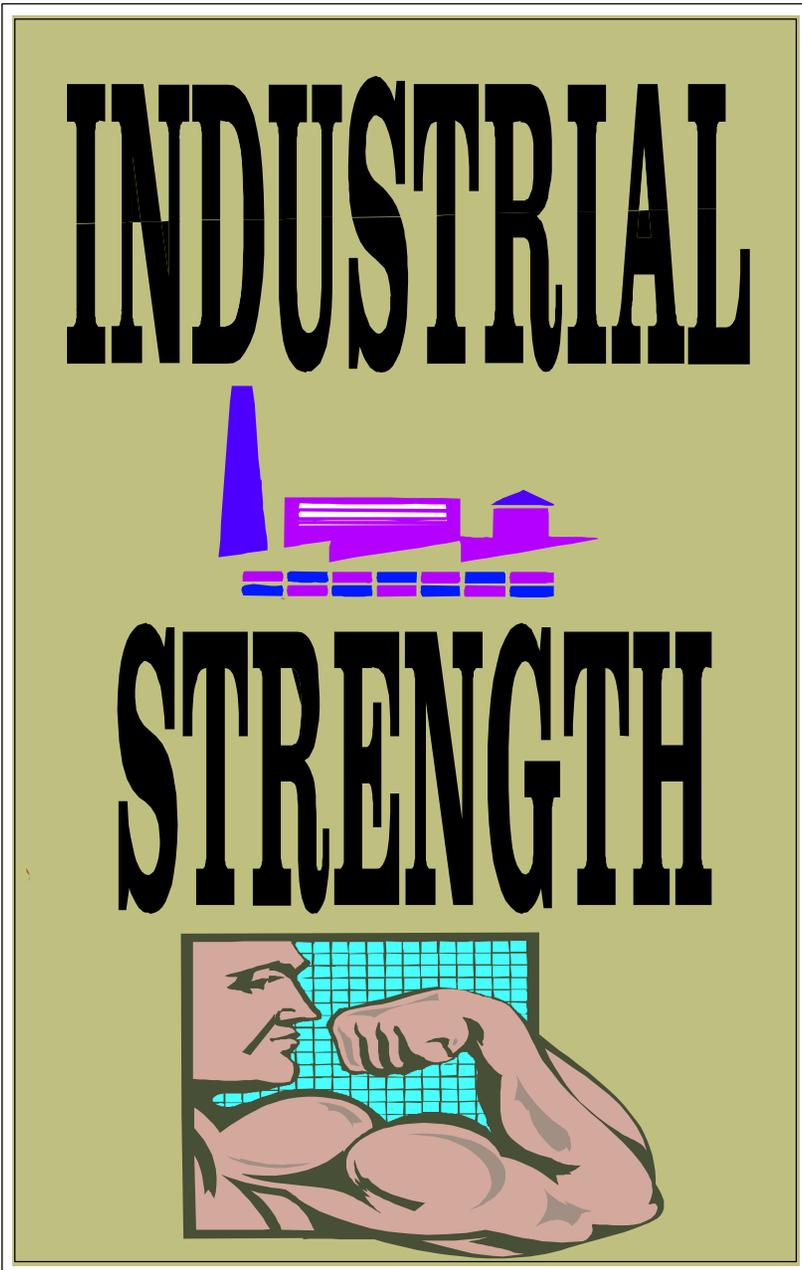


Appendix B: Update on the External Environment and VS Planning Scenarios

In 1998, VS created a set of scenarios to examine a variety of future environments in which the organization might have to work. The VS scenarios explored three key dynamics:

- consumer motivations, i.e., would consumers be predominately price and convenience oriented or would concern about sustainability of the environment and quality of life dominate,
- openness of the U.S. economy, i.e., will the movement to unrestricted free trade continue or will forces calling for greater protectionism move to the forefront, and
- role of government, i.e., would sentiments that the federal government is too involved in American affairs move to the forefront.

VS updated information about each scenario in August 1999. For each scenario, key 1998/1999 milestones supportive of the scenario were identified as were upcoming direction-setting events. The remainder of this Appendix contains this updated information.



Scenario Recap: Industrial Strength The Scene in 2010

Corporate farming has become the rule within U.S. borders in the year 2010. Mega-farms in poultry, pork, and beef have replaced family farms and are producing an inexpensive and convenient food supply. Smaller food animal industries such as sheep and captive wildlife farming are diminished, having been out-competed by the big three industries for increasingly tight water and land resources. A few niche suppliers provide buffalo meat and specialized ethnic foods to limited markets.

Animal welfare and environmental concerns are secondary as the agriculture industries have already overcome most of their own problems in this area. Jobs and a lucrative tax base are more important to state and local governments than additional gains in environmental quality. Consumers' main concerns are the cost and convenience of their food.

International trade is extremely important to these mega-producers and the U.S. has been very successful. Sizable gains in market share have been achieved in Russia, China, South America, and parts of the Pacific Rim. Competition in these international markets is fierce.

Government has a smaller overall role in this super-integrated agricultural production sector. The big players prefer to keep the government out of their business as much as possible. Research, export assistance, food safety monitoring, and trade barrier negotiations are the principle government functions.

Milestones in 1998/1999

- ❑ **INCREASING CONSOLIDATION & CORPORATE FARMING**
 - The lowest hog prices in decades are causing small producers to fold while large, corporate hog producers continue to expand
 - Cactus Feeders acquires Koch Beef Co. feedlots, making Cactus the largest beef cattle feeder in the world
 - Merger between Cargill and Continental's grain merchandising business, joining the world's two largest grain and oilseed exporters
 - Emergence of "supply chains" in the pork industry - It is estimated that more than half of all hogs sent to market move under some type of marketing contract
 - Pork: Costs of production on farms with more than 3,000 head are estimated to be a third less than on farms with less than 500 head. Beef: Costs of producing calves is 50% less on ranches with 500 cows than on ranches with fewer than 50 cows
- ❑ **CONSUMERS OPT FOR CONVENIENCE AND PRICE**
 - Perdue Farms acquires a manufacturer of entrees and sauces, enabling Perdue to take advantage of the home meal replacement trend
 - 1997 sales of "convenient meal solutions" (ready-make-foods, home meal replacements (HMR), restaurant meals) were valued at \$142 billion; HMR is the fastest growing segment with annual growth at 8%
 - 70% of consumers spend just 30 minutes preparing dinner at home, compared with 2.5 hours in 1960
 - Only 11 cents of the consumer dollar is spent on food today, compared with 21 cents in 1950
 - Texas meat-packing company develops a method which includes pre-harvest production practices and a special marinating process to ensure that steak is always tender, always juicy, and always tasty

Milestones cont'd

- ❑ **BEEF, PORK, AND POULTRY REMAIN ON TOP**
 - Beef remains America's most popular meat; it is consumed 77.8 million times every day
 - Poultry consumption has increased steadily for the past 20 years; chicken and turkey combined now exceed beef in per capita consumption
 - Study finds that lean red meat (beef or pork) is as heart-healthy as fish or poultry
- ❑ **INCREASING EXPORTS**
 - 1998 pork exports were up 15.6% in volume from 1997, the 8th consecutive annual record
 - Broad support in Congress to exclude agricultural commodities from trade sanctions
 - Proposed pact between the U.S. and China will increase access to the Chinese market for U.S. poultry, pork, beef, wheat, and citrus
- ❑ **PRODUCT DEVELOPMENT FOR LARGE FARMS**
 - USDA grants \$500 thousand for application of new technology to disinfect and deodorize animal manures, allowing concentrated feeding operations to economically transport manure-base products to other areas
 - Scientists develop the Enviropig, a strain of pigs that should produce manure 20 to 50% lower in phosphorus than regular pigs, allowing the production of more pigs in given land spaces

Upcoming Direction-Setting Events

- ❑ State regulations regarding corporate farming
- ❑ Federal antitrust regulations
- ❑ Final EPA rulemaking on animal feeding operations
- ❑ Small farms - a time to act

VS Strategic Objectives & Principles Most Impacted by this Scenario

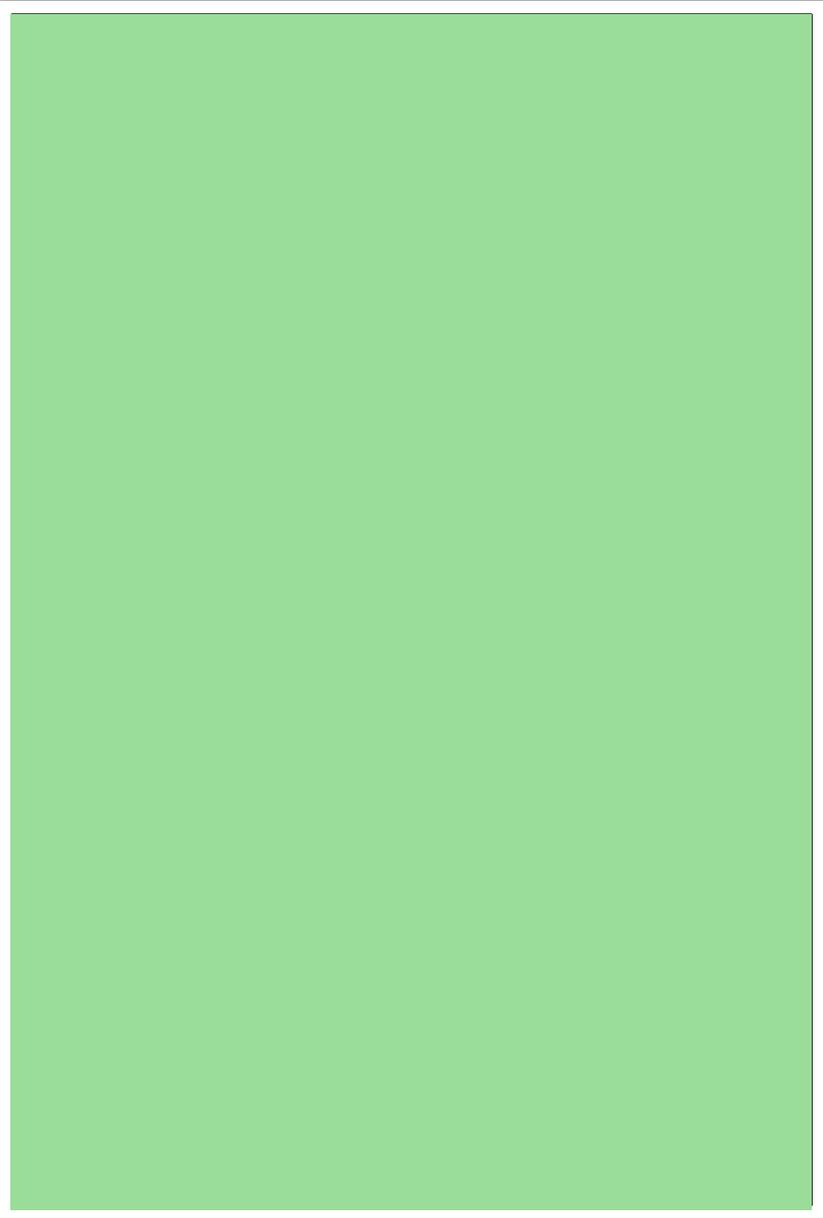
This scenario impacts objectives/principles which enhance or assist export activities. Since trade is paramount, the industries will continue to insist upon VS' function of preventing an incursion of a foreign animal disease, mounting a rapid response in case of a negative event, and eradicating disease which may limit exports. Monitoring management practices may lose importance, as the large industries will conduct their own monitoring.

Impacted Principles from VS Futuring Process

- Collective workforce
- Holistic and comprehensive animal health perspective
- Flexibility
- Right data, right time
- Animal kingdom
- International relations

Impacted VS Strategic Plan Objectives

- 1.1 Import activities
- 2.3 Emerging animal health issue detection
- 1.3/2.4/3.1 Emergency management system
- 2.5 Monitoring and surveillance integration initiative
- 2.6 National animal health monitoring system
- 3.2-3.4: Eradication programs
- 3.8 Poultry initiatives
- 3.9 Scrapie
- 3.11 Wildlife initiatives
- 3.12 Aquaculture initiatives
- 4.1 Biologics
- 4.2 Disease status certification
- 4.3 Production process auditing and certification
- 4.4 Diagnostics
- 4.5 Export program



Scenario Recap: Green Eggs & Ham The Scene in 2010

Growing environmental awareness, coupled with a greater appreciation of agriculture, was a driving force behind many of the changes that took place in the early 2000's.

The public's top priority in 2010 is community and environmental sustainability. For agriculture, this concern has led to a boom of community-supported farms where consumers contract directly with farmers for foodstuffs and often assist with production or harvesting.

Meat, poultry, and dairy products sold in grocery stores are labeled with information about where and how the animals were raised. Health concerns have led to less consumption of meat products in general. Beef has lost its status as America's mainstay.

Environmental legislation has cut heavily into large factory farms. U.S. exports of meat products have dropped; U.S. products are no longer competitive in the still price-oriented markets of Asia and Latin America. Many large U.S. corporations have moved their operations overseas to continue to sell in these markets.

The federal government focuses on research and programs which benefit small farms.

Milestones in 1998/1999

- ❑ **INCREASE IN ALTERNATIVE GROCERY OUTLETS**
 - Number of farmers' markets nationwide: 1,755 in 1994; 2,410 in 1996; 2,746 in 1998
 - Number of community-supported-agriculture farms nationwide: 60 in 1990; 200 in 1992; 1,000 in 1998
- ❑ **INCREASE IN ALTERNATIVE MEATS AND VEGETARIANISM**
 - Survey of 2,000 supermarket shoppers finds that 90% of consumers are making changes to assure a healthy diet, including eating more fruits & vegetables and less red meat
 - Vegetarian Times magazine has a monthly circulation of 330 thousand, up from 150 thousand in 1990
 - Dr. Spock recommends a vegetarian diet after the age of 2 in his last edition of "Baby and Child Care"
- ❑ **INCREASE IN ORGANICS**
 - USDA allows "organic" label claims on meat, poultry, and eggs
 - General Mills markets organic cereal
 - First major organic dairy plant in the U.S. opens in Wisconsin
 - U.S. sales of organically-grown food were a record \$5 billion in 1997
- ❑ **INCREASE IN ENVIRONMENTAL AWARENESS & SOCIAL RESPONSIBILITY**
 - Survey of extension specialists indicates that concentrated animal feeding operations are controversial in 38 of the 48 responding states
 - USDA/EPA unified national strategy to minimize the environmental and public health impacts of animal feeding operations
 - Many states passed or proposed regulations regarding corporate farming
 - "Business for Social Responsibility" has grown from 45 members in 1993 to 1,400 members in 1998, including General Motors and Coca-Cola
- ❑ **SUPPORT FOR SMALL FARMS**
 - Humane Society poll finds that 70% of voters are willing to vote for a political candidate who supports family farms

Milestones cont'd

- USDA creates the Council on Small Farms, a new office whose purpose is to integrate a small farm emphasis into USDA policies and programs
- School Meals - Small Farmers initiative, a national program to foster partnerships between schools and local farmers
- A federally-funded program in Maryland promotes rabbit and goat meat production
- Vermont House approves a \$1 million pilot project to promote agri-tourism
- ❑ **SUPPORT FOR ANIMAL WELFARE**
 - Humane Society nationwide poll of 1,000 registered voters indicates that 77% of Americans are concerned about the inhumane treatment of animals on factory farms
 - Proctor & Gamble follows other large companies including Gillette Co. and Colgate-Palmolive in ending animal testing
 - A federally-sponsored panel of scientists endorses, for the first time, a new non-animal test to evaluate chemicals' corrosiveness and irritation to human skin
 - Harvard Law School and Hastings College of the Law at UC-San Francisco offer new courses on animal rights law

Upcoming Direction-Setting Events

- ❑ National, state, and local elections (2000)
- ❑ Unfolding of product labeling initiatives
- ❑ State regulations regarding corporate farming
- ❑ Final EPA rulemaking regarding animal feeding operations

VS Strategic Objectives & Principles Most Impacted by this Scenario

This scenario impacts objectives/principles which are trade-related, as exports will be significantly less. It will require the implementation of an animal identification system, which will likely also entail some certification programs. Smaller and more diverse farms will mean expanding the VS repertoire to include wildlife, aquaculture, and other 'non-traditional' species. National monitoring systems evolve to emphasize concerns in food safety, animal welfare, organics, and the environment.

Principles from VS Futuring Process

- Natural resource and public health issues
- Holistic and comprehensive animal health perspective
- Flexibility
- International relations
- Animal Kingdom

Objectives in VS Strategic Plan

- 2.6 National animal health monitoring system
- 2.7 National animal identification system
- 2.8 Surveillance
- 3.11 Wildlife initiatives
- 3.12 Aquaculture initiatives
- 4.2 Disease status certification
- 4.3 Production process auditing and certification
- 4.5 Export program



Scenario Recap: Ask Not What Your Government Can Do For You... The Scene in 2010

Fueled by both dismay at the inefficiency of government bureaucracies and concern about the reach of government in individual lives, Americans spent the opening years of the 21st century dramatically reshaping their institutions.

Governments at all levels are much smaller than at the turn of the century. The change in the size of the Federal government has been the most dramatic. Federal agencies are a fraction of their former size. Programs which were seen as outliving their usefulness were eliminated as were programs providing "corporate welfare" to industries. A number of federal assets were sold and some services such as the Post Office are now run by the private sector. The Federal government has returned to its core mission of conducting foreign policy and regulating commerce with foreign nations and between states.

State governments lead in setting domestic policy. Decisions around education, job training, transportation, housing, and social services are all made by state and local governments. Many state and local services have been privatized. Everything from airports to libraries to prisons to water systems are run by the private sector.

An ethic of personal responsibility has taken root in the American public. Along with this ethic has come a change in philosophy whereby the government is no longer looked to for solving all of society's ills.

Milestones in 1998/1999

- ❑ **SPENDING DECISIONS LIMIT DISCRETIONARY SPENDING**
 - Congress passes nonbinding budget resolution which calls for more than a 15% cut in domestic discretionary programs in FY 2000. In June 1999, House Republican leadership reaffirms intention to honor spending caps
 - Variety of tax cut bills are in draft stage in Congress. House and Senate each pass tax cut bills which would provide for \$792 billion in tax cuts over 10 years.
- ❑ **PRIVATIZATION OF GOVERNMENT SERVICES**
 - Large U.S. cities (Atlanta and Milwaukee) look to privatization of infrastructure (water, sewer, etc.) as a way to meet environmental standards. Local governments are unable to bear the cost of infrastructure upgrades
 - Countries such as Australia continue to privatize government agricultural services - 1) the producer-owned company, Meat and Livestock Australia, began operations in 1998. The company provides services in the areas of market access, research and development, animal health and welfare, meat safety, etc. 2) Project 2 of Australia's meat inspection reforms allows the performance of routine meat inspections by trained company employees under government veterinary supervision. FSIS is planning a similar pilot in the U.S.
- ❑ **DISCRETION GRANTED TO STATES IN RUNNING PROGRAMS**
 - Workforce Investment Act is signed into law. The Act shifts federal funding for more than 60 job training programs to three block grants for states and cities.
 - Education Flexibility Partnership Act (Ed-Flex) is enacted giving local schools greater control over \$15 billion of education monies.

Milestones cont'd

- ❑ **SUPREME COURT REASSERTS STATE'S RIGHTS**
 - U.S. Supreme Court rules continue to define state sovereignty. New rulings protect states from suits seeking state compliance with federal laws. Narrow majority on the Court (5 to 4) takes a more limited view of the role of the federal government.
- ❑ **EFFORTS TO LIMIT FEDERAL PREEMPTION OF STATE DISCRETION IN MANAGING PROGRAMS**
 - Federalism Act of 1999 introduced in the House would require Congressional bills and agency rulemaking to consider whether the bill or rule would preempt a state or local governments' ability to set its own standards. Currently only a few federalism assessments are prepared during agency rulemaking to comply with Executive Order 12612 on federalism. The debate over preemption centers around national standards vs. state flexibility. States have recently thwarted congressional efforts to preempt state authority in areas such as product liability, property rights, banking, etc. States are currently concerned about the federal government setting standards for managed care.

Upcoming Direction-Setting Events

- ❑ National, state and local elections (2000)
- ❑ Annual Supreme Court sessions
- ❑ Annual legislative sessions
- ❑ Expiration of current discretionary spending limits (2002)
- ❑ Freedom to Farm Act renewal (2002)

VS Strategic Objectives & Principles Most Impacted by this Scenario

This scenario impacts objectives/principles which would require a sizable workforce, i.e., control and eradication programs. It also impacts VS services which might be amenable to privatization, i.e., port inspections, diagnostics, inspections of biologics facilities. Also impacted are activities which might be perceived to be rendering assistance to industry which the industry should pay for itself, i.e., NAHMS and other industry specific initiatives.

Impacted Principles from VS Futuring Process

- Collective workforce
- New funding approaches
- Flexibility
- International relations

Impacted VS Strategic Plan Objectives

- 1.1 Import activities
- 2.1, 3.5 Biologics
- 2.2, 3.6 Diagnostics
- 2.6 National animal health monitoring surveys
- 2.8 Surveillance programs
- 3.1 Emergency response
- 3.2, 3.3., 3.4 Disease control and eradication programs
- 3.7, 3.8, 3.9, 3.11, 3.12 Industry specific programs
- 4.2 Disease status certification
- 4.3 Production process auditing and certification
- 4.4 Diagnostics
- 4.6 Veterinary accreditation



Scenario Recap: America is Job #1 The Scene in 2010

The United States no longer has an open door policy when it comes to imports. The American political process responded to troubling low commodity prices and fears that unrestricted free trade was harming workers and the environment and subjecting consumers to unsafe imported food products by enacting a variety of new trade rules. Among these rules are requirements that workers producing products imported by the U.S. receive a decent wage in their country and that minimum U.S. environmental and food safety standards be adhered to during production.

U.S. exports, particularly of agricultural goods, are much smaller than at the turn of the century. Retaliation against new U.S. trade rules has hurt U.S. export markets. Within agriculture some large-scale corporate producers have gone out of business while others have moved their operations overseas.

Overall, agricultural production in the U.S. remains below turn of the century levels. The exodus of large-scale producers is the main cause of this decline. Coupled with reduced supplies of imported agricultural products, this decrease has caused the price of food to increase. The U.S. population seems content to bear these higher costs believing that current U.S. trade policies are protecting both jobs and the environment, and improving food safety.

Milestones in 1998/1999

- ❑ **WEAKNESSES IN U.S. ECONOMY MAY LEAD TO CHANGING SENTIMENTS REGARDING TRADE**
 - Commodity prices bottom out as the Asian crisis lowers demand for U.S. exports
 - The U.S. trade deficit continues to break new records as each month's figures are recorded
 - More layoffs occur in the U.S. in 1998 than in any year since 1993, a year the economy was emerging from recession
 - Share of U.S. income going to bottom 60% of American families continues to fall
 - In a Spring 1998 poll, 58% of Americans agreed with the statement that foreign trade is "bad for the U.S. economy because cheap imports hurt wages"
- ❑ **U.S. TRADE PARTNERS REFUSE TO CHANGE TRADE RULES**
 - European Union refuses to lift ban on hormone treated beef
 - European Union makes only a slight modification to their banana import regime after losing WTO case
- ❑ **U.S. RETALIATES IN "DUMPING" DISPUTES, CONSIDERS OTHER LEGISLATION TO REGULATE IMPORTS**
 - U.S. imposes restrictions on imported steel
 - U.S. imposes high tariffs on lamb from New Zealand and Australia
 - Several *Imported Food Improvement* bills are introduced in Congress. These bills would require that standards for preparation, packing and inspection of imported food be equivalent to systems, conditions, and measures in the U.S.
 - Country-of-origin labeling on produce and meat products is proposed in several bills introduced in Congress

Milestones cont'd

- ❑ **POLITICAL LEADERS SUGGEST ADDITIONAL CONSIDERATIONS FOR TRADE NEGOTIATIONS**
 - President Clinton, in a commencement address, states that he would support new trade agreements only if they were linked to strong guarantees on worker rights
 - EU Commissioner Franz Fischler states that "International trade rules need to do more than restrict trade distorting measures, they need to encourage production practices that improve food safety, environmental standards"
 - Rubin Ricupero UNTAD Secretary General, in looking toward the upcoming Millenium Round of trade negotiations, states "Agricultural liberalization has socio-economic effects in developing countries which should be taken into account in the negotiations on the continuation of the reform process"
 - U.S. adds the environment to its trade negotiating goals: "Members should agree to pursue additional multilateral approaches... to bring more predictability and discipline to measures affecting agricultural products while protecting health *and the environment*"

Upcoming Direction Setting Events

- ❑ National, state and local elections (2000)
- ❑ Millenium Round of trade negotiations (beginning 1999)
- ❑ Legislative actions regarding imported food such as labeling, production standards
- ❑ Resolution of key issues before WTO (beef dispute, etc.)

VS Strategic Objectives & Principles Most Impacted by this Scenario

This scenario impacts objectives/principles related to trade due to the reduction in trade volumes and diminished importance of science-based protocols and harmonization. It also impacts programs such as emergency management, control/eradication, industry initiatives (swine and poultry futures), and monitoring programs as VS' clients in the U.S. change due to the departure of large, corporate agricultural producers.

Impacted Principles from VS Futuring Process

- International relations
- Natural resource and public health issues
- Holistic and comprehensive animal health perspective

Impacted VS Strategic Plan Objectives

- 1.1 Import activities (ports, risk assessment, etc)
- 2.6 National animal health monitoring system
- 2.8 Surveillance programs
- 1.3/2.4/3.1 Emergency management system
- 3.2 - 3.4 Disease control and eradication programs
- 3.8 Poultry initiatives
- 4.1 Biologics
- 4.2 Disease status certification
- 4.3 Production process auditing and certification
- 4.4 Diagnostics
- 4.5 Export program
- 4.6 Veterinary accreditation