

Livestock Production

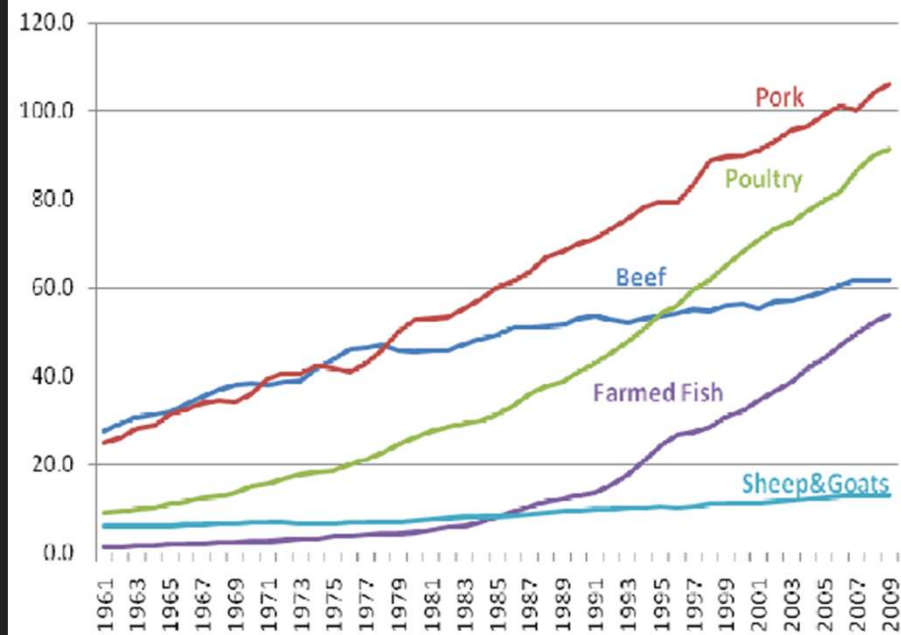
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Livestock production and consumption

- Consumption of meat is rising
- Reasons: population growth, standard of living, third world countries development
- Industrial breeding vs. free range farming
- Shift of production to other countries

Figure 7: World Animal Protein Production 1960-2009



Source: Earth Policy Institute, FAOSTAT

Livestock Production and the Environment

18% of all global greenhouse gas emissions

9% carbon dioxide

30% of methane

consumption ranges from 34-76 trillion gallons annually.

20%-33% of all freshwater consumption in the world today

leading cause of species extinction, ocean dead zones, water pollution, and habitat destruction

91% of Amazon destruction.

136 million rainforest acres cleared

Beef in the US

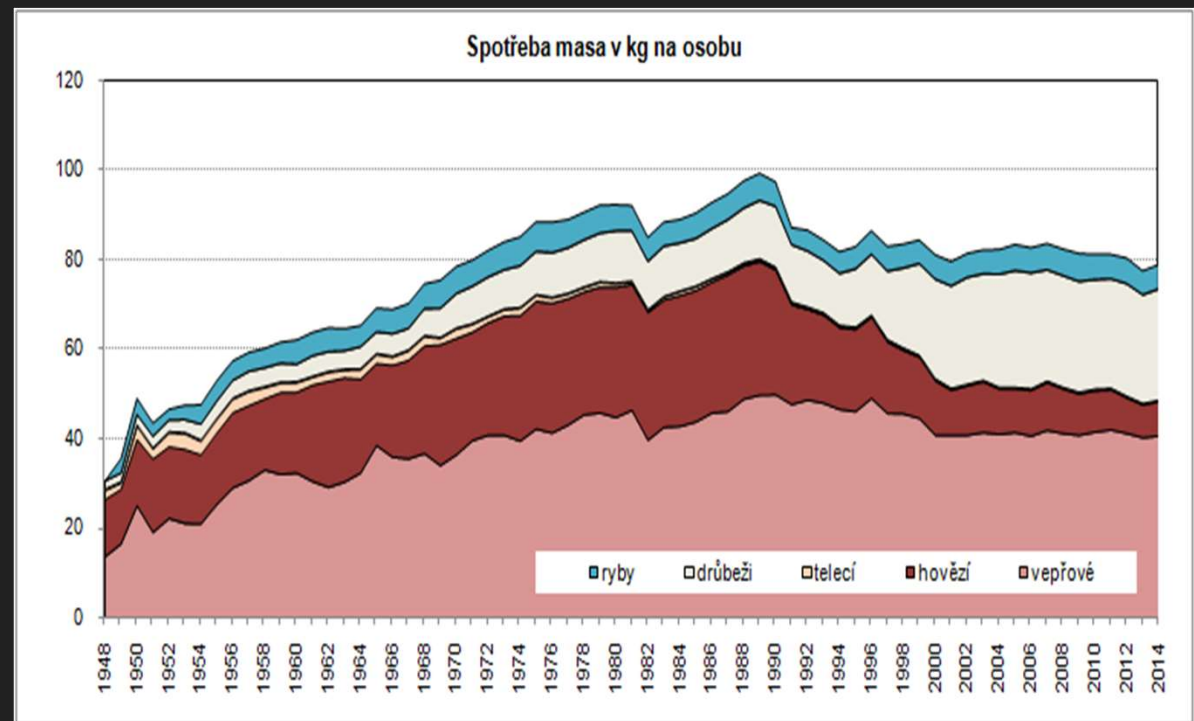


Production and consumption in the Czech Republic

Pre-communist vs
communist style of
production

Subsidy of meat industry

Regulations of pollution



Laws and Regulations

Greenhouse Gas Reporting:

Farms that have emissions larger than the threshold must report

The threshold to report is 25,000 metric tons of CO₂ per year

Resource Conservation & Recovery Act (RCRA)

Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)

“Follow label instructions to apply pesticide legally”

Government Programs

Food Purchases Program

Help provide assistance to farmers that are under financial stress by buying products

Federal programs provide compensation if farmers adopt conservation and environmental programs aimed that protect natural resources.

Soil and water resources



Agriculture in US Economy

Meat production companies
\$81.2 billion in revenues
to federal and state taxes

Consumption \$2.4 billion in
state sales taxes

6% of GDP \$864.2 billion

Table 1. U.S. beef industry

Year	Averaged annual U.S. retail Choice beef price (\$/lb)*	Retail equivalent value of U.S. beef industry (\$ billion)	Total U.S. beef consumption (billion lb)	Value of U.S. cattle and calf production (\$ billion)	U.S. beef production (commercial carcass weight, billion lb)	U.S. beef exports (commercial carcass weight, billion lb)	U.S. beef exports (value in \$ billion)	U.S. beef exports as percent of production (%)
2002	3.32	60	27.9	27.1	27.09	2.447	2.629	9.0
2003	3.75	63	27.0	32.1	26.24	2.518	3.186	9.6
2004	4.07	70	27.8	34.8	24.55	0.460	0.631	1.9
2005	4.09	71	27.8	36.6	24.68	0.697	1.031	2.8
2006	3.97	71	28.1	35.6	26.15	1.145	1.617	4.4
2007	4.16	74	28.1	36.0	26.42	1.434	2.187	5.4
2008	4.33	76	27.3	35.6	26.56	1.996	3.014	7.5
2009	4.26	73	26.8	32.0	26.07	1.935	2.909	7.4
2010	4.40	74	26.4	37.0	26.41	2.300	3.839	8.7
2011	4.81	79	25.5	45.2	26.28	2.785	5.041	10.6
2012	4.99	85	25.8	48.2	26.00	2.453	5.114	9.4
2013	5.29	88	25.5	48.5	25.70	2.589	5.721	10.1
2014	5.97	94	24.7	60.0	24.20	2.573	6.519	10.6
2015	6.29	105	24.8	60.0	23.70	2.266	5.621	9.6

*BSE was confirmed in the U.S. cattle herd in late December 2003.

Sources: USDA, Economic Research Service, World Agricultural Supply and Demand Estimates, and National Agricultural Statistics Service.

Possible solutions

- Externalities
- Is recommendation of government sufficient?
- Taxation of meat and dairy products?



Sources

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