INTERNATIONAL TRADE

Timeline of Events

- After WWII, voters in countries who had gone hungry during the war vowed "never again". This self-sufficiency attitude has shaped agricultural trade in this century.
- WWII to 1973: little dependence on trade, the US basically ignored the world economy
- 1947: GATT signed
- 1953: waiver to keep agricultural out of GATT negotiations
- 1957: beginnings of EU with West Germany, France, Italy, the Netherlands, Belgium, and Luxembourg joining together as a trading block under the Treaty of Rome. Today the EU is one of the most influential trading blocs in the world.
- 1960's: start of integrated global capital market and great global interdependence between countries resulting in closely linked economies. Capital flows drive foreign exchange markets, which play a major role in trade flows.
- Kennedy Round of GATT, 1962-66, first time GATT seriously attempted liberalization of agricultural commodity trade, but primarily focused on grains. Did result in some tariff reductions on farm products and individual agreements between countries

1970's

- Early 1970's: major trade shifts (ex: Japan and Soviet Union go from exporters to major importers), sharp rises in real prices of food commodities, and a decline in world food output, together with first oil crisis resulted in near panic in policy makers and an attempt to isolate economies; much of panic dealt with grains, but animal products were affected by general policy changes and trade
- Later part of 70's saw good growth of exports
- Overall, the 70's saw worldwide increased demand for agricultural products due to improving economies and increasing incomes. The resulting export-supply response led to greatly increased world trade of agricultural products. World agricultural trade expanded 41% in volume. US agricultural export sales increased at an annual rate of over 20%.

1980's

- mid-1980's: non-tariff barriers were pervasive with record levels of trade distorting governmental support in place
- 1986: world agricultural prices on downward trend, reaching lowest point for many years; US agricultural exports fell dramatically
- 1986 start of Uruguay Round of GATT: brought agriculture into GATT; removed quotas; established reduction on tariffs; limited export subsidies; over time, decrease domestic subsidies that distort trade
- 1989: Canada/US Free Trade Agreement (CFTA), precursor to NAFTA
- 1989: APEC established to promote greater economic and trade cooperation in Pacific Rim countries (US is a member)

1990's

- 1990: US agricultural exports just under \$40 billion
- 1994: Final Act of GATT Uruguay Round signed. Establishment of World Trade Organization (WTO)
- 1994: NAFTA became effective
- 1996: US agricultural goods largest US export; sales of \$60 billion
- 1997: about 1 million jobs (on and off the farm in rural and urban America) are supported by agricultural exports
- 1997: 1 of 3 farm acres in US is dedicated to exports

Trends

- There is an increasing tendency for countries to come together into geographic groupings to form trade agreements, resulting in increasing trade liberalization. This has lead to a consumer market that responds more to economic signals than to political decisions.¹
- Trade agreements provide rules for trade and the availability of an impartial panel of experts to establish the facts in dispute and judge the merits of arguments made. They don't ensure that governments won't act in their own self-interest.
- The director general of WTO has stated plans to seek maximum farm trade liberalization in the next round of WTO negotiations, which start in 1999.
- Increasing market globalization. Technology is allowing markets to be more and more global and integrated through advances such as techniques to increase shelf life of meat, which allows fresh meat to be shipped further, as well as technologies resulting in instant information flow. Example of how integrated the world markets already are: when US and Canada raised import restrictions to protect their markets from Australian and New Zealand beef, those suppliers diverted exports to the Japanese market. This in turn kept Japanese beef prices lower, reducing US market share in Japan.²
- There is an increasing trend towards multinational corporations in food manufacturing, processing, and retailing. This includes joint ventures between companies and contract growing arrangements.
- Trade in processed foods accounts for about 2/3 of international trade in the food and agriculture sector. It has exceeded the value of trade in unprocessed or bulk agriculture commodities since 1991, and is expanding more rapidly. Over the past 25 years, the value of total world trade in processed foods has increased at an average annual rate of about 10.5 %.3
- An important change in global agricultural trade in the last decade or so has been a shift from bulk commodities (grains, cotton, oilseeds, leaf tobacco, raw sugar) to non bulk commodities (animal products, fresh and prepared horticultural products, intermediate products such as vegetable oil and protein meal).⁴
- Traded beef remains a relatively small portion of global consumption, but is growing in importance.⁵
- In developing regions such as Latin America, North Africa, the Middle East, and much of Asia (including China, Taiwan, and South Korea), rising incomes are leading to rising meat demand. This increase in demand may initially be met by imports, but over time,

- import demand slows as domestic production catches up with demand.⁵
- Key growth areas for world agricultural trade are East Asia and Latin America. However, the FY1998 forecast for Asia reflects slower export growth due to the current financial crisis in several Asian countries.⁶
- The breakdown of state managed economies and central control of agriculture is resulting in increased privatization of the agriculture sector in these countries.
- Increasingly, consumers are demanding that food products be produced in an environmentally sound manner, both domestically and abroad.¹

Country: United States (US)

- US farmers and ranchers are twice as reliant on foreign trade as the US economy as a whole
- Total US agricultural trade increased 50% between 1990-1996, much of the increase was in high-value exports such as meats. 7 (*Graph 1*)
- Agricultural exports were up 31% in FY1995 compared to 1990. 60% of the increase in US agricultural exports from 1990 to 1996 was due to rising high-value exports such as beef, poultry meat, and a wide range of horticultural products.⁸
- Animal and product imports are forecast to reach \$6.9 billion in FY1998⁶
- The US is a net meat exporter
- Since the mid 1980's, bulk commodity exports have been a declining share of US agricultural trade. In FY1991, high value product2 (HVP) exports exceeded bulk exports when they reached a record \$20.4 billion. Prior to this and since at least the mid 19th century, only during WWI and WWII were US bulk exports less than 50% of agricultural exports.⁹
- Increases seen in the mid 80's in US meat exports were due to: 1) depreciation of the US dollar making US products relatively cheaper; 2) technologies developed allowing shipment of chilled rather than frozen meat (consumers prefer chilled meat because of its higher quality); 3) reduced trade restrictions in Pacific Rim countries; 4) increasing incomes in other countries resulting in increased meat consumption; and 5) US poultry and

\$500-\$1000 before you start seeing a slowing in the demand for staples such as food grains or tubers, and replace them with meat and animal products. Factors which can affect this include income distribution, dietary customs, local production costs, and marketing infrastructure. Typically poultry meat and egg demand shows the fastest initial growth due to relatively widespread acceptance and low costs. Examples of countries currently at this stage are China, Egypt, Indonesia, Pakistan, and the Philippines. When per capita income reaches roughly \$1000-\$10,000, demand for food staples is generally declining and demand for livestock products is increasing. At this income level, the take off point for import demand for protein has been reached. Usually meat production is local, however, if conditions do not exist for efficient local meat production, it may be imported. Examples of countries currently at this stage are North Africa, SE Asia, Central Europe, and Central and South America. Countries with annual per capita income greater than \$10,000 have the highest levels of agricultural import demand but with the slowest growth of import demand. Demand is stable and is for higher quality agricultural goods. Examples of countries currently at this stage are the US, Australia, Canada, the EU, and Japan. (CAD:ERS)

²A HVP has been processed (such as flour), receives specialized handling (such as fresh fruit and vegetables), or meets specific needs through higher than average quality or preserved identity in a niche market (such as animal and plant breeding stock). Basically, a HVP is other than raw grains, oilseeds, cotton, and tobacco.⁹ Processing at packing plants give meat and an byproducts HVP status.

- pork processors increasingly successful in identifying international market segments which are complementary to the US market.¹⁰
- US gains from the Uruguay Round of GATT in livestock trade are from reduced EU subsidized exports and new access in Asia.¹¹
- Rising incomes in developing countries support US export expansion, especially in meats and value-added food products.¹
- In the past 10 years, most of the growth in US exports of non bulk commodities has primarily been in East Asia, Canada, and Mexico.¹²
- The value of US food exports is rising 10% each year, nearly 3 times the rate of domestic food sales. In 1993, US processed food exports were \$24.4 billion while bulk commodity exports were \$18.8 billion.
- One of the toughest issues US trade officials face is the growing, hand-to-hand combat over food production, processing and import standards. Technical issues, not traditional protectionist barriers, are dominating agricultural trade talks around the world.¹³
- Greater than ½ million nonfarm jobs handle and process agricultural products for export. 14

Canada

- In 1995, total agri-food trade between the US and Canada was over 16 billion Canadian dollars, more than doubling since 1989. It is in rough balance between the two countries.
- The US is Canada's largest agri-food market with over 50% of Canadian exports going to the US.
- Canada is the US's 3rd largest export market with about 12% of US agri-food exports going to Canada.
- Since implementation of CFTA/NAFTA, agricultural trade between the US and Canada has increased more rapidly then the rate at which US trade with the world increased. CFTA/NAFTA has added an estimated \$1.4 billion to US agricultural exports to Canada, which was an estimated 25% of US agricultural exports to Canada in 1995. CFTA/NAFTA has added an estimated \$1.9 billion to Canadian agricultural exports to the US.¹⁵
- The major beneficiaries of CFTA/NAFTA are Canadian consumers and US producers with the net welfare gain to both countries being positive. All together, consumers benefit by nearly \$1 billion per year in each country. 15
- There have been notable increases in US exports to Canada in "other meat", which excludes poultry, and with poultry. US imports of meat products from Canada has also significantly expanded.¹⁵ Live animals and red meats are 2 of the 3 major imports from Canada.
- Canada has a strong comparative advantage over the US in live animal trade¹⁵
- CFTA/NAFTA has encouraged a large expansion of bilateral trade in manufactured food products.¹⁵

Mexico

• The US is Mexico's largest trading partner

- Mexico's imports of meat and meat products grew at an annual rate of 35% since reforms in the early 1980's.
- Under NAFTA, US exports to Mexico have increased over what they would have been without NAFTA. Mexican exports to the US have not.¹⁵

South America

- Regional economic integration in the Americas is back on the political agenda for the hemisphere, however, until the business community is totally committed to and plans for intra-America trade, it will lag behind trade with other regions of the world.¹⁶
- Currently under way are partial liberalizations of import regimes for agricultural products in many South and Central American countries.¹⁶
- Latin American countries seem to be stabilizing their economies, resulting in increasing sales.
- Increasing trends in Latin American countries towards supermarkets and fast-food outlets is creating a demand for consistent volume and quality, which the US can meet.¹⁷

Former Soviet Union Countries (FSU)

- Pre-reforms, consumption of livestock products were keep artificially high due to price controls. In moving to a more free market system, livestock production has been slow to recover. The results have been high costs of meat production leading to higher priced meat in the markets, in turn resulting in decreased consumption of livestock products.⁵
- The high domestic price of meat does result in continued demand for imports of lower cost meat. Meat imports have increased about 5 times their 1992 level.

Asia

- Nearly 43% of world agricultural exports go to Pacific Rim countries
- APEC countries accounted for 63% of US agricultural exports (\$37.6 billion) in 1996, with over half of these exports being processed or consumer-ready products. These exports support over half a million US farm and non-farm jobs.
- Western Pacific countries are the worlds largest net importing region of agricultural products, primarily due to Japan, South Korea, Taiwan, and Hong Kong.⁴
- Food safety of US meat is a major issue in much of Asia Pacific
- Customers and consumers in China, Hong Kong, and Malaysia associate "Made in the USA" with an assurance of high quality in food products.¹⁸
- Several current issues are having a negative impact on animal agriculture production in China. These issues are: 1) water is being diverted away from agricultural use for other industrial and urban uses, leading to shortages for croplands, and thus to decreased animal production; 2) the internal infrastructure needed by agriculture is extremely weak; and 3) transmission of technology and information does not reach the farmers. 12,19

Product: Beef

- About 10% of US total beef output was exported in 1997. In FY1996, US fresh, frozen and chilled red meat exports were \$4.3 billion. US beef export value is projected to be up in FY1998 primarily due to higher prices rather than greater volume. (*Graph 4, 5*)
- The US is the dominant supplier of beef to Canada and the US is Canada's major beef export market. Total US red meat imports are forecast to rise in FY1998, reaching 1.2 million tons (\$2.8 billion). Argentina will likely fill its 20,000 ton US beef quota for 1998.⁶
- In 1996, US beef and veal exports to Mexico jumped nearly 80%. US cattle exports to Mexico are likely to show a strong gain in FY1998.⁶
- Primary US competition in world beef trade will be from Australia, New Zealand, and emerging South American exporters. 20 (*Graph 2*)
- Main growth markets for beef are Japan, South Korea, and Mexico. Graph 3. In 1990, US exported \$1.6 billion beef to East Asia. In 1995, the US exported \$1.7 billion to Japan alone, however a slow down in the growth of the US beef export market to Japan is expected in FY1998.⁶ US beef exports to South Korea more than doubled from 1990 to 1996. (*Graph 6*, 7)

Poultry

- (Graph 8, 9)
- In 1996, US broiler meat exports were more than 17% of total US production. Exports of US poultry meat in 1996 reached nearly \$2.5 billion and are expected to reach \$2.55 billion in FY1998 due to rising sales to Hong Kong and Russia.⁶
- Over half of FSU meat imports are poultry meat, primarily from the US. 43% of 1996 US broiler exports went to the FSU. ¹⁰ In 1996, the FSU accounted for \$1 billion in US poultry meat sales.
- The US market share of broilers in Japan fell in 1996 due to growing competition from China.¹⁰
- Mexico has become an important market for US poultry.
- US table egg exports to Hong Kong are expected to increase in FY1998.⁶

Pork

- 6 largest pork exporters (US, Canada, China, EU, Central and Eastern Europe, and Taiwan) account for greater than 95% of world pork exports.⁵ (*Graph 10*)
- In 1997, 6% of US pork was exported, up 2% from 1990.
- US pork export value is expected in increase in FY1998 with higher volumes more then offsetting lower prices. (*Graph 12, 13*)
- (Graph 14, 15)
- Currently, most of Canada's pork imports are from the US.⁵
- The US captured more than 90% of the pork import market in Canada and Mexico, largely at the expense of European pork.
- EU pork production has slowed due to higher costs associated with environmental regulations and animal welfare measures.⁵
- US pork exports to the EU increased 33% between 1994 and 1996.
- There was an 8 fold increase in US exports of pork to Korea between 1992 and 1996.²⁰
- Hong Kong currently imports greater than 95% of its pork consumption.

- Major Canadian pork export markets are the US and Japan.⁵
- (Graph 11)

Hides and Skins

- Korea, Japan and Italy accounted for greater than 50 % of world hide imports in 1996.
- The US dominates the world hide market. In 1996, US production of bovine hides and skins was almost 1.2 million tons, which was approximately 30% of total world production. US exports were 20 million whole hides valued at nearly \$1.13 billion. The US exports approximately 56% of its production of hides and skins, primarily in the form of whole cattle hides.
- Korea is the largest purchaser of US whole cattle hides, buying about 40% of total US exports.
- Italy buys about 60% of exported US calf and kid skins
- Brazil is the US's largest competitor in the international market for bovine hides and skins.
- Due to tight supplies, the value of US exports increased in the first half of 1997 while the quantity exported did not increase. 1998 US export quantities are forecast to decrease slightly due to continued tight supplies.
- Wet blues'3 market share of hide and skin exports is growing due to the following advantages: 1) they weigh less and are therefore cheaper to transport; 2) they are better quality due to being tanned sooner after slaughter, which reduces staleness; and 3) the tanning process results in significant pollution issues, so buying wet blues puts the pollution control issues in the exporting country. US exports of wet blues is about 10% (volume weight) of the total US export market for hides.²¹

Processed Foods

- The world market in processed foods is approaching 1 trillion dollars, with the US among the world leaders in both imports and exports.³
- (Graph 16, 17, 18, 19)
- Western Europe, North America, Japan, Australia, and New Zealand are the leading importers of processed foods, accounting for 87% of the \$160.8 billion worldwide imports for 1987. The US is the leading importer at \$23.3 billion. These same nations accounted for 57% of the exports with the Netherlands, France, US, and West Germany being the top exporting countries.³
- Worldwide, trade in meat products was the 2nd largest processed foods product category at 18% of world trade in 1987.³
- Foreign direct investment (FDI) is the dominant form of international commerce as compared to agricultural commodities where trade dominates and FDI is almost nonexistent.³
- US exports of processed foods increased 97% between 1985 and 1991. Imports rose 26% during same time period. The product category most responsible for this growth in exports was meat products which went from an \$114 million deficit in 1985 to \$2 billion surplus in 1991. The vast majority of this category for both imports and exports is

³Wet blues are an intermediate product for tanneries which have already undergone basic tanning operations. They have been rinsed with chrome solutions to avoid decomposition.

- meatpacking. In 1994, US exports in meat products were nearly \$7 billion, which was 26.5% of the total value of all US food sector exports.³ (*Graph 20, 21, 22, 23*)
- The net effect to producers from importation of processed foods and outbound FDI is hard to quantify, but recent trends suggest that trade in processed foods is increasingly beneficial to the US farm sector.³

Uncertainties For The Future

- More and more trade agreements are being made. Signals given by the recent success of NAFTA and GATT negotiations indicate that the world is moving further down the open trade path. But there are signals from some countries that the political cost of adjusting to more open markets is forcing them to look for ways to limit their reforms.²² Others have said that the tendency for countries to come together into geographic groupings, forming trade agreements, has the potential to undermine the larger and unwieldy GATT.²³
- What would happen if we did have free trade? A study modeling agricultural trade liberalization in all industrialized countries resulted in world market prices increasing considerably for most products. For example, the study projected beef and diary product prices to roughly double.²⁴
- Trade is very tied to politics. The party in charge of a country can determine trade policies, participation level in trading blocs and trade agreements, and levels of tariffs, quotas and other trade inhibiting mechanisms on particular products. Example: after the USSR invaded Afghanistan in 1979, the US implemented a 16 month embargo of agricultural shipments to the USSR.
- In countries that have periodic changes of the ruling party, trade policies can change with the ruling party, potentially resulting in significant impacts on the level of trade.
- The trend towards trade liberalization is dependent upon continual reinforcement and advancement from the political systems around the world.
- Trade is directly related to exchange rates and exchange rates are related to the economic situation within a country. Economic crises such as the one Mexico experienced in 1994 and the current Asian situation can dramatically affect trade levels. "Exchange rates are now the single most important variable in determining the economic environment for agricultural trade."²⁵
- Many analysts believe that the Pacific Rim growth will continue to surpass the growth of
 other regions of the world, thus becoming even more economically important in the
 future.
- It is estimated that annual growth in demand for livestock products (primarily meat) in ASEAN countries will be 7%. The major beef suppliers for Japan are projected to remain the US and Australia, with the US gaining in market share. 5
- Reasons for this growth include: 1) continuing robust economic growth and rapid income growth resulting in gains in purchasing power far exceeding those in other regions of the world;⁵ 2) trade reform; 3) limited agriculture land resources; and 4) westernization of diets leading to increased meat consumption.²³

- Factors growth are dependent upon include decentralized markets, export-oriented policies and agricultural policy in general, high investment and savings rates, and political and economic stability.
- However, very recent forecasts for Asian markets are now mixed in the degree of growth projected for the area due to the current economic situation in several countries. Most analysts are currently projecting slowing, though continuing, short term growth in the region, with recovery in the long term.
- Uncertainties that could derail growth include economic instability, political instability and war, the trend towards decreased savings and investments in Japan, and directing agricultural policy towards a protectionist point of view.^{23,26}
- To gain an increasing share of the expanding agriculture demand in Western Pacific countries, the US will need to maintain and increase the recent shift from exporting primarily bulk commodities to exporting primarily high-value goods.⁴ In addition, US producers will need to better meet Asian customer needs such as less external fat on meat and packaging in smaller quantities.²⁷
- Based on past performance in these markets, there is good probability for North American exports to grow rapidly to meet this demand with agricultural trade flow from North America to Asia remaining the largest in the world.^{4,12}
- At a 10% annual growth rate in the 1990's, China is the most rapidly growing economy in the world, second only to Japan. On a purchasing power parity basis, it is the world's 2nd largest economy and is currently the world's largest agriculture producer and consumer. It currently runs the second largest agricultural trade deficit with US. While China has potential for substantial growth in trade, in the past it has been a minor and sporadic player in the world market. Two future scenarios for China are 1) self-sufficiency with discouragement to trade, and 2) an evolving trade scenario.²² Some experts believe China has decreasing potential as an agriculture exporter due to slowing growth of agricultural production, increasing domestic demand, and less land available for agriculture due to population pressures. Agricultural exports that are developed will be processed high-valued products.^{5,12} With China, relatively minor changes in assumptions regarding future trading patterns can result in relatively large changes in trade projections due to the size of the population.⁵
- When will China join the WTO? When China joins the WTO, the likely impact would be a gain to US farmers and food processing firms. This is because China's labor-intensive sectors, that have comparative advantages, would pull resources away from farming, thus reducing China's agricultural exports and increasing its imports.
- There is no move by the central government in China to deal with several current issues which are having a negative impact on animal agriculture production. These issues are: 1) water is being diverted away from agricultural use for other industrial and urban uses, leading to shortages for croplands, and thus to decreased animal production; 2) the internal infrastructure needed by agriculture is extremely weak; and 3) transmission of technology and information does not reach the farmers. 12,19
- FSU: The pace of reform and trade developments between Russia and EU will affect the trade status of FSU countries. Reform of domestic and export policy is needed so the agriculture sector can meet the tough standards and demands of foreign markets. Faster

- paced reform will result in increased income levels sooner, leading to demand for high-valued food products, including meat. Slower paced reform will delay the import potential for high-valued products.²² It is unknown whether these countries will, in the long run, emerge as consumers (i.e. importers) or as competitors (i.e. exporters) in agricultural trade.
- As income levels rise in developing countries, demand for meat also rises. Whether these countries become importers or exporters in animal agricultural products depends on if domestic production meets domestic demand, or is less than or greater than domestic production.
- There is considerable uncertainty over the next 15 years due to possibilities of EU enlargement, Common Agricultural Policy (CAP) reform, and GATT agreements, leading to 2 possible scenarios. 1) EU enlargement with effective CAP reform which is disciplined by GATT. This results in a more market oriented situation with EU farm prices significantly lower and nearer to world prices, resulting in a decrease in the EU's trade surplus. This could cause a significant increase in world market prices, the extent of which would depend on the size of the EU market relative to the world market. This scenario of a more market oriented approach has the smallest chance of being adopted due to fear by the Europeans that it would lead to an unacceptable reduction in farm incomes. One study, however, determined this decrease in farm incomes to be less severe than most policy makers believe, and the overall economic welfare in EU countries to be increased by 0.2-0.7%.²⁴ This scenario would result in a good outlook for the US, and other developed countries, to expand exports into markets currently filled by the EU. Developing countries that are agricultural importers would lose in this scenario due to increased world prices.²⁴ 2) EU enlargement with ineffective CAP reform would extend current policies to more countries. This would result in continued large surpluses in a greater number of countries and expanding EU agriculture exports at the expense of US exports.²²
- Continued Mexican trade liberalization will provide opportunities for greater imports of meats, almost entirely from the US.⁵ However, as domestic production increases over time, it may catch up with demand, resulting in a slowing of the rate of growth of meat imports. Mexico is projected to run a trade deficit with the US beyond the year 2000.
- Already under way are reforms of import regimes for agricultural products in many South and Central American countries with an overall effect of decreasing barriers to imports. These reforms are toward less government intervention and more liberalized, open markets, resulting in more rapid economic growth and trade for the area. Sustained reform could substantially increase trade of agricultural products with the US, and Argentina and Brazil could continue to be highly competitive with the US in meats. However, the future of these reforms is uncertain. Farm lobbies are beginning to realize the implications of freer markets, including the negative impacts on local producers, and may resist them. And if public perception is that the costs for these reforms are too great and political pressure comes to bear, the reform process could slow or stop, resulting in relatively low levels of agricultural trade growth.
- If the food industry in Central and South America can develop the degree of product differentiation, niche markets, and quality control as seen in US, European, and Japanese

- food systems, then expansion of US agricultural trade to these countries is likely to continue well into the next century.
- Outbreaks of known diseases, as well as newly emerged diseases, can affect a country's
 trade in animal products. BSE in the UK is an example of what the emergence of a new
 disease can do to the consumption and trade of a product. Another example from recent
 years is the FMD outbreak in Taiwan which wiped out a major world exporter for one
 commodity.
- The issue of food safety and how it affects trade has been said to be "the most vexing issue in the fight for freer trade." How it will affect trade is unknown. Recent examples: 1) when 179 Michigan schoolchildren became ill last summer after eating tainted strawberries from Mexico, parents and politicians blamed freer trade 2) When a panel of judges ordered the EU to open its borders to hormone-treated US beef, outraged residents said open markets had gone too far. ¹³
- As baby boomers age, domestic US consumer demand for beef will stagnate, resulting in the US relying on younger, faster growing populations in countries with emerging economies for a larger proportion of total beef demand. This makes the US beef market more susceptible to exchange rate fluctuations, domestic policies of other countries, and international trade policies.²⁸
- Weather patterns can impact production, thus having an impact on a country's export or import levels. For example, several years of draught in Australia have had a negative impact on their export market in animal products.
- A group of ERS economic analysts were asked "What non-US events do you think will have the most impact on US agricultural trade over the next 15 years?" Their answers included population growth, new cost-reducting production and transportation technology, environmental problems, GATT, and political events in China, Europe, the former Soviet Union, and Latin America.²²

References

(The charts are in a separate file)

- 1. Dees, Stephen P. _The changing global marketplace_ speech at the Agricultural Outlook Forum, 1996. gopher://usda.mannlib.cornell,edu:70/00/reports/waobr/aof/aof/6/dees.asc.
- 2. Chadee, Doren and Hiroshi Mori _The Japanese beef market in transition_ Choices 4th Qtr 1993, pg 32-33.
- 3. Henderson, Dennis R., Charles R. handy, and Steven A. Neff. (eds) _Globalization of the Processed Foods Market_ Food and Consumer Economics Division. ERS USDA. Agricultural Economic Report no. 742. Sept 96
- 4. Coyle, William T. _Trade patterns in the Pacific Rim: Outlook for the next decade: Discussion_ American Journal of Agricultural Economics, vol 76, pg 1119
- 5. Commercial Agriculture Division, ERS, USDA. _International Agricultural Baseline Projections to 2005. Agricultural Economic Report No. 750. May 1997.
- 6. FAS: USDA _Fiscal 1998 Outlook for U.S. Agricultural Trade_ off internet 12/97
- 7. Collins, Keith (USDA economist) _The outlook for US Agriculture_ presented at Agricultural Outlook Forum, Feb 1996. gopher://usda.mannlib.cornell.edu:70/00/reports/waobr/aof/aof/96/collins.asc
- 8. World Agricultural Outlook Board, Office of the Chief Economist, USDA _Agricultural Baseline Projections to 2005, Reflecting the 1996 Farm Act. Feb 1997.
- 9. MacDonald, Stephen _High-value exports surpassed traditional bulk products_ Food Review vol 15 pg 28. July 1992.
- 10. Brester, Gary W., James Mintert, and Dermot J. Hayes. _US Meat Exports Increasing Rapidly_Choices. 4th quarter, 1997. pg 22-23.
- 11. Josling Tim et al 1994 _The Uruguay Round Agreement on Agriculture: an Evaluation_ commissioned paper no. 9, The international Agricultural Trade Research Consortium
- 12. Coyle, William and A. Desmond O_Rourke. _Options for U.S. Agriculture in APEC_ Choices 1st Qtr 1997 pg 32-35.
- 13. Nall, Stephanie Food fight: Safety fears grow along with trade Journal of commerce. pg 1a 1/5/98
- 14. Schumacher, August Jr. _Building Prosperity with U.S. Trading Partners_ Speech at the Agricultural Outlook Forum, 1996. gopher://usda.mannlib.cornell,edu:70/00/reports/waobr/aof/aof96/schuma.asc.
- 15. Tweeten, Luther, Jerry Sharples, Linda Evers-Smith. _Impact of CFTA/NAFTA on U.S. and Canadian Agriculture_
- 16. Josling, Timothy _Regional trade reforms and Western hemisphere economic integration: implications for agriculture and economic growth: discussion_ American journal of agricultural economics vol 77, pg 1298
- 17. AP2 _Latin America likely area for increased farm exports_ AP new article 12/23/97
- 18. Ng, Gregory, _The Changing Global Market Place_ presented at the Agricultural Outlook Forum. Feb 1996. gopher://usda.mannlib.cornell.edu:70/00/reports/waobr/aof/aof96/gregng.asc

- 19. Goldberg, Joseph. _China_s Agricultural Prospects_ Speech at the Agricultural Outlook Forum, 1996. gopher://usda.mannlib.cornell.edu:70/00/reports/waobr/aof/aof96/goldberg.asc.
- 20. Reed, Steve _World Meat Trade A U.S. Perspective_ Speech at the Agricultural Outlook Forum, 1996. gopher://usda.mannlib.cornell,edu:70/00/reports/waobr/aof/aof96/reed.asc
- 21. FAS: USDA _Livestock and Poultry, World Markets and Trade, Hides and Skins_ Oct 97
- 22. Sharples, Jerry in collaboration with Lon Cesal, Hunter Colby, Christian Foster, David Kelch, Robert Koopman, Daniel Plunkett, and David Sedik. _World events shaping future U.S. agricultural trade_ Choices, 2nd Qtr 1994. pg 4-9
- 23. Coyle, William T., Dermot Hayes, and Hiroshi Yamauchi (eds). _Agriculture and Trade in the pacific: Toward the Twenty-first Century_ Westview Press, Boulder CO 1992
- 24. Koester, Ulrich and Tangermann, Stefan. _The European Community_, a chapter in Agricultural Protectionism in the industrialized world. Ed. Fred H. Sanderson. Resources for the Future, Wash DC. 1990 pg 108-111.
- 25. Shane, Mathew D. _Exchange Rates and U.S. Agricultural Tade_ Jan 1990 USDA:ERS:Agriculture Information Bulletin Number 585.
- 26. AP1 _Japan to fend off U.S. pressure on farm market at OECD_ AP news article 12/24/97
- 27. Davies, Stephen P. Personal communication.
- 28. Lambert, Chuck. NCBA position paper _International Markets_ 1997