1,168	1,092	1,097	1,155	1,136	1,220	1,256	1,276	1,284	1,287	1,302	1,316
Brazil	434	392	358	269	315	360	339	347	363	370	376	382	393	403
Canada	159	191	220	219	260	310	240	308	317	322	327	330	333	336
Central/East Europe <sup>1</sup>	149	153	99	112	122	118	121	152	155	155	166	181	199	219
Hungary	40	40	40	40	40	37	39	51	50	46	43	42	40	39
Poland	20	16	14	17	18	19	17	32	33	32	36	39	45	52
European Union-15 <sup>2</sup>	1,235	1,121	1,096	923	578	677	879	877	817	817	817	817	817	817
Former Soviet Union <sup>3</sup>	722	565	452	222	207	192	328	318	329	259	391	413	436	463
Russia	4	2	4	3	2	2	3	0	0	0	0	0	0	0
Ukraine	286	253	179	176	170	160	188	167	180	195	209	222	234	247
New Zealand	426	448	466	504	505	490	483	499	494	490	490	490	490	489
Total	5,213	4,897	4,966	4,680	4,428	4,792	4,753	5,250	5,310	5,319	5,531	5,643	5,766	5,909
<b>Importers</b>														
United States	1,107	1,089	1,075	954	950	930	1,000	1,131	1,154	1,177	1,196	1,214	1,235	1,255
Canada	221	270	286	256	235	200	249	177	174	170	167	163	160	157
European Union-15 <sup>2</sup>	472	426	426	374	375	364	393	350	350	350	350	350	350	350
Former Soviet Union <sup>3</sup>	734	409	542	614	612	627	561	585	597	553	720	752	763	770
Russia	494	407	541	612	610	625	559	495	507	553	610	642	653	660
Japan	591	731	842	927	957	985	888	1,075	1,093	1,118	1,141	1,166	1,188	1,211
Mexico	130	96	90	42	75	110	83	185	215	220	228	237	244	267
South Korea	183	132	165	194	218	240	190	333	362	394	423	454	483	512
Total	3,438	3,153	3,426	3,361	3,422	3,456	3,364	3,836	3,945	3,982	4,225	4,336	4,423	4,522

<sup>1</sup>Includes the Czech Republic, Slovakia, Hungary, Poland, and Other Central and Eastern Europe (Albania, Bulgaria, Romania and the former Yugoslavia). <sup>2</sup>Excludes EU-15 intratrade. <sup>3</sup>Includes Russia, Ukraine and the other republics of the Former Soviet Union; includes FSU intratrade.

## Overview of World Beef Market

About 10 percent of world beef production enters the export market. Trade patterns are affected by price and quality differences, health and sanitary restrictions, tariffs, quotas, and subsidies. The leading exporters are Australia, EU, United States, New Zealand, Brazil, Argentina, and Canada. Together, they accounted for about 85 percent of total exports in 1995.

The seven leading importers are the United States, Japan, EU, FSU, Canada, South Korea, and Mexico. In 1995, these countries imported about 66 percent of the beef traded.

Their share of the world market is projected to increase by 2005 as declining EU exports of subsidized beef will induce North African and Middle Eastern countries to import less beef and more of other meats, particularly poultry.

**Foot-and-mouth disease.** The world beef market has traditionally been separated into two distinct segments based on the presence of foot-and-mouth disease (FMD). FMD countries must heat-treat and package their beef in airtight containers before they can export to FMD-free areas. This limits potential for export growth by FMD-endemic countries, such as Brazil, Argentina, China, and some areas in Eastern Europe. Programs for FMD eradication continue in several countries. Uruguay recently was approved to ship fresh/frozen beef to the United States, and Argentina is nearing approval.

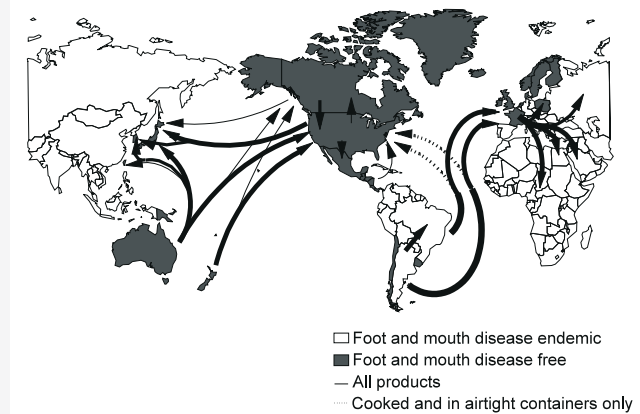
**Quality.** Traditionally, beef trade has been split into higher priced grain-fed beef and lower priced grass-fed beef markets. Because of differences in the types of beef traded, some countries are both importers and exporters of beef. For example, the United States is the world's largest beef producer, the largest importer, and the third largest exporter. The United States produces and exports mostly grain-fed beef and imports lower priced grass-fed beef. U.S. beef was, at one time, exported mainly to hotels for the tourist and business trade. But, with rising incomes, changing tastes and lifestyles, and reduced trade barriers in Japan and South Korea, demand for grain-fed beef has increased,

and so have U.S. exports. However, in times of surplus production, low-priced trimmings from U.S. grain-fed beef have competed favorably with grass-fed product.

Most grain-fed beef exports come from the United States, Canada, and Australia. Feed grain production problems in Australia may limit its capacity to be a reliable and growing source of high-quality fed beef. However, Argentina could become a larger supplier of grain-fed beef as the price spread between grain-fed and grass-fed beef increases. Australia and New Zealand produce mainly grass-fed beef for export, exporting 64 and 81 percent of their production, respectively, in 1994.

**Technology.** Beef is a highly perishable commodity and relatively recent technological breakthroughs in transportation, storage, and distribution have increased the possibilities for trade. Extending shelf life has increased trade in chilled beef. Nonetheless, beef trade is limited primarily to those countries with a fairly well-developed urban infrastructure.

Major beef trade flows



expected to increase demand for beef more rapidly than the production sector can respond. The proximity of these markets to sources of low-priced imported product (the United States, CEE, and FSU) is expected to stimulate increased trade through the period. However, as domestic production catches up with demand later in the period, import growth is expected to slow.

**United States.** U.S. beef imports are expected to increase by about 3 percent per year. Increased production in Australia and Canada will provide ample supplies of processing-grade beef at the same time that U.S. supplies of cow beef will be low as producers rebuild their herds. Imports from New Zealand will likely decline slightly as

production in that country falls. Imports from Australia and New Zealand both will remain below the TRQ levels established under the WTO. Trade with Canada and Mexico is governed by the NAFTA, which does not limit the movement of beef between the countries.

**Japan.** Japan's imports are expected to increase substantially, with little change in production. Japan is committed to reducing its beef tariffs in accordance with the UR agreement, with imports projected to increase from 60 to almost 70 percent of consumption. Domestic demand for beef is expected to increase about 2 percent per capita per year, with consumption reaching about 14 kilograms per capita by 2005. Despite a general decline in Japan's

meat production, government support for calf producers will result in only modest declines in beef production. Australia and the United States are projected to remain the major suppliers with the United States gaining increased market share.

**Former Soviet Union.** In the FSU, economic restructuring of the livestock sector has led to a sharp decline in beef production. In response to loss of production subsidies and declines in consumer incomes, beef production has fallen 65 percent since the late 1980's. As government support for consumption was eliminated, per capita consumption declined to levels more in keeping with countries at a similar economic level. It is expected that beef production will bottom in 1998 and increase during the remainder of the forecast period. In the medium term, imports will decline, but, as incomes increase later in the end of the period, imports are expected to rise.

Russia's policy toward imported products in general and meat in particular cause some uncertainty in formulating a long-term forecast. Currently, it is expected that some increase in tariffs will occur but that there will not be any drastic changes in meat import policies.

**European Union.** Large stocks of beef in the EU and consumer concerns over beef consumption in general in light of the Bovine Spongiform Encephalopathy (BSE) outbreaks in the EU will place significant pressure on beef imports. Given internal supplies of product, it is highly unlikely that EU governments will favor expanding imports beyond their WTO commitments. It is possible that if there is sufficient consumer resistance to beef consumption in member states, beef imports could fall below the stated commitment levels.

**Canada.** Canada's cattle inventory has reached the highest levels since the 1970's and beef production is expected to rise over the next several years. Concurrently, per capita consumption is expected to remain fairly constant, and imports will decline. The United States is the dominant supplier to the Canadian market.

**South Korea.** Driven by steady income growth, South Korea's per capita consumption is projected to increase to 16 kilograms by 2005, up 60 percent from 1996. Although continuation of some government support for livestock producers (mainly through price supports and low-cost loans) is expected to continue, Korean cattle production is forecast to expand at a rate somewhat less than the

### Impact of the BSE Crisis on the EU Projections

The recent crisis in the EU over bovine spongiform encephalopathy (BSE, or "mad cow" disease) is projected to have a lingering impact on the EU beef sector, with rippling effects throughout European agricultural markets. Beef consumption in the EU dropped 12 percent in 1996 and will continue to decline in the long term. Consumption has been steadily declining since the late 1980's, and BSE will accelerate this trend. The projections assume that BSE's dampening effect will last 6 years and that beef consumption will return to trend around 2002.

A major problem faced by the EU is that production cannot be adjusted quickly enough to address the market imbalance, resulting in a substantial stock buildup over the next few years. The UK's 6-year cattle eradication program will account for about a 3-percent annual production decline. But this alone will not be enough to bring production in line with consumption. Early on the projection period, production will exceed consumption by as much as 1 million tons, and WTO limits on subsidized exports and the ban on British beef exports will inhibit the EU's ability to unload this surplus on world markets. This imbalance results in large intervention stocks in the near term, until beef production more closely reflects the shrunken demand.

The projections are based on the assumption that the EU will soon adopt additional policies to reduce beef production. The EU Commission is considering incentive programs to promote early culling and lower slaughter weights and has identified the beef sector as the top priority for policy reform. Another factor that will discourage beef production is the ever-declining price of beef during the projection period. Despite lower beef prices relative to pork and poultry, the projection is based on the assumption that consumers will continue to harbor health concerns until BSE is eradicated and the European beef supply is again deemed safe. Even in such a scenario, it is unclear whether beef consumption would fully recover to pre-BSE levels.

Declining beef consumption throughout the EU will be offset by gains in pork and especially poultry consumption, which is forecast to rise 15 percent over the next decade. It is assumed that some consumers will reduce or eliminate meat consumption altogether, rather than substitute other meats. Therefore, where previous baselines plotted a gradual increase in total meat consumption, this year's results project virtually no change in overall meat consumption during the projection period.

The increased demand for pork and poultry will stimulate domestic production of these grain-intensive meats, driving up demand for feed grains. Demand for barley and other coarse grains, in particular, will increase with expanded feed use. Conversely, demand for corn gluten feed, a major feed input for beef cattle, will be dampened, mirroring the decline in beef consumption.

increase in consumption. Korea is expected to end its quota in 2001 and replace its markup with tariffs that are subject to reduction. Imports are expected to continue climbing 13 percent per year. Better quality grain-fed beef, will continue to dominate imports.

**Mexico.** Mexico's beef imports and production will continue to be affected by the current economic crisis and the lingering effects of a drought that extended into 1996. As the economy improves over the coming decade, demand for beef is expected to return to pre-crisis levels and reach almost 24 kilograms by 2005. In the short term, the need to rebuild herds will limit production growth and result in rapid growth in imports; as production expands beyond 2000, however, the rate of growth in imports is expected to decline.

**Taiwan.** Taiwan is expected to become a significant importer of beef by 2005. Domestic meat consumption, although still favoring pork, is expected to increase in response to continued income growth. With little restriction on beef imports, growth in demand will likely translate into import growth of almost 7 percent per year.

### Highlights for Major Exporters

Australia and the United States will likely vie for the role of leading exporter of beef and veal by the end of the forecast period. Concurrently, cutbacks in subsidized EU exports and a reduction in beef production in New Zealand will limit the expansion of these countries in the growing world beef market. With increased production and the potential to expand into the growing Pacific Rim markets, Argentina is poised to expand exports and become the fourth largest exporter of beef.

**Australia.** Australia has moved into first place in beef exports over the EU, but will come under increasing pressure from the United States for that role. With the return of better weather after several years of drought, herds are being rebuilt. Feed grain sufficiency will remain a problem in Australia, however, and as long as it exists will limit Australian expansion into the higher end of the fed beef market against the United States and Canada.

**European Union.** The level of EU beef stocks is expected to remain a serious burden on the EU throughout the forecast period. The crisis in consumer confidence as a result of the BSE scare is expected lead to a more rapid decline in domestic consumption at the same time that beef exports are projected to fall, primarily due to UR

commitments. It is unlikely that these large stocks can be marketed without subsidy unless the domestic market price falls to world price levels. As a result, it will difficult for the EU to market its stocks. If the EU is to bring its stocks down to a manageable level, beef production will have to decline. Nonetheless, it is expected that unless the EU significantly reforms its beef production regime, it will be carrying large stocks for the foreseeable future.

The pace of CAP reforms in the EU is a significant uncertainty in the forecasts. The extent of any declines in CAP support to reduce production will have a major impact on feed use, prices, and trade. Failure to reduce production or market stocks could lead to a significant financial burden for member countries.

**United States.** U.S. exports are expected to increase, with the main growth markets being Japan, South Korea, and Mexico. Expansion of meat production over the next several years is expected to reduce prices and U.S. beef should become more competitive. Exports will rise from 6 to 12 percent of U.S. production.

**New Zealand.** New Zealand's beef production is expected to decline marginally as low beef prices and weakening dairy prices encourage producers to look for more profitable alternatives. Although total U.S. beef imports are expected to increase, the U.S. share of New Zealand's exports is expected to decline as New Zealand continues encouraging sales in other buyers to reduce its dependence on the U.S. market.

**Brazil.** In Brazil, beef production will expand to meet growing domestic demand. Per capita consumption is expected to increase about 1 percent per year and increases in beef production are expected to keep pace with the growth in consumption. Due to tariff reductions under MERCOSUR, Argentina will likely be the major supplier to Brazil.

**Argentina.** Argentina's beef production is expected to grow slowly as declines in cattle pasture will be offset by more intensive management of the remaining areas. Animal weights are expected to increase, and, coupled with a steady decline in per capita consumption, more beef should be available for export.

Progress is being made in eradicating foot-and-mouth disease (FMD) and, at the least, an approval of regionalized FMD-free status is likely. Should this occur,

Argentina could be limited in its sales to the United States by the U.S. tariff rate quota, but could expand sales to other countries, particularly in the Pacific Rim. Argentina could potentially compete with U.S. beef in these markets by shifting toward production of fed-beef. However, much of its production and exports are expected to remain in low-cost, grass-fed conditions, under which it has a competitive advantage.

The timing of Argentina's achievement of FMD-free status is a source of uncertainty in the world beef trade outlook. Also uncertain is the nature and pace of the sector's adjustment to FMD-free status. FMD-free status is not likely to slow beef exports to Brazil or Chile. However, a shift toward becoming a reliable supplier of fed beef could result in reduced supplies of grass-fed beef.

**Canada.** Canadian exports are projected to remain strong throughout the period. The United States will remain Canada's major beef export market, but fed-beef exports into other countries should increase fairly rapidly.

Elimination of the Western Canada Grain Transportation Act could encourage increased feeding of livestock in western Canada. Coupled with modern plants in Canada, fed-beef could be exported to the United States and markets in the Pacific Rim.

**Central and East Europe.** Some growth in Central and East European beef exports and production is projected. With improved feeding practices, slaughter weights and output will increase. Per capita beef consumption has declined from the 1990 peak due to a drop in incomes, changes in relative prices, and the end of subsidies. But as income growth returns, per capita consumption is expected to rise.

As in the FSU, the future pace of reform in the CEE countries is uncertain and could affect the outlook for production and trade of beef. It is unclear to what extent governments will maintain support to livestock producers, how fast production will recover, or how quickly these countries will look to expand exports. Trade developments with the EU and Russia will also have a strong impact.

**Table 33—Beef supply and use projections**

	Slaughter	Yield	Production	Imports	Exports	Consumption		Ending stocks
						Total	Per cap	
	<i>1,000 head</i>	<i>Kg/hd</i>	<i>----- 1,000 tons -----</i>			<i>Kgs.</i>	<i>1,000 tons</i>	
<b>United States</b>								
1992	34,489	0.31	10,613	1,107	601	11,146	43.6	166
1993	34,746	0.30	10,584	1,089	578	11,019	42.7	242
1994	35,691	0.31	11,194	1,075	731	11,528	44.2	252
1995	37,294	0.31	11,585	954	826	11,726	44.6	239
1996	38,506	0.31	11,814	950	894	11,891	44.8	218
1997	38,489	0.30	11,558	930	1,010	11,481	42.9	215
1993-97 avg.	36,945	0.31	11,347	1,000	808	11,529	43.8	233
1999	35,381	0.30	10,614	1,131	1,054	10,691	39.2	215
2000	35,785	0.30	10,735	1,154	1,106	10,784	39.2	215
2001	35,864	0.30	10,759	1,177	1,148	10,789	38.9	215
2002	36,256	0.30	10,877	1,196	1,190	10,883	38.9	215
2003	36,502	0.30	10,950	1,214	1,237	10,927	38.8	215
2004	36,432	0.30	10,929	1,235	1,280	10,884	38.3	215
2005	36,530	0.30	10,959	1,255	1,339	10,875	38.0	215
<b>Argentina</b>								
1992	11,900	0.21	2,520	16	296	2,232	67.3	25
1993	12,100	0.21	2,550	2	280	2,273	67.8	24
1994	12,400	0.21	2,600	3	376	2,230	65.8	21
1995	12,300	0.21	2,600	6	513	2,088	60.9	26
1996	12,500	0.20	2,550	4	450	2,105	60.7	25
1997	12,000	0.21	2,500	2	480	2,025	57.8	22
1993-97 avg.	12,260	0.21	2,560	3	420	2,144	62.6	24
1999	12,024	0.21	2,515	0	475	2,041	57.0	26
2000	11,782	0.21	2,467	0	473	1,995	55.1	25
2001	11,891	0.21	2,493	0	482	2,011	55.0	26
2002	12,171	0.21	2,554	0	490	2,063	55.8	27
2003	12,457	0.21	2,617	0	506	2,110	56.5	28
2004	12,555	0.21	2,640	0	516	2,124	56.3	28
2005	12,389	0.21	2,607	0	527	2,081	54.6	27
<b>Australia</b>								
1992	8,480	0.22	1,838	5	1,191	646	36.9	36
1993	8,357	0.22	1,806	5	1,169	634	35.8	44
1994	8,332	0.22	1,829	6	1,168	669	37.4	42
1995	7,917	0.22	1,717	5	1,092	650	36.0	22
1996	8,040	0.22	1,775	5	1,097	680	37.2	25
1997	8,285	0.22	1,862	5	1,155	700	38.0	37
1993-97 avg.	8,186	0.22	1,798	5	1,136	667	36.9	34
1999	8,588	0.22	1,913	0	1,220	693	36.9	27
2000	8,458	0.23	1,959	0	1,256	703	37.1	27
2001	8,437	0.24	1,986	0	1,276	710	37.2	28
2002	8,393	0.24	2,002	0	1,284	718	37.3	28
2003	8,397	0.24	2,012	0	1,287	725	37.3	28
2004	8,447	0.24	2,032	0	1,302	730	37.3	29
2005	8,479	0.24	2,053	0	1,316	737	37.3	29
<b>Brazil</b>								
1992	24,400	0.18	4,420	114	434	4,080	26.4	50
1993	25,200	0.18	4,545	48	392	4,201	26.8	50
1994	24,300	0.19	4,550	117	358	4,309	27.1	50
1995	24,021	0.20	4,750	127	269	4,648	28.9	10
1996	25,008	0.20	4,960	100	315	4,745	29.2	10
1997	26,197	0.20	5,150	80	360	4,870	29.6	10
1993-97 avg.	24,945	0.19	4,791	94	339	4,555	28.3	26
1999	25,379	0.20	5,081	97	347	4,832	28.8	11
2000	25,694	0.20	5,149	95	363	4,881	28.8	11
2001	25,978	0.20	5,211	95	370	4,936	28.9	11
2002	26,967	0.20	5,415	97	376	5,135	29.8	12
2003	27,993	0.20	5,627	99	382	5,343	30.7	13
2004	29,114	0.20	5,858	100	393	5,564	31.7	13
2005	30,084	0.20	6,059	101	403	5,756	32.5	14

Continued—

**Table 33—Beef supply and use projections—cont'd**

	Slaughter	Yield	Production	Imports	Exports	Consumption		Ending stocks
						Total	Per cap	
	<i>1,000 head</i>	<i>Kg/hd</i>	<i>----- 1,000 tons -----</i>			<i>Kgs.</i>	<i>1,000 tons</i>	
<b>Canada</b>								
1992	3,238	0.28	898	221	159	960	35.0	16
1993	3,036	0.28	860	270	191	931	33.5	24
1994	3,083	0.29	903	286	220	962	34.1	31
1995	3,148	0.29	928	256	219	969	34.0	27
1996	3,600	0.28	1,025	235	260	995	34.5	32
1997	4,000	0.28	1,120	200	310	1,012	34.8	30
1993-97 avg.	3,373	0.29	967	249	240	974	34.2	29
1999	---	---	1,182	177	308	1,051	35.4	30
2000	---	---	1,198	174	317	1,055	35.2	31
2001	---	---	1,211	170	322	1,059	35.0	31
2002	---	---	1,222	167	327	1,062	34.8	31
2003	---	---	1,234	163	330	1,067	34.6	32
2004	---	---	1,244	160	333	1,071	34.5	32
2005	---	---	1,255	157	336	1,076	34.4	32
<b>Central &amp; Eastern Europe<sup>1</sup></b>								
1992	11,215	0.21	2,342	59	149	2,296	18.8	196
1993	9,660	0.21	2,074	72	153	2,041	16.9	153
1994	7,230	0.21	1,493	69	99	1,491	12.4	134
1995	6,571	0.22	1,421	71	112	1,416	11.8	87
1996	6,707	0.22	1,470	65	122	1,443	12.0	78
1997	6,647	0.22	1,454	93	118	1,440	12.0	86
1993-97 avg.	7,363	0.21	1,582	74	121	1,566	13.0	108
1999	---	---	1,501	108	152	1,455	12.1	124
2000	---	---	1,510	112	155	1,466	12.2	125
2001	---	---	1,522	118	155	1,484	12.3	126
2002	---	---	1,548	120	166	1,500	12.4	128
2003	---	---	1,570	124	181	1,511	12.5	129
2004	---	---	1,594	128	199	1,522	12.5	131
2005	---	---	1,623	132	219	1,535	12.6	133
<b>EU-15</b>								
1992	32,799	0.27	8,843	472	1,235	7,908	21.5	1,296
1993	29,997	0.27	8,149	426	1,121	7,813	21.1	937
1994	28,706	0.27	7,857	426	1,096	7,603	20.5	521
1995	28,316	0.28	7,846	374	923	7,409	19.9	404
1996	26,258	0.28	7,316	375	578	6,465	17.3	1,052
1997	26,520	0.28	7,421	364	677	6,817	18.1	1,343
1993-97 avg.	27,959	0.28	7,718	393	879	7,221	19.4	851
1999	---	---	6,763	350	877	6,480	17.1	1,161
2000	---	---	6,722	350	817	6,265	16.5	1,151
2001	---	---	6,719	350	817	6,108	16.0	1,295
2002	---	---	6,495	350	817	6,020	15.8	1,303
2003	---	---	6,318	350	817	5,983	15.6	1,171
2004	---	---	6,387	350	817	5,881	15.3	1,210
2005	---	---	6,366	350	817	5,893	15.3	1,216
<b>Former Soviet Union<sup>2</sup></b>								
1992	41,624	0.18	7,338	734	722	7,350	25.2	0
1993	33,791	0.17	5,861	409	565	5,705	19.5	0
1994	34,182	0.16	5,554	542	452	5,644	19.3	0
1995	28,081	0.16	4,505	614	222	4,897	16.7	0
1996	25,463	0.16	4,090	612	207	4,495	15.4	0
1997	20,290	0.18	3,725	627	192	4,160	14.2	0
1993-97 avg.	28,361	0.17	4,747	561	328	4,980	17.0	0
1999	---	---	4,937	585	318	5,204	17.7	0
2000	---	---	5,018	597	329	5,286	17.9	0
2001	---	---	5,084	553	259	5,378	18.2	0
2002	---	---	5,153	720	391	5,482	18.4	0
2003	---	---	5,249	752	413	5,588	18.7	0
2004	---	---	5,338	763	436	5,665	18.9	0
2005	---	---	5,444	770	463	5,751	19.1	0

Continued—



**Table 33—Beef supply and use projections—cont'd**

	Slaughter	Yield	Production	Imports	Exports	Consumption		Ending stocks
						Total	Per cap	
	<i>1,000 head</i>	<i>Kg/hd</i>	<i>----- 1,000 tons -----</i>			<i>Kgs.</i>	<i>1,000 tons</i>	
<b>Hungary</b>								
1992	476	0.21	100	1	40	70	6.8	33
1993	261	0.36	95	3	40	70	6.9	21
1994	0	0.00	100	3	40	70	6.9	14
1995	0	0.00	100	3	40	70	6.9	7
1996	0	0.00	100	3	40	70	7.0	0
1997	0	0.00	105	14	37	72	7.2	10
1993-97 avg.	---	---	100	5	39	70	7.0	10
1999	---	---	115	14	51	77	7.8	21
2000	---	---	115	14	50	79	8.0	21
2001	---	---	113	14	46	81	8.3	21
2002	---	---	112	14	43	83	8.5	21
2003	---	---	112	14	42	84	8.7	21
2004	---	---	112	14	40	86	8.9	21
2005	---	---	113	14	39	88	9.1	21
<b>Japan</b>								
1992	1,491	0.40	592	591	1	1,190	9.6	98
1993	1,511	0.39	593	731	0	1,302	10.5	120
1994	1,537	0.39	602	842	0	1,446	11.6	118
1995	1,505	0.40	601	927	0	1,518	12.1	128
1996	1,460	0.40	585	957	0	1,540	12.3	130
1997	1,430	0.40	570	985	0	1,565	12.5	120
1993-97 avg.	1,489	0.40	590	888	0	1,474	11.8	123
1999	---	---	575	1,075	0	1,647	13.1	126
2000	---	---	577	1,093	0	1,668	13.2	127
2001	---	---	576	1,118	0	1,692	13.4	129
2002	---	---	574	1,141	0	1,713	13.5	130
2003	---	---	571	1,166	0	1,735	13.6	132
2004	---	---	569	1,188	0	1,755	13.8	134
2005	---	---	567	1,211	0	1,777	13.9	135
<b>Mexico</b>								
1992	7,770	0.21	1,660	130	1	1,789	20.2	0
1993	7,870	0.22	1,710	96	1	1,805	20.0	0
1994	8,310	0.22	1,810	90	1	1,899	20.6	0
1995	8,550	0.22	1,850	42	2	1,890	20.1	0
1996	8,180	0.22	1,800	75	2	1,873	19.6	0
1997	8,200	0.22	1,800	110	3	1,907	19.5	0
1993-97 avg.	8,222	0.22	1,794	83	2	1,875	20.0	0
1999	8,205	0.22	1,840	185	4	2,021	20.0	0
2000	8,434	0.23	1,902	215	5	2,112	20.5	0
2001	8,820	0.23	1,999	220	6	2,214	21.1	0
2002	9,188	0.23	2,094	228	6	2,316	21.8	0
2003	9,519	0.23	2,181	237	7	2,411	22.3	0
2004	9,828	0.23	2,263	244	7	2,500	22.7	0
2005	10,070	0.23	2,331	267	7	2,591	23.2	0
<b>New Zealand</b>								
1992	2,816	0.18	518	1	426	96	28.4	24
1993	3,060	0.19	575	3	448	98	28.6	56
1994	2,945	0.19	566	3	466	98	28.3	61
1995	3,565	0.18	630	2	504	100	28.5	89
1996	3,758	0.16	616	3	505	107	30.2	96
1997	3,655	0.16	587	2	490	107	29.8	88
1993-97 avg.	3,397	0.18	595	3	483	102	29.1	78
1999	3,681	0.16	607	0	499	109	29.7	88
2000	3,655	0.16	603	0	494	109	29.8	88
2001	3,665	0.17	605	0	490	115	30.1	88
2002	3,676	0.16	607	0	490	117	30.4	88
2003	3,677	0.17	607	0	490	117	30.6	88
2004	3,665	0.16	605	0	490	115	30.7	88
2005	3,647	0.17	602	0	489	113	30.8	88

Continued—

**Table 33—Beef supply and use projections—cont'd**

	Slaughter	Yield	Production	Imports	Exports	Consumption		Ending stocks
						Total	Per cap	
	1,000 head	Kg/hd	----- 1,000 tons -----			Kgs.	1,000 tons	
<b>Poland</b>								
1992	3,699	0.17	634	34	20	658	17.2	10
1993	3,640	0.13	462	28	16	474	12.3	10
1994	3,249	0.12	405	18	14	409	10.6	10
1995	2,817	0.14	400	8	17	393	10.2	8
1996	2,870	0.14	408	15	18	407	10.5	6
1997	2,870	0.14	415	20	19	416	10.8	6
1993-97 avg.	3,089	0.14	418	18	17	420	10.9	8
1999	---	---	446	15	32	429	11.0	5
2000	---	---	453	16	33	436	11.2	5
2001	---	---	459	18	32	444	11.3	5
2002	---	---	470	18	36	452	11.5	5
2003	---	---	480	18	39	459	11.6	5
2004	---	---	494	18	45	467	11.8	6
2005	---	---	511	18	52	477	12.0	6
<b>Russia</b>								
1992	20,138	0.18	3,632	494	4	4,122	27.7	0
1993	19,678	0.17	3,380	407	2	3,785	25.5	0
1994	19,771	0.16	3,071	541	4	3,608	24.3	0
1995	17,292	0.16	2,801	612	3	3,410	23.0	0
1996	15,878	0.17	2,633	610	2	3,241	21.9	0
1997	14,600	0.16	2,400	625	2	3,023	20.4	0
1993-97 avg.	17,444	0.16	2,857	559	3	3,413	23.0	0
1999	---	---	2,369	495	0	2,864	19.4	0
2000	---	---	2,392	507	0	2,899	19.6	0
2001	---	---	2,410	553	0	2,963	20.0	0
2002	---	---	2,430	610	0	3,040	20.5	0
2003	---	---	2,466	642	0	3,108	20.9	0
2004	---	---	2,501	653	0	3,154	21.2	0
2005	---	---	2,545	660	0	3,205	21.5	0
<b>South Korea</b>								
1992	537	0.26	137	183	0	313	7.2	31
1993	687	0.26	176	132	0	317	7.3	22
1994	778	0.26	200	165	0	372	8.4	15
1995	780	0.27	214	194	0	416	9.3	7
1996	850	0.27	233	218	0	454	10.1	4
1997	933	0.27	256	240	0	495	10.9	5
1993-97 avg.	806	0.27	216	190	0	411	9.2	11
1999	976	0.26	255	333	0	588	12.7	10
2000	1,063	0.25	263	362	0	625	13.3	11
2001	1,059	0.25	267	394	0	660	13.9	11
2002	1,063	0.26	271	423	0	694	14.5	12
2003	1,066	0.26	277	454	0	730	15.1	12
2004	1,068	0.26	281	483	0	763	15.7	13
2005	1,071	0.27	285	512	0	797	16.2	13
<b>Ukraine</b>								
1992	9,845	0.17	1,654	0	286	1,368	26.5	0
1993	7,895	0.17	1,379	0	253	1,126	21.8	0
1994	8,216	0.17	1,421	0	179	1,242	24.2	0
1995	7,124	0.16	1,158	0	176	982	19.2	0
1996	6,200	0.16	1,007	0	170	837	16.5	0
1997	5,690	0.17	940	0	160	780	15.4	0
1993-97 avg.	7,025	0.17	1,181	0	188	993	19.4	0
1999	---	---	941	0	167	774	15.4	0
2000	---	---	975	0	180	795	15.8	0
2001	---	---	1,000	0	195	805	16.0	0
2002	---	---	1,030	0	209	821	16.3	0
2003	---	---	1,059	0	222	837	16.7	0
2004	---	---	1,088	0	234	854	17.0	0
2005	---	---	1,120	0	247	873	17.4	0

<sup>1</sup>Includes the Czech Republic, Slovakia, Hungary, Poland, and Other Central and Eastern Europe (Albania, Bulgaria, Romania and the former Yugoslavia).

<sup>2</sup>Includes Russia, Ukraine and the other republics of the Former Soviet Union.