

## World on the Edge - Supporting Data for Chapter 12

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GRAPH: Farmers' Markets in Operation in the United States, 1994-2010

A full listing of data for the entire book is on-line at:

[http://www.earth-policy.org/books/wote/wote\\_data](http://www.earth-policy.org/books/wote/wote_data)

This is part of a supporting dataset for Lester R. Brown, **World On the Edge: How to Prevent Environmental and Economic Collapse** (New York: W.W. Norton & Company, 2010). For more information and a free download of the book, see Earth Policy Institute on-li

## Undernourishment in the World, 1969-2010

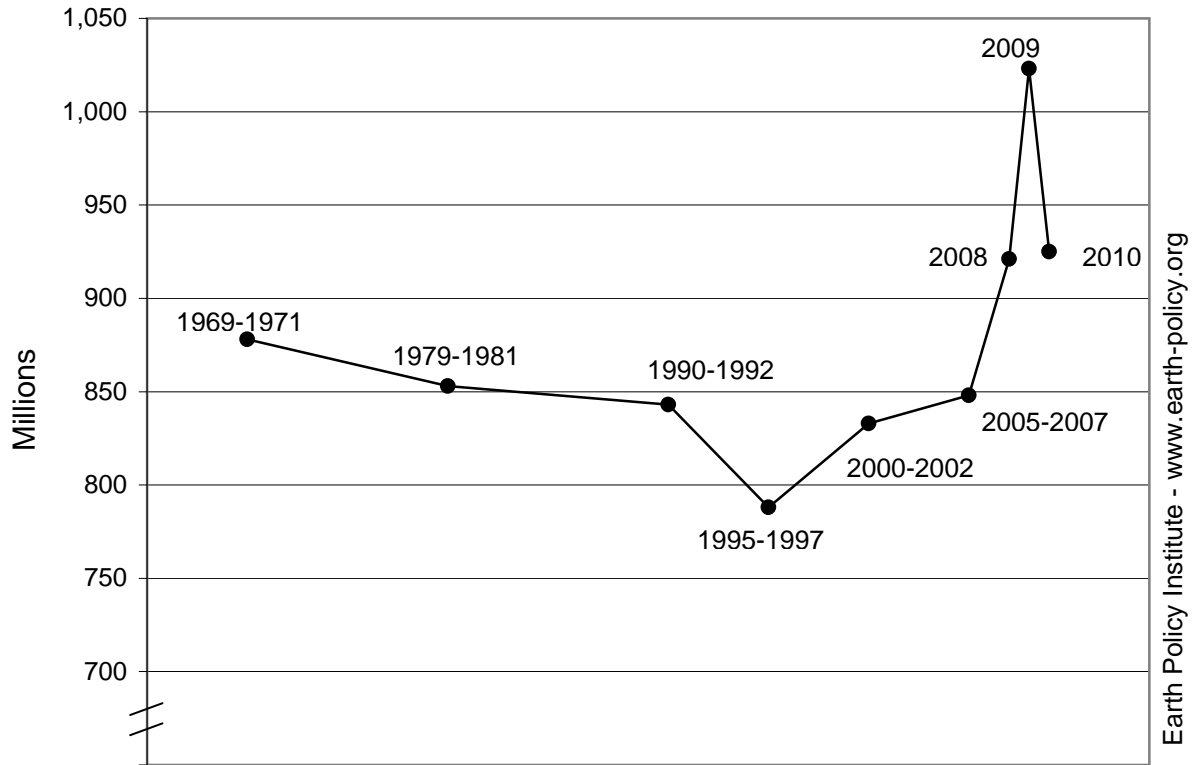
Year(s)	Number of Undernourished People Millions
1969 - 1971	878
1979 - 1981	853
1990 - 1992	843
1995 - 1997	788
2000 - 2002	833
2005 - 2007	848
2008	921
2009	1,023
2010 *	925

Note: 2010 is a projection by FAO.

Source: Compiled by Earth Policy Institute (EPI) with data for 1969-2007 from U.N. Food and Agriculture Organization (FAO), "Hunger," at [www.fao.org/hunger/en](http://www.fao.org/hunger/en), viewed 1 November 2010; data for 2008 from David Dawe, FAO, e-mail to J. Matthew Roney, EPI, 2 November 2010; data for 2009 and 2010 from FAO, "Hunger: Graphics," at [www.fao.org/hunger/hunger\\_graphics/en](http://www.fao.org/hunger/hunger_graphics/en), viewed 1 November 2010.

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## Number of Undernourished People in the World, 1969-2010



Source: EPI from FAO

## Undernourishment in the World and in Selected Groups and Regions, 2010

Group or Region	Undernourished People in 2010 Millions	Share of Population Percent
Developed Countries	19	2
Developing Countries	907	16
Asia and the Pacific	578	16
Latin America and the Caribbean	53	9
Near East and North Africa	37	8
Sub-Saharan Africa	239	30
<b>World</b>	<b>925</b>	<b>13</b>

Notes: Data are projections; columns do not add to totals due to rounding.

Source: Compiled by Earth Policy Institute from U.N. Food and Agriculture Organization (FAO), "Global Hunger Declining, but Still Unacceptably High," policy brief (Rome: September 2010); share of population calculated using U.N. Population Division, *World Population Prospects: The 2008 Revision Population Database*, at <http://esa.un.unpp>, updated 11 March 2009.

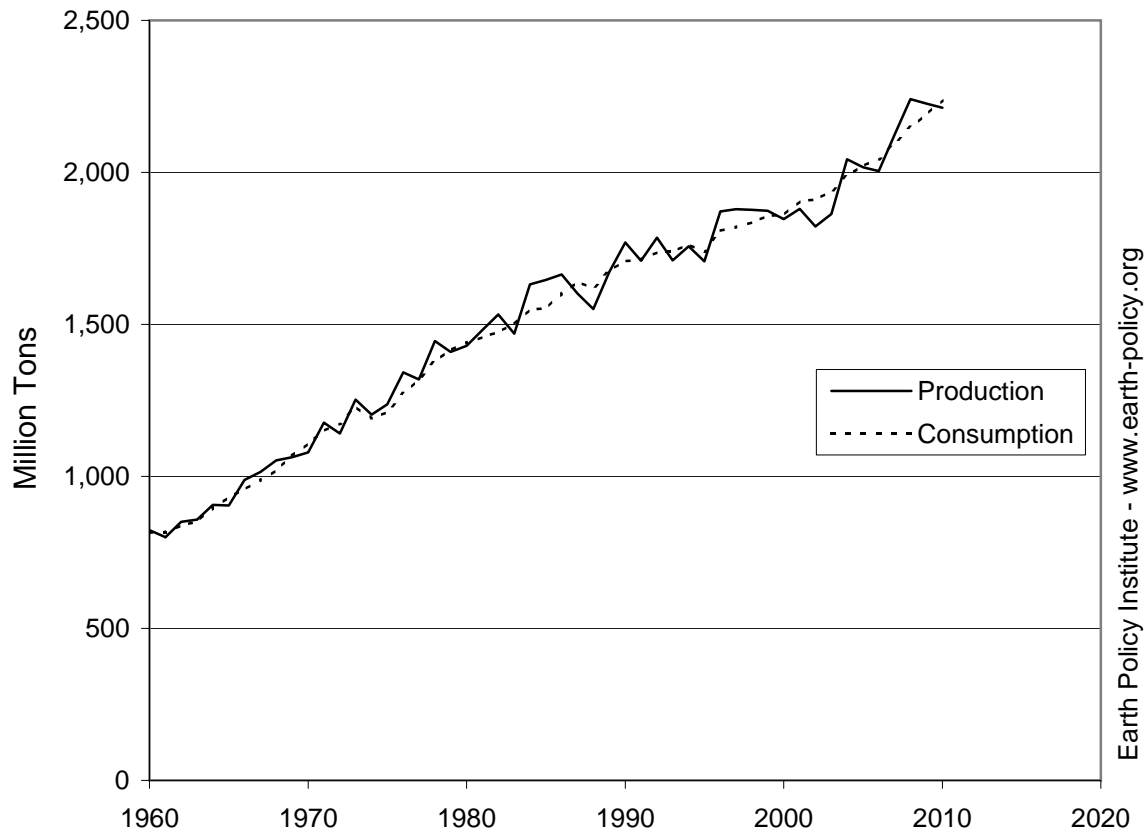
This is part of a supporting dataset for Lester R. Brown, **World on the Edge: How to Prevent Environmental and Economic Collapse** (New York: W.W. Norton & Company, 2011). For more information and a free download of the book, see Earth Policy Institute on-line at [www.earth-policy.org](http://www.earth-policy.org).

### World Grain Production and Consumption, 1960-2010

Year	Production	Consumption	Surplus or Deficit
	Million Tons		
1960	824	815	8
1961	800	817	-17
1962	850	838	13
1963	858	852	6
1964	906	896	10
1965	905	932	-27
1966	988	957	32
1967	1,014	988	27
1968	1,052	1,020	32
1969	1,063	1,069	-6
1970	1,079	1,108	-29
1971	1,177	1,150	27
1972	1,141	1,174	-33
1973	1,253	1,230	23
1974	1,203	1,190	13
1975	1,237	1,212	25
1976	1,342	1,273	69
1977	1,319	1,319	0
1978	1,445	1,380	65
1979	1,409	1,416	-6
1980	1,429	1,440	-11
1981	1,482	1,458	24
1982	1,533	1,475	58
1983	1,469	1,501	-31
1984	1,632	1,549	83
1985	1,647	1,553	94
1986	1,664	1,601	63
1987	1,601	1,640	-39
1988	1,550	1,620	-70
1989	1,673	1,677	-4
1990	1,769	1,707	62
1991	1,709	1,714	-5
1992	1,786	1,737	49
1993	1,711	1,740	-29
1994	1,756	1,762	-6
1995	1,707	1,740	-33
1996	1,872	1,808	64
1997	1,879	1,820	59
1998	1,877	1,836	41
1999	1,874	1,857	18
2000	1,846	1,860	-14
2001	1,880	1,905	-26
2002	1,822	1,910	-88
2003	1,864	1,936	-73
2004	2,043	1,990	53
2005	2,017	2,021	-4
2006	2,004	2,044	-41
2007	2,125	2,096	28
2008	2,241	2,149	92
2009	2,226	2,190	36
2010	2,213	2,238	-25

Source: U.S. Department of Agriculture, *Production, Supply and Distribution*, electronic database, at [www.fas.usda.gov/psdonline](http://www.fas.usda.gov/psdonline), updated 12 August 2010.

# World Grain Production and Consumption, 1960-2010



Source: USDA

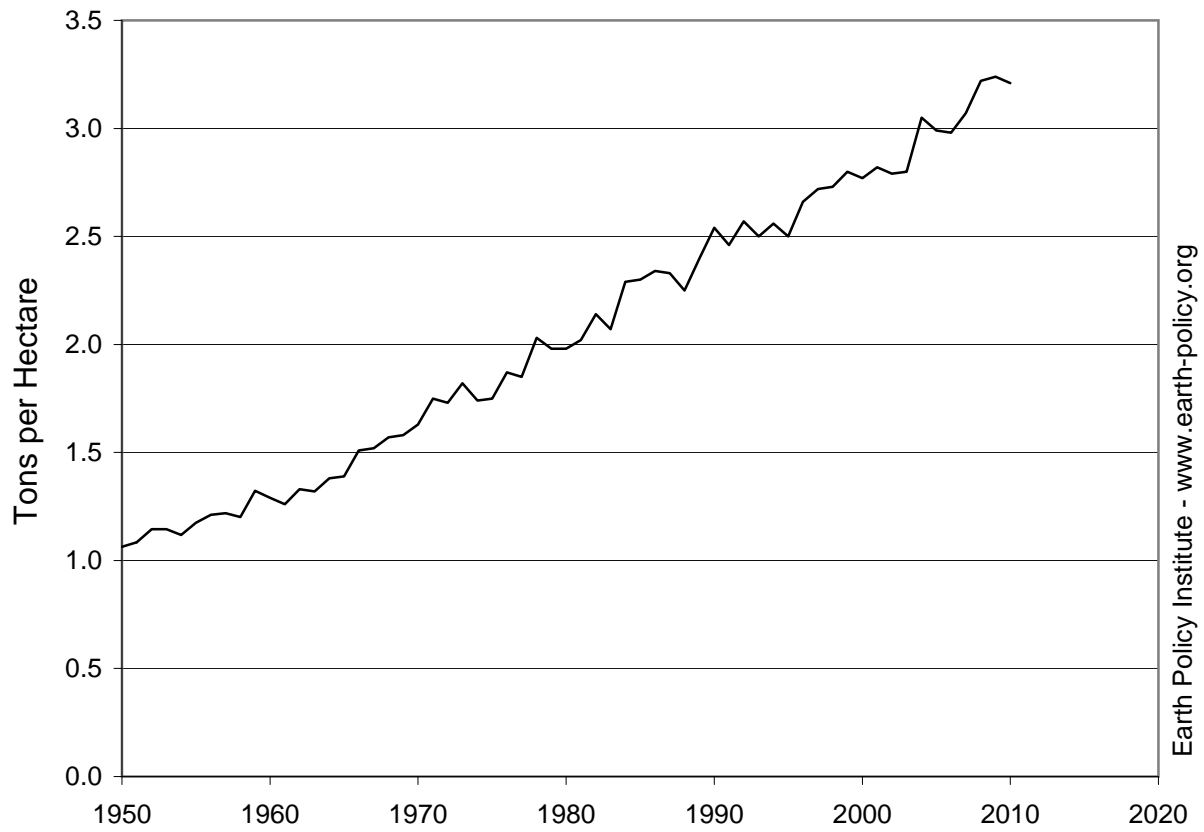
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### World Average Grain Yields, 1950-2010

Year	Yield
	Tons per Hectare
1950	1.06
1951	1.08
1952	1.14
1953	1.15
1954	1.12
1955	1.17
1956	1.21
1957	1.22
1958	1.20
1959	1.32
1960	1.29
1961	1.26
1962	1.33
1963	1.32
1964	1.38
1965	1.39
1966	1.51
1967	1.52
1968	1.57
1969	1.58
1970	1.63
1971	1.75
1972	1.73
1973	1.82
1974	1.74
1975	1.75
1976	1.87
1977	1.85
1978	2.03
1979	1.98
1980	1.98
1981	2.02
1982	2.14
1983	2.07
1984	2.29
1985	2.30
1986	2.34
1987	2.33
1988	2.25
1989	2.40
1990	2.54
1991	2.46
1992	2.57
1993	2.50
1994	2.56
1995	2.50
1996	2.66
1997	2.72
1998	2.73
1999	2.80
2000	2.77
2001	2.82
2002	2.79
2003	2.80
2004	3.05
2005	2.99
2006	2.98
2007	3.07
2008	3.22
2009	3.24
2010	3.21

Source: Compiled by Earth Policy Institute, with 1950-1959 data from Worldwatch Institute, *Signposts 2001*, CD-ROM (Washington, DC: 2001); 1960-2009 from U.S. Department of Agriculture, *Production, Supply and Distribution*, electronic database, at [www.fas.usda.gov/psdonline](http://www.fas.usda.gov/psdonline), updated 12 August 2010.

## World Average Grain Yields, 1950-2010



Source: EPI from Worldwatch; USDA



### World Grain Yields, Annual Percent Increase by Decade, 1950-2010

Decade	Average Annual Increase Percent
1950-1960	1.9
1960-1970	2.4
1970-1980	2.0
1980-1990	2.5
1990-2000	0.9
2000-2010	1.5

Source: Compiled by Earth Policy Institute, with 1950-1959 data from Worldwatch Institute, *Signposts 2001*, CD-ROM (Washington, DC: 2001); 1960-2010 from U.S. Department of Agriculture, *Production, Supply and Distribution*, electronic database, at [www.fas.usda.gov/psdonline](http://www.fas.usda.gov/psdonline), updated 12 August 2010.

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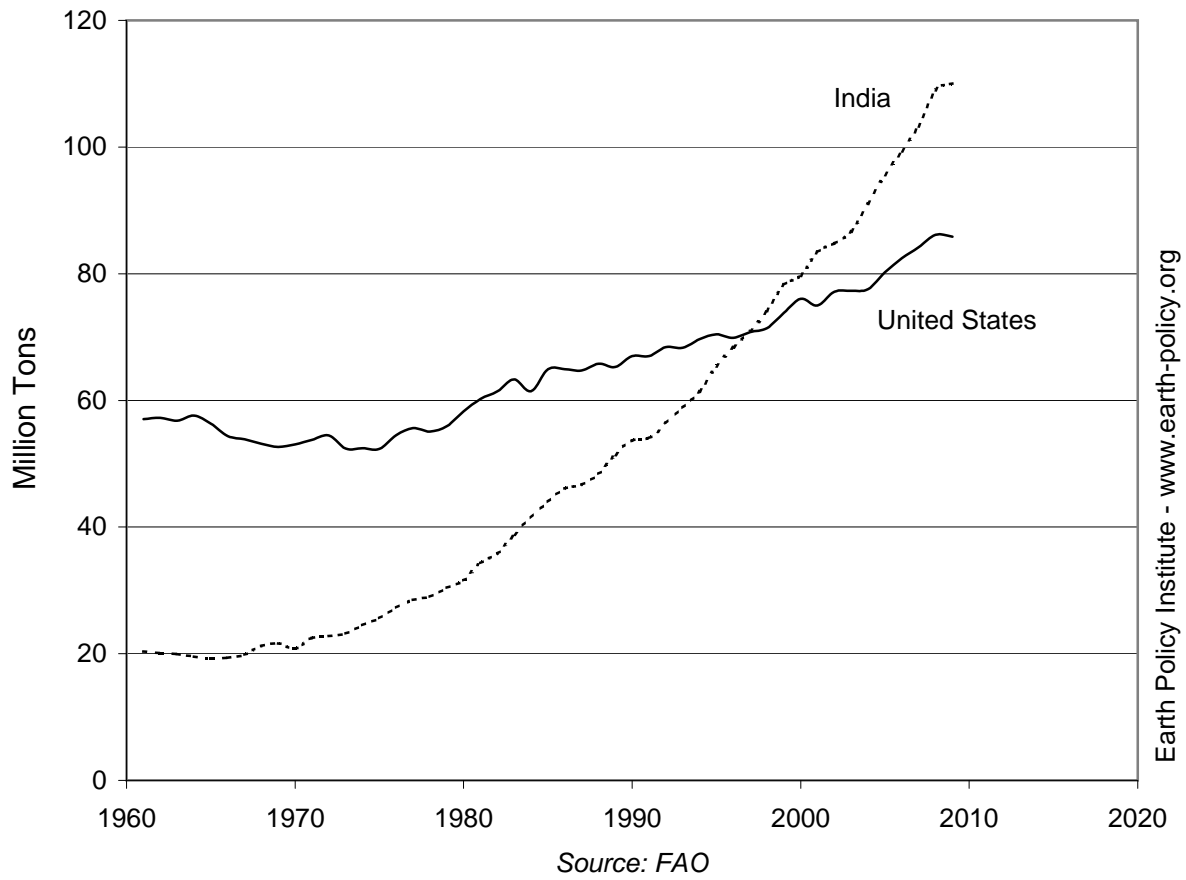
### Milk Production in India and the United States, 1961-2009

Year	India	United States
	Million Tons	
1961	20.4	57.0
1962	20.1	57.3
1963	19.9	56.8
1964	19.5	57.6
1965	19.2	56.3
1966	19.4	54.4
1967	19.9	53.9
1968	21.2	53.2
1969	21.6	52.7
1970	20.8	53.1
1971	22.5	53.8
1972	22.8	54.4
1973	23.2	52.4
1974	24.5	52.4
1975	25.6	52.3
1976	27.3	54.5
1977	28.5	55.6
1978	29.0	55.1
1979	30.4	56.0
1980	31.6	58.2
1981	34.3	60.2
1982	35.8	61.5
1983	38.8	63.3
1984	41.5	61.4
1985	44.0	64.9
1986	46.1	64.9
1987	46.7	64.7
1988	48.4	65.8
1989	51.4	65.3
1990	53.7	67.0
1991	54.1	67.0
1992	56.4	68.4
1993	58.9	68.3
1994	61.4	69.7
1995	65.4	70.4
1996	68.4	69.9
1997	70.9	70.8
1998	74.1	71.4
1999	78.2	73.8
2000	79.7	76.0
2001	83.4	75.0
2002	84.8	77.1
2003	86.7	77.3
2004	91.1	77.5
2005	95.6	80.3
2006	99.3	82.5
2007	103.3	84.2
2008	109.0	86.2
2009	110.0	85.9

Source: U.N. Food and Agriculture Organization, *ProdSTAT*, electronic database, at [faostat.fao.org](http://faostat.fao.org), updated September 2010.

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## Milk Production in India and the United States, 1961-2009



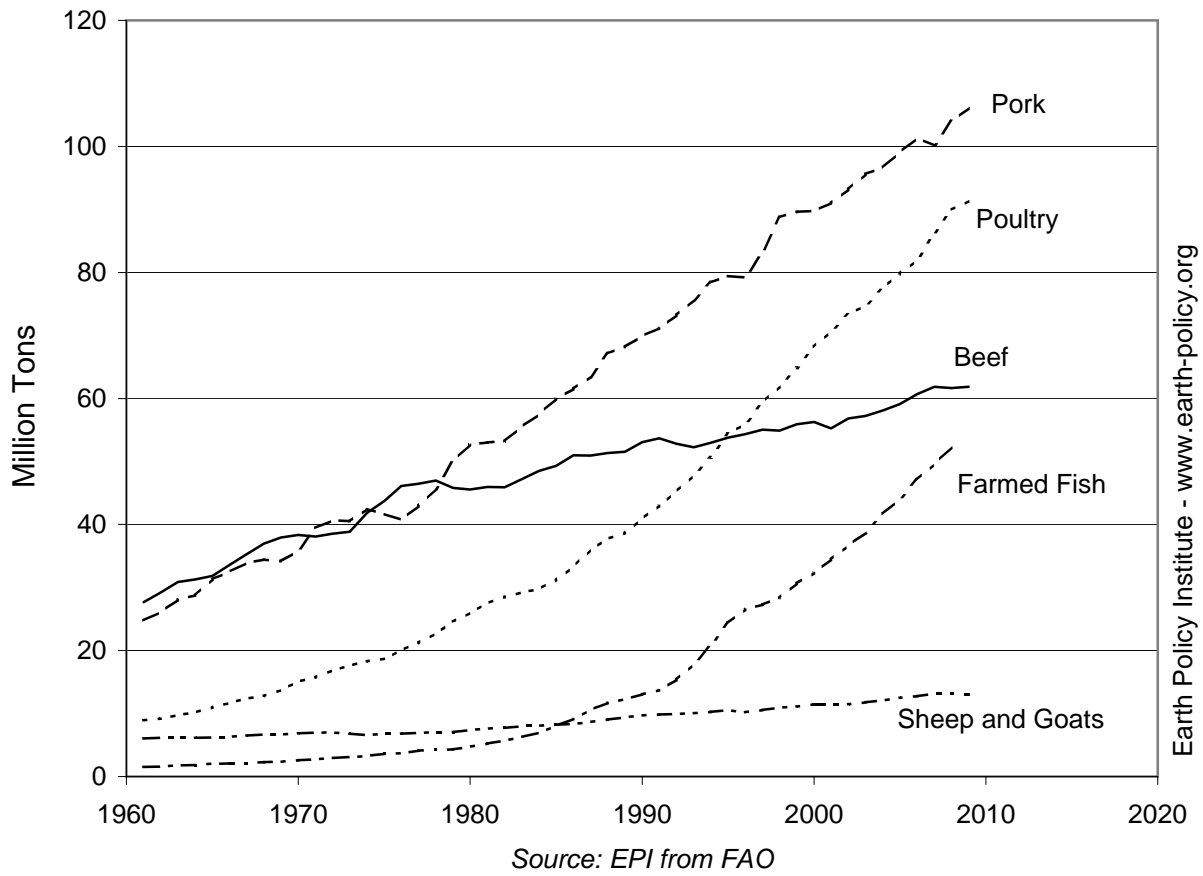
### World Animal Protein Production, 1961-2009

Year	Beef	Pork	Poultry	Farmed Fish	Sheep and Goats
	Million Tons				
1961	27.7	24.8	9.0	1.5	6.0
1962	29.2	26.1	9.2	1.6	6.2
1963	30.9	28.1	9.8	1.8	6.2
1964	31.3	28.7	10.1	1.8	6.2
1965	31.9	31.3	11.0	2.0	6.2
1966	33.6	32.5	11.7	2.1	6.3
1967	35.3	33.9	12.4	2.1	6.5
1968	37.0	34.4	12.8	2.3	6.7
1969	37.9	34.2	13.7	2.4	6.7
1970	38.3	35.8	15.1	2.6	6.8
1971	38.1	39.5	15.7	2.7	7.0
1972	38.5	40.7	16.8	3.0	7.0
1973	38.8	40.5	17.6	3.1	6.8
1974	41.9	42.5	18.3	3.3	6.6
1975	43.7	41.7	18.7	3.6	6.8
1976	46.1	40.8	20.0	3.7	6.8
1977	46.5	43.0	21.2	4.1	6.9
1978	47.0	45.7	22.7	4.2	7.0
1979	45.8	50.1	24.6	4.3	7.0
1980	45.6	52.7	26.0	4.7	7.3
1981	46.0	53.0	27.5	5.2	7.6
1982	45.9	53.2	28.5	5.7	7.7
1983	47.2	55.5	29.2	6.2	8.0
1984	48.5	57.5	29.8	6.9	8.1
1985	49.3	60.0	31.2	8.0	8.2
1986	51.0	61.5	33.3	9.2	8.3
1987	50.9	63.4	36.0	10.6	8.7
1988	51.3	67.1	37.7	11.7	9.1
1989	51.6	68.2	38.6	12.3	9.4
1990	53.1	69.9	40.9	13.1	9.7
1991	53.7	71.2	43.0	13.7	9.9
1992	52.8	73.2	45.2	15.4	9.9
1993	52.3	75.6	47.9	17.8	10.0
1994	53.0	78.4	50.6	20.8	10.3
1995	53.8	79.4	54.4	24.4	10.5
1996	54.3	79.2	55.9	26.6	10.2
1997	55.0	83.2	59.4	27.3	10.5
1998	54.9	88.8	61.9	28.3	10.9
1999	55.9	89.6	64.8	30.7	11.1
2000	56.3	89.8	68.2	32.3	11.4
2001	55.3	91.0	70.6	34.5	11.4
2002	56.8	93.2	73.4	36.7	11.5
2003	57.2	95.6	74.7	38.7	11.8
2004	58.1	96.6	77.5	41.7	12.1
2005	59.1	99.1	79.8	44.1	12.5
2006	60.7	101.3	81.9	47.1	12.8
2007	61.9	100.2	86.3	49.6	13.1
2008	61.7	104.0	89.9	52.3	13.1
2009	61.8	106.1	91.3	n/a	13.0

Source: Compiled by Earth Policy Institute from U.N. Food and Agriculture Organization (FAO), *ProdSTAT*, electronic database, at [faostat.fao.org](http://faostat.fao.org), updated September 2010, and FAO, *FISHSTAT Plus*, electronic database, at [www.fao.org/fishery/statistics/software/fishstat](http://www.fao.org/fishery/statistics/software/fishstat), updated March 2010.

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# World Animal Protein Production, 1961-2009



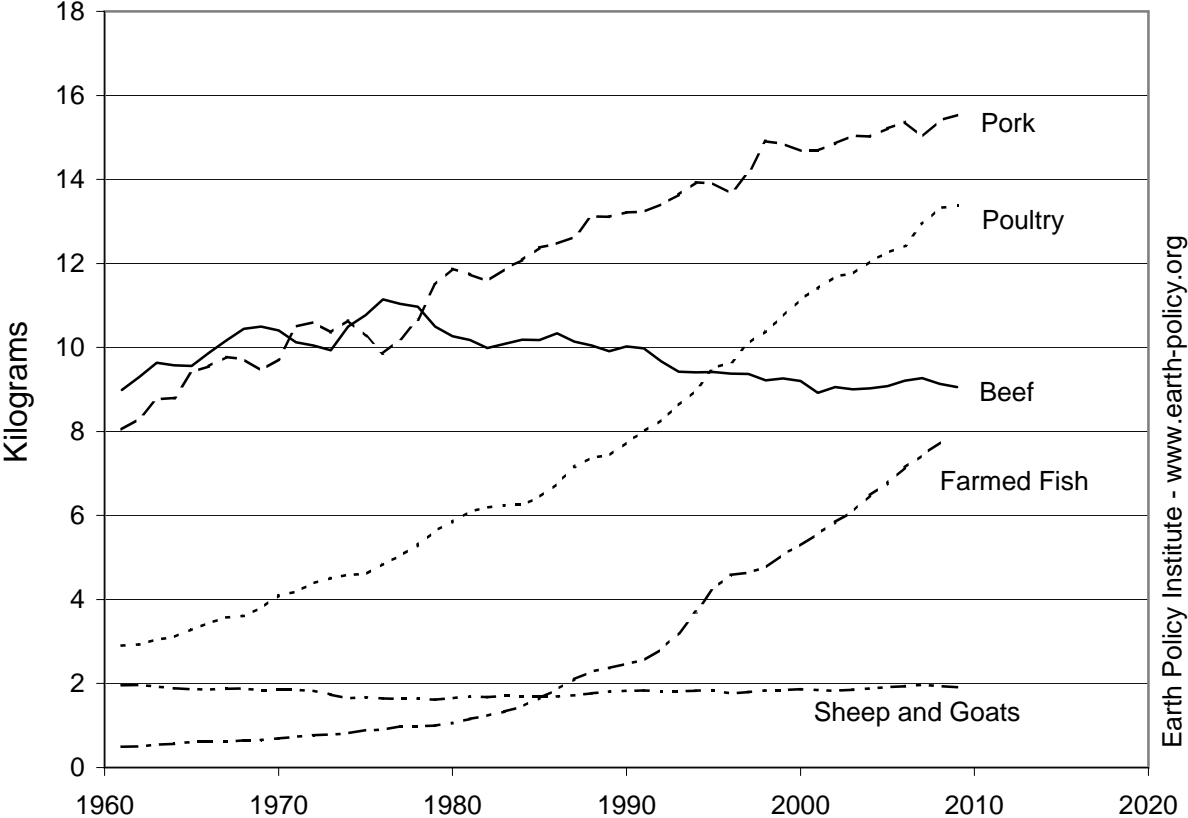
### World Animal Protein Production Per Person, 1961-2009

Year	Beef	Pork	Poultry Kilograms	Farmed Fish	Sheep and Goats
1961	9.0	8.0	2.9	0.5	2.0
1962	9.3	8.3	2.9	0.5	2.0
1963	9.6	8.8	3.0	0.6	1.9
1964	9.6	8.8	3.1	0.6	1.9
1965	9.6	9.4	3.3	0.6	1.9
1966	9.9	9.5	3.4	0.6	1.9
1967	10.2	9.8	3.6	0.6	1.9
1968	10.4	9.7	3.6	0.6	1.9
1969	10.5	9.5	3.8	0.7	1.8
1970	10.4	9.7	4.1	0.7	1.9
1971	10.1	10.5	4.2	0.7	1.9
1972	10.0	10.6	4.4	0.8	1.8
1973	9.9	10.4	4.5	0.8	1.7
1974	10.5	10.7	4.6	0.8	1.6
1975	10.8	10.3	4.6	0.9	1.7
1976	11.1	9.9	4.8	0.9	1.6
1977	11.0	10.2	5.0	1.0	1.6
1978	11.0	10.7	5.3	1.0	1.6
1979	10.5	11.5	5.6	1.0	1.6
1980	10.3	11.9	5.8	1.1	1.7
1981	10.2	11.7	6.1	1.2	1.7
1982	10.0	11.6	6.2	1.2	1.7
1983	10.1	11.9	6.2	1.3	1.7
1984	10.2	12.1	6.3	1.5	1.7
1985	10.2	12.4	6.4	1.7	1.7
1986	10.3	12.5	6.8	1.9	1.7
1987	10.1	12.6	7.2	2.1	1.7
1988	10.0	13.1	7.4	2.3	1.8
1989	9.9	13.1	7.4	2.4	1.8
1990	10.0	13.2	7.7	2.5	1.8
1991	10.0	13.2	8.0	2.6	1.8
1992	9.7	13.4	8.3	2.8	1.8
1993	9.4	13.6	8.6	3.2	1.8
1994	9.4	13.9	9.0	3.7	1.8
1995	9.4	13.9	9.5	4.3	1.8
1996	9.4	13.7	9.6	4.6	1.8
1997	9.4	14.2	10.1	4.6	1.8
1998	9.2	14.9	10.4	4.8	1.8
1999	9.3	14.9	10.7	5.1	1.8
2000	9.2	14.7	11.2	5.3	1.9
2001	8.9	14.7	11.4	5.6	1.8
2002	9.1	14.9	11.7	5.8	1.8
2003	9.0	15.0	11.8	6.1	1.9
2004	9.0	15.0	12.0	6.5	1.9
2005	9.1	15.2	12.3	6.8	1.9
2006	9.2	15.4	12.4	7.1	1.9
2007	9.3	15.0	12.9	7.4	2.0
2008	9.1	15.4	13.3	7.7	1.9
2009	9.1	15.5	13.4	n/a	1.9

Source: Compiled by Earth Policy Institute from U.N. Food and Agriculture Organization (FAO), *ProdSTAT*, electronic database, at [faostat.fao.org](http://faostat.fao.org), updated September 2010; FAO, *FISHSTAT Plus*, electronic database, at [www.fao.org/fishery/statistics/software/fishstat](http://www.fao.org/fishery/statistics/software/fishstat), updated March 2010; U.N. Population Division, *World Population Prospects: The 2008 Revision Population Database*, electronic database, at [esa.un.org/unpp](http://esa.un.org/unpp), updated 11 March 2009.

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# World Animal Protein Production Per Person, 1961-2009



Source: EPI from FAO, UNPop

Earth Policy Institute - [www.earth-policy.org](http://www.earth-policy.org)

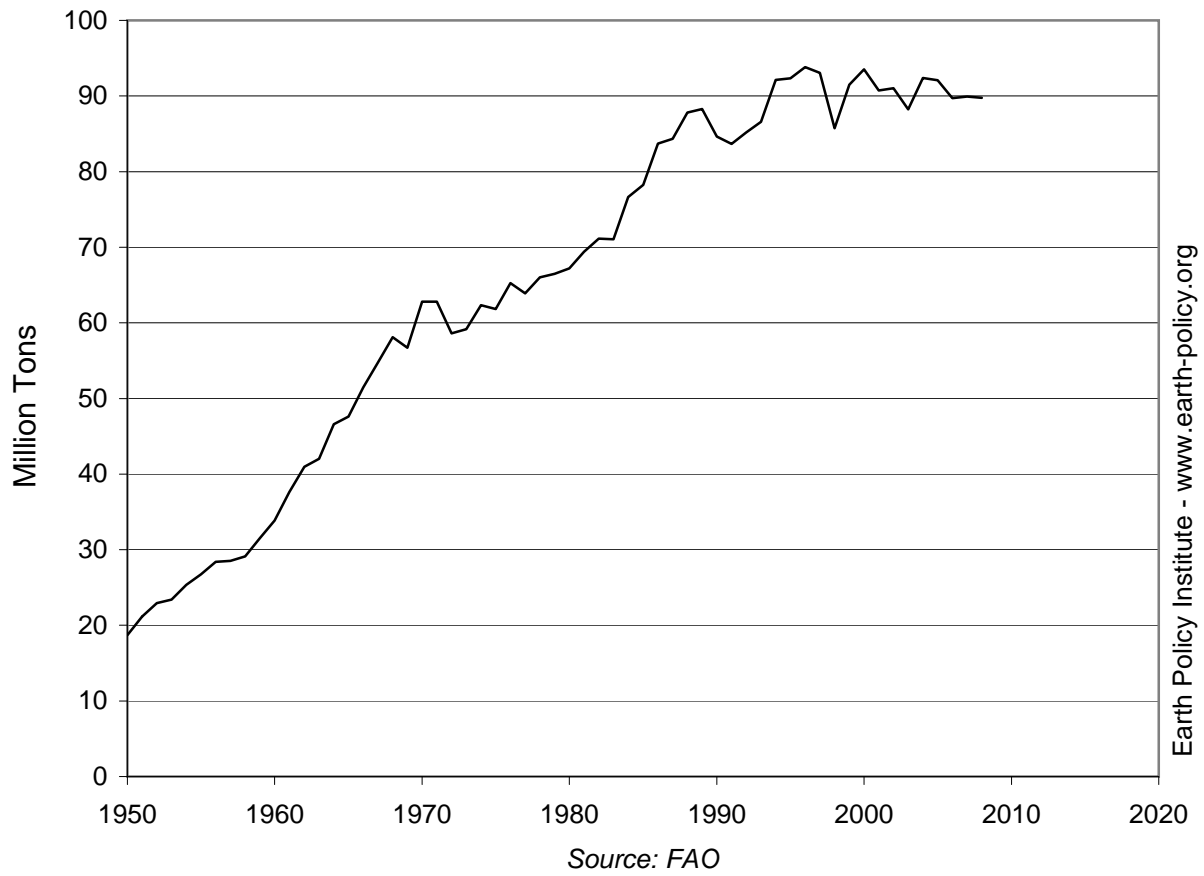
**World Total and Per Person Wild Fish Harvest, 1950-2008**

Year	Harvest	Harvest Per Person
	Million Tons	Kilograms
1950	18.7	7.4
1951	21.2	8.2
1952	22.9	8.8
1953	23.4	8.8
1954	25.3	9.3
1955	26.7	9.7
1956	28.4	10.1
1957	28.5	10.0
1958	29.1	10.0
1959	31.5	10.6
1960	33.8	11.2
1961	37.6	12.2
1962	41.0	13.0
1963	42.0	13.1
1964	46.6	14.3
1965	47.6	14.3
1966	51.5	15.1
1967	54.8	15.8
1968	58.1	16.4
1969	56.7	15.7
1970	62.8	17.0
1971	62.8	16.7
1972	58.6	15.3
1973	59.1	15.1
1974	62.3	15.6
1975	61.8	15.2
1976	65.2	15.8
1977	63.9	15.2
1978	66.0	15.4
1979	66.5	15.2
1980	67.2	15.1
1981	69.4	15.4
1982	71.1	15.5
1983	71.1	15.2
1984	76.7	16.1
1985	78.2	16.1
1986	83.7	17.0
1987	84.4	16.8
1988	87.8	17.2
1989	88.3	17.0
1990	84.7	16.0
1991	83.7	15.6
1992	85.2	15.6
1993	86.6	15.6
1994	92.1	16.4
1995	92.3	16.2
1996	93.8	16.2
1997	93.1	15.8
1998	85.7	14.4
1999	91.5	15.2
2000	93.5	15.3
2001	90.8	14.6
2002	91.0	14.5
2003	88.3	13.9
2004	92.4	14.4
2005	92.1	14.1
2006	89.7	13.6
2007	89.9	13.5
2008	89.8	13.3

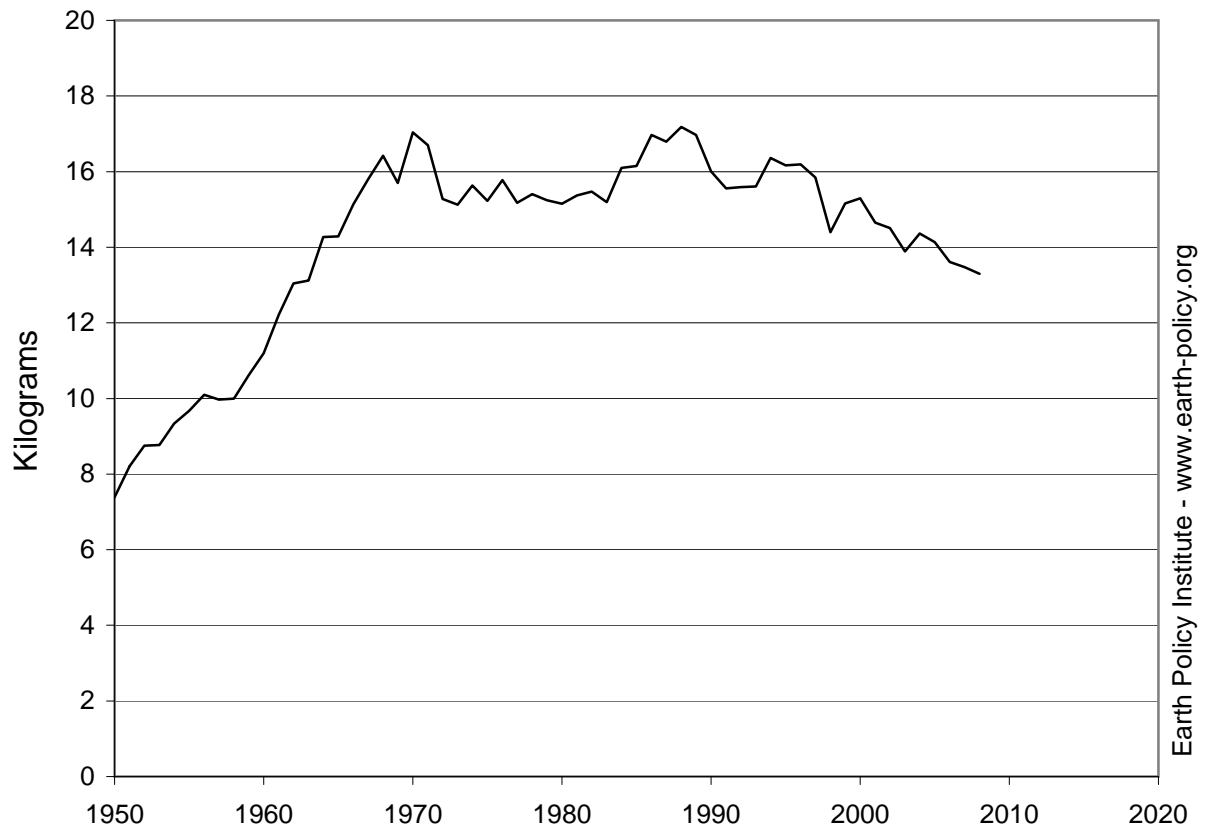
Source: Compiled by Earth Policy Institute from U.N. Food and Agriculture Organization, *FISHSTAT Plus*, electronic database, at [www.fao.org/fishery/statistics/software/fishstat](http://www.fao.org/fishery/statistics/software/fishstat), updated March 2010; U.N. Population Division, *World Population Prospects: The 2008 Revision Population Database*, electronic database, at [esa.un.org/unpp](http://esa.un.org/unpp), updated 11 March 2009.



# World Total Wild Fish Harvest, 1950-2008



# World Wild Fish Catch Per Person, 1950-2008



Source: EPI from FAO

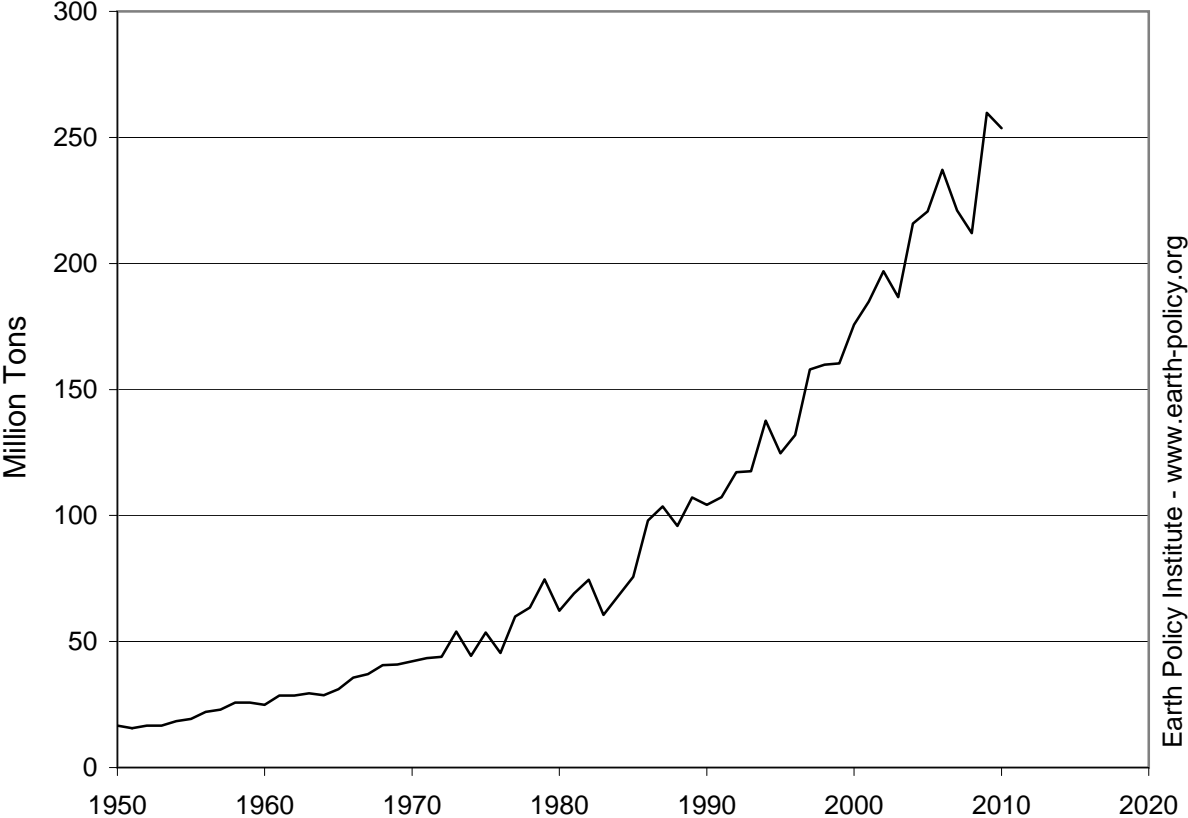
Earth Policy Institute - [www.earth-policy.org](http://www.earth-policy.org)

### World Soybean Production, 1950-2010

<u>Year</u>	<u>Production</u> Million Tons
1950	17
1951	16
1952	17
1953	17
1954	18
1955	19
1956	22
1957	23
1958	26
1959	26
1960	25
1961	29
1962	29
1963	29
1964	29
1965	31
1966	36
1967	37
1968	41
1969	41
1970	42
1971	43
1972	44
1973	54
1974	44
1975	54
1976	45
1977	60
1978	63
1979	75
1980	62
1981	69
1982	75
1983	61
1984	68
1985	76
1986	98
1987	104
1988	96
1989	107
1990	104
1991	107
1992	117
1993	118
1994	138
1995	125
1996	132
1997	158
1998	160
1999	160
2000	176
2001	185
2002	197
2003	187
2004	216
2005	221
2006	237
2007	221
2008	212
2009	260
2010	254

Source: Compiled by Earth Policy Institute, with 1950-1963 from U.S. Department of Agriculture (USDA), in Worldwatch Institute, *Signposts 2001*, CD-ROM (Washington, DC: 2001); USDA, *Production, Supply and Distribution*, electronic database, at [www.fas.usda.gov/psdonline](http://www.fas.usda.gov/psdonline), updated 12 August 2010.

# World Soybean Production, 1950-2010



Source: EPI from Worldwatch, USDA

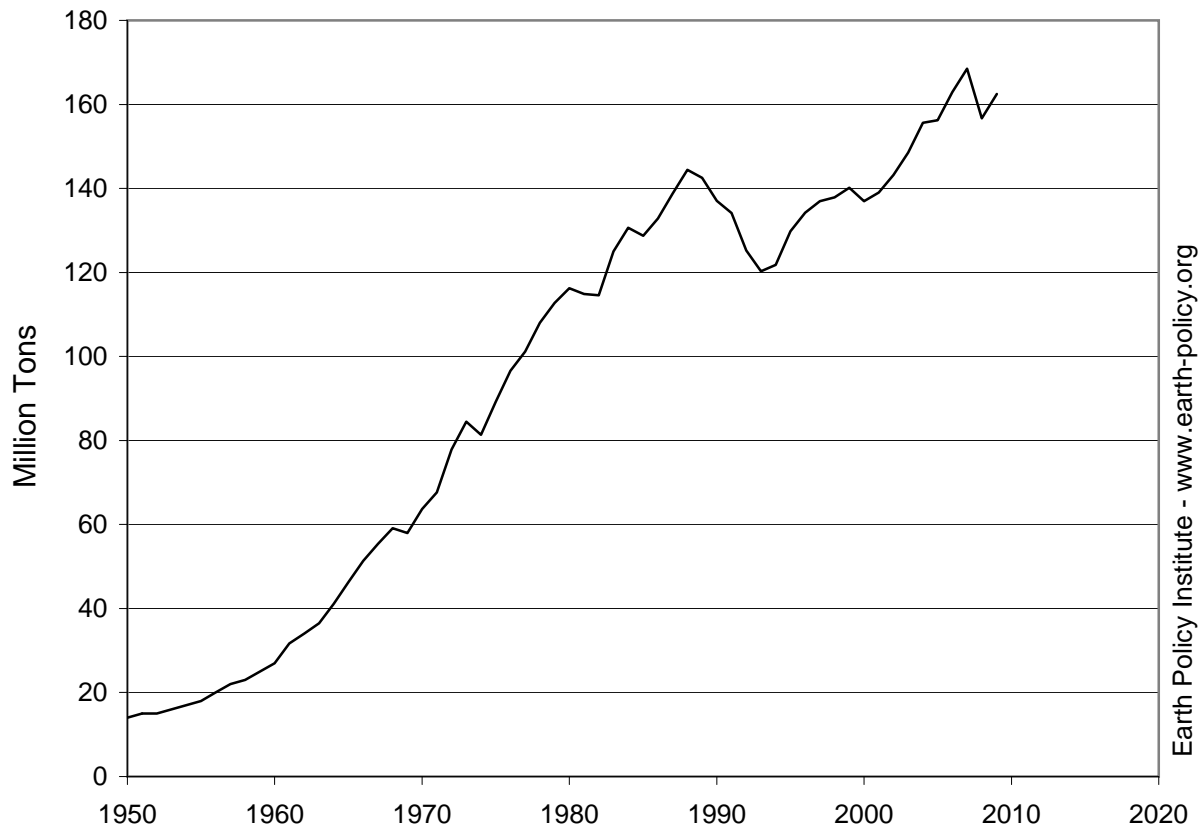
Earth Policy Institute - [www.earth-policy.org](http://www.earth-policy.org)

## World Fertilizer Consumption, 1950-2009

Year	Fertilizer Consumption Million Tons
1950	14
1951	15
1952	15
1953	16
1954	17
1955	18
1956	20
1957	22
1958	23
1959	25
1960	27
1961	32
1962	34
1963	37
1964	41
1965	46
1966	51
1967	55
1968	59
1969	58
1970	64
1971	68
1972	78
1973	84
1974	81
1975	89
1976	97
1977	101
1978	108
1979	113
1980	116
1981	115
1982	115
1983	125
1984	131
1985	129
1986	133
1987	139
1988	144
1989	143
1990	137
1991	134
1992	125
1993	120
1994	122
1995	130
1996	134
1997	137
1998	138
1999	140
2000	137
2001	139
2002	143
2003	149
2004	156
2005	156
2006	163
2007	169
2008	157
2009	163

Source: Compiled by Earth Policy Institute, with data from 1950-1960 compiled by Worldwatch Institute from U.N. Food and Agriculture Organization, *Fertilizer Yearbook* (Rome: various years); 1961-2006 data from International Fertilizer Industry Association (IFA), *IFADATA*, electronic database, at [www.fertilizer.org/ifa/ifadata/search](http://www.fertilizer.org/ifa/ifadata/search), retrieved 18 August 2010; 2007-2009 data from Patrick Heffer and Michel Prud'homme, *Fertilizer Outlook 2010 - 2014* (Paris: IFA, June 2010), p. 5.

## World Fertilizer Consumption, 1950-2009



Source: EPI from Worldwatch, IFA

## Farmers' Markets in Operation in the United States, 1994-2010

<u>Year</u>	<u>Farmers' Markets</u>
1994	1,755
1996	2,410
1998	2,746
2000	2,863
2002	3,137
2004	3,706
2006	4,385
2008	4,685
2009	5,274
2010	6,132

Source: U.S. Department of Agriculture, Agricultural Marketing Service, "Farmers Market Growth: 1994-2010," at [www.ams.usda.gov](http://www.ams.usda.gov), updated 4 August 2010.

This is part of a supporting dataset for Lester R. Brown, **World on the Edge: How to Prevent Environmental and Economic Collapse** (New York: W.W. Norton & Company, 2011). For more information and a free download of the book, see Earth Policy Institute on-line at [www.earth-policy.org](http://www.earth-policy.org).

## Farmers' Markets in Operation in the United States, 1994-2010

