Attacking Global Barriers

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Introduction

As the 21st century begins, agricultural producers and agribusiness managers are operating in a global marketplace unlike any that has ever existed. Its potential may only be exceeded by its complexity.

Politics and economics have created vast melting pots of cultural interaction. Technology has eliminated geographic production boundaries, creating the potential for agricultural producers and processors to satisfy the diverse palates of a growing world population. New communication options have contributed to higher customer expectations and increased consumption of goods. General economic prosperity in both developed and developing nations translates into stronger demands for better quality foods of more diverse types. New foods and demand for a greater diversity of foods—everything from Scottish salmon to French wines—have increased the need for trade.

There are, however, intense ideological differences over cultural, political and economic issue. As evidenced by the heinous terrorist attacks of Sept. 11, 2001, this extreme ideological disparity has yielded deadly barriers to world peace. Until the challenges of eliminating those enormous barriers are met, trade and economic growth worldwide will be endangered.

In much less violent expressions of differences, proponents and protesters of trade have over the last few years had violent clashes at nearly a dozen gatherings of world leaders, including Seattle, Prague and Genoa, where one protester died. In each location, property damage and security costs have totaled in the millions of dollars. For the Genoa summit, total cost is estimated at $145 million.

These problems are in large part due to a lack of understanding, a lack of transparency, the inadequacies of current transatlantic education systems, and dissatisfaction with the perceived effects of trade on income and employment. Education can play a major role in reducing those problems.

Economic growth has not been consistent with all population segments or nations. Nor have the economics of low-cost production translated into profitable returns for all farmers, ranchers and agribusinesses. An aggressive regulatory environment adds costs that are often not recovered in the market price.

Environmental and urban pressures are forcing farmers and ranchers to modify production and marketing practices. With razor-thin margins in commodity crop production, value-added alternatives are sought. Agronomic conditions may yield more production than domestic markets can absorb, making export markets crucial to financial viability. New products and marketing techniques are used to capitalize on new customer needs and demands.

Political attempts to capitalize on the benefits of low food costs while protecting the livelihood of agricultural producers have yielded complex government programs and trade policies. Yet the costs of current agricultural programs—both in the U.S. and the European Union—are becoming increasingly unacceptable to other sectors.

Food, the technology used to produce it, and any diseases or pests it may carry can, in a matter of hours, be transported anywhere in the world. Safety barriers, often in the form of trade restrictions, are the preventative response.

The United States and the European Union remain key players in world agriculture but Brazil, Argentina, Australia and geographic trade alliances are gaining significant roles in both the market and policy arena. The World Trade Organization has mixed success with the arduous process of creating a world platform for trade.

The Internet has radically altered information flow, not only increasing the speed of communication but virtually eliminating access barriers for information generators and information consumers. Rapid advancements in science yields data—sometimes conflicting—that is open to vast interpretation.

There are more voices at the table of agricultural issues and more tools they can use to communicate a message that may or may not be factual. The need for consumer wariness has never been greater. Yet, overwhelmed by the volume and detail of information, consumers become skeptical, cynical and untrusting. Perfection is sought in an imperfect world.

With their purchasing power, consumers communicate their likes and dislikes directly to the bottom-line. And, while there is more interaction of cultures, preservation of individual cultural mores, tastes and values is paramount.

While agriculture has overcome geographic and logistical barriers to the movement of goods and services, still remaining are what Professor Frank Bleckman of George Mason University calls the oldest barriers to trade: protectionism, fear of competition and fear of others—the "fear that the way others do things will challenge or negate the way we do things."

Meeting the challenges of this complex agribusiness environment requires managers who, with an understanding of the cultural, political and economic influences, are able to mediate resolutions beneficial to farmers, ranchers, agribusiness people and consumers of the world marketplace.

Recognition of this need is what led to the creation of Attacking Global Barriers (AGB), also known as the Phoenix Project, a consortium of 11 educational institutions in Europe and the United States. (See Appendix.) The focus of AGB is two-fold: To build educational programs that prepare managers for the diverse business and cultural challenges of the international agricultural marketplace, and, secondly, to broaden the understanding of potential barriers to trade by bringing together managers, educators, regulators and politicians.

The AGB conference, "Leadership for Attacking Global Food and Agribusiness Barriers," brought together industry leaders, trade officials, diplomats, students and educators for two days of discussions on trade issues. In the pages that follow, you will find an overview of the diverse elements of selected trade issues and the challenges facing managers, educators and government leaders.

While built on the foundations of academic presentations, this publication is non-traditional in its inclusion of communiqués, opinions and analysis from a variety of people involved in today's debates on trade. In addition to participants at the conference, we invited representatives from a number of key organizations to contribute their knowledge and perspective on these important issues.

We exercised our prerogative to edit papers, with the goal of presenting a broad and complete perspective on issues. Any errors, while unintended, are the responsibility of the editors.

Our goal was to offer readers a broad view of the diversity of issues and commonality of our goals. It is our hope that this document will serve as a basis for discussion and further understanding of the complex issues facing global trade.

Eric Thor
Jonathan Turner

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Education

A New World

By Barry Dent, Principal, Royal Agricultural College, Cirencester, United Kingdom

Most consumers are oblivious to the massive changes that have occurred in sourcing food products in recent years. In industrial nations, consumers have come to expect the availability of a vast array of fresh food products year-round, regardless of the season.

Consumers appreciate, almost above all other attributes, the real price reductions that competitive global food markets have generated. Consumers presume food to be safe and of acceptable quality, assigning responsibility for that, interestingly enough, to supermarket management. All this provides the bedrock for a low-inflation economy and creates opportunities for growth in other sectors, a fact well appreciated by politicians.

Globalization of agriculture creates huge potential to boost the economies of developing world by providing access to markets hitherto closed or restricted. This market access allows opportunity for growth through job creation, with all the associated economic benefits that result.

Globalization also has its downside. Farmers and ranchers face the continuous challenge of price competition from areas of the developing world that have much lower land and labor costs. One option to compete is through increased scale and industrialization of operations. Some family farms in developed countries are unable to withstand the financial pressures. This and the reduction in farm populations result in a continuous loss to cultural identity in rural areas.

A significant proportion of shoppers in developed economies prefer locally produced and marketed goods for which supermarkets are not ideal outlets. A marketing infrastructure at the local and regional level is only beginning to emerge in the United Kingdom (UK), for example, although it is somewhat more advanced in other European Union (EU) countries.

Such an infrastructure is important to rural stability. If not balanced by strong local and regional competition, globalization through multi-national supermarket outlets has the potential to lead to the extinction of local food specialization, not to mention local customs and culture.

Populations in developed countries have general concerns about food provenance. These interests are greatly magnified by pressure from activist groups in such areas as animal welfare, genetic modification or irradiation. Domestic producers suffer if regulations imposed on production and processing are not also applied to imported product. In the UK, for example, this has not always happened, causing disastrous results for local producers, as well as consumers. Production restraints pushed by special interest groups have resulted in reduced domestic output, yet supplies were replaced in supermarkets by imported product that does not conform to the same constraints.

Reduction in biodiversity is another downside to globalization. Some of this deterioration can be related to poor profit margins on farms and hence lack of money to enhance environmental features. In Europe, the direct public support for these characteristics, supposedly so appreciated by urban populations, has been nowhere near sufficient to maintain the basic fabric of the countryside.

All these complex and inter-related elements are fundamental to understanding and managing globalization. The enormity of the economic watershed over which we are crossing—and from which there is no going back—is beginning to strike home. Because of this, the greatest challenge facing organizations today is producing leaders with the capacity to manage change successfully, leaders who can grapple with immediate issues, but who can negotiate with full understanding of the wider implications of their actions.

In the early 1960s John F. Kennedy said: "It is a time for a new generation of leadership to cope with new problems. For there is a new world to be won." How relevant this is to our present circumstances and how appropriate to the Phoenix Program. Planting an understanding of these complex but crucial issues in agri-food business students today is a fundamental building block for the success of global agribusiness in the future. ■

Attacking Global Barriers with Agribusiness

By Eric P. Thor, Ph.D., S.A.M.,
Arizona State University East, Mesa, Arizona, U.S.A.

In the last 15 years, it has become clearly evident that business and cultural disagreements presented significant and economically costly barriers to trade between Europe and the United States. Each is the other's first and second major trading partner, respectively.

Both Europe and the U.S must understand each other technically and culturally in order to successfully mediate differences and achieve efficient trade systems. Trying to solve issues in the World Court has proven to be frustrating and expensive in both time and money.

While the General Agreement on Tariffs and Trade (GATT), the World Trade Organization (WTO) and regional agreements represent general consensus on trade issues, disputes develop over specific interpretations. For example, potential exporters and importers have repeatedly regarded health and phytosanitary regulations as barriers to free trade.

Agribusiness is a major contributor to wealth and employment in global terms and is the focus of much multinational activity. It is vitally important to provide effective and comprehensive collaborative, management development and training at the undergraduate and postgraduate levels.

Lack of understanding between the future leaders of countries and trading blocks will be a major impediment to globalization of the food business. We believe the difficulties can, in part, be resolved through appropriate education—education that encompasses not only classroom work, but hands-on internships with leading agribusiness firms worldwide.

Attacking Global Barriers (AGB) is a framework through which educators, agribusiness executives, diplomats and government officials can come together to better understand the trade and management issues which are crucial to the long-term economic viability of our collective economic future. AGB, also known as the Phoenix Project, is a five-year project to foster improved understanding between European and U.S. universities—students and faculty—as well as agribusiness leaders, diplomats and government regulators.

AGB focuses on educational and academic issues, and impediments to student movement. It works to set high academic standards, ensuring an improved curriculum, enhanced team projects, and improved dissertation for students. Undergraduates and postgraduates who will become managers often lack experience, understanding and appreciation of one another's business challenges.

A Standards Board and Evaluation Committee has been set up to oversee academic standards, ensuring that European and U.S. students earn a recognized accredited degree that incorporate study at a variety of institutions. European MBA students receive their degree under the Erasmus Program, the initial part of the European Credit Transfer System involving 145 higher education institutions in the European Union member states.

Here is some of the current work of AGB:

- Administrative hurdles are being eliminated, allowing students and faculty to more easily do undergraduate and postgraduate work at participating institutions, transferring their existing knowledge, experience and expertise.
- An agrifood MBA program is being developed, building on the experiences of the project's European partners in developing a similar program in the EU.
- Working relationships are being developed with industry on both sides of the the "pond." Today, many European companies derive as much as 50% of their earnings from their U.S. subsidiaries.
- Building AGB's reputation as a sustainable mechanism to assist educators, government diplomats

and agribusiness leaders understand trade issues.

- New information technologies allow better academic curriculum in such areas as economically feasible student lectures from varied locations, improved academic lesson plans, communication of thesis and project needs, and interaction of students on food management issues.

AGB provides intensive, problem-solving MBA educational experiences at multiple universities in the same time period students would normally need to earn the degree at just one institution. It reduces costs while enriching the experience and operational ability of the students. In addition to business education, they receive the crucial bonus of social and cultural integration on EU and U.S. matters.

AGB has been successful in linking food management businesses, increasing communication between the 11 consortium schools and more than 2,000 food and agribusinesses, and increasing employment opportunities for students. AGB congresses, conducted in 1998 and 2001, helped academics, diplomats and industry leaders gain understanding of trade and educational issues.

The successful efforts of AGB will build relationships to feed the world and assist academics and professionals in working together in a more professional and culturally aware manner. ■

Attacking Global Barriers

The Project

Participating institutions work together to attack the transatlantic barriers to education, trade and business by improving the understanding of prospective managers through study and application opportunities in the European Union, South America and the United States. The focus is to reduce business, trade, educational and cultural barriers that may ultimately limit the economic growth of the world's economies. Project goals are:

- To reduce transatlantic barriers to trade and business development by providing learning experience in both the European Union (EU) and the United States for students seeking bachelors or masters of business administration (MBA) degrees.
- To strengthen the food and agribusiness masters of business administration degree program, as well as the secondary education environment for undergraduates in the EU and the U.S.
- To develop high-level partnerships between education and business, and between education and governments.
- To attract a diversity of students from a broad range of nationalities and ethnic origins, with the goal of disseminating globally the long-term benefits of the program.
- Assess educational opportunities, study trade barriers, arrange for staff and student exchanges, and provide a capstone experience with industry for agribusiness and food undergraduates and masters degree students. Assist the faculty to develop links for teaching, research and curriculum development.
- The project Web site is http://www.rural mediation.com.

Consortium Members

Arizona State University East, Mesa Arizona, USA (Lead institution in U.S.A.)
Clemson University, Clemson, S.C., U.S.A.
Fachhochschule Nürtengen, Nüertengen, Germany
Institute Superieur Agricole de Beauvais, Beauvais, France

Ecole Superieur d'Agriculture, Angers, France
Royal Agricultural College, Cirencester, England (Lead institution in EU)
Technological Educational Institute, Athens, Greece
Universidad Politecnica de Valencia, Valencia, Spain
Universidad de Tras-os-Montes e Alto Douro, Vila Real, Portugal
University of Kentucky, Lexington, Kentucky, U.S.A.
Utah State University, Logan, Utah, U.S.A.
Interest in consortium membership has been received from universities in South America, Australia and New Zealand.

Funding

Funding has been provided by the European Commission's Directorate General for Education and Culture (DGEAC); and the Fund for the Improvement of Postsecondary Education (FIPSE) of the U.S. Department of Agriculture. Consortium members provide cost sharing, primarily in faculty time.

Project Coordinators

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Bridging Educational Barriers

By Cassandra H. Courtney, Program Officer, Fund for the Improvement of Postsecondary Education, U.S. Department of Education

The Fund for the Improvement of Postsecondary Education (FIPSE) was established in 1972 to encourage reform and innovation to improve and promote quality and access to postsecondary education. FIPSE is highly regarded as a leader in many areas of higher education reform, including access and retention, faculty development, assessment, curricular reform (especially in math and science), and distance learning. Since 1995, FIPSE has given increased attention to activities related to international education and foreign language acquisition.

In cooperation with various foreign governments, FIPSE participates in three international grants that address the internationalization of educational training and seek to remove or attack barriers to education. These grants are: European Union (EU)/USA Cooperation Program in Higher Education and Vocational Education and Training, a joint effort of FIPSE and the European Commission's Directorate General for Education and Culture; North American Mobility Program, a project of the governments of the United States, Mexico and Canada; and the U.S./Brazil Higher Education Consortia Program, which is new this year.

The partnership between various foreign governments and the U.S. Department of Education in jointly funding international consortia is a unique model. It is designed to facilitate collaborative development of curricula among institutional consortia members, the exchange of students and faculty, internship experiences for students, language acquisition, the mutual recognition of academic credits, and use of education technologies, such as distance education.

The EU/U.S.A. Cooperation Program grew out of the 1990 Transatlantic Declaration on EU/U.S. Relations. It reflects a shared concern between the EU and the United States for "continuous efforts to strengthen mutual cooperation in fields which directly affect the…well-being of their citizens." Now in its seventh year, the program has funded a total of 40 consortia projects.

The program has expanded academic, professional, and cultural opportunities for students. It has also demonstrated its potential to produce a global work force and labor market, expanding general awareness of global issues in business and industry.

The program has promoted student-centered cooperation among consortia members. Projects include vocational education and training (23%), professional research (43%), curriculum development (85%), teaching (78%), and work placements and apprenticeships (48%).

International travel for U.S. and EU students has provided exposure to an increasingly global world environment. As a direct result of the program, 600 U.S. students and nearly 300 U.S. faculty have traveled or studied abroad at partner institutions. About 300 U.S. students have participated in work placements or internships.

While the program has successes, challenges also exist, including recruitment of U.S. students. Barriers include language preparation, the amount of mobility stipends for student travel, or such administrative obstacles as obtaining necessary academic approvals.

Another challenge is administrative coordination. For these collaborative projects to work well, it is crucial that administrative details about such things as student housing, the assignment of grades, and the recognition and transfer of academic credits be agreed to before a project begins in earnest. Grantees often have not devoted enough time to these planning activities.

To address these challenges, FIPSE is providing a small amount of additional funding to improve the language skills of U.S. students. Guidelines are being revised to provide greater flexibility in the size of student mobility stipends, and to give increased emphasis to planning activities.

A recent article in the Chronicle of Higher Education discussed completion of a massive bridge-and-tunnel project that will link Denmark and Sweden "for the first time since the last ice age." The article discussed prospects for creation of an integrated learning region, with Danish and Swedish universities joining forces to support what is expected to be a new, economically competitive metropolitan region.

That article was about a physical barrier to educational cooperation. You and I are aware that barriers of other kinds frequently prevent higher education from being truly internationalized. Our challenge is to move higher education out of a different "ice age" by helping students understand our global world. International communication and travel have bridged many physical barriers. It is our responsibility to bridge the educational ones. ■

Education for the Global Village

By Ioannis Kazazis,
Professor of Quality Control-Quality Assurance,
School of Food Technology and Nutrition,
Technological Educational Institute,
Athens, Greece

As Southern Europeans assess and develop trade education, there are several major factors to consider: tradition, historical trade patterns and modern needs. To meet the challenges today requires new knowledge skill sets.

Human knowledge, culture, civilization—all the features that differentiate Homo sapiens from other creatures—took more than three millennia to be diffused in the world.

In ancient Greece in the first millennium BC, this diffusion took place internally from polis to polis. Through trade routes it was extended in the Mediterranean basin. The invasion of the Eastern world by Alexander the Great, a student of Aristotle, disseminated Greek civilization to Asia.

The first millennium AD was dominated by the Pax Romana and Greco-Roman civilization and later by the Byzantine Empire. The great events of the second millennium AD start with the fall of Constantinople to the Ottomans. The great scholars were forced to move to West Europe, and brought with them the documents of the cultural past. The Renaissance emerged. At the same time, the discovery of the American continent and the development of the present European culture and civilization created the framework of modern life.

Through the millennia, local education was created—based on slow patterns of communication, limited developments and evolutions, slow dissemination activities and limited cooperation—in narrow geographical regions.

At the onset of the 3rd millennium AD, we are experiencing rapid and unpredictable change. Events in science, politics or business are now known in any corner of the planet the moment they happen.

It would seem our global village of interactive communications would present no barriers to global employers and employees. The internationalization of economies means the free movement of people, capital, goods and services. The impact of information technologies and technological progress bring a new industrial revolution with radical changes to the nature of work, conditions of employment and production. Competition has increased on the local, national and international level—to the benefit of the global consumer.

Success in this new environment requires new knowledge and new skills and creates the need for new cooperation plans on a broad regional level.

This new world era puts new demands on education. What type of people should an employer seek and what skill sets should they have? What educational background most benefits employers and employees? What qualifications, merits, principles, and cultural levels will society require of its citizens?

To cope with the competition and the changing business climate, enterprises are requiring a variety of skills.

Broad basic knowledge. The primary goal of education and training must be the development of the whole person—the personal and societal development of the individual. This includes: the capacity to learn and master fundamental knowledge; adequate scientific awareness; knowledge of history and geography; and the ability to think, analyze, make decisions and interpret information from a variety of sources.

Knowledge and skills for working life. The ability of the individual to acquire skills through all learning opportunities—traditional education routes, continuing education or occupational experience enhances their employability. First, there is increased demand for advanced degrees—bachelors, masters and doctorates. Secondly, new forms of education and training are also in demand—continuing education, on-the-job training, open and distance learning. As these options increase, the issue arises of a "personal skill card"—how to validate such skills acquired as languages, math, informatics or accounting.

There is an increasing demand for employees who can combine qualifications and skills acquired from different experiences. An expansion of technical innovation in all areas creates new knowledge

requirements. The separation between education and vocational training is becoming less distinct.

All these evolutions lead to the development of networks of education and training, which must cooperate to ensure that all people have access to training. Individuals must have permanent access to education and training provision.

Thirdly, in the new world era, enterprises are looking for employees with specific qualifications and interpersonal skills, Employees with these qualifications and skills on the job may progress without or with fewer difficulties.

Among those qualification: basic knowledge; ability to master new technologies; involvement in high-quality research; problem-solving abilities; mastering their job; ability to work independently; ability to deal with change; ability to work in a multidisciplinary team; responsible; ability to cooperate; creative; decision-making abilities; management abilities; reasoning; enterprise creation abilities; professional development; and proficiency in at least two languages, which also encompasses the ability to live in and appreciate the unique aspects of different cultures.

The Role of Education

Europe has a traditional role as the basis of the world civilization, and European society has a wealth of traditions and cultures. On the other side of the Atlantic, especially in the United States, there are unique developments in science, technology and economy. It is obvious that close cooperation in education can be beneficial.

The information society is changing our teaching methods, replacing the passive teacher-student relationship with a new interactive relationship. Changing teaching methods do not, however, affect the content of the material taught.

Data from both sides of the Atlantic indicates that in recent years the quality of the workforce has increased substantially. This is a necessity requiring new and increasing investments in education.

Changes in the labor market—the needs of employees and employers—require different kinds of skills and knowledge, greater understanding of the languages, cultures and business methods of the world. The new developments of scientific and technical knowledge create a new model of knowledge production combining extreme specialization and cross-disciplinary creativeness. Higher education curricula must emphasize multiculturalism and diversity for the preparation of graduates in an economy without borders.

In the future, education must enhance everyone's potential to develop the knowledge, skills and abilities to meet the needs of the individual, business and society.

Internationally, we need institutional strategies, including specialized international programs and student and staff exchange. Geographical mobility must be encouraged.

We complain of trade barriers, but in education the barriers to mobility of students, teachers, trainees and researchers are also significant. These include recognition of diplomas, agreement on curriculum requirements, and agreement on a transparent system of educational credits. There are also legal and administrative barriers.

Educational institutions and agribusiness must develop cooperative networks to serve not only new graduates, but working professionals. We must be continually aware of the requirements of the labor market that may change due to demographics, organizational structures, or work focus. We have to offer an open and flexible approach to knowledge acquisition and encourage lifelong learning. We must develop acceptable methods of validating skills in well defined areas of knowledge.

At the same time, quality in education and training must be a priority. The role of education must be to promote scientific and technical culture by defining and teaching ethical rules in every scientific field, particularly biotechnology and information technology. Civics and environmental protection should be key elements of the curricula.

This dynamic approach to education will in a variety of ways contribute to the needs of the enterprises and the people, but will respond to the long-term needs of our societies for a balance in technical progress and human welfare. ■

Speak a New Discipline

By Dr. John C. Bednar, Director, Language and International Trade, Clemson University, South Carolina, U.S.A.

A select number of educational institutions worldwide have developed programs that combine the study of business with the study of one or more foreign languages. These academicians have the foresight and acumen to realize that while English serves as a sort of lingua franca in the international business world, it falls far short of providing the competitive edge most companies need in today's marketplace.

In the United States, most postsecondary educational institutions teach one or more foreign languages and some, if not all, of the disciplines in business administration—accounting, economics, marketing, management, finance, mathematics and law. Very few institutions have formal programs that combine the two; even fewer insist on extensive linguistic and cultural training beyond a year or two of foreign language study. Rarely is an overseas internship or study required.

To my continued amazement, most colleges and universities in the United States are, at best, giving lip service to foreign language acquisition. They are wrong. Language learning always means culture learning, which is at the heart of every effort to improve global communication and remove global barriers.

The bachelor of arts degree program in language and international trade at Clemson University, now in its 13th year is basically a double major of foreign language (French, German, Japanese, Spanish and soon Mandarin Chinese) and business (international trade, tourism, textiles and applied international economics, including agricultural commerce). This degree is housed in the College of Architecture, Arts and Humanities (formerly the College of Liberal Arts), and includes the traditional requirements of a liberal arts degree. One of the program's central components is an obligatory overseas internship or the equivalent of at least one semester of study abroad.

Graduates from this program either continue their studies at the graduate level or work in marketing, sales or human resources for international businesses.

Similar programs with extensive foreign language training have been developed at a relatively small number of other institutions in the United States. Many business programs have the word "international" in their titles, but require only one or two years of foreign language study at the college level, and little or no overseas experience.

Why is this? The European Union is creating research centers throughout the United States. The U.S. Department of Education's Fund for the Improvement of Postsecondary Education (FIPSE) has underwritten and encouraged growth of educational programs in this area. The message at almost all international business meetings is the importance today of Spanish and Mandarin Chinese. All the indicators are pushing us towards more knowledge of foreign languages and cultures, yet there is lack of agreement in the United States about curricular development in the field of language and business.

It is time for this to change. We can correct this problem by marrying business and foreign language studies in a new discipline that encompasses a multitude of undergraduate, masters and doctorate programs at institutions throughout the world. Indeed, the Phoenix Project's international MBA would be very much at home in this discipline.

I argue that the two critical issues for this disciplines success are its name and adequate funding. The discipline—which in truth already exists—should be called Language and International Trade.

One of the major hurdles in the creation of new programs at the university level is funding. It is perfectly normal for traditional, tried and proven programs to receive long-term funding by virtue of the fact that they are tried and proven. Innovation and change are appreciated

but rarely receive solid funding until they have demonstrated their worth. Not many corporations and foundations will take the chance that one small program will blossom and grow into a widely accepted worldwide discipline of study. And they're right.

I propose taking the elements already in place in virtually every university in the world, and administratively combine them into a new *Language and International Trade Unit* and activating a fund raising plan to assure its long-term success. If such a task can be accomplished, we will not only be able to guarantee the future of programs like the Phoenix Project, we will lay the foundation for other curricular concentrations responding to new needs.

The key element here is the common name. A Language and International Trade Program should follow common curriculum guidelines, with customization to each of these institution's unique needs. The time-consuming job of getting the various deans and responsible administrators to agree on a name change for an existing program or the creation of a new discipline can occur over a two- to three-year period.

At the same time, a comprehensive fund raising program must be activated with the goal of a permanent endowment for each program. I propose a $1 million endowment for each institution within four years. The initial funding sources should be the individuals, international corporations and foundations already supporting the respective institutions.

The fact that the institutions are unified in this effort must be communicated to their respective industrial partners. It is crucial that corporations underwriting creation of this new discipline know their support will not be isolated, that the number and variety of institutions involved will bring rich, diverse, long-term resources to the employees and prospective employees of the corporations.

The colleges and universities involved will cooperate in sharing research and knowledge, help each other in the development of overseas internships and study programs, publish a scholarly journal in the field, and have an annual conference with their business partners.

Creation of this new discipline at multiple colleges and universities would be an exhilarating example of the academic community responding quickly and decisively to a recognized need the business community does not have the time or resources to address itself. Companies are, however, willing to invest funds in this work because they recognize the need for professionals who can work and communicate as citizens of the world.

A core group for this new endeavor already exists in the Attacking Global Barriers (AGB) consortium. AGB has not only the commitment but the working framework for international study, internships, faculty teaching and research exchanges.

I recognize that our European partners, who do not use fund raising as we do in the United States for public colleges and universities, may be uncomfortable with that aspect of the proposal. But their leadership in this new discipline would be highly attractive to international industrial corporations, and would, in fact, enhance the possibility of even more widespread financial support from the corporate sector.

"Language learning always means culture learning, which is at the heart of every effort to…remove global barriers."

With the potential to create any concentrate in the degree there are endless possibilities for private sector and government support.

The key is the name. Disparate individual programs, all using a different nomenclature, are destined to be limited in their ability to attract widespread support. But a unified effort by large number of institutions using the same name and core curriculum for the discipline can revolutionize the academic world and garner massive long-term support. ■

A Global Market Education

By Kenny Dan,
Financial Analyst,
Salt River Pima Maricopa Indian Community,
Scottsdale, Arizona, U.S.A.

Multiculturalism, multidimensional thinking and education are important concepts in the new global world. Both trading patterns and education are important parts of future opportunities and challenges. Different cultures, regions and peoples need to be incorporated into the trade education focus.

The tribes that comprise the Salt River Pima Maricopa Indian Community (SRPMIC) need to understand and educate themselves on trade issues, commercial development, financial analysis and compliance both within the tribal system and and the U.S. This is not an easy task for most Native Americans.

In both Europe and America, there are more than 50 native peoples groups which are part of the heritage and future of trade. For the future of trade, it is very important. As a former employee of NAPI, the Navajo Nation's farming and agribusiness enterprise, working with all aspects of farming operations, new business ventures, and agricultural and industry research, I know that trade is increasingly important. As both a participant and student of the Attacking Global Barriers project, I have come to better understand the educational, cultural and business opportunities in transatlantic trade.

Foreign trade of Indian agricultural products has economic growth potential for many tribes. Yet few have taken or found success with such a marketing venture. The reasons: lack of research, understanding, product development and, most importantly, education.

My own education on international trade and the impact of cultural issues was highlighted two years ago with a visit to the Royal Agricultural College. I was invited to address indigenous groups from emerging market countries on Native American agricultural practices, and their contribution to the U.S. Southwest economy.

I returned from that trip with a better understanding of British and European farming practices, and a greater awareness of the differences from the U.S. in British and European banking, education, marketing and socioeconomic structures. Furthermore, I appreciated our common appreciation for sustainable and environmental practices.

I returned from Britain excited about the market opportunities that exist, but much more aware of the potential for dispute and conflict arising from market and cultural differences. There is great need for further education in the area of trade barriers in a cross-cultural environment and the mechanism of resolving barriers. Emphasis is needed on cultural diversity and sensitivity within the business community if market opportunities are to be fully developed.

There are 21 officially recognized Indian Tribes in Arizona; approximately 900 members of those tribes enroll each year in education programs as Arizona State University and other institutions in the state. Educating these students on international business practices and cultural issues is an important step in developing both domestic and international trade for their respective tribes. ■

Trade

The Future of Global Leadership

By Jean Heilman Grier, Senior Counsel for Trade Agreements, U.S. Department of Commerce, Washington, D.C., U.S.A.

The views expressed in this paper are solely those of the author, and do not necessarily reflect those of any department or agency of the U.S. Government.

Global leadership is needed to manage the complexities of international trade. The challenges facing the international trading arena include: the need to manage the resolution of disputes between trading partners; the tension between reliance on multilateral negotiations and the negotiation of bilateral and regional free trade agreements (FTAs) to expand international trade disciplines; the changing nature of stakeholders in the international trading system; and the addition of new members to the World Trade Organization (WTO).

To manage these challenges, it is important for leaders in the international trade area, both national governments and global institutions, in particular the WTO, to embrace and exhibit the hallmarks of leadership—transparency, accountability and integrity.

To attract foreign traders and investors, national governments must be based on the rule of law, have transparent, accountable and predictable regulatory systems and be free of corruption. Similarly, international institutions such as the WTO must be rule-based, as well as transparent to their members, their stakeholders and the public at large.

A vibrant international trading system benefits all the participants. Open markets and rule-based trading regimes play a critical role in promoting prosperity and expanding economic opportunities throughout the world. The U.S. Trade Representative Robert Zoellick has noted that the expansion of global trade and of economic growth in the United States "are not coincidental; they are achieved in concert. One strengthens and reinforces the other."

Over the past decade, exports of U.S. goods and services accounted for more than one-quarter of U.S. economic growth and supported an estimated 12 million jobs. In the agricultural sector in the United States, one in three acres is planted for export purposes. Last year, American farmers sold more than $50 billion of agricultural products in foreign markets.

Developing countries are increasingly recognizing the central role played by trade and investment in improving their international competitiveness. For example, Former Mexican President Zedillo observed: "What is now clear from the historical evidence of the last century is that in every case where a poor nation has significantly overcome its poverty, this has been achieved while engaging in production for export markets and opening itself to the influx of foreign goods, investment and technology, that is, by participating in globalization."

Resolution of Trade Disputes

One of the key complexities of the international trade arena is the need to provide for effective resolution of disputes that arise between trading partners. The integrity and future of the international trading system, centered on the WTO, depends on ensuring compliance with international obligations.

The WTO Understanding on Rules and Procedures Governing the Settlement of Disputes (DSU) represents a marked improvement over the GATT [General Agreement on Tariffs and Trade] mechanism with respect to the resolution of disputes between WTO members. The WTO made significant improvements in the GATT dispute settlement procedures by providing for: 1) strict time limits for each step in the dispute settlement

process; 2) creation of a standing Appellate Body of seven independent experts to review legal issues in panel reports; 3) automatic adoption of panel or appellate body reports and of requests for retaliation in the absence of a consensus to reject the report or request (unlike under the GATT where a country could block implementation of a panel report, which rendered the GATT dispute settlement process relatively ineffective); and 4) automatic authority for complaining parties to retaliate on request, including in sectors outside the subject of the dispute, if panel recommendations are not implemented and there is no mutually satisfactory resolution of the dispute.

The DSU is administered by the Dispute Settlement Body (DSB), which includes representatives of all WTO members. DSB is empowered to establish dispute settlement panels, adopt panel and Appellate Body reports, oversee the implementation of panel recommendations and authorize retaliation.

The dispute settlement procedure is critical to the success of the WTO. Without effective enforcement of WTO obligations, the rules-based international trading system would be undermined. The WTO dispute settlement mechanism has been used extensively by both developed and developing countries. During its first six years in operation, WTO members filed 219 requests for consultations, covering 168 distinct matters (in a number of cases more than one country challenged the same measure). The United States has filed about a quarter (56) of all of the complaints and has received 46 requests for consultations on U.S. measures.

Resort to dispute settlement under the WTO is intended to bring members into compliance with their WTO obligations. When a WTO panel finds a member to be in violation of a WTO agreement, that member is expected to make the necessary changes in its laws, regulations or practices to conform to its obligations. However, national interests dictate that members balance their domestic political interests with their international obligations in deciding whether or not to comply with an adverse WTO panel finding. When a member chooses not to comply with a panel recommendation, the complaining member may retaliate against it (with the approval of the DSB).

Retaliation generally involves the suspension of concessions. Imposing sanctions on a trading partner is rarely a satisfactory course for either party, but, without such penalties, the integrity of the international trading system would be undermined, with potential destabilizing effects.

Regional Agreements

A second challenge confronting the international trading system is the tension between expanding international trade obligations through multilateral negotiations and the negotiation of bilateral and regional FTAs. The 139 WTO members have been working over the past several years to develop a framework for a new round of multilateral negotiations that would build on the WTO agreements. So far, they have not been able to reach a consensus on whether a new round should be launched and if so, whether it should be comprehensive or limited to specific sectors and issues.

In the absence of a consensus on a new WTO round, WTO members are expanding their use of regional agreements. WTO Director General Michael Moore recently framed the issue as follows: “Many countries are looking at regional alternatives. Sometimes, this is good, sometimes, this is a building-block. But regionalism must never be seen as a substitute for the multilateral system. Because we know that the ones who will miss out the most from regional and bilateral agreements will be the smallest, the most vulnerable and the poorest.”

A number of WTO members are actively engaged in the negotiation of free trade agreements. Currently, there are approximately 130 FTAs in force globally. The European Union (EU) has entered FTAs with 27 countries, of which 20 were signed since 1990. The EU is

also negotiating FTAs with the Mercosur countries and the countries of the Gulf Cooperation Council. Japan is negotiating its first free trade agreement with Singapore, and is exploring free trade agreements with Mexico, Korea and Chile.

The United States is a party to two FTAs: one is with Canada and Mexico (North American Free Trade Agreement or NAFTA), and the other is with Israel. The United States recently negotiated an FTA with Jordan, which is awaiting congressional approval. The United States is in the midst of negotiating FTAs with Chile and Singapore, as well as a Free Trade Agreement of the Americas (FTAA), which would cover all of the Western Hemisphere (except Cuba).

New Stakeholders

The third international trading system challenge is the changing and expanding nature of stakeholders in the international trading system and the need to recognize and balance their respective and often competing interests. The interests of the traditional trade constituencies, namely business and agriculture (which may also have differing interests), are challenged by new constituencies.

The new stakeholders, many of which garnered considerable publicity at the WTO Ministerial in Seattle at the end of 1999, include environmental, labor, economic development, human rights, consumer and animal rights Non-Governmental Groups (NGOs). Accommodating these new voices in the international arena constitutes a challenge to both national governments and the WTO.

Since the negotiation of NAFTA, which included environmental and labor side agreements, the United States has been engaged in a vigorous trade policy debate on how to address labor rights and environmental issues in trade negotiations. While the text of the U.S.-Jordan FTA includes labor and environmental provisions, whether these provisions will receive Congressional approval and whether such provisions should be included in future trade agreements continue to be actively debated. Some have expressed concern that without a satisfactory resolution of these issues, the domestic consensus that has provided the foundation for the international trading system in the post-World War II era may be threatened.

A fourth challenge facing the international trading system is the terms that should be imposed on new countries that want to join the WTO. Currently, there are nearly 30 countries with applications pending for accession to the WTO.

Accessions pose challenges of how to integrate countries with a variety of economic systems, histories and cultures into an organization based on a common set of rules and disciplines. A prime case is the vigorous debate involving adding the People's Republic of China to the WTO. One of the key issues that is examined in the accession process is whether the applicant has a legal regime in place that will provide the foundation for its adherence to WTO obligations.

Key Elements

There are unequivocal benefits for an international trade system founded on transparency, accountability and integrity. To attract foreign traders and investors, national governments must be based on the rule of law, have transparent, accountable and predictable regulatory systems and be free of corruption.

The recent Asian economic crisis exposed underlying weaknesses in government regulatory systems and highlighted the importance of the development of strong economic legal infrastructures, which are transparent and based on the rule of law. The Organization for Economic Co-Operation and Development (OECD) has said that: "The top priorities for government reform are improving regulatory adaptability, transparency and accountability."

A transparent regulatory system instills the confidence needed to attract foreign

traders and investors. The OECD Working Party of the Trade Committee in an April 2000 Report, "Strengthening Regulatory Trasnparency," has defined transparency in a regulatory system. It stated: "Transparency relates to the openness and impartiality of decision making in the design, introduction, administration and enforcement of new or amended regulations."

The transparent development of governmental policy and decision-making are important defenses against capture of a regulatory process by special vested interests, "insider" access to information, policy rigidity and the lack of accountability. It also improves business predictability, fosters more efficient markets and increases public trust and confidence in the government.

Several key elements are essential in a legal system that supports trade and investment. A fair, transparent and predictable legal system must be based on the rule of law and provide fair and non-discriminatory treatment (national treatment and most-favored nation treatment) of investors and their investments and of traders and their activities.

Governments must adhere to the international standard on expropriation, which means that investments can be taken only for a public purpose, with due process of law, and only if accompanied by prompt, adequate and effective compensation. Governments must also allow unrestricted transfer of all returns relating to an investment (such as profits and royalties), as well as provide mechanisms for the resolution of commercial disputes within a dependable legal framework, which includes the fair and prompt recognition and enforcement of arbitral awards. Governments must also offer effective protection and enforcement of intellectual property rights.

Following the Seattle Ministerial, the WTO has been examining the issue of transparency, both in its conduct of WTO business and in its relationship to the public. One of the concerns is whether the WTO should increase the transparency and opportunities for public input into its dispute settlement process. The discussion has included whether non-governmental parties, such as environmental groups, should be allowed to file amicus curia briefs with dispute settlement panels, and whether anyone from the public should be allowed to observe proceedings of the panels. Currently, only government representatives and their attorneys are allowed to participate in panel proceedings.

Integrity is another essential element of a sound international trading system. For more than two decades, the United States has been engaged in efforts to combat the bribery of foreign public officials in international business. A recent report issued by the U.S. government—"Addressing the Challenges of International Bribery and Fair Competition 2000,"—pointed out that: "Bribery and corruption can affect international trade in many different ways. If left unchecked, it can negate market access gained through trade negotiations, undermine the foundations of the rules-based international trading system, and frustrate broader economic reforms and stabilization programs." A recent country analysis by the World Bank suggests there is a strong correlation between ratings on the rule of law and the level of economic development. The bribery of public officials impedes economic development around the globe and hinders the development of democratic institutions. The negative political, economic and social effects of bribery are greatest in the world's poorest countries.

In conclusion, global leadership is essential to manage the complexities of the international trading system. Transparency, accountability and integrity—the hallmarks of leadership—are essential for active and effective participation in international trade. ■

European Biotech Imports

What the European Union Wants the United States to Understand

By Tony Van der haegen, Minister-Counselor, Washington Delegation, European Commission

While offering the advantages of increasing trade, prosperity and choice, globalization has also created problems and new uncertainties. Genetically modified organisms (GMOs) in agriculture have been available for about 10 years, [but] their commercial use has been expanding rapidly in the United States in just the last couple of years.

Since 1996, difficulties in placing GMO products on the market in the European Union (EU) have given rise to trade tensions with the U.S.

The Regulatory Process

In the U.S., different federal agencies regulate different aspects of GMOs. USDA issues permits for field trials and commercial release for production. Pesticides used in or on foods and feed are regulated primarily by the Environmental Protection Agency (EPA). The Food and Drug Administration (FDA) regulates the safety of domestic and imported foods, except meat and poultry which is regulated by USDA.

After a nation-wide hearing, FDA has now proposed regulatory changes in the field of GMOs, including mandatory notification and guidelines for voluntary labeling (important since no longer warning sign=change of philosophy).

In the EU, the country of origin of the food, and whether it has been imported into the EU has no bearing on the enforcement of the legislation, in particular of the traceability and the labeling requirements. These measures apply in the same way to U.S. or EU biotech products.

Community biotechnology legislation has been in place in the EU since the early 1990s, but is now in the process of being fundamentally revised.

The main instrument for giving consent to experimental releases and for placing GMOs on the market in the EU is the revised Directive 90/220/EEC, adopted by the European Parliament and the European Council of Ministers in February 2001. This horizontal directive covers not only GMOs (living organisms that can be reproduced), but also GMO-derived products.

The revised directive, which now covers food, feed and seed, confirms the pre-marketing authorization procedure and the risk assessment procedure for all GMOs. It strengthens the former directive through the introduction of: mandatory traceability and labeling at all stages of placing on the market; mandatory monitoring requirements after placing on the market; mandatory consultation of the public (as with the U.S. Federal Register); mandatory consultation of the EU Scientific Committee; application of the precautionary principle when implementing the directive; and a time-limited consent of a maximum of 10 years.

However, the new directive foresees an exception for pharmaceutical products.

Traceability concerns the whole food and feed chain. The idea is to have a unique identification through a code for the life of GMOs and to be able to recall the products in case of problems. Labeling is process-based (in the U.S. it is content-based). In other words, even if no trace of DNA or protein can be found in a GMO-derived product, it will still have to be labeled—the basic idea being consumer choice.

If one compares the U.S. and EU regulatory approaches, it is fair to say that the first is industry-driven and the second, consumer-driven.

The Approval Procedure

Under pressure from public opinion, in October 1998 five member states of the EU blocked (with a minority blocking vote) the GMO approval procedure. Until that time, 18 GMOs had been approved; 14 are still pending. In July 2000, however, the European Commission (EC) decided to break the

deadlock and proposed a strategy to regain public trust in the approval procedure for GMOs. The objective was and is to resume the authorization process, address public concerns and give a clear response to political and legal concerns over GMOs which favors consumer safety and choice.

While adopting the revised Directive 90/220, six member states—France Italy Austria, Greece, Denmark and Luxembourg—declared they would accept the relaunch of the GMO approval procedure only if the EC came forward with more specific proposals regarding traceability, labeling and perhaps even environmental liability. The EC has promised to do so, but this will, of course, delay the relaunch of the GMO approval process. Until when? What will the U.S. reaction be?

The EU Consumer

Food safety is the most important ingredient in food for the European consumers. A large majority of Europeans are worried about transgenic food. More than 60% of the 1997 Eurobarometer respondents were concerned about the risks associated with genetically modified (GM) food, compared with 40% in the case of the medical applications of biotechnology. This result is consistent with those of private polling institutes.

The 2000 Eurobarometer helps assess the reasons for consumer concerns with GM food. Items gaining the highest support are: "even if GM food has advantages, it is against nature"; "if something went wrong, it would be a global disaster", "GM food is simply not necessary".

Clear labeling of GM food is favored by 74% of consumers (Eurobarometer 1997). Fifty-three percent of the respondents say they would pay more for non-GM food; 36% would not (Eurobarometer 2000).

One can argue at length about the rationality or irrationality of the EU consumer's attitude towards GMOs. This attitude is largely due to a series of factors which are fundamental to understanding the European situation:

1. There is a food surplus, thus consumer choice is a given.
2. Food in Europe involves far more than mere sustenance. Generally speaking, the European has a relationship with food that is emotional and is even a fundamental part of his culture.
3. U.S. citizens are more prone to adopt modern technology; Europeans are more of a conservative nature.
4. The blood scandal (blood tainted with the AIDS virus) which occurred in the EU at the end of the 1980s, as well as food scares related to BSE (1995), Dioxin (1999), and now BSE and foot and mouth disease (FMD). Beef is no longer on the menu of many schools in Europe.
   Each time, politicians said there was no danger and each time they were wrong…Of course, their risk assessment was based on the information given to them by their scientists, (e.g. in the case of BSE—could not jump the species barrier sheep to beef to humans). In the case of BSE, uncertainty about the incubation period makes extrapolation from the modest current death rates pointless.
   The BSE and Dioxin crises have cost the jobs of two Belgian ministers and two German ministers, and has seen the arrival of a Green minister at the head of the new ministry for agriculture and consumer affairs, which in some ways is a revolution.
5. These scares have been greatly amplified by the tabloid press, and more so in the United Kingdom (UK) and Austria, where, by the way, the resistance to GMOs is the greatest. The tabloid press has invented the destructive expression of Frankenstein food [which leads to] no trust. No trust in scientists and no trust in politicians. Science-based is not necessarily a quality label any more in Europe.

Faced with growing popular pressure to phase out GMOs and legal uncertainties on GM food labeling, many retailers have adopted a restric-

tive stance on GM food.

6. The retailing industry is the linchpin in the food market due to its proximity to consumers. Their key market position allows them to amplify consumer preferences and relay them to the food industry. Already, McDonald's in Europe, and British supermarkets such as Asda and Tesco (42% of the market share), have decided their lines of meat or poultry would come from animals not fed with GM feed.

   Their restrictive approach on GM food had cascading effects on the upstream side of the food chain in domestic and foreign markets. Food processors and grain companies have been hard-pressed to segregate GM and non-GM products and regionalize production.

7. The disastrous and, for some arrogant, public relations campaign of biotech companies (supply-driven, totally ignoring the final consumer), is considered by some as forcing down their throats food they don't want to eat. The whole public relations campaign was definitely counter-productive.

8. To the EU consumer, the heart of the matter is that GM food is neither cheaper nor does it taste or ripen better, and are not yet quasi-pharmaceutical products ("help to prevent decaying teeth or weight reduction). No added value and plenty of other choice, so why take the risk? "Do we really know the potential long-term risks and health hazards?" asks the EU consumer.

   As Sir Leon Brittan, the former EU trade negotiator said, "We as government officials can approve all we want, but it won't matter if consumers won't buy it."

9. EU consumer concerns seem to be spreading to Australia, New Zealand, Japan, South Korea and some Latin American countries. In reaction, biotech companies have started to reassess their hard-sell campaigns. Companies such as Kraft Foods, Nestlé, Kellogg and PepsiCo have promised not to use GM grain or corn in their plants in Europe.

The Biotech Consultative Forum

At their summit in the United States in December 1999, [U.S.] President Clinton and [European Commission] President Prodi decided to set up a biotech consultative forum comprised of members of civil society from both sides of the Atlantic. There were 20 members in total—10 from each side—including farmers, consumer and environmental representatives, ethicists and university professors. The forum's report, presented Dec. 18, 2001 at the EU/U.S. summit in Washington, D.C., contains 23 unanimously adopted recommendations, including mandatory premarketing authorization, and mandatory labeling of GMOs in order to allow for the consumer to choose.

Since the report is, by and large, in favor of the EU approach, my feeling is that the U.S. administration is shelving it.

U.S. Exports

The situation has led to bilateral trade difficulties. Because of the consumers' attitudes, the EU retail sector, by and large, no longer buys GM-labeled food.

U.S. farmers and exporters cannot export GMOs that have been approved in the U.S. but not in the EU (e.g. 11 corn GM crops have been approved in the U.S. and four in the EU, where five are pending).

In the absence of EU thresholds for corn and soya commodities, only 69,000 tons of U.S. corn were exported to the EU in 2000 (3,614,828 tons in 1995), mainly because of the fear that the U.S. shipments might be commingled with non-EU-approved GMOs. However, U.S. exports of corn gluten continue because the product is processed and thus live GMOs cannot be detected. But one can only wonder what is going to happen once corn gluten has to be labeled as a

GMO-derived product in the future.

U.S. soya exports to Europe continue since the U.S. exports only one GMO variety (also feed) to the EU and this variety has been approved. But soya exports have decreased from 9,920,335 tons (1995) to 6,296,343 tons (2000), mainly due to Latin American competition.

The de facto moratorium of the approval process and the new forthcoming EU legislation on traceability and labeling of GMOs causes strains between the EU and the US.

The forthcoming EU rules on traceability and labeling could seriously hamper U.S. sales of soybeans, the U.S. government says in an official démarche undertaken last Tuesday to the EC, the more so that the traceability proposal also lays the documentary basis for another forthcoming regulation that would require all foods derived from GMO products to be labeled as such even if there are no longer traces of DNA or protein.

The U.S. démarche draws the attention of the EC to the difficulties that might arise from this legislation; US$4 billion of U.S. exports are at stake. It also suggests sending a team to Brussels to discuss the draft text. The Commission agreed for next week.

The risk is real that the U.S. biotech industry, or at least some representatives of it, will ask the U.S. administration to take to the World Trade Organization (WTO) the case of the de facto moratorium of approving GMOs in Europe.

Personally, I do not think it would be a good idea for the U.S. to go to the WTO and create a new EU/U.S. dispute. Why? This is personal: First, I am not sure the U.S. would win, which would further undermine the confidence of U.S. citizens and the US Congress in the WTO. However, the same would be true were the U.S. to win; since food is the number one political issue in Europe, I do not see how EU policy makers could comply with the WTO ruling.

The Future

In the decades after World War II, food policy was determined by the need to increase output and efficiency in order to achieve food security.

We need to consider the implications of a new food production and consumption model, focused less on output and more on meeting consumer expectations for safe, wholesome, nutritious and diversified foods.

Fundamentally, agriculture and food production are demand-driven. But, are the real demands of consumers being reflected upstream in the food chain? Are consumers' interests being heard in the boardrooms of multinational food-producing companies?

There is also the thorny question of quality versus price. Will people pay more for higher quality products? If so, how much more? What guarantees can they have of getting a higher quality product? Do modern production methods militate against tasty and wholesome food produce?

Some of these questions are simple and straightforward. But I expect the answers will be complex, particularly given the complexity of the modern food chain and the high expectations of the modern consumer.

This is an exciting new initiative that may, in time, have policy implications for the Common Agricultural Policy (CAP). I have the feeling the days of the traditional CAP are over.

Many things may happen if consumer confidence is not restored and if, on the contrary, consumer concerns spread around the world. Worldwide, Japan is introducing more stringent biotech labeling. Many other countries have adopted biotech legislation or are in the process of doing so: Australia, New Zealand, Korea, Tunisia, Saudi Arabia, Mexico, Brazil and Chile.

If U.S. farmers want to maintain their export share to Europe and other parts of the world, they should start drawing some conclusions from the StarLink problem. In the long run, consumers around the world

will decide what premiums they will pay for non-biotech products.

On the other hand, some exporting countries are likely to produce and export both types GMO and GMO-free crops, developing marketing systems that offer consumers products differentiated by biotech status. But the problem will always be the risk of commingling GMO-free with GMO crops, or GMO-approved crops with GMO non-approved crops. That will mean that good segregation will have to be in place, which probably means some investment and costs.

As to the irrational attitude of the EU consumers, I think one should apply the French saying: "il faut donner du temps au temps" —one should give time to time, and at the same time try to educate consumers in this field in order to gradually restore confidence. But to reach that goal, the pyres which darken the skies in some parts of Europe have to disappear and BSE has to be eradicated.

There will not be a real incentive for consumers to buy bio-engineered food unless it is less expensive (until now, U.S. farmers have retained the benefit of a better yield from GMO crops for themselves and have not passed it on to the retailers or consumers), or unless a second or third generation of GMOs bring real added value to consumers. If this happens, I am convinced genetically engineered food is definitely going to break through between now and 10 years.

However, in the meantime and considering the current situation in Europe, I am of the opinion that the EU and the U.S. should try to keep the communication lines open, and try to find an acceptable solution if they want to avoid things getting out of hand. ■

Trade Barriers Research

By Mary Anne Normile, Economic Research Service, U.S. Department of Agriculture, Washington, D.C., U.S.A.

The Economic Research Service (ERS) is the main source of economic information and research of the U.S. Department of Agriculture. Our mission is to inform and enhance public and private decision-making on economic and policy issues related to agriculture, food, natural resources and rural development.

The program encompasses research, analyzes of food and commodity markets, policy studies, and development of economic and statistical indicators. The information and analyzes are produced for use by the private sector and to help the executive and legislative branches of the federal government develop, administer and evaluate farm, food, rural and resource policies and programs.

ERS disseminates economic information and research results through an array of academic and policy and public oriented outlets. These include research reports, market analysis and outlook reports, and articles in ERS periodicals; the ERS Web site (www.ers.usda.gov); briefings, staff analyzes, and congressionally mandated studies for government policy makers; and articles published in economic and other social science journals and papers presented at academic conferences.

Research on Trade Barriers

ERS conducts a wide-ranging program of research on both market and non-market trade barriers.

A program of comprehensive research on the WTO and agriculture examines the implications of the Uruguay Round Agreement on Agriculture (URAA) and continuing negotiations to further liberalize agricultural trade for agricultural trade and for the U.S. food and agriculture sectors.

A major ERS study examined the question whether bilateral and plurilateral trade agreements serve as building blocks for multilateral trade liberalization, or

divert trade from more efficient countries. ERS analysis found that regionalism and multilateralism are likely to be mutually reinforcing in agriculture.

ERS also conducts research on the impacts of individual regional trade agreements, including North American Free Trade Agreement (NAFTA), Free Trade Area of the Americas (FTAA), Asian Pacific Economic Community (APEC), and the European Union (EU), including the likely impacts of EU membership for Central and Eastern European countries.

Through its research on international agriculture, ERS provides analysis of agricultural and trade policies of countries and regions important to U.S. agriculture. This addresses trade barrier reductions through analysis of the effects of China's accession to the WTO, the impacts of economic and agricultural restructuring in transition economies, and the effects of policy reform in the EU.

As an agency of the U.S. Department of Agriculture, the ERS research on trade barriers focuses on the effects on the U.S. agricultural sector. However, ERS analysts also consider the effects of trade barriers and their reduction on global trade, and the effects of agricultural policy and structural changes on foreign country, as well as, regional agriculture.

I'd like to focus on ERS research on the WTO and agriculture. This project is where ERS conducts the broadest and most comprehensive research on trade barriers.

WTO and Agriculture

Despite the accomplishments of the URAA, agricultural trade barriers are still high. The global average agricultural tariff after the Uruguay Round is 62%, compared to much lower tariffs for industrial products. Tariff peaks and megatariffs make trade barriers much higher for some commodities and countries.

Trade-distorting support to agriculture remains high in several countries. Some support considered non- or minimally trade distorting under the provisions of the URAA may, in fact, affect production by keeping inefficient resources in agriculture or by influencing producers' expectations.

Export subsidies, while declining under the URAA, continue to distort world markets for dairy products, sugar, grains, and other products.

Technical barriers to trade have grown in importance. Lower protection provided by tariffs and other non-technical barriers to trade has raised the profile of technical barriers. It has proven difficult to reach a consensus on what constitutes a "science-based" rationale for restricting trade.

The trade and pricing practices of state trading enterprises (STEs) were not regulated in the URAA. STEs are important players in world markets for wheat, barley, rice and dairy products, but their lack of transparency raises concern that STEs will be used to circumvent WTO commitments.

To address these issues, ERS has undertaken a program of research, analysis, and data development that aims to inform both policy makers and stakeholders of the key issues and impacts of trade liberalization.

- URAA: One of the principal objectives of the research program is to study the impact of alternative strategies for agricultural trade liberalization under the three main disciplines in the URAA—market access, domestic support and export subsidies. Studies will examine issues related to implementation of these disciplines and the likely impacts of further agricultural trade liberalization. These studies include: the economics of Trade Administration; anti-dumping and other trade remedies; trade distortion resulting from domestic support policies; economic issues associated with multifunctionality; the economics of price bands; and use of export subsidies.

- Model and data development: In 2000, ERS developed a framework for quantitative analysis of options for agricultural trade liberalization. In 2001, additional analytical tools are being developed that will provide greater commodity detail and finer delineation of policy instruments. Development of databases will continue data on export subsidies and domestic support in a format compatible with the market access data.
- Developing country interests in the WTO: Developing countries, which constitute the majority of WTO members, are increasingly active participants in multilateral trade negotiations. Current and future WTO negotiations will witness significant participation by developing countries in setting the agenda for negotiations and in reaching agreements. The special interests of developing countries in the WTO will be further explored through analyzes of impacts of trade liberalization, and changes in preferences in multilateral and bilateral trade agreements.
- Commodity market impacts: This project focuses on identifying and analyzing trade issues important to individual commodities.
- Technical barriers to trade: ERS research on technical barriers, including sanitary and phytosanitary measures, aims to improve understanding of these barriers through an econometric analysis of the non-scientific determinants of questionable trade barriers and an evaluation of the implementation of the TBT and sanitary and phytosanitary standards agreements.
- New issues: Research will analyze possible new areas for negotiations including the effect on agriculture of trade barrier reductions in the service sector; implications of Trade-Related Aspects of Intellectual Property Rights (TRIPS) Agreement for agriculture; and the methodology for calculating trade damages in rulings of the WTO Dispute Settlement Body.

Key Findings

An ERS study released in January 2001 measured the costs of agricultural support and protection and estimated the benefits from eliminating or reducing policy distortions.

The study showed that global trade barriers, including tariffs and tariff-rate quotas, domestic support, and export subsidies, impose substantial long-term costs on the world economy. Trade barriers lower demand for trade partners' products; domestic subsidies can induce an oversupply of agricultural products, depressing world prices; and export subsidies create increased competition for producers in other countries. The study found that eliminating these policy distortions would raise world purchasing power by $56 billion, or about 0.2% of global GDP. Full elimination could raise world agricultural prices about 12%.

The study also found that tariffs and tariff-rate quotas account for 52% of the agricultural price distortions from agricultural protection and support.

In cooperation with other international organizations, ERS has developed the Agricultural Market Access Database (AMAD). It provides data and information on WTO member countries regarding tariff schedules, tariff bindings, applied tariff rates, import quantities, notifications to the WTO on countries' commitments, and other data useful in analyzing market access issues in agriculture. AMAD provides greater transparency to the level of protection afforded by tariffs and tariff-rate quotas and supports trade models and other analytical tools.

An ERS analysis of the pattern of agricultural tariffs across countries and across commodities showed that the highest agricultural tariffs are found in South Asia, nonEU Western Europe, and the Caribbean, while the North America, the EU, and the Asia-Pacific regions have the lowest. Large differences in average tariffs across countries indicate the potential for farmers in one country to benefit from protection while reducing prices and incomes of farmers in other countries.

The analysis also indicated that the world average tariffs are highest for tobacco, dairy, meat, and sugar, and lowest for horticultural products, spices, and nuts. Megatariffs—tariffs of 100% or more—are present across all commodities and regions, and effectively cut off all imports other than the minimum access amounts. Bound agricultural tariffs in developing countries are considerably higher, on average, than in developed countries, reflecting special and differential treatment and flexibility accorded to developing countries. ■

Globalization of Education and Trade

A Financial Regulator's Perspective

By Ann Jorgensen, Chairman, Farm Credit System Insurance Corporation and Member of the Board, Farm Credit Administration, Washington, D.C., U.S.A.

It's hard to pick up a newspaper or listen to a news report these days without learning about some food or agricultural development that impacts trade. European countries went on another red alert in late February over an outbreak of foot-and-mouth disease in the United Kingdom (UK), the first outbreak of the disease in 20 years, which has prompted a worldwide ban on meat and livestock exports from the UK.

Financial institutions that provide credit and related services to farmers, ranchers and farm related businesses, and financial regulators that supervise and examine these institutions, have a keen interest in market and environmental events that impact the industries and may be the key players to help in controlling these outbreaks.

The recent outbreak of foot-and-mouth disease in Britain comes on the heels of recent cases of "mad cow disease," swine fever, salmonella poisoning, and concerns over the safety of genetically modified crops, like corn and soybeans, which have significant trade implications for the U.S.

Britain's farmers have yet to recover from the devastating effects of the mad cow disease crisis that began in 1986. Mad cow disease, or bovine spongiform encephalopathy (BSE), is a brain-wasting cattle ailment. BSE has recently spread to the European mainland.

A similar animal health crisis in the United States could prove challenging to livestock producers and, in turn, impact their ability to meet financial obligations to lenders and other creditors. However, U.S. producers and creditors, unlike their counterparts in many parts of the world, have various risk management tools, as well as emergency response programs available from federal and state agencies to deal with weather, disease, or other environmental calamities.

Personal Experience

The challenges faced by livestock producers across the Atlantic resonate well with this hog producer from Iowa. While not on the scale of Europe's mad cow crisis, we had an animal health scare about 20 years ago when Aujeszky's disease, more commonly known as pseudorabies, impacted many hog operations like my family's.

Pseudorabies is a disease of swine that can also affect cattle, horses, dogs, cats, sheep and goats. The disease is caused by pseudorabies virus (PRV), an extremely contagious herpes virus that causes reproductive problems and occasional death losses in breeding and finishing hogs.

We experienced financial losses, as did many other operators in Iowa. We were a breeding multiplier herd selling all of the gilts for breeding purposes. When we tested positive for pseudorabies, our herd was immediately quarantined. We could only sell our breeding stock for

slaughter. We suffered increased costs and reduced market opportunities. Loss of breeding stock sales was not the only cost; feed, veterinarian and testing expenditures also increased. We had to test a sampling of the herd every 60 days. Our operation was impacted for about 18 months.

The market price of slaughter hogs was not impacted because production numbers were not affected. Outbreaks had continued for many years but it wasn't really an epidemic. Because of the cost to individual producers, many Iowa farmers exited farrowing operations and many breeding stock operations also went out of business.

At first you don't think of all the ramifications of the disease. For instance, think about breeding services that use artificial insemination. The disease could be transferred through the semen. Now, you have to have a "certified free" herd before you can sell semen.

Every time we sold feeder pigs, the veterinarian had to certify them. The test costs $35 per load. We continued vaccinating, testing and monitoring until we were able to test free of the disease.

From 1975 to 1985, state and federal laws were enacted to control the spread of the disease, tests and vaccines were developed, and pilot studies were conducted to determine the feasibility of an eradication program.

In 1989, the U.S. Department of Agriculture (USDA) established a voluntary eradication program for pseudorabies in the United States. This cooperative program involves federal, state and industry participation. USDA's Animal and Plant Health Inspection Service (APHIS) coordinates the national pseudorabies eradication program. State governments promulgate and enforce the intrastate regulations, and producers contribute by having their herds tested and instituting control and eradication measures.

Because of a national pseudorabies eradication program, 40 states have been declared pseudorabies free and there are only about 110 swine herds in the remaining 10 states that are under quarantine for the disease. The goal is for complete eradication in the United States by 2002.

Today, we all work in a global market place. We must think about our systems in collaboration with our trading partners. The bottom line: eradication programs require a national commitment, which includes money and time, as well as the commitment of the producers.

Given the global nature of agricultural trade, Europeans will need to muster a transnational commitment if they are to eradicate animal diseases like mad cow and foot and mouth, which have implications for producers and consumers far beyond their borders.

Commodity Concentration Risk

Food safety and animal health greatly impact the individual farmer, but it also is an issue for financial institutions and their regulators. As the regulator of the Farm Credit System (FCS), I am particularly concerned about issues that inhibit domestic and foreign sales of agricultural commodities.

FCS is part of the U.S. financial services industry that my agency, the Farm Credit Administration (FCA), is responsible for regulating. FCS is a network of borrower-owned lending institutions (banks and associations) and related service organizations serving all 50 states and the Commonwealth of Puerto Rico. Its area of business activity even reaches beyond U.S. borders, in certain instances, in order to facilitate agricultural trade. Today, there are140 Farm Credit institutions (banks and associations) which specialize in providing credit and related services to farmers, ranchers, and producers or harvesters of aquatic products. Loans are also made to finance the processing and marketing activities of these borrowers. In addition, loans are made to rural homeowners, certain farm-related businesses, and agricultural, aquatic, and public utility cooperatives.

FCS is one of five principal suppli-

ers of farm credit in the United States. The others are commercial banks, the Farm Service Agency (FSA) of the USDA, life insurance companies, and individuals and others.

Of the estimated $173 billion U.S. farm debt for 1999, commercial banks account for 41%, followed by FCS with 26%, life insurance companies with 6%, and FSA with less than 5%. The remaining 22% percent of U.S. farm debt is supplied by individuals (mainly seller financing of real estate) and other institutions such as farm equipment suppliers like John Deere and Case.

FCS's mission is to finance agriculture in both good times and bad. Agriculture is a sector of the economy that is particularly vulnerable to inclement weather, diseases, pests, commodity price changes and exchange rate fluctuations. As a single sector lender, the loan portfolios of FCS institutions are concentrated in agricultural commodities.

While some FCS institutions have diversified their loan portfolios, as of September 30, 2000, there were 197 instances at 135 associations where loans to a single commodity exceeded capital. Concentrations in cattle loans were particularly high with 36 institutions reporting cattle loans that exceeded capital. In light of the BSE and foot and mouth outbreaks in the EU, this concentration gives the FCA great concern.

Safety and Soundness Procedures

The FCA is the independent arms-length regulator for the FCS, operating much like the Federal Reserve, the Office of Controller of the Currency, the Office of Thrift Supervision, and the National Credit Union Administration. FCA has a set of procedures examiners follow to evaluate the safety and soundness of institutions whose borrowers are affected by crop disease or pestilence.

If we learn of disease or pestilence affecting a certain crop or geographic area we will:

- Determine through analysis of our loan database those institutions having significant commodity concentrations.
- Use the institutions' loan databases to complete stress tests on their loan portfolios. This provides useful information in determining the potential impact this adversity may have on borrowers' repayment capacity, financial condition and ultimately credit quality, and the institutions' financial performance. We also expect the institutions to complete similar stress tests and will request copies of their studies to analyze, if available.
- Use our database of loan underwriting standards employed by FCS institutions. We maintain this database to allow our examiners to analyze these standards and determine whether an institution has adjusted their standards or underwriting practices to respond to the potential for increased risk.
- Evaluate the local association's reporting to its board of directors to determine whether the board is provided adequate data to make informed decisions regarding underwriting standards, exceptions to underwriting standards, and characteristics of loan portfolio risk.
- Evaluate association management's use of risk management programs or techniques to limit risk to the institution. This would include use of government guarantee programs, multi-peril crop insurance, and differential pricing programs.
- Evaluate the board's policy guidance to determine whether concentration limits have been established (in relation to capital) to limit exposure to commodity and single borrower risks (lending limits).
- Evaluate whether the institution's business planning process has adequately considered concentration risks, and other existing or potential

risks (from crop disease, pestilence, etc.), when determining the institution's earnings, capital and allowance for loan loss needs.

- Evaluate management's knowledge and experience in dealing with similar risk exposure in the past. Determine whether management has a proven track record in managing through periods of increased risk caused by crop disease or pestilence.

We balance our evaluation on the above items with the institution's financial capacity to bear risk. These factors provide the basis for a risk rating that we assign each institution that we examine (our Financial Institution Rating System commonly referred to as the "CAMELS" system by banking regulators). We use the rating to communicate the severity of the problem and to establish a "special" supervisory strategy that will correct weaknesses.

FCA's Global Markets Program

FCA has a Global Markets Program to share our expertise in agricultural credit delivery systems to facilitate economic development abroad and to learn more about global risks facing U.S. agriculture. Over the past year, we have hosted teams from Armenia, Bosnia, Brazil, Russia and South Africa who came to learn about the FCS and the role of the FCA as the safety and soundness regulator.

We have sent our own staff to participate in technical assistance missions or workshops abroad, most recently in Armenia, Brazil, Russia, and South Africa.

FCA also has participated in the activities of the Zurich-based International Confederation for Agricultural Credit (CICA). CICA's mission is to provide countries an independent forum for examining and discussing problems confronting agriculture, especially in the area of agricultural credit.

Noted experts in the international agricultural finance industry participate in CICA's conferences and provide articles for discussion and publication. In November 2000, I attended CICA's 30th General Assembly in Tashkent, Uzbekistan, where I participated in a roundtable on bank insurance.

The increasingly open nature of the world economy, the growing importance of foreign markets for FCS debt issuance, and the development of new alliances between agricultural credit institutions (both within and between countries) serve to underscore the significance of organizations like CICA.

The U.S. Role

Unlike many of the world's developing countries, the United States has the luxury of a broad network of federal, state, and local agencies that are involved in research, education, extension, inspection and marketing of agricultural products.

The United States provides leadership for agricultural education and trade by sharing its expertise with the world community through scientific collaboration, technical assistance, and training and by participating in various international forums like the World Trade Organization.

Scientific Collaboration: Numerous USDA agencies and land grant universities participate in short-term exchange visits between U.S. and foreign scientists, as well as long-term collaboration on research projects. These exchanges allow participants to use science to help solve critical problems affecting food, agriculture, and the environment in both the United States and in collaborating countries.

The activities reduce threats to U.S. agriculture and forestry, develop new technologies, establish systems to enhance trade. and provide access to genetic diversity essential to maintaining crops that are competitive in the world marketplace. The exchanges also promote the safe and appropriate development and application of new technologies for food safety, improve the nutritive value and resistance of crops and livestock, develop new and improved agricultural products, and fos-

ter environmental sustainability. Other mutually beneficial food and agriculture issues range from reducing barriers to marketing and trade to preventing introduction of new pests, to developing practices that meet the needs of limited-resource and small farmers.

Technical Assistance: Various technical assistance programs exist to increase income and food consumption in developing nations, help mitigate famine and disasters, and help maintain or enhance the natural resource base. The programs are sponsored by such international donor institutions as the U.S. Agency for International Development (USAID), the World Bank, regional development banks, specialized agencies of the United Nations, and private organizations. Technical assistance is provided in areas such as food processing and distribution, plant and animal protection and quarantine, soil and water conservation, and forest management.

Training: Career-related training for foreign agriculturists provides long-term benefits to economic development, magnifying potential because those who learn teach others. Working collaboratively with USDA agencies, U.S. universities, and private-sector companies and organizations, the Foreign Agricultural Service (FAS) designs and implements study tours, academic programs, and short-term courses and training in a variety of areas such as agribusiness, extension education, natural resource management, policy and economics, and human resource development. FAS' Cochran Fellowship Program helps expose senior- and mid-level specialists and administrators from developing, middle-income, and emerging market countries to U.S. expertise, goods, and services, to promote broad-based development that is mutually beneficial to continued scientific, professional, and trade relationships. As of last year, the Cochran Fellowship Program has provided U.S.-based, non-academic training for almost 7,600 international participants from 81 countries worldwide.

Inspection: USDA's Animal and Plant Health Inspection Service (APHIS) is charged with ensuring the health and care of animals and plants, improving agricultural productivity and competitiveness, and contributing to the national economy and the public health. To carry out its mission, APHIS:

- Guards U.S. borders against foreign agricultural pests and diseases.
- Searches for and monitors agricultural diseases and pests.
- Takes emergency action if foreign pests or diseases get past our border defenses.
- Protects animal health by fighting certain domestic animal diseases.
- Facilitates agricultural exports through scientifically based sanitary and phytosanitary standards.
- Controls wildlife damage and helps protect endangered species.
- Enhances the humane care of animals used in research, exhibition, and the wholesale pet trade.
- Makes sure of the safety of genetically engineered plants and other products of agricultural biotechnology.

Trade Negotiations: The United States Trade Representative (USTR) is the United States' chief trade negotiator and the principal trade policy advisor to the President. USTR is responsible for developing and implementing trade policies, which promote world growth, and create new opportunities for American businesses, workers and agricultural producers.

U.S. trade policy aims to create growth and raise living standards by opening markets abroad and maintaining an open-market policy at home; promote the rule of law and defend the rights of U.S. workers, farmers and businesses, and create worldwide opportunities for economic development and technological progress. USTR's work proceeds in the World Trade Organization, in regional forum in each part of the world, and with all our major trading partners as well as through the execution of American trade laws.

Last June, the United States submit-

ted its proposal for a comprehensive long-term reform of agricultural trade in anticipation of the possible launch of the next trade round this November in Qatar. The U.S.' principal objective is to reduce substantially high levels of protection and trade-distorting support that disadvantage competitive, U.S. farmers, ranchers and processors and that distort international markets. The U.S. is also calling for the application of sound science in determining trade measures related to sanitary and phytosanitary conditions to protect human, animal and plant life. At the same time, the U.S. in its proposal to the WTO recognizes the special circumstances in developing countries and the importance of enhancing food security through a broad range of reform efforts.

Attacking Trade Barriers

Dismantling global trade barriers to improve the functioning of food and agricultural markets has long been a goal of the United States and other exporting countries. The U.S. is pursuing a three-prong approach in its trade deliberations: bilaterally with individual countries, regionally through trade agreements like the Free Trade Agreement of the Americas, and multilaterally through the World Trade Organization.

Wealthy countries like the United States, Canada, Japan and Western Europe have a moral obligation to assist the least developed countries in solving their food and agricultural problems through scientific collaboration, technical assistance, training and fair trade agreements. The U.S. Congress has traditionally made funds available through a variety of programs across different federal agencies for training agriculturists from public and private sectors abroad who are concerned with agricultural trade, agribusiness development, management, policy, marketing and technology transfer. Program objectives are to provide high quality training resulting in knowledge and skills that will assist eligible countries develop agricultural systems necessary to meet the food needs of their domestic populations; and strengthen and enhance trade linkages between eligible countries and agricultural interests in the United States.

The world is increasingly linked through trade and information flows. A financial crisis or food safety concern in practically any part of the globe is almost instantaneously transmitted to our computer terminals, radios, or television sets. Consumers, producers and traders react and the implications are revealed in the value of our investment portfolios and what remains unsold on the supermarket shelves. Public officials are called on to intervene for a quick fix and blamed when the problem persists for more than a few days. Here are some points to consider:

- Agriculture and agricultural markets are significantly impacted by global events, disease outbreaks, and customer perceptions.
- Risk management strategies must extend beyond local considerations to the global community.
- Financial institutions and their regulators are specialists in risk management.

To improve the situation globally, agricultural financial institutions and their regulators might want to:

- Participate and become members of global organizations promoting agricultural trade and food standards.
- Provide leadership and technical assistance especially in risk management and insurance as ways to improve world markets.
- Help establish and facilitate networks among businesses, governments, and educational institutions for partnerships and alliances.
- Pressure governments and national leaders for sound public policies that support efficient global markets.
- Require lending officials to address "global markets" as a separate risk component that must be evaluated and managed in their loan portfolios.

Credit institutions like the FCS and financial regulators like the FCA can help other countries understand the significance of their problems from a credit standpoint and provide assistance in developing risk management techniques that are appropriate for their situation. There may be an opportunity to explore insurance programs that offset the financial impact of pest and disease on producers. Financial institutions could be of help in developing this type of insurance program.

High-level partnerships between government, business, and education will continue to provide an effective avenue for addressing challenges that arise from the existence of business, trade, educational, and trade barriers throughout the world. ■

Alternatives to Traditionally Structured Trade

By Ron Laskin,
Executive Vice President,
Allfield Associates, Inc.,
Washington, D.C. U.S.A.

Countertrade is a mechanism by which barriers to concluding international sales transactions, encumbered by traditional structuring, can be mitigated. These barriers may include such things as insufficient hard currency, weak buyer credit, imposition of offset programs and export credit agency shortfalls.

The ability to find commercially acceptable solutions in difficult markets can advance global reach and stimulate otherwise stagnant economies, many of which are agrarian-based. Given the right set of circumstances, the development and dissemination of new technologies can be a by-product of countertrade structured transactions.

Before examining alternatives to traditional trade, agreement on terminology is important.

- Trade: Agreement to exchange goods and/or services for "equal value."
- Traditional trade: Currency acceptable to seller is mechanism for determining equal value.
- Non-traditional trade: Something in lieu of currency needed to achieve value equilibrium.
- Countertrade: Performance requirements establish the value equilibrium.
- Offset: Reciprocal demand placed on seller as a condition of purchase.

Countertrade imposes defined performance requirements on the trade parties, with the greatest burden placed on the seller to generate the return of value.

The definition used by the Association Pour La Compensation Des Echanges Commerciaux unveils most of these performance requirements: "A commercial transaction whereby the seller undertakes to purchase goods and/or services in the client's country, to transfer technology or manufacturing licenses, or provide services to the client's country, or to undertake any other transaction in exchange for the client's commitment to purchase the goods and/or services covered by the main supply contract, such a commitment being conditional on the above transactions."

Countertrade encompasses a number of transactional forms that vary by the means used to establish the value equilibrium necessary for the trade to proceed. Barter is a structure that specifies the direct exchange of goods and/or services within a specified time period. Currency creation is a structure for acquiring acceptable currencies to pay for the original export. Offset is a structure that demands that the seller establish one or more methods of revenue generation in the client's country.

Evolution of Barter

Barter was probably the earliest form of commerce, and continues today as a widely adopted non-currency mode of conducting business. Basic barter involves spot transactions based on the exchange of goods/services.

Corporate barter is an asset value recovery program whereby greater value is received in future delivery of goods/services than would have been possible by cash alone. Corporate barter institutionalized the barter process in that it established a pseudo currency called "trade credits," which could be used, along with a percentage of cash, to purchase goods and services available through the barter company.

A company with an asset having a market value less than book value could decide to a) hold the asset in hope of an improving market; b) dispose of it at a loss; or c) accept payment for the asset in trade credits equal to a multiple of market. The company would realize the improved value at a future date when these credits were fully used.

A cornerstone for most corporate barter has been the furnishing of media since it can be almost universally applied to such a wide range of clients. Food and beverage companies have frequently and repeatedly utilized corporate barter to deal with surplus and short-dated inventory, surplus equipment, real estate and even receivables.

With an insured transaction, insurance coverage guarantees the value of the future delivery of goods/services in lieu of best effort. Insured and monetized barter is the ability to generate current cash payment equal the value of future delivered goods/services using insurance policy as collateral.

Recent inclusion of insurance coverage and banking facilities has elevated the potential for barter transactions from the most rudimentary swapping of goods to highly sophisticated structures. The insurance provisions and the ability to generate cash payments derived from the value of underlying cross purchase activities has introduced financial engineering aspects to countertrade, thereby greatly extending its application.

Aside from the obvious comfort of having converted countertrade to an insurable transaction, the added comfort of providing cash payment is a significant development. Although this structure does not eliminate the performance criteria, it does provide recourse should the trading fail to deliver the intended value. There may also be beneficial booking and tax implications associated with this structure. Since this is a relatively new financing facility, it deserves greater amplification.

The Trading Plan

To qualify for the ability to offer insurance, a few trading companies have undergone evaluation by a consortium of underwriters that examined a range of criteria, including financial strength, core trading competencies, past contract performance and staffing. Operating under guidelines set by the broker and underwriters, proposed transactions are submitted for insurance approval on a case-by-case basis. Approval hinges on the existence of a demonstrable trading plan with sufficient capacity, leverage and coverage to minimize the risk of a claim.

The trading plan must be tailored to the spending profile of the client company, but more specifically, only to those areas of spending made available for trade. The significance is being able to derive current cash from the value imbedded in the normal purchasing activities of a company over the insured term. The client can use the cash to mitigate barriers of traditional trade structures.

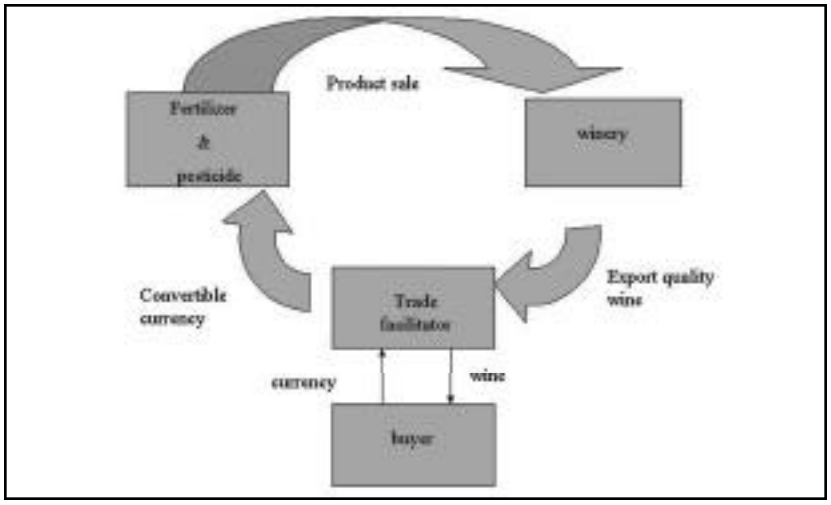
Offset is the form of countertrade most commonly applied to defense and major capital equipment sales and, since it is a government-imposed obligation, receives special attention in these sectors. The sale and payments occur in accordance with traditional contracts. However, penalties are imposed for failure to meet the qualified reciprocal demands that can take various forms: co-

production; licensed production; subcontractor production; qualified investment; technology transfer; or counter-purchase.

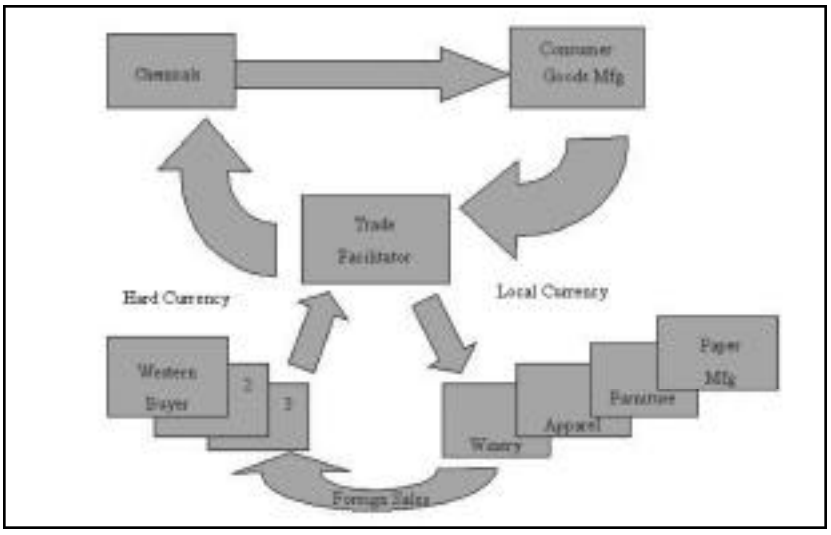
Cash derived through the insured transaction structure previously described can fund the qualifying event under the offset program. It becomes the decision of the seller how best to employ the derived cash.

The following schematics will outline the responsibilities and deliverables for a number of selected situations for which countertrade offers a viable solution. With adaptation, the process is transferable to an almost endless set of circumstances and business sectors.

Countertrade can be an effective tool in concluding transactions that would otherwise be difficult or impossible. But there is an added degree of complexity with more parties involved and the need for several intermediate steps to occur over an extended period of time before a transaction can be declared as complete. It is obviously not the structure of first choice, but rather a viable alternative or contingency plan. Defense contractors and many multinationals with large and recurring offset or countertrade programs to manage may maintain dedicated staff. But for the most part, this is an outsourced function suited for companies familiar with the physical, as well as the contractual trading aspects. ■

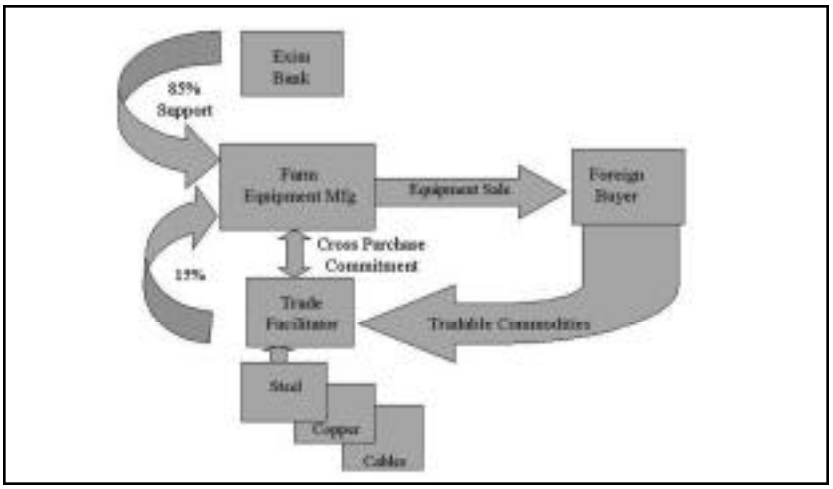


In this example, the foreign winery unable to pay cash pledges export quality wine in sufficient quantity and at a price that will ensure that the value of the fertilizer and pesticide is returned through the trading process.

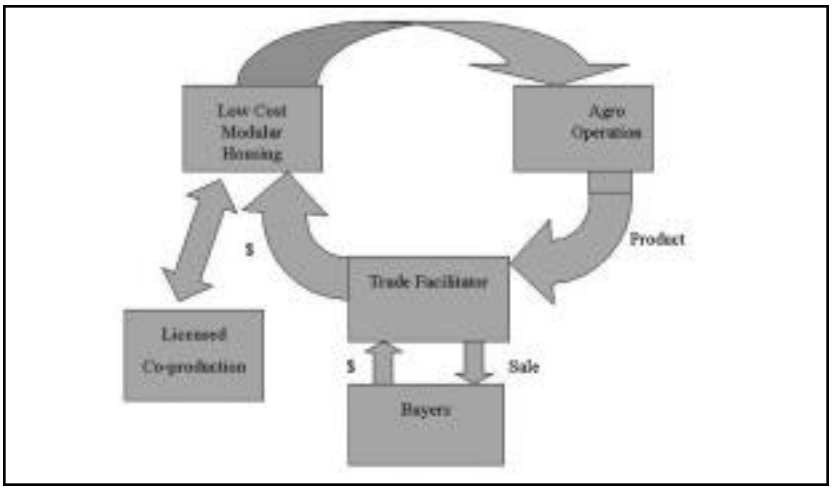


The foreign operation of a consumer goods manufacturer requires imported chemicals but generates sales in local (soft) currency. The trade facilitator arranges for the purchase of domestically produced products of export quality and the subsequent foreign sales. If necessary, investment or technology transfer is arranged to improve the production to export quality. This mechanism returns to the Seller the required hard currency.

Exim Bank agrees to provide 85% coverage for the export of farm equipment. The 15% differential is generated by the manufacturer's cross purchase commitment (of sufficient size) which qualifies for insurance and commercial bank support. The foreign buyer organizes the supply of tradable commodities as a form of payment.



The sale of low-cost modular housing into an agricultural region is facilitated by the countertrade of agro products. In addition, an offset obligation is met by the establishment of an in-country licensed co-production of modular housing.



The Black Sea Common Market

By Ceslav Ciobanu, Moldovian Ambassador to the United States

Globalization of education and trade issues is a logical part of the broader focus of attacking global barriers to trade.

First of all, we are speaking about the establishment of the new economic order. Globalization of education and trade is a key factor to ensure that everyone benefits from this new order and is not left behind in poverty and underdevelopment.

Secondly, the process of globalization is equally objective and irreversible as well as complicated and controversial. It is not a secret that often different issues place North America on different sides of the barricade from western Europe or Southeast Asia, and vice versa. But in the process of establishing this new economic order, one should avoid transforming developing countries, including the Independent States of the Former Soviet Union, into victims of trade fights, or creating new barriers and obstacles that would only widen the gap between those who benefit from globalization and those who are disadvantaged by it.

Thirdly, global markets offer equal opportunities for all, but opportunities do not guarantee results. In this respect, regional integration between different countries should not be perceived as an alternative to globalization, but as a mechanism aimed at facilitating this process, by eliminating

existing barriers and not replacing them with new ones.

Given this background I would like to share with you some reflections on the Black Sea Common Market and Eastern Europe. The example and experience of my country, the Republic of Moldova, is eloquent in this respect. Moldova is located in one of the most turbulent parts of Europe—the southeastern part of the continent, where major transformations have been occurring during the last decade, both in terms of mentalities, perceptions, and economic realities, as well as at the level of institutions and international organizations.

Our country was the first among post-Soviet states to become a member of the Council of Europe; to sign the Partnership and Cooperation Agreement with the European Union (EU); to become a member of the Central European Initiative; and is aspiring to join soon the Stability Pact for Southeastern Europe.

Moldova is the first, and still the only former Soviet Republic to adhere to the South European Cooperation Initiative (SECI), a U.S. sponsored initiative aimed at creating a regional association to encourage cooperation among member states and facilitate their integration into European structures. At the same time, we finalized negotiations on accession to the World Trade Organization (WTO) and hope to be accepted as a full member at the next General Assembly in May. I would like to elaborate more on some issues related to the emerging Black Sea Market.

The end of the Cold War and the fall of the Soviet Union triggered profound transformations of international systems. The bipolar world—with the two poles in Moscow and Washington—disappeared, leading to development of the totally new type of international order, a much wider world based on a complex network of relationships. The most radical changes of the last decade have occurred in Central, Eastern and Southeastern Europe—the former buffer zone between the two blocks.

Countries and international organizations had to adjust to new conditions. In this effort of adaptation, most institutions changed their goals and principles (e.g. NATO), while some disappeared completely (Warsaw Pact). Moreover, hundreds of new international organizations have been created to help countries better understand and deal with the challenges and opportunities of the increasingly interdependent and global world.

According to some studies, since 1990 the number of international organizations increased three-fold. One of these new institutions is the Black Sea Economic Cooperation (BSEC). Created in 1992, it reunited 11 countries from four different worlds: the former Soviet Union (Russia, Ukraine, Moldova, Georgia, Armenia and Azerbaijan); former Socialist countries of Southeastern Europe (Romania, Bulgaria and Albania); a member of the European Union (Greece); and Turkey, the only representative from Asia.

All these countries are united by the common goals of taking advantage of the cooperation potential in the region.

The Black Sea region constitutes the heartland at the crossroads of the East-West and North-South trade routes. It is here that civilizations emerged, prospered and disappeared, shaping diverse peoples, cultures, reforms and ideas.

Today the Black Sea region represents:

- An area of 20 million square kilometers and an unsaturated market of 200 million people, with supply well behind demand in agriculture, industry and services;
- A foreign trade capacity of more than US$300 billion;
- The second largest source of oil and natural gas, after the Middle East.
- Resources that include an abundant and skilled labor force, reserves of minerals and metals, and an area endowed with eight seas and numerous ports.
- An important bridge between European and Asian civilizations, dating back to the Silk Road, waiting

to be rediscovered by the worlds of tourism and business.

It is clear that the globalization process, including its integral components of education and trade, cannot be achieved without including this region, and without taking into consideration the advantages and problems of regional integration.

Globalization and Moldova

On declaring its independence from the Soviet Union in 1991, Moldova had to cope simultaneously with three major tasks: democratization, transition to a market economy, and nation building. Each required tremendous efforts and resources, and all had to progress simultaneously. To make things even more complicated, Moldova had to promote these deep reforms against the backdrop of a changing international order. The rupture of the established economic and trade links that had existed with the former Soviet Union caused almost a two-fold decline in Gross Domestic Product (GDP), forcing us to look for new solutions and alternative markets, as well as to engage in new sets of relationships with countries in our region.

For a small country such as Moldova—and remember, a majority of the world's countries are small countries—international cooperation is the key to survival and the only gate toward economic prosperity. Why? As a country of less than 5 million people, our small internal market can absorb only a fraction of the production of our economy's industries, in particular agriculture. Though it occupied less than 0.2% of the former Soviet Union's land territory and had only about 2% of its population, Moldova accounted for up to 40% of former Soviet Union's tobacco leaf and wine production, 20% of sunflower production and fresh grapes and 25% of fruits.

From the standpoint of the international economy, the 1990s represented the worst period for a country heavily dependent on agricultural exports and almost totally dependent on imports of energy resources. Prices for agricultural products declined, while those for oil and gas soared.

This only stimulated Moldova's search for a way out of this trap. It provided additional stimulus to speed integration into the global economy through regional and subregional organizations, such as BSEC, and the GUUAM consultative group—Georgia, Ukraine, Uzbekistan, Azerbaijan and Moldova. Moldova's main interest in GUUAM is development of mutually beneficial economic projects. Among these are reviving trade links of the old Silk Road; different transportation corridors, including that of oil and gas transportation from the Caspian Sea region to Europe; and establishment of a free trade zone. In other words, Moldova has tried to seize every opportunity to benefit from regional cooperation and globalization.

However, our country's first major contact with globalization trends was devastating. In 1998, Moldova was severely impacted by the Russian financial crisis, devaluation of the ruble and the flight of western capital. Our national currency devaluated almost three-fold, the foreign debt skyrocketed overnight and Moldovan agricultural exporters suffered a terrible blow.

This is a vivid example of Moldova's vulnerability to external factors beyond its control. Nevertheless, we are confident that globalization or regional interdependence were not the main causes of the problems. Rather, we were not prepared enough to face the challenges of the new economic order.

Unfortunately, one cannot yet say that today we have overcome all the barriers and obstacles to our integration into European structures and the World Trade Organization (WTO). By following Moldova's thorny path of integration into western economic structures, one might even think that Europe tries to build a new Berlin Wall, to impose a new Iron

Curtain. How else can one explain that six years after signing the Partnership and Cooperation Agreement with the European Union (EU), we have progressed very little in this direction? We haven't been yet accepted to the Stability Pact for South-East Europe, although Moldova is part of this region historically, geographically and politically.

Senseless obstacles have been invented during the eight years we've tried to join the WTO. For example, in 2000, our negotiations were totally blocked for months because of disagreements between the U.S. and the EU regarding audiovisual and intellectual property.

For us, the way out of this dead-end road is through the pragmatic concept of regional cooperation as an effective confidence-building measure and a pillar in the new European architecture. During its nine year of existence, the BSEC has contributed substantially to the process of enhancement of peace and security in this area. Today, it can be confidently said that BSEC has emerged as an important and effective player on the European stage. BSEC has established working relations with the EU, the Central European Initiative, the South-East European Cooperative Initiative (SECI) and the Council for the Baltic Sea States.

To paraphrase Charles Darwin, one can say that in today's world it is not the strongest who will survive, but the one best able to adapt to change. We aspire to more humane and fair globalization. In that sense, the question is not whether we should welcome the emergence of a truly global market economy through globalization, but what kind of global economy we should work to build.

Today, 1.3 billion people are living on less than US$1 a day, including about 70% of Moldova's population. It is a crucial lesson of history to make the right conclusions from this situation, and to alleviate the negative impact of globalization on developing and poor countries. Otherwise we will soon have to face Hamlet's dilemma: "To be or not to be? That is the question." ■

National Animal Identification: The U.S. Perspective

John F. Wiemers, DVM, MS, National Animal Idnetification Director, Animal and Plant Health Inspection Service, USDA

Introduction

Why is animal identification an issue for USDA, APHIS, Veterinary Services, as well as the livestock inudstry in the U.S.? What has changed to make it so important? Why is there a need for a shift in policy for animal identification? This document is intended to answer these questions and provide background information and guidance in establishing livestock identification programs.

Public Sector Needs

The development of a national livestock identification system is imperative for many reasons. Recent global events highlight this need. The presence of Bovine Spongiform Encephalopathy (BSE) in Europe demanded a massive revamping of animal identification methods in that part of the world. As these methods were implemented, other countries trading with Europe have been expected to develop equivalent systems. Australia and New Zealand, for instance, have recently begun to modify their systems to more accurately track animal movement. The Canadian beef industry, in response to the BSE issue, has developed a national identification system. This is an issue for the U.S. because the identification systems used to control BSE may set the global standard for animal identification. It is a legitimate role of government to be involved in the oversight of global trade, and thus, in the oversight of animal identification systems.

Other events in the world are also driving the need for animal identification. European consumers are beginning to set

the mark for what is considered acceptable food for human consumption. The March 15, 2000, issue of National Hog Farmer included an article entitled, "European Consumers Call the Shots." In it, John Gadd of Dorset, England, outlined five major farm based criteria on which future trade with the European Union (EU) will be based: (1) must not be given antibiotics or hormones, (2) must not put breeding females in gestation crates but in bedded group pens, (3) must not wean pigs under 21 days of age, (4) must easily trace animals to the farm of origin, and (5) must have inspection and verification protocols in place.

We realize that the EU is not a major market for animals and animal products from the U.S. The standards they set will, however, be adopted by countries that do rely on trade with the EU. Many of these countries also trade with the U.S. It is reasonable to assume, therefore, that the EU standards will have an influence on the U.S. It is hoped that the U.S. will be able to work with our trading partners using science and common sense to resolve these issues. Will that be enough?

Not according to Mr. Gadd, [who says]: "My American friends, you are living in a dream world. The trade negotiators could come to an agreement…but that doesn't mean they can sell it [meat]. …Retailers will not stock what the housewife will not buy.…the European consumer definitely calls the shots over food safety. Be warned."

On the home front, United States livestock disease eradication programs are nearing completion. Brucellosis and pseudorabies, will soon join the list of diseases no longer found in the country. Tuberculosis will not be far behind. Without a national livestock identification system in place, we can expect the level of livestock identification to decline. Three years after Canada successfully completed their brucellosis eradication program, the level of cattle identification dropped from over 90% to around 10%. In the U.S., many brucellosis free states are already dropping calfhood vaccination requirements, and organizations such as the National Institute for Animal Agriculture (NIAA) and United States Animals Health Association have proposed resolutions to curtail calfhood vaccination for brucellosis. These efforts will reduce the number of calfhood vaccination tags applied. This piece of identification is the "front end" to our trace back system. When collected with a blood or tissue sample, it tells us where the animal was born.

Until 1992, approximately nine million calves were vaccinated annually and received calfhood vaccination eartags. As early as 1997, however, the number dropped to almost five million and in 2000 reached the four million mark. The decline is not dramatic at this time. In fact, a couple of states have actually increased the number of calves vaccinated last year compared with the previous year.

We anticipate, however, that in the next several years, there will be a national void in cattle identification unless there is a policy shift. There is already a void in certain areas of the country where calfhood vaccination is being cut back. Factors that influence national termination of the brucellosis vaccination program include concern in western states over the Yellowstone bison issue, state laws requiring vaccination, and state import requirements.

Eventually, other tags required for interstate shipment and testing will not be necessary as states and regions are recognized free of the diseases. As surveillance programs are allowed to taper off because of continued absence of the diseases, slaughter animals will not require identification to the extent they did in the past. The backtags used for slaughter animals now provide the "back end" of the nation's trace back system, i.e. they tell us where the animal was just prior to slaughter. Unless we provide for an ongoing identification system, we may lose this capability.

The United States, however, will continue to require a high level of livestock identification for many reasons. Ongoing surveillance for eradicated dis-

eases is important to ensure complete eradication, and to convince foreign trading partners that our livestock population is free of disease. We will need a stepped up monitoring system for foreign animal diseases, e.g., Classical Swine Fever, and Foot and Mouth Disease, that threaten to enter our borders. In addition, we are concerned with monitoring certain endemic diseases of interest to our industries, establishing health status certification programs, and facilitating trade with other countries. We will continue to require, at a minimum, "front end" and "back end" identification to support our epidemiological delivery system.

These issues are significant because the public is concerned about maintaining a plentiful and affordable supply of meat and milk. This requires that the health and productivity of the "national herd" be monitored to guard it against destructive diseases, both foreign and domestic whether accidental or intentional.

In addition, the national economy is of great concern. A viable domestic and international market for U.S. animals and animal products is an important factor in the stability of the U.S. economy. It is, therefore, in the public interest to maximize the contribution of agriculture to the overall economic picture.

These thoughts are embraced in the mission statement of USDA, APHIS, Veterinary Services (VS) contained in the most recent Strategic Plan: VS protects and improves the health, quality, and marketability of our nation's animals, animal products, and veterinary biologics by preventing, controlling, and/or eliminating animal diseases, and monitoring and promoting animal health and productivity.

The public also demands assurance that the products they consume are safe and wholesome. For this reason, the safety and authenticity of foods of animal origin must be monitored. This task is conducted under the jurisdiction of USDA's Food Safety Inspection Service, and Agricultural Marketing Service, as well as the Food and Drug Administration. APHIS at this time has a supportive role in this effort in helping to provide information of the tracing of animal identification. With the advent of mandatory HACCP programs in slaughter establishments, new needs for animal identification have emerged. New sampling strategies have brought an increased understanding of the magnitude of the problem of drug residues and food borne pathogens in meat. The development of pathogen reduction systems have pointed out the need for an increased level of identification for all food animals.

In summary, the public issues of global trade, disease control and food safety, the completion of livestock disease control programs, the emphasis on surveillance and monitoring, and the emergence of HACCP systems for food safety, indicate the need to develop a new Federal policy for animal identification.

Private Sector Needs

The private sector demands a quality identification system as well. It is clear that a producer's primary concern, however, is that of maximizing the profit of the agricultural enterprise and ensuring its sustainability over time. The goal of the livestock producer is to raise animals that consistently grow as quickly as possible, eat the least amount of feed, require the least amount of medical treatment, produce the best grading carcass, produce the most milk, etc. Breeding stock producers' goal is to select and develop genetic lines that produce the offspring demanded by their industries while preserving genetic diversity. In short, the producer's goal is to minimize the cost of production and maximize the value of the animal product.

Producer organizations have begun to develop identification systems of their own. In the dairy industry, the Farm Animal Identification and Records (FAIR) Pilot Project is demonstrating the value and functionality of a farm to slaughter identification system that uses a unique life number for each animal in the system using the American Identification Numbering (AIN) system. Use of the number is shared by produc-

ers, semen providers, milk recorders, breed registration service, and regulatory agencies needing to trace the animal. The project is gathering useful information that will facilitate the development of a national system. Since the beginning of the F.A.I.R. Pilot Project, nearly 100,000 dairy animals have been identified in the system.

Outside of the project, nearly one and a half million dairy animals have been identified in 37,000 herds with AIN. This represents approximately 6-7% of the dairy animals in the U.S. The acceptance of the AIN system is growing rapidly.

Beef alliances nationwide are realizing the need to measure the profitability of individual animals, verify the production systems under which cattle are raised, and develop branded beef products. Programs have begun to generate identification systems and methods that support the producer needs. Farm to table audit systems are being used to add value to beef products.

From discussion with key database providers in the beef industry, it is estimated that between eight and ten million beef cattle, or approximately 10-13% of the national herd, now have information recorded on electronic databases.

One and a half to three million cattle (2-4%) are identified in detailed audit trails from birth to slaughter. In these systems an animal can be pinpointed much the same way a parcel can be traced by UPS or Federal Express. Projections are for fifteen to twenty million animals to be so identified within three years. This will represent 20-30% of the national herd depending on the rate of decline that has occurred since the peak in 1996.

Other species industries are also moving in the direction of national identification system. The swine industry is beginning to adopt a premises-based system for the identification of cull breeding animals and feeder pigs. The equine industry is exploring the use of high tech methods to provide fraud resistant identification. The sheep industry is getting ready to begin a national campaign to eradicate scrapie in domestic flocks, and is developing identification systems and methods to support this effort.

In summary, there are definite livestock industry needs for animal identification. Many groups in the private sector are developing systems that serve their own private interests. Whether or not the industries will be able to achieve the level of identification that is required by the government to fulfill its public responsibility is not known. Even if the industries can reach the level that is needed, it is not known whether or not they can do it in the time frame that is necessary.

Public vs. Private

It is clear that the goals of the private sector do not always coincide with those of the public sector. In fact, they sometimes collide head-on. In developing national animal identification systems, it is essential for governmental officials to understand that private systems generally exist to serve private needs.

Much expense and effort is invested in "on-farm" systems that are not designed to be used by the public. Many producers are understandably fearful that government access to private identification systems will allow their own systems to be used against them. The overwhelming concern is that human cases of food borne illnesses will be traced to the farm level, and the producers will be held liable.

This is especially disconcerting since many of those human health pathogens produce no clinical signs in the animal. The organisms are often a part of the normal intestinal flora of healthy animals and are not easily detectable. What happens at the consumer level often has little to do with the husbandry practices at the farm level.

Other issues include the proprietary nature of economic data, genetic information, etc., in which the government has no need to be involved and which give an agricultural enterprise a competitive advantage in the market place.

Private producers, on the other

hand, need to be aware of their role in producing food for public consumption. They should envision themselves not just as cattle ranchers or hog farmers, but as food producers. As soon as the animal leaves the farm and enters slaughter channels, it is in the public food supply. The producer can no longer say, "that is 'my' animal." If the animal contains chemicals or antibiotics that pose a human health risk or a disease that may threaten the health or marketability of the national herd, it is a public problem. It is in the public interest to test the product and trace problems back to the source. Private identification systems must allow government access to the information that will enable this process to take place.

In summary, government programs and policies must be sensitive to the concerns of private producers. With limited resources and a diminishing number of government program identified animals, the government reliance on producer applied identification and information databases will increase. Access to this information will depend on the relationship of trust that is established between the public and private sectors. Successful implementation of a national system will require a mutual understanding and reconciliation of public and private goals and objectives.

The U.S. is in a position to set a new standard for national animal identification systems based on the principles that characterize U.S. Agriculutral production: free enterprise, market forces, entrepreneurial spirit. We must act and not be acted upon. We must not wait until an emergency forces us to build a reactionary system.

Policy for USDA

It is clear that there is a need for government involvement in the development of animal identification systems. It is also clear that there is a need to respect private enterprise. A policy that allows the industry to develop identification systems within the guidelines established by the federal government is recommended. The following policy statement is proposed:

USDA, APHIS, VS, supports industry efforts to develop innovative, market driven, voluntary livestock identification systems. In order to protect the national supply of food and fiber from disease and contamination, identification systems must be able to demonstrate the ability to adequately trace the movement of individual animals. Such systems must complement agency programs and support its overall mission. APHIS will work with private industry to assure that the agency needs are met. The needs of federal agencies are being coordinated through an Interagency Committee on Animal Identification.

To this end, APHIS, VS will work with industry groups and organizations to develop basic standards in the following key areas of focus, in order of priority:

First, a uniform, nationally recognizable numbering system for individual animal identification must be established. This is essential to indicate the farm of origin of the animal, i.e., where it was born. This can be accomplished within one next year.

Second, a uniform premises identification system must be developed. This is critical in correctly identifying the locations with which an animal is associated. This can be accomplished within the next year.

Third, a method to evaluate and approve identification methods for official use in livestock needs to be implemented. This can be accomplished within the next year.

Fourth, consensus on a list of basic information necessary to adequately trace the movement of individual animals is needed. This can be accomplished within the next year.

Fifth, standards for the official use of electronic identification devices in livestock must be agreed to. This can be accomplished within the next two years.

Sixth, standards for electronic data messaging and data retrieval for the information needed to support the agency

goals need to be developed. This will be accomplished within the next two years.

With these standards in place, the livestock industry will have the tools to develop national livestock identification systems. APHIS, VS anticipates that within three to four years there will be a crisis in livestock identification if nothing is done. It should be the common goal of the public and private sectors to develop systems using the standards agreed upon before a crisis is faced. Input from the entire livestock industry is critical to successful implementation of such systems.

This policy will provide the agency with the level of identification that is required in the time frame that is necessary. ■

Food Safety and Standards

Rapporteur:
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Bovine spongiform encephalopathy (BSE) has become one of the most important diseases in recent times. There are currently two theories that explain the origin of this disease—the prion theory and the autoimmune theory.

The prion theory is that BSE results when winter feed obtained from brain, spiral cord, pancreas, etc., contaminated by prions was fed to cattle. As a consequence, meat consumption by humans containing prions could cause Creutzfeld-Jacob disease (CJD).

Some specialists disagree with this theory. "We have had no evidence of any dietary, iatrogenic or occupational risk for CJD," stated a recent report from the National CJD Surveillance Unit.

The autoimmune theory suggests that winter feed contained bacteria with a molecular mimicry to brain tissues, in particular "acinetobacter". Exposure to this bacteria would develop autoimmune responses. Studies by a team lead by immunologist and Professor Alan Ebringer of King's College, University of London showed that cows affected by BSE presented high levels of antibodies to acinetobacer in comparison to healthy cows raised with no winter feed supplements.

This study also shows an important presence of autoantibodies to both bovine myelin and bovine neurofilaments in all the affected cows. In the same way, a CJD study showed that all patients possessed autoantibodies against neurofilaments located in the gray matter of the brain. This may suggest that BSE is an autoimmune disease.

Ebringer's group is developing an antemortem test that may be very useful in the near future. This test analyzes a composite index of Myelin-Acinetobacter-Neurofilaments.

If the autoimmune theory is finally accepted, it means the culling of cattle was unnecessary, and that meat was always safe for human consumption. ■

U.S. Producer Concerns

By Tobin Armstrong,
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Armstrong, Texas, U.S.A.

There are three issues of great concern to U.S. producers.

It is very difficult for the U.S. beef producer to reconcile his commitment to free trade and his obligation to live up to rules of the World Trade Organization and the Uruguay Agreement when he sees the European Union repeatedly in violation of these commitments by refusing to allow the importation of U.S. beef. Twice the U.S. producer has seen the WTO court rule in his favor when the issue was litigated, and yet the EU has refused to be guided by these legitimate judgments. The fact is that the EU's scientific community has declared that there is no valid scientific basis for denying access to beef where growth-promoting ear implants were used. I can assure you that U.S. beef producers are deeply disturbed by this aberrant behavior on the part of fellow members of the WTO.

The U.S. beef producer is deeply concerned about the inability of the scientific community in Europe to clearly define bovine spongiform encephalopathy (BSE)—what causes it, how it can be treated or eradicated, and what if any relationship it has to Creutzfeld-Jacob Disease (CJD) or variant CJD (VCJD) in humans. This inability of the scientist to clarify this issue beyond reasonable doubt makes U.S.cattle producers very uneasy because of the threat that false information spread by sensationalists or anti-beef groups will do great damage to the market for beef worldwide.

U.S. cattle producers are rightly fearful that in the likely event of an outbreak of hoof and mouth disease in Canada, the United States, Mexico or Central America, these countries will not have a plan in place that provides for political cooperation in eradication, as well as the physical and financial aspects so that immediate and positive action can be taken with full cooperation of all parties. U.S. cattle producers think this should be a top priority for all agencies of government who will be in any respect involved in dealing with the emergency. ■

Trade: Key to U.S-European Relations

By John Block,
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There are several key areas of focus for the United States and European Union. First, both are trying to expand exports. The U.S. is looking for additional ways within GATT and WTO, including the Trade Promotion Authority. President George.W. Bush has asked Congress to focus on this area in 2001.

President Bush is asking Congress for trade promotion authority—fast tract as several past presidents have named it. This would help both Europe and the United States. It will not be an easy sell to Congress or several groups. The last time former President Clinton asked for it, it was denied. Labor unions are worried about competition from cheap labor and environmentalists want to impose strict environmental obligations on other countries.

If we think these kind of internal conflicts are unique, guess again. Turn back the clock to 1990, when EU members pledged to grant full EU membership to the former communist states of Central Europe. It sounded then like a great idea. Why not include Poland, Hungary, Estonia, Slovenia and the Czech Republic?

From the Atlantic perspective, if the objective is to improve security and promote economic development, expanding the EU clearly is the right thing to do. An ambitious timetable for admitting those nations is 2004. As the time draws closer, apprehension increases. The EU

provides some US$95 billion in agricultural subsidies. but French farmers do not want to share that with poor Polish farmers. The EU's poorest states receive heavy subsidies—Spain, Portugal, Greece and Italy. If the new Central European members come aboard, they become the "poor" and will take money away from the "old poor." That doesn't sit well with the "old poor." Nevertheless, the concept of enlargement is important for all of us, including the U.S. farmer.

But enlargement is not just a dispute over money. Entry into the EU opens the border to the free movement of people. The Germans and Austrians are worried about competition from cheap labor in the East. Sound familiar? Some of the Eastern nations, Poland for example, are worried that the rich Germans will want to buy up their properties. Thus, the Europeans should help President Bush. The U.S. needs trade promotion authority. The EU needs to expand eastward. But with the growing opposition to globalization, it's not going to be an easy sell.

A second area of study and importance is biotechnology. Whether called genetically modified organisms (GMOs) or new science, this is an important area for both Europe and the U.S. U.S. farmers have all kinds of problems exporting biotech food products to Europe. Japan is giving us trouble, too.

Even here at home environmental groups, and others who want to safeguard the safety of the food supply, raise red flags. Well, we finally got a break from an unexpected source.

According to the Wall Street Journal, in an almost breathtaking display of political incorrectness, the United Nations (UN) has blown the whistle on the nutty fears over genetically modified foods, saying the developing world can ill afford such self-indulgent hysteria. The UN report, "Making New Technologies Work for Human Development," says western-based environmental groups are impeding efforts to address hunger in the Third World nations by blocking the development of bioengineered foods. Take that Green Peace! Do you really care about the 800 million people suffering from malnutrition?

With biotechnology we produce rice, corn, soybeans and many other crops, increasing yield by 30%, maturing 30 days earlier, higher in protein and vitamins—healthier food. Why do you choose to deny the needy of the world when the UN report points out that the science does not support your objections? The risk is bogus!

Mark Madlock Brown of the UN development program says, "This research shows the enormous potential of biotech to improve food security in Africa, Asia and Latin America." The UN report states: "The current debate in Europe and the U.S. over genetically modified crops mostly ignores the concerns and needs of the developing world."

We already have everything. Are we so selfish that we would deny the poor people of the Third World? I urge the consumer organizations and food safety advocates to let biotechnology deliver the promise of abundance and better health.

A third area of intense interest is animal disease. There is no question about it. Farmers are very worried about the threat of mad cow disease and foot and mouth disease—two very difficult diseases. To dispense with mad cow first, only 90 people in the world have died of a brain disease similar to mad cow. There is no proof of a relationship. Of course that doesn't stop the media from hyping the risk. No one can expect them to put it into its true minimal perspective. I think the chance of an outbreak here in the United States is very, very remote. In fact, I believe the mad cow hysteria in Europe has pretty well run its course.

Foot and mouth disease is very contagious and a much greater risk than mad cow, but only an economic risk. There is no health concern for people at all. The risk to farmers, ranchers and agribusiness can be enormous. Here is what Fiona Houston wrote: "My family's heard of beef cattle, a lifetime's worth of careful breeding, is being shot and burned, along

with hundreds of ewes and lambs; 400 cows (160 of them pedigreed) and 400 sheep. The Highland cattle (the long-haired ones with the big horns), and the rare Belted Galloways kept in a field for the pleasure of passing tourists, are to be killed by police marksmen, as they are too wild to catch. All will be dumped by machines into trenches and set alight. The smoke and the stench will stick to the air for nearly a week. The countryside around my family's 650-acre farm in Gretna Green, Scotland, just inside the border with northern England, is a war zone. Flames light the night; smoke darkens the day. The devastation of the rural economy is almost complete."

This is just a taste of what could happen, but I don't think it will. This is a global barrier for us all to solve.

The U.S. is focusing on many of the same sustainable and environmental topics as is Europe.

A fourth area is interest to the Attacking Global Barriers group is the U.S. food supply. We in the U.S. so used to the luxury of abundance of everything—including food and creature comforts—that it is hard to imagine that most people in the world can only dream about such things. A few months ago, I attended the Food Marketing Institute convention. There were 100s of exhibits of food and food equipment. Every imaginable kind of food was there. More than 25,000 people attended that huge show, with more than half being from hundreds different foreign countries. Why did they come?

Because we have a food system here in the U.S. that is the envy of the world. It starts on the farm, but that's only a section of the chain. We have food that is processed all kinds of ways. Think about your supermarket. You have a whole aisle of breakfast cereal, too much to choose from. There must be 50 different kinds. Cereal is no longer just oatmeal and corn flakes. Bread is not just bread either. There are more kinds of bread than I can think about.

When talking to some of the international attendees at the food show, you find that they do appreciate the great food system that we take for granted. They not only want to see what variety of food that we have to offer, they want to get an insight of how we do it. What are the critical pieces of this unbelievable food system? Can they take some ideas back home and apply them there?

I left the expo and took a taxi to the airport. The taxi driver was a young man for Ethiopia, who had been in the U.S. nine years. "U.S. is the greatest country on this earth. People from all over the world want to come here to live," he said. "Too many Americans don't realize that many people in the world are without food, without clean water, without shelter. We just take too much for granted. Those that would protest living conditions here should spend some time in Ethiopia." Both Europe and the U.S. need to work for a better and safer food supply.

Finally, both Europe and the U.S. need to work together for better farm policy. The Senate Agriculture Committee hearing didn't do very much to clarify what we're looking forward to in terms of farm policy. This year, U.S. Secretary of Agriculture Ann Veneman will direct a new farm policy, which will be very important for all farmers in both the U.S. and Europe.

The new administration is saying that we need policy that takes into consideration the whole food chain—farmer to consumer. When you get into specifics, I'm not sure exactly what that means. Undersecretary of Agriculture J. B. Penn made the point that trade policy must be closely linked to our domestic agricultural policy. Let's expand trade through reform of trade rules. The President desperately needs trade promotion authority. Senator Richard Lugar pointed out that agriculture is twice as reliant on trade as the rest of the economy. One of Senator Tom Harkin's priorities is an expanded package of conservation in the farm bill.

Here is what I think:

1. Yes, the next farm bill will be "greener" than the last. The U.S. is focusing on many of the same sustainable and environmental topics as is Europe.
2. A creative approach to market development must be found because the World Trade Organization rules are closing in on us.
3. Farm commodities that you never heard of are reaching to get their hand in Uncle Sam's farm program cookie jar. Congress will resist any major financial costs in the months ahead.

Management

The Battle Against Protectionism

By Frank Blechman,
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George Mason University (GMU) is named for George Mason, a colonial landholder, a neighbor of George Washington and a political philosopher. GMU is relatively new, but our name harks back to colonial times when trade with the "mother country" was the sine qua non of Virginia.

Fairfax County, Virginia, where GMU is located, sits between the Blue Ridge Mountains to the west and the Potomac River to the East. In 1740, rapids in rivers and mountains were the great barriers to trade. Access to waterways was the great avenue of trade. Colonial trade policy defined what could be traded with whom.

Today, we live in an era of Internet commerce. Mountains, oceans, even time-zones present no real barriers to trade. Money and information flow around the world faster than good and services. Yet, we the oldest barriers to trade still remain: protectionism, fear of competition and fear of others.

We fear that the ways others do things will challenge or negate the way we do things. We fear that the invasion of goods and services will be accompanied or closely followed by an invasion of people from afar; people with strange ways. We fear that our way of life is at stake. We fear that our sense of our self will be destroyed.

Our identity is a very peculiar commodity. We don't know how it's made. As individuals, clans, tribes, communities, regions and nations, we are so afraid of losing our identity that we sometimes hide it from outsiders. We certainly don't want to share it or trade it. Even though we're flattered, we worry when others imitate it. Identify is the ultimate possession.

If trade were just about the exchange of goods and services, credit and information, we would have no problem. Over the last 6,000 years of recorded human history, we have evidence that people of the world have traded constantly. Some of the oldest written records are commercial lists. In every age, traders have overcome the barriers of their day to bring home the new, the exotic and the apparently valuable.

We are here at this conference today because meeting face-to-face, we build relationships of trust and understanding. This is as true today as it was 200 or 2,000 years ago. Face-to-face, human-to-human, we lower our fears that contact with others will corrode our being.

Working together, we find ways to reassure our friends. We lower the barriers of fear by showing that we have traveled across them, and have returned, alive, unharmed, maybe even improved.

People have been studying conflict for thousands of years of recorded human history. But only in the last 50 years have scholars begun systematically integrating knowledge about how conflicts end. The creation 15 years ago of a graduate degree program by GMU's Institute for Conflict Analysis and Resolution (ICAR) coincided with the publication and popularization of principled "win-win" negotiation. Today, there is a recognized, established and respected field of study and practice called conflict analysis and resolution.

Nearly one-third of all students in U.S. public schools today have some exposure to conflict resolution skills and techniques. There are hundreds of community-based dispute resolution centers throughout the U.S. Through these, thousands of mediators and arbitrators have been trained to help individuals and organization resolve problems efficiently without recourse to lengthy and expensive litigation.

Most major corporations have dispute resolution clauses in all contracts. The Society for Professionals in Dispute Resolutions has nearly 4,000 members. Dispute settlement is now offered in most law schools in the USA.

Conflict is the product of unmet needs and unrecognized differences, as well as unacknowledged issues. ICAR (http://www.gmu.edu /departments/ICAR/)

views conflict as neither good nor bad, but rather a normal product of human interaction. Our work attempts to maximize the creative, renewing positive qualities of conflict while minimizing the destructive distorting negative ones.

Conflict is a dynamic system in which events and understandings constantly restructure and reinterpret the past, present and future. At a conscious, rational level all conflicts can be described as having origins, dynamics, processes and outcomes. But within conflicts, experience has shown that what one party describes as a source or beginning may represent a midpoint or response from another point of view.

The complexity and fluidity that make conflict hard to describe, are the very features that make conflict analysis and resolution so productive. The trajectory of a particular conflict is never absolutely fixed from beginning to end. Small unexpected gestures, actions and non-actions can create very large changes in outcome. These small systemic inputs are the workbench of our field. Working with research techniques borrowed from other fields of social science, we are very slowly generating new methods more appropriate for the context of our work.

ICAR's objective is to build more resilient social, institutional and global relationships; able to handle routine conflicts more efficiently and to weather serious conflicts which might destroy more rigid structures. To achieve an understanding such resilient relationships our methods of learning and teaching must also be suitably adaptable. ■

A Groundwork for Resolution

By Eric P. Thor, Ph.D., S.A.M.,
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Disputes are inevitable in the global trade of goods, investments and intellectual property. Whether over economic systems or financial resources, these disputes can be a serious impediment to income, jobs, and regional and global growth. National interests and laws are often in conflict.

Several organizations and universities are working on ways to help resolve issues in less time and with less expense than the traditional national or world court systems. The world's formal legal dispute system is time consuming and expensive. It is not uncommon for cases to cost in excess of US$50 million.

Mediation, alternative dispute resolution, peace making and arbitration are techniques that can help solve commercial or civil disputes. This is particularly true where the "rule of law" or courts cannot—or will not—solve issues quickly, economically and efficiently. In fact, rural alternative dispute resolution grew out of farmers' disputes, which could not be resolved by existing institutions. In the U.S., more than 70% of disputes referred to mediation are solved to the satisfaction of all parties.

Around the world today, mediation and dispute resolution are used in everything from trade matters and cross border issues, to land issues, health determinations and divorce.

Within every country there are many different cultures, business practices, civil and commercial practices. The challenge of varied cultural and commercial practices is as prevalent in developed countries as in emerging market nations.

Take for example the Southwest region of the United States, where the population includes more than 27 Native American nations, large Asian and Hispanic communities and five major religions. People must work together to solve disputes, mediate crises and build communities. The techniques and institu-

tions that grew out of the U.S. farm credit crisis and America's Southwest cultural and ethnic diversity provide a number of ideas, techniques and educational tools that are useful in alternative dispute and crises resolution anywhere in the world.

In the emerging market nations—where two out of every three people in the world reside—these disputes can even be more difficult. In Indonesia, for example, the Academy of Agriculture, Bogor Agricultural University and Arizona State University have for three years been working to develop new ideas and institutions to assist alternative dispute resolution. This includes the establishment of the Indonesia Rural Alternative Dispute Resolution and Agribusiness Unit (IRADRU). It focuses on developing joint techniques, courses and certified training to assist in rural, civic and commercial dispute settlements.

IRADRU promotes civic and mediation centers in rural areas from which training and courses are offered for mediation certificate and dispute resolution programs. The purpose is for the respective parties to assist each other in the alternative dispute resolution process.

While focused on income and job growth through trade, Europe, Asia and the Americas have yet to develop effective dispute resolution mechanisms.■

Mediation Helps Rural Areas

By Chester A. Bailey,
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USDA's Agricultural Mediation Program, administered by the Farm Service Agency (FSA), was borne out of the farm financial crisis of the 1980s.

At that time, Farmers Home Administration (FmHA), now part of FSA, held a debt portfolio of about $26 billion, representing about 15% of the farm debt in the United States. The number of FmHA borrowers had declined to 242,000 in 1988, from about 270,000 in 1986. In January 1988, 85,000 borrowers were delinquent, and another 33,000 were in bankruptcy, foreclosure or other "inactive" status. The loan portfolio of delinquent borrowers totaled more than $11.4 billion, with about $9.6 billion in overdue payments of principal and interest.

The farm credit crisis provided fertile soil for innovation in the field of mediation. In 1985, the states of Iowa and Minnesota launched farmer-creditor mediation programs to keep farmers and lenders from being plowed under in bankruptcy and foreclosure actions. The following year, Alabama, Kansas, Mississippi, Nebraska, North Dakota, Oklahoma, South Dakota, Texas, Wisconsin and Wyoming started mediation programs.

While progress was being made at the state level, FmHA had hardened its position on not participating in state mediation programs. FmHA officials ruled that state governments could not mandate participation by a federal agency in mediation and county FmHA could not participate in mediation on a mandatory or voluntary basis. This decision was based on a historic eighth Circuit Court of Appeals decision in Coleman vs. Block in which the court ruled that FmHA could not foreclosure on a loan because it had not adequately notified the borrowers of their rights. The ruling prevented USDA and FmHA from foreclosing on loans and by extension, from participating in any process that could lead to foreclosure.

Many settlements that for one reason or another depended on FmHA's participation were frustrated. Consequently farmers began filing for bankruptcy because then FmHA would be forced to participate in bankruptcy proceedings. The problem was resolved with national legislation that included clarification of the rights of borrowers, including the

right to mediation. The Agricultural Credit Act of 1987 instituitionalized farm-creditor mediation at the federal level.

That legislation authorized the Secretary of Agriculture to help develop USDA certified state agricultural loan mediation programs. A total of US$7.5 million was appropriated for each of the fiscal years 1988 through 1991, with annual matching grants limited to the lessor of 50% or $500,000 of the cost of any State program. The level of matching grants has since been raised to 70%.

Legislation has three times extended the mediation program authority, with current authorization through fiscal year 2005. In addition the program has been expanded to include mediation issues involving wetland determinations, conservation compliance, rural water loan programs, grazing on National Forest System lands, pesticides, and other issues the Secretary deemed appropriate.

The mediation program has helped producers and creditors resolve disputes confidentially in a non-adversarial setting, thus avoiding the traditional process of litigation, appeals, bankruptcy and foreclosure. This is crucial as U.S. family farmers continue to deal with a fluctuating economy, low commodity prices and a seemingly endless rash of natural disasters.

The most difficult disputes to resolve involve farm loan programs (60%); Conservation Reserve Program (20%); and Production Flexibility Contracts (20%).

The mediation program continues to grow for a good reason–it works. The number of mediation clients increased from 4,140 in 1999 to more than 4,673 in 2000. Agreements or resolutions increased from 2,898 in 1999 to more than 3,411 in 2000. At a cost of $400 to $750 per case, mediation offers significant savings over national level administrative hearings, which cost around $3,500 per case.

A couple of examples illustrate the program's effectiveness. An Arizona farmer was denied a lower interest rate and not allowed to restructure his loan after a decade of delinquency with an FSA program. A major problem was lack of communication between FSA and the farmer, who did not understand some of the financial issues such as redoing the terms and conditions of the loan. The mediator settled this case within 27 hours to the satisfaction of both parties.

Another case involved a borrower who had no way to communicate outside of her native Navajo language. The mediators conducted the entire session in Navajo, which was a first for the state. Again, the principal problem was lack of communication, and the case was resolved within two weeks.

Federal legislation encourages state involvement by providing matching grant funds to participating states. Currently, 25 states participate: Alabama, Arizona, Arkansas, Florida, Idaho, Illinois, Indiana, Iowa, Kansas, Maryland, Michigan, Minnesota, Missouri, Nebraska, Nevada, New Jersey, New Mexico, North Dakota, Oklahoma, South Dakota, Texas, Utah, Washington, Wisconsin, and Wyoming.

The National Association of State Departments of Agriculture cites the program for its significant role in resolving agricultural credit and other disputes. The program has also received other significant recognition, including a National Association for rural Mental Health article citing the programs mental health benefits. The Center for Theology and Land lists the program in its Rapid Response brochure, a resource for farmers. Vice President Gore cited the program's effectiveness in a National Performance Review Report.

Several USDA agencies have requested the state mediation programs to mediate cases including rural housing, rural development issues, civil rights and risk management or crop insurance cases.

Mediation helps thousands of agricultural producers resolve financial problems and stay on their farms.

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Rural Empowerment and Agribusiness Development

By Maman Achmad Rifai,
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Indonesia is an archipelago country comprised of 17,508 islands, of which only 6,000 are inhabited. Seventy percent of the country's 215 million people—it is the fourth most populated country in the world—reside on the five main islands of Sumatra, Kalimantan, Sulawesi, Irian Jaya and Java.

Indonesia has 33 provinces, each of which is divided into districts and urban areas municipalities or kotamadya. In all there are 55 kotamadya and 246 districts, which are also divided into 3,529 sub districts and 67,544 villages.

Indonesia's population is comprised of approximately 300 ethnic group with 583 different languages and dialects. Our national motto is Bhineka Tunggal Ika which means "unity in diversity."

The total land area of Indonesia is about 181 million hectares. Of that total, 120 million hectares is forest; 22 million is cropped; 6 million are in perennial crops; 7 million in wetland crops; and 9 million, dry land crops. On Java, the average farm is less than one-half hectare, while the average is 1 hectare to 3 hectares on other islands.

Agriculture has long been the backbone of the Indonesian economy. Closely integrated with the wider objective of national development, agriculture has a strategic, multipurpose role as a provider of food and employment, a supplier of inputs to other sectors of the economy, and an important source of foreign exchange.

For rural peoples to be competitive and successfully meet the new challenges of globalization, they must adapt to the positive signals from strategic environment changes.

Agribusiness in Indonesia

Indonesia like many other countries, has gone through several stages of agricultural development. A significant achievement has been self-sufficiency in rice production, which was done through a comprehensive program of improved agronomic practices and greater use of value-adding inputs.

The agricultural sector grew at an average annual rate of 4.5 % during the First Long Term Development Plan. Agribusiness is a unique and critical sector, linking Indonesia's natural resource –based economy to greater employment and higher earnings through value-added processing of raw material inputs.

Agribusiness also supplies the domestic market with basic consumer goods and contributes to national productivity in value –added manufacturing. These value adding agricultural activities also promise to shift the source of non-oil foreign exchange earnings away from bulky, raw agricultural products toward more processed agricultural products.

Indonesia's current economic climate provides favorable conditions for further agribusiness development, as shown by domestic consumption patterns and agricultural production. Consumer spending on value-added food products is increasing at annual rate of approximately 6%. There is also a trend toward higher output per employee and higher value of production per hectare. The growth of demand for processed food products, will in turn, promote development of technology, investment and marketing systems.

The agricultural labor force, including forestry, has been growing approximately 1.05% per annum. To avoid the negative impact of excessive urbanization, the government policy on rural development has consistently encourage people to remain and make a living in the rural areas, while not necessarily engaging in agricultural production. This strategy is aimed at reducing the pressure for urban development and all the social and economic upheavals that accompany such a transformation.

The key to making this strategy successful is the generation of off-farm

employment, such as delivery services and manufacturing industries (input, post harvest, processing, packaging and transport). Agribusiness development, off-farm employment and diversification imply the need to broaden the development program from a concentration on the primacy of rice to one that optimizes rural productivity for higher employment and added value.

Accordingly, the government of Indonesia is adjusting its policies, promoting the expansion of other food crops, fisheries, livestock, spices and industrial crops. A stronger claim can be made for expansion of agro-based services and manufacturing, the sector where employment and income increases will be derived.

There is a need for commercialization of rural agriculture. Profit in the hands of farmers will expand rural economies, providing incomes and purchasing power. Commercialization will stimulate a diversification from rural to urban lifestyles.

There will be an increasing move away from traditional, small-holder farming, especially in villages close to urban centers. To enable rural residents meet this changing environment, villages must developed small agribusiness management system.

Recent political change in Indonesia have resulted in a society that is more open in expressing problems and needs. One result is an increasing number of conflicts not easy to resolve by existing institutions. Many conflicts related to agriculture, agribusiness and rural community development; this is significant since agriculture is the country's predominant economic sector.

Mediation and alternative dispute resolution are techniques that can be used to resolve conflicts, while at the same time serving as a vehicle for rural empowerment. The Indonesia Rural Alternative Dispute Resolution and Agribusiness Unit (IRADRU) is an integral part of partnership encouragement and rural community empowerment.

The main objective of a mediation group is to empower the rural community and rural agribusiness society to better serve society. IRADRU will be established at central level manage by universities consortium, related partners and at centers in selected districts or villages. A goal is to revitalize agribusiness groups, rural community association and networks; to build the capacity of rural peoples to participate in mediation activities.

Rural Agribusiness Mediation Center (RAMC) is designed to support commercialization of agriculture by mediating rural disputes. RAMC begins as a pilot project in full partnership of local community, with full control transferred to the local entity within two years. The goal is to be an independent institution fully managed by area residents. RAMC also provides human resource development, training key leaders or local professionals in mediation and dispute resolution.■

The 10 Most Common Mistakes Made Across the Board

By Susan F. Shultz,
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In the new millennium, virtually every company competes globally. Economics is blurring borders; technology is erasing them. This has tremendous implications for trade barriers. As a market-centered model overtakes the global economy, the capital markets compel reform.

Agribusiness is at the core. Trade barriers are eroding as a direct result of the free market pressures of the markets.

My premise is simple: Better boards equals better companies. In this powerful, volatile, global environment, companies are increasingly driving policy, making corporate governance pivotal. Speed, globalism, and transparency are upending the traditional government focus on territory, politics, protectionism, military might and diplomacy. As a result, the influence of business and its leadership is mushrooming. As the influence of governments recedes and market forces prevail, trade barriers will weaken.

Because of the evolving market driven globalize, we can no longer ignore the leadership of our agribusiness companies. These are the companies driving reform in the developing world; if their leadership is flawed, their economies are at risk.

Since the early 80s, about half of our executive search business at SSA has been recruiting, structuring, strengthening and benchmarking boards of directors. We have repeatedly observed companies making what we have come to call the 10 most common mistakes in governance. No list is a panacea. But it is an indicator and a platform.

It's important to remember that companies no longer win by outworking their competition; they win by outthinking them. That's what boards are about.

Originally, boards were sort of a part time gentleman's club for giving company affairs quick once over. But legal and shareholder demands are forcing boards to act more like full time auditors

Essentially, the role of the board is to address the big issues–and avoid the big, fatal mistakes. The key is to help insure that the right leadership is in place, with the resources they need to succeed.

Further, board members are a powerful multiplier, providing access to partners, the financial community and successful operating models. Strategic boards—boards that avoid the 10 mistakes--essentially are independent boards that are proactively engaged in a company's success at a policy level. It is ironic that the one group with the power to decide the fate of an organization is the one group that is often randomly selected, rarely held accountable and almost never evaluated.

Two key points to keep in mind. First, boards are a pivotal success factor for all companies. The importance of boards for large organizations is increasingly recognized. Less understood and valued are the potentials for boards of mid size and small, private, closely-held, fast growth and/or pre IPO companies, the very companies without the in-house resources of large companies. Agribusinesses with an international portfolio have the most to gain. If a company does not have a strategic board, it's already in trouble and doesn't even know it.

Secondly, boards are everyone's business. We depend on directors to take care of and hopefully grow our investments. Analysts know this, and pay a premium of 20% for good boards. Worldwide, 75% of institutional investors consider board practices at least as important as financial performance when they evaluate companies in which to invest.

Better boards mean better companies. If a company's leadership is making these 10 mistakes, beware. Rank company governance on a scale of 1 to 10, deducting a point for each mistake. Start with a perfect 10. A score less than 8 are reason for investigation, less than 5 is reason for alarm and under 3, a failed board.

1. Failure to recruit strategically. Proactively recruit to your future–to your strategic plan. If you don't know what you are looking for, how do you find it? And, how do you know when you have found it? Create a board charter. Benchmark existing competencies. Develop position profiles. Recruit in a continuum. Too often being nominated to a board has more to do with the potential director's relationships or star appeal, than capacity to contribute.
2. Too many insiders. The best number of insiders is one, because an insider's allegiance is likely to be to his boss. It is too difficult for an inside director to function as the subordinate of the CEO every day and then, at a board meeting, become, in effect, his superior. Further, a CEO may be reluctant to discuss certain issues in front of employees–such as a downsizing, succession or compensation. You already know what the insiders think. Why not get the benefit of outside expertise, access and wisdom?
3. Too many paid consultants. This includes your investment banker and your venture capital partners whose goal usually is to get their money out as quickly as possible, which may or may not coincide with what's best for the company. It also includes your commercial banker, lawyer, accountant, management consultant and anyone else who stands to have his or her income compromised. You already have their commitment and expertise. Why pay for it again when it is an obvious conflict? If a conflict exist, it is most likely to surface during the very crises the director is there to help resolve
4. Too much family. There are unique issues superimposed on independent directors of these companies, such as continuity, corporate credibility and family values. Employees, clients, customers, shareholders and the financial community need an independent governing body to validate and balance their interests.
5. Too many cronies. What could be wrong with inviting friends and colleagues to sit on your board? After all, these are the people you know best; the people you trust and respect who will support you-the people most like you. First, you are severely limiting your universe. Second, cronyism tends to beget favors and compromise objectivity. Interlocking directorships tend to breed beholden directors whose allegiance is to one another, rather than the shareholders. One study indicates CEO compensation is up to 17% higher in companies with interlocking directorships.
6. Getting the money wrong. Too many boards reward mediocrity and failure instead of achievement, with such devices as repriced options, exit packages, and compensation guarantees. Directors must manage consultants whose allegiance is likely to be to the CEO who pays them and who tend to benchmark rather than assess compensation packages.
7. Fear of diversity. Diversity means that you have access to the best. Period. Any CEO who has 10 people just like him sitting around the board table will end up essentially talking to himself. A homogenous board generates the same predictable solutions over and over again. Diversity drives innovation.
8. Information block. Too often management filters and parcels out information to their board. Strategic governance means entrusting your directors with full information, good and bad, and trusting directors to do the right thing. It also means providing access to employees, investors, analysts, customers and other key constituencies. In turn, it is the director's responsibility to know: the internal controls; what systems are in place; how management knows whether numbers from the field are accurate; what drives profitability;

how research and development decisions are made; budget comparisons relative to forecasts; how capital spending is done; how management reports back; and the critical success factors.

9. Passive boards. Does the board overlook more than it oversees? The only bad idea is no idea. If you sit there quietly, you never have the debate. Hearing other points of view gives other board members an opportunity to tailor their own ideas. Boards that exist solely to stamp their approval on management's decisions are failed boards. Entrenched directors are another symptom of a failed board. Is the board evaluated? Are members rotated off the board? Do board members evaluate the CEO effectively and plan succession proactively?
10. Failed Leadership. It is the CEO who imprints the board, empowers it and shapes its culture. If you don't have a CEO who wants a strong, strategic board, your leadership is failed. Is there transparency? Do independent directors meet privately? The dramatic untold stories are the hundreds of companies, public and private, that have avoided crises because of the advice and counsel of strategic boards of directors working in concert with a strategic CEO.

In this global economy, as free markets supplant governmental mandates, visionary, honorable leadership will make the difference in opening markets and reducing trade barriers.

Susan F. Shultz is the author of The Board Book. The Web site of SSA Executive Search International is www.ssaexec.com. ■

The 21st Century Agribusiness Leader

By Matthew Christoff, Co-Managing Director, Global Agribusiness Practice, Spencer Stuart, and Mary Thompson, Business Editor, Farm Journal

Enormous transitions are taking place in agribusiness today, and, as we've heard in numerous presentations at this conference, no where are those changes more acutely felt than in the leadership ranks.

The global agribusiness leadership survey undertaken by Spencer Stuart and Farm Journal involved a series of one-on-one interviews with more than 40 senior executives of agribusiness companies worldwide, complemented by a written survey distributed to more then 1,000 executives across the international agribusiness value chain.

We started by asking agribusiness executives to define what they saw as the trends most impacting their businesses, and the strategies they would use to address those issue, strategies that ultimately have a significant impact on the agribusiness leaders of the 21st Century.

Agribusiness leaders described the shift-taking place in the structure and strategies of agribusiness today as historic in its proportions.

Equally as significant was the overwhelming consensus among executives on the strategies needed to survive and thrive. In the last decade, we've seen the difference leadership makes in industries undergoing fundamental change, including the telecommunications, airlines and utilities. Agriculture today is no exception.

Executives told us that success for agribusinesses across the value chain will require leaders adept at using Internet and e-Commerce tools, but who are also skilled at maximizing the returns of standard business practices. It will take the teamwork of the young whiz kids with the experience of veteran business people to create this new agribusiness model. Building the right leadership team will be a major competitive issue for agribusiness in the future.

We started this project with the goal of trying to better understand the key trends effecting agribusiness executives across the value chain and around the world. Understanding how senior agribusiness leaders viewed the impact these trends on their business strategies was a critical foundation for defining future leadership needs and gaps.

It quickly became apparent that agribusiness is not dealing with trends, but rather a series of high-voltage shocks that are fueling a fundamental restructuring of the industry—and impact the strategies business will use to achieve and maintain profitability.

- Globalization tops the executive's list of important trends. It holds opportunities for expansion, new supply sources and greater demand complexities all fuse together into much higher pricing volatility. Equally, if not more volatile as we all know, are the political actions and reactions of governments, trade groups, activists and lobbying interests.
- Close on the heels of globalization were advances in information technology (IT) and the Internet. The Internet promotes the free transmission of information, allowing market pricing to be much more transparent and supporting opportunities to consolidate the supply chain. The industry's gold-rush atmosphere has disintegrated in recent months (and since this survey was conducted), but the Internet and IT will be a key element in the long-term strategies of agribusiness.
- Biotechnology. This is a classic type of shock—it provides a chance to fundamentally recreate products, which in turn, yields new opportunities for differentiation and value creation. But this is a good news/bad news story that is creating much risk and uncertainty, particularly where GMOs are concerned.
  But how big is the potential for biotech? One senior Ag chemical executive said it this way: "Imagine if you were a caveman in the Stone Age and had invented the wheel. Could you have imagined a Case combine? We're in the Stone Age of biotechnology."
- Dramatic consolidation among producers, input suppliers, processors and food retailers is creating huge multinational players seeking to build advantage as they grow. There are ripple effects as buyers demand pricing concessions and force new requirements on suppliers. The impact of the Wal-Marts of the world will continue. At the same time, consolidation creates opportunities for new businesses to serve niche markets or fill gaps left as businesses realign.Size of operations resulting from this consolidation also becomes a factor as executives wrestle with, as one news report called it, "A new kind of complexity and a new degree of turmoil."
- Last, but far from least is the power of today's consumer. Consumers are extremely vocal—by voice and by purchasing decisions—letting every element of the food industry know of their constantly changing health, convenience and taste requirements.

Strategies

The magnitude of these trends are both disquieting and exhilarating to today's leaders. Yet agribusiness executives are not passive in their responses, or the strategies needed to ensure that their companies are competitive in the future. Six key strategies were evident in the survey.

The words may look familiar—such things as "restructuring" or "expansion"—but the message we heard from industry leaders was clear: The actions being taken to carry out these strategies will radically alter the industry's landscape and competitive environment. People know there is no where to hide.

- Build advantage by profound industry restructuring: Whether by merg-

er, acquisition or alliances, agribusinesses are moving to capture cost benefits, productivity gains, broaden access to distribution, build scale or other synergies by consolidating within their segment, as well as across the value chain.

- Drive dramatic productivity improvements: Consolidation is not new—but the magnitude of today's consolidations in company sizes and types of businesses is unprecedented. And executives expect this to continue as the ante is raised in global competition.
- Achieve real global expansion: As you are all aware, in today's agribusiness marketplace, local is global. U.S. consumers eat New Zealand apples. Red and green tractors are becoming part of the landscape of Chinese agriculture. Consumer food companies are packaging the same product for multiple countries, languages and tastes. Production operations extending across hemispheres reduce weather and disease risks, as well as expand seasons. Interestingly, in our discussions with executives, it was also quite apparent that global market thinking is more prevalent among agribusiness leaders in the rest of the world, than in the U.S.
- Invest in development of revolutionary new products and services: You're all familiar with the tremendous potential in biotechnology and information technology. There is much controversy today about GMOs, but to the person, EVERY executive we interviewed felt that--barring a major health crisis or government setback--biotechnology will play a major role in helping agriculture feed the world. Biotechnology and information technology may yield greater opportunities to differentiate through product innovation then ever before. Pricing pressures are also fueling innovation. In the dairy sector, there are a number of examples where radical innovation is going hand-in-hand with traditional product development. Meeting consumer needs is crucial. Multiple dairy companies are developing "to-go" packaging for dairy beverages to meet consumers needs for convenience and portability. On the more radical front, Australia's Bonlac Foods has recreated Recaldent, a milk-derived product that can re-mineralize teeth. This new ingredient is now trademarked in Freedent gum.
- Aggressively building brands: Companies have renewed recognition of the value of brands—to leverage major investments in products and to differentiate products and companies with consumers, investors and political entities.
- Partner across the value change: It was almost a universal response that partnering is the way of the future. This is new wisdom. Agribusiness, although long a truly global industry, has in the past been totally reluctant to partner. Even the largest players told us "going it alone" is no longer feasible. Partners are needed to build competitive advantage and minimize exposure to the multitude of investment risks. It also allows product development to be more closely aligned with knowledge of consumer needs.

Executives emphasized that one of the most important aspects of partnering—as demonstrated by the grain exporting agreement between Mitsui and Cenex Harvest States—is creating ventures that maximize the strengths of each party and yield win-win situations for everyone. The future will hold varied and large-scale business relationships that past generations of agribusiness leaders could not even have imagined.

Implications

So what are the implications of these significant strategy shifts on the people who will lead agribusinesses tomorrow?

Our quantitative survey asked leaders to highlight the skills that need to be built within their companies today and three years from now. Four of the top five skill gaps were the same across the time frame: Strategic/business development, expertise in information technology, experience in international markets and marketing/brand management experience.

But moving to the top of the skills list in the future is experience in Internet/E-commerce, rated number one in combination with information technology. Dot.coms have been badly bruised and battered in the months since this survey was done, but the Internet, and more broadly IT, will play a crucial role in managing the supply chain, build better knowledge of consumers and competitors, and more effectively sell products.

Strategic planning/business development rated first today--was a close second in the future. This reflects the uncertain business horizon, an appreciation of the long-term impacts of strategic choices, and anticipation that consolidations and partnering will continue to be a vital for success.

Given the importance executives place on globalization of the industry, it's not at all surprising that management experience in international markets ranked third. Notably, non-U.S. players rated it much higher than did their U.S. counterparts.

We also asked executives what personality characteristics agribusiness leaders need to complement their functional skills.

- International experience—Visiting countries is no substitute for on the ground experience.
- Given the importance of partnering, the ability to understand and collaborate with other players across the value chain will be key.
- Rewards will go to those who can break out and successfully take risks, to become an agribusiness entrepreneur.
- Building advantage will start with knowing customers and consumers better than competitors do.
- Tomorrow's leaders must be positive to change and ambiguity.
- Another need is the ability to communicate to a variety of audiences; farmers, employees, bankers, customers, regulators and members of the community that the business calls home.
- And finally, there is a real need to be vocal advocates for the industry.

Once we identified the needed skills, we asked executives where top executive talent will come from today and in the future. Respondents see a significant talent gap within their companies. While a little more than half of new executive appointments would come from within their firm, they believe that new talent is needed from the outside. These executives see new talent coming from both other agribusiness companies, as well as companies outside of agribusiness. The fact that more than 40% of executives will come from outside the company is most surprising.

Executives expect their company's talent gap to grow. Two things we'd note: 26% of the executives expect talent to come from outside the industry, raising the question of how this new blood will be attracted. Secondly, there is a war for talent and other agribusinesses may have their sights aimed at your best and brightest.

We asked executives about the challenges they face in filling the talent gap—80% of respondents cited the lack of qualified talent within their own company as a major challenge in identifying new leaders.

Also of significant concern was the ability to attract talent from outside the industry. One industry executive lamented that agribusiness lacks the appeal to compete against such industries as the emerging E-commerce business in attracting the stars of tomorrow.

Respondents worry that the level of compensation may not be sufficient to attract great talent. Again, other indus-

tries pose fierce competition.

Once leaders are in place, how did you keep them? The top concern in retaining talent was that opportunities for growth may not be sufficient to retain the superstars. Our respondents feel vulnerable to recruitment of talent from other firms—both agribusiness and non-ag. Consistent with what executives told us regarding recruitment, compensation is an issue in retention of talent.

Whether hiring a member of the senior management team, hiring a new member of your teaching staff or educating tomorrow's agribusiness leaders, here are some issues to consider:

Leadership is not the job of one person. This was one of the messages we heard repeatedly. The supersonic speed of today's complex business environment mandates that leadership be nurtured in key personnel throughout the organization.

Are you instilling in your staff and students the excitement and challenges of a constantly changing agribusiness environment? Do they have the attitude and the skills needed to deal with change, with risk?

Does your staff or student body reflect the diversity of today's marketplace—within countries and across borders? As one executive put it: "People need to be comfortable in a global world and learn to work across geographies. There should be no foreigners.

Combinations of tools and strategies never before considered will be needed to address an ever-changing array of new challenges. Creativity and new thinking must be encouraged. Mistakes will be made, but they will be costly only if we don't learn from them.

Assessment of strategic options—whether new alliances, IT investments, new product or new market opportunities--will come faster and probably with more dollar signs than ever before. Risk assessment will be critical.

How are you building communication skills in your students? Do they know how to address a regulator, a customer, an investor, or one of those dread media people?

Finally, successful agribusiness leaders understand that all that is happening, all the forces reshaping the industry, are just the beginning. Comprehensive, structural changes are occurring in every element of our diverse and complex industry. The successful agribusiness leader of the 21st Century will have many and varied responses. Walking away from it won't be one.

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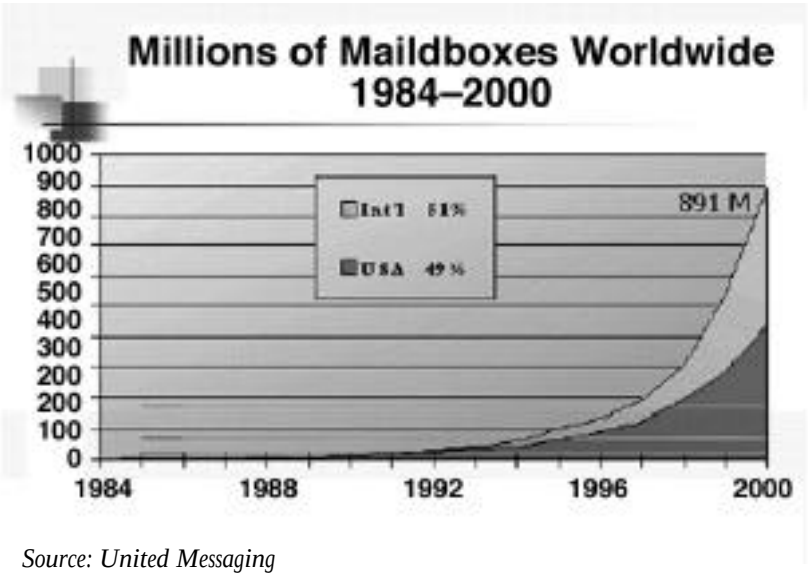
Technology and Relationship Risk

By Kenneth Smith, Managing Director, Strategic Directions, LLC, Alexandria, Va,. U.S.A.

International trade is being transformed by new transportation, communication and other technologies of the 21st Century. This transformation has pluses in that it greatly facilitates trade at the consumer level. However, there are also negatives in the form of greater risks associated with relationships at the business-to-business level.

Historically in trade transactions, a face-to-face meeting and handshake, or more recently, a paper document, existed to reduce the financial and material risk for specific transactions. Furthermore, traditional international conventions set up to help govern or solve disputes between individuals, businesses and governments in many countries are not always geared to operating in this new environment. As such, this virtual environment requires businesses to focus more on the risks associated with their partner relationships.

In the dawn of the new millennium, virtual trade is transforming the way modern enterprises do business. Virtual trade, that is doing business over the Internet, along with the tools needed to participate, is increasing at an enormous pace.



Source: United Messaging 2000 Annual Report

- According to Forrester Research, the total value of goods and service traded between companies over the Internet exceeded $100 billion in 2000. IDC forecasts that by the end of 2001, the volume of Internet commerce will reach $220 billion.
- ActivMedia's annual study of Web-generated revenues projects that E-commerce—which went from $2.7 billion in 1996 to $22 billion in 1998—will accelerate to US$717 billion by the end of 2001. The future is yet unknown and being defined even today.
- Similar to the invention of television, market merchants smell blood over the Internet. The Internet becomes a wild open frontier to explore.
- The Internet, virtual malls and on-line banking allows orders, shipment and payment to cross borders virtually untraceable by governments and others.
- On-line ordering and on-line payment is a fast growing market; the latest assessment show a 67% increase in 2000. United Messaging and others estimate that at the end of 2000 there were 891 million electronic mailboxes on the more than 700 different platforms—all traders, customers, and businesses in the new world of E-commerce and trade.

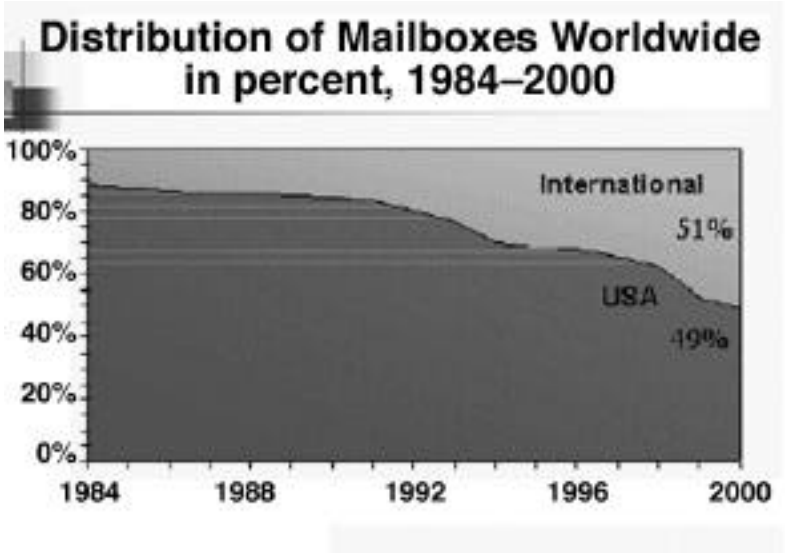
The e-mail market is booming outside the U.S. An estimated 53% of last year's e-mails originated outside the U.S. International e-mails are expected to further outstrip the U.S. in the future. Technology is changing fast; J-phone and I-mode devices in Japan suggest that more than half the nation uses wireless. The growth in these technologies suggest attacking global barriers must include ways to lessen "relationship risks" created by virtual trade.

This risk relates directly to the potential of commercial trade transactions

breaking down or ending in disputes because of the lack of understanding, trust or commitment on one or more of the parties. Strategic cross border alliances remain a major component of these risks in cross-Atlantic trade. The explosive growth of e-mail, a key indicator of Internet availability, see chart on previous page

Agribusiness and food trade education need to address components related to relationship risk. The historical concepts of "touchy and feely" components in trade are important to assure that disputes have a way to be resolved. Businesses need strategies to manage relationship risk. Governments need to adopt policies that facilitate relationship risk reduction. Individuals need to assume that risk management must be part of the transaction for the future.

If addressed, business and trade development will achieve a better understanding of the overall people process—cross borders, cross cultures, cross languages and cross oceans in this new environment. ■



Source: United Messaging 2000 Annual Report

Student Presentations

Should the U. S. Red Meat System Develop Shared Accountability by Implementing Traceability?

By Sterling Liddell,
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and
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Research recently completed as part of the U.S./EU Attacking Global Barriers Program suggests that the U.S. red meat system is falling behind many of its major competitors and trading partners in terms of traceability, transparency, and assurance (TTA) (Liddell). In fact, the U.S. pork system ranks last when compared with the United Kingdom (UK), Denmark, Canada, Japan and Australia/New Zealand for TTA (Liddell).

Traceability, also known as identity preservation, is defined in Liddell as the ability to track the identification of red meat products from retail back through the various stages of production. Transparency is the availability to consumers of information regarding the processes used during each phase of an individual red meat product's creation. Assurance is the processes involved in monitoring the food chain for safety through product tests and process audits.

TTA is obtained through a system of records and certifications that allow food products to be traced and certified back to different points in the food chain. Currently most U.S. red meat is traceable from retail back to the processor, but not to the farm or animal level. Establishing TTA prior to processing would require a system that is currently not in place in the United States. For example, completely traceable (animal-level) TTA would require a system capable of tracking where and when animals were born, progeny of the animal, when they were sold, the types of medications administered, feeding and handling regimes, slaughter location, grading information, shipment dates, the location of the retail outlet where the meat was sold, and any other information handlers or consumers might desire.

Producer traceable (farm-level) TTA would require similar information for groups of animals but not individual animals. Capturing and cataloguing this information for a TTA system will likely best be handled through electronic systems. Such systems are currently being developed. However, these systems will also require third-party certification to be credible (Bailey and Hayes).

It is conceivable that in the near future any consumer questions about the origin, management or processing procedures of a red meat product could be tracked back through the system to the farm or ranch where the animal was born (Coe). While the United States has been slow to adopt TTA standards and certifications, some countries in the European Union (EU) have developed comprehensive TTA systems. Table 1 presents the definitions and levels of TTA that exist in various TTA programs in the EU as identified by Liddell and demonstrates the complexity of tracing and record keeping systems that would be required in the United States if such systems were adopted here.

There are two reasons red meat producers and processors in the U.S. should be concerned that the U.S. system is lagging other countries in terms of TTA. First, consumers have become increasingly concerned about the processes (inputs and methods) used to produce food. Emerging consumer concerns that can be addressed with TTA include providing increased consumer confidence in food safety, animal welfare, and preserving the environment.

Many different claims can be and are made about what inputs, or absence of inputs, exist in food products; these claims may be problematic. For example, a product may claim to be free of genetically modified organisms (GMOs), be produced with sensitivity for animal welfare, or produced using environmentally-friendly processes. The potential for fraud exists if no credible system is in place to support these claims.

TTA can establish or affirm the reputations of producers and suppliers by communicating credible evidence, either

positive or negative, about a firm's products. Since these issues relate to the inputs and methods used in food production, they must necessarily be concerned with being able to trace food and food inputs to their sources.

Second, if competitors are able to differentiate their red meat products as being superior to U.S. red meat products in terms of TTA, the U.S. may lose market share in its red meat export markets. For example, recent heightened concerns about food safety in Japan, the U.S.'s principal export market for red meat, could eventually lead to a loss of U.S. market share if competitors such as Canada, Australia/New Zealand, and Denmark are successful in convincing Japanese buyers that their products are "safer" than U.S. products because their system provides more TTA than the U.S. system. Liddell and Bailey report the U.S. pork industry has less private involvement in developing food safety and quality assurance—food attributes not directly related to food safety but which still add value for some consumers, such as animal welfare, environmental preservation or absence of GMOs—than our principal international competitors (EU, Canada, and Australia/New Zealand) and customers (Canada and Japan) (See Table 2). The United States also has less public and private involvement in quality assurance programs for red meat than do our principal competitors and customers.

There has been some resistance to developing TTA systems in the United States. These are several reasons for this. Many producers believe TTA is being thrust upon them because of developments in the EU. They worry that developing TTA systems may unnecessarily raise consumer concerns about food safety, and that costs will be increased if TTA systems are adopted. U.S. red meat producers are also concerned about shared accountability (liability) if TTA systems were implemented in the United States. Processors are concerned about the costs of tracking and possibly segregating meat within packing plants; country-of-origin issues also concern some packers.

These issues have led to a slow reaction to TTA issues on the part of the US red meat industry. For example, at this conference Dr. John Wiemers, who chairs the Animal Identification Committee of USDA's APHIS, reported that the Committee is cautiously examining alternatives for tracking animals through the U.S. red meat system, but no plans are in place to implement any of these systems unless evidence exists that higher prices will be paid for products that are traceable. This suggests than an urgent need exists for research and extension work to investigate the potential benefits and costs to U.S. red meat producers if TTA programs were implemented in the United States.

Some may view the shared accountability presented by TTA as a threat. However, TTA may help alleviate threats from competitors, especially in export markets, and may also open new windows of opportunity within the U.S. red meat marketing system. If U.S. TTA systems were developed, they may or may not contain all of the TTA features listed in Table 1. But they should be developed based on the type of information and certification consumers would want and for which they are willing to pay. U.S systems will likely be based on electronic tracking. This provides new opportunities to not only provide TTA for marketing purposes, but also establishes a means to track production information in a way that has not been done before.

The result may be a system where information is passed more freely between consumer and producer than exists now. Producers could have direct feedback from and communicate production practices information to consumers. This information could include animal welfare assurances, environmental preservation techniques, medication and feeding regimes, or an absences of GMOs.

Producers could also obtain information on how individual animals graded at processing, where the meat was sold and priced, and consumer acceptance of the

product. It is possible that a bar code or other identifier on the product could provide the identification a consumer would need to communicate with a producer or processor by accessing an Internet web site or an email address.

An example of such a system that is currently operational is Swedish Farm Assured meats (Swedish Farm Assured). While traceability and quality assurance programs have become an essential part of the EU red meat marketing systems, this success may not be directly transferable to similar U.S. programs, as the two industries have different structures and cultures. While the EU has a chain approach (especially in pork) to connect the needs of consumers with production practices, the components of the U.S. chain are more distinct (Lautner).

U.S. producers are less export-dependent than some EU producers. In general, EU consumers are also more sensitized to food safety, animal welfare and environmental issues, as well as being less confident in government inspection/certification than are U.S. consumers. Thus the EU systems can be used as models but are probably not seamlessly transferable to the United States. Further research and extension activities are needed to determine which systems are appropriate to implement in the US to address the concerns of U.S. consumers as well as consumers from our major trading partners. ■

Table 1. Definitions and Levels of Traceability, Transparency, and Assurance Used in Different TTA Programs in the European Union.

Category and Subcategories	Definition
I. Traceability	The ability to trace the identification of an individual red meat product backward through the various stages of production.
A. Completely Traceable	The ability to trace red meat products backward from retail to initial inputs of production (genetic lines, feed inputs, etc.).
B. Producer Traceable	Identification of an individual product back to the producer but not to the initial production ingredients.
C. Processor Traceable	Identification of an individual product back to the processor but not to the producer.
D. Distributor Traceable	Identification of an individual product back to the distributor but not the processor.
E. National Origin Traceable	Identification of an individual product back to the nation of origin but not the distributor.
II. Transparency	The availability of consumer information about all of the processes used at each phase of a red meat product's manufacturing.
A. Producer Transparency	Information on the entire set of production practices from producer to consumer is available to consumers.

	B. Processor Transparency	Information is available to consumers on all of the production practices between the processor and the consumer.
	C. Distributor Transparency	Information is available to consumers on all production practices between the distributor and consumer.
	D. National Transparency	National standards are publicly available and decisions about national standards are open to both industry and consumer input.
III.	Assurance	The processes relating to monitoring the food chain for safety through product tests and process audits.
	A. Farm Assurance	The creation of safety and quality standards at the farm level that involve regular internal and external verification through testing or auditing.
	B. Processor Assurance	The process of testing and auditing specific requirements at the abattoir and processor level to ensure safety and quality standards are met.
	C. Transportation Assurance	The process of testing and auditing live animal and meat product transportation techniques to ensure specific standards of safety and quality are met.
	D. Retail Assurance	The process of auditing retail handling procedures to ensure that safety and quality standards are met.

Source: Liddell

Table 2. The Level of Private and Public Involvement in Certification Programs for Food Safety and Quality Assurance in Selected Countries.

Food Characteristic	Private Certification[a]	Public Certification[b]
Food Safety	US - Low	US - High
	UK - High	UK - High
	Denmark - High	Denmark - High
	Canada - Moderate	Canada - High
	ANZ[c] - High	ANZ - High
	Japan - Low	Japan - High
Quality Assurance	US - Low	US - Moderate
	UK - High	UK - Moderate
	Denmark - Moderate	Denmark - High
	Canada - Low	Canada - Moderate
	ANZ - Low	ANZ - Moderate
	Japan - Low	Japan - Moderate

Source: Liddell and Bailey.

Notes

[a] The levels for Private Certification are basically as follows:

High = aggressive private company and private association band naming and certifications for food safety and quality assurance

Moderate = Private associations actively involved in implementing systems to certify food safety and/or quality assurance

Low = Little private involvement in certifying food safety and/or quality assurance

[b] The levels for Public Certification are basically as follows:

High = Aggressive inspections relating to food safety and/or inputs in food production not directly related to food safety, HACCP implementation, ban on potentially unhealthy substances, etc.

Moderate = Adherence to animal protection laws with investigations usually generated following complaints

[c] ANZ = Australia/New Zealand

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Market Opportunities for Branded Beef

By Chris Luchs, B.S. Agribusiness, 2000, Morrison School of Agribusiness and Resource Management, Aizona State University, U.S.A.

Among four potential markets for U.S. branded beef—the Caribbean, Japan, Poland and South Korea, Poland, with its transitional economy, was the riskiest. But that has all changed with the recent bovine spongiform encephalopathy (BSE) incident in France, that resulted in a Poland banning all European Union (EU) meat.

The result is an opportunity for U.S. beef that can show a clear providence.

Prior to the BSE incident, EU beef exporters were already familiar with distribution channels, French and German companies own all hypermarkets in the country and there was consternation with American use of the bovine growth hormone.

All that has changed. There are still risks in the Polish market, but they are controllable. Poland is an investment. It can be a very profitable market that can grow in line with the volume that Nebraska Corn-Fed Beef (NCFB) can handle.

A study of the market also indicated Poland can be the launching pad for NCFB into the former Soviet Republics and Central Asian Republics.

The study used a variety of sources, including government Web sites, electronic publications, popular media and academic studies. In addition to this secondary research, a survey was developed to judge the attitudes of Polish consumers towards a U.S. branded beef product. Collaborating with me on the survey was Jan Barwicki, a MBA student at the University of Warsaw.

A total of 1,200 surveys were distributed throughout Poland, with 150 returned to date. From the surveys returned, we were able to draw some conclusions.

A market analysis was also done of the strengths, weaknesses and opportunities and threates—also known as a SWOT analysis—of the Polish beef market.

Market Segments, Characteristics

Based on the surveys, the Polish population can be divided into three segments—office workers, construction workers and business workers.

Office workers include clerks, doctors, and other white-collar occupations. This segment is more likely to eat light meals, less meat and more vegetables than the other segments. The construction worker segment includes farmers, carpenters and other manual labor occupations. This segment seems to eat meat at every meal. The business worker segment is made up of sales representatives, bankers and other business professionals. This group was the only group to consume beefsteaks on a regular basis. They will order steaks in restaurants as well as purchase steaks from stores or shops. This group also consumes more salad than the other two segments.

The survey also found that the typical Polish meal includes three courses—soup, a second dish and dessert. The soup is typically a hardy stew that usually includes meat. The second dish is usually a meat dish with vegetables. The dessert is usually a sweet pastry; however it can also be a cup of coffee. The meat used is predominantly of domestic origin.

In addition to the survey, our group questioned Jan Barwicki and his fellow students about the Polish perception of beef. According to them, there are only a limited number of beef dishes. Some examples are beef tartar, beef cutlet, beefsteak or Zraz zawijany, which is minced beef wrapped with a variety of additives such as cucumber, onion pepper in bread dough. It is usually served as an appetizer or a second dish.

Beef tartar, is raw beef with raw eggs. The beef used is usually hamburger. The beef must be very fresh for this dish; otherwise there is a risk of food poisoning.

Beef cutlet is a thinly sliced piece of beef that is pounded flat and then breaded and fried like German schnitzel. Beefsteak is a thick slice of beef similar to U.S. steaks, however it is served in smaller portions.

Strengths

Economically, Poland is moving in a positive direction. As a founding member of the WTO [World Trade Organization], and with aspirations of becoming a member of the EU, the motivations to become economically stable are great. Poland is currently the only European country on the U.S. Commerce Department's list of the 10 largest emerging markets. For these reasons, Poland is aggressively seeking to trade when opportunities arise.

During 1999, real GDP averaged US$4,000 per capita in Poland. This number is one quarter above pre-transitional levels (1984). Most of this accomplishment can be credited to aggressive strategies on trade. In 1999, the share of merchandise trade to GDP was approximately 44%, down from 49% in 1997. Manufactured products account for 77% of exports, a number that has consistently risen since 1992. One down side to this aggressive strategy is a current account balance of almost 9% of GDP for 1999.

In 1998, there was a 12% increase in income for the average employed Pole, which has translated into increased spending in several sectors of the economy. Specific sectors are education, culture and leisure. This trend is even more visible when self-employed households are studied. These households earn approximately 30% more than the national average, and consume considerably more products.

Other strengths are that the meat industry is the largest food sector in Poland, with total net sales reaching 20% of the entire sector in 1995. Poles consume a lot of meat. In household budgets, expenditure on meat amounts to one-eighth of total expenditure and one-third of expenditure on food, with per capita meat consumption averaging 72 kilograms (158 pounds) annually–U.S. per capita consumption is 212 pounds per annum. Poles are known as voracious meat consumers. According to our survey, Poles have meat for almost every other meal.

Weaknesses

The Polish market has many weaknesses. The greatest weaknesses are that Poland is not a traditional beef market; the strength and tradition of the pork industry; and the transitional nature of the Polish market.

The beef market is currently the weakest segment of the meat market, and is in a deep recession. The situation, however, may not be a result of lack of consumer preference, but rather a lack of beef itself. Beef production in Poland is strongly connected with the dairy industry; the domestic consumer is mainly offered beef that comes from dairy cows selected for slaughter. The supply of meat from young cattle for slaughter has also been very small in recent years.

Due to these shortages, Poland has become a significant importer of carcasses and meat "semi-products" for the past two years. These products were purchased from the European Union, as the quality of meat is superior to domestic products. Even the introduction of import compensation fees, has not slowed the growing trend to import meat.

In light of the declining numbers of cattle and pigs for slaughter, imported meats have become a substantial source of raw material supply for large meat processing plants.

In addition to the beef industry's recession, Poles are not accustomed to using much beef in their diet. The average Pole consumes only about 12 kg per year and this level is declining. According to Jan Barwicki, the usual beef product mixes in Polish grocery markets are ground beef, beefsteak/cutlet, and a product known as "beef with bones." These products are usually used as meal additives, not entrees. An example of beef use in Poland is a dish called Hunter's Soup,

which consists of vegetables, beef broth and chunks of meat. The meat is usually a combination of pork, beef, or chicken.

Pork is beef's largest competitor on per capita consumption. The historical reasons for such high pork consumption rates can be attributed to the abundance of wild boars, prior to the 19th century. Last year, Polish consumers consumed approximately 42 kilograms of pork per year, while beef and chicken average about 12 kg per annum. Pork is the staple in most diets and is present in many Polish recipes.

As mentioned earlier, Poland's GDP per capita was US$4,000 in 1999. Even though this is the first time that Poland's GDP exceeded its 1984 GDP, food expenditures still account for 50% of total expenditures. In addition, the majority of Poles earn less than the GDP, yet there is a small segment that earns much more than the GDP. This illustrates that even though Poland's economy is progressing, many Polish people are still just trying to survive; the gap between the rich and poor is growing.

Due to this subsistence environment, the majority of Poles are not buying luxury items. Despite the favorable perception of U.S. products, the current economic environment has led Poles to begin considering these products as high quality at a high price, while domestic products are beginning to be viewed as high quality at a low price. According to Jan Barwicki, the average price of beef that was consistently bought at Polish grocery markets was 20 zloty per kg (US$2.07 per pound). This is the price that Poles are accustomed to paying for beef.

Opportunities

The most substantial opportunity for the Polish beef market was created by the BSE or mad cow disease outbreak. The most recent outbreak occurred in France last month (Februrary 2000). Since BSE can be passed to humans and is incurable, Poland has banned beef importation from countries that have had outbreaks. According to Jan Barwicki, Poland has banned the importation of beef from France, Switzerland, United Kingdom, Portugal, Spain, Germany, Denmark and Holland. In fact, beef products from the United Kingdom have been banned since the United Kingdom's1984 BSE outbreak.

As mentioned before, Poland has been importing the majority of its beef. The outbreak of BSE in the EU has effectively eliminated the traditional supply for the beef market. Food brokers and export/import companies are desperately looking for beef from approved countries such as the U.S. This is, of course, great news for Nebraska Corn Fed Beef (NCFB), since [it is] a quality product to help fill the demand. And there is demand. At present, most people in the EU have a strong fear of domestic beef. A recent Newsweek article reported that Italian cattle raisers have set up roadblocks at borders to keep French beef out of their country; the checkpoints were kept in place even after the Italian government officially banned the meat. In addition, Jan Barwicki informed the group that Polish consumer would not buy any beef from the EU, not even if the beef is from an approved country.

Not that NCFB would want to capitalize on the very legitimate fears of an entire continent—but if they did, they would not be the only ones. Sweden is already making a play for the EU import beef market. Haakan Svenson, chief veterinarian for Sweden's National Food Administration, was recently quoted as saying, "These days I say you shouldn't be afraid, but if you are afraid: Eat Swedish."

Other opportunities for beef are strong market demand for beef byproducts, increasing pork prices, positive economic trends, changing consumer consumption. With the advent of the BSE outbreaks, Polish consumers are looking for substitute suppliers for beef byproducts such as honeycomb tripe, cow brains, blood, liver, and hearts. These products are used in many Polish delicacies. Honeycomb tripe is currently an especially hot product.

The increases in Polish pork are due to the expectation that pork production will decline by as much as 7 % in 2000 as compared to 1999. The decrease is a result of lower hog inventories and slaughter numbers. In conjunction, the number of farms and slaughter facilities is also decreasing.

In addition, Poland's economy is showing signs of strengthening. GDP is expected to grow by at least 5% by the end of 2000. Inflation and interest rates have been kept relatively low and unemployment rates are decreasing. The increase in employment is due to an increase in self-employment. As the Polish economic outlook continues to improve, Poles are beginning to eat out of the home more often.

This is in stark contrast to traditional Polish consumption, which focused on meals eaten at home.

Threats

The biggest threats to a successful introduction of NCFB's product are chicken, the BSE reaction, beef from other countries, and negative economic events. Chicken has been gaining ground in the Polish diet and economy in the last few years. Since 1990, Polish poultry consumption has increased at a steady rate every year, infringing on the domains on the domains of pork, and especially beef. By 2012, it is expected that per capita consumption of poultry will reach 18 kg.

Besides healthy considerations, certain market factors have fed the poultry increases. Popular U.S. fast food restaurants like McDonald's, Kentucky Fried Chicken have whetted the appetites for chicken convenience products. Poultry's lower prices (excluding turkey) have proven irresistible to Polish shoppers. There have been limited supplies of red meats due to BSE.

Poland's domestic poultry industry is also enjoying a bountiful market. According to USDA estimates, Polish producers enjoyed a 13% increase in production in 1997. They also exported 25,000 tons of poultry meat, mostly duck and geese. If there were any meat product that would threaten the tenuous beef industry in Poland right now, it would be poultry. Just as poultry consumption has been steadily increasing since 1990, beef consumption has been decreasing.

Another reason for chicken's increased consumption is the Polish consumer's reaction to the BSE outbreaks. The Polish consumer is now afraid of beef. They do not know where the beef is from and are concerned about their safety. Since the BSE outbreak, beef consumption has plummeted while substitute meat consumption is increasing. Also, Jan Barwicki indicated that many Poles are buying more vegetables and fruits and less red meat.

NCFB is not the only beef producers who are interested in Poland. Argentina, Australia, and other U.S. beef producers consider Poland to be an attractive market. The main reason, other than the BSE scare, is that Poland has been a relatively untapped market.

The last threat is an economic downturn. This seems unlikely; however Poland is a transition economy. Poland is progressing from a communist nation that was adamantly opposed to any capitalistic ideal, to a capitalistic nation. All it would take to destroy the progress is another financial scare like the "Asian Flu." Poland's economy is very delicate and civil and legislative conflicts still occur.

Conclusions

Based on our findings, Poland should be considered an investment for NCFB. Currently, NCFB cannot meet the total demand for beef in Poland. NCFB should target four and five star restaurants as consumers of its product. This target market is small enough for NCFB to supply.

In addition to market characterization and segmentation, the survey provided a glimpse into the Polish consumer psyche. Due to the BSE outbreak, the majority of respondents have decreased their consumption of beef. However, they have not eliminated it from their diets. Many

were willing to consume beef whose country of origin was clearly defined and as long as the country did not have any cases of BSE. Poles are also consuming other meats such as poultry, pork, and fish.

In general, the BSE scare has lead to a slight increase in the number of vegetarian consumers, increased the concern for food safety, and decreased the consumption of beef. Polish beef consumers have had all normal sources of beef banned and are looking for new BSE free suppliers such as the United States and Australia. There has been less emphasis on growth hormone and antibiotic usage and more emphasis on non-BSE countries of origin. The BSE scare has had little impact on the number of Poles eating outside the household, however many ask for the country of origin before ordering the beef. ■

Hands-on Classroom Projects

By Ana Sampaio, Graduate Student, Universidade de Tras-os-Montes e Alto Douro, Vila Real, Portugal

I was one of the first Portuguese students to participate in the Attacking Global Barriers Phoenix Project. As a student, I want to highlight the success factors and what I learned while studying in the U.S.

Wine labeling differences and related disputes are an important area of study for attacking global barriers between Europe and the U.S. I wanted to understand the facts of the case. The Phoenix Project meant I could not only meet other faculty, students and industry representatives, but learn educationally and personally. For me, this was very appealing.

My first project under the Phoenix Project was related to rural development and rural tourism. Students and professors wanted to better understand the differences between Portugal and the United States. Rural tourism is a very important part of Europe's tourism industry. Tourism is also increasingly important in Arizona and the U.S. Both countries need more jobs, and income opportunities in rural areas.

From a student's perspective, I could learn about developing rural income and jobs for the two regions, as well as gain a better understanding of America's Western heritage, and its careful ways of preserving homes, ranches and rural settings.

This is very important. In Portugal we have three of four decades of development in rural tourism and continue to work on it., especially in the Duoro region where I am from. As one of the world's premier wine regions, we need to create more jobs and opportunities for young people to help the area develop.

Portugal's rural tourism's strengths lie in its rich history and beautiful manor houses. This makes possible tourism in quiet and enchanting places. One of these manor houses, located in the Douro Valley, has been considered by a BBC travel show as having the sixth greatest view in the world.

During this project the Awatukee Wine and Food Society of Arizona visited this region and was most impressed with rural tourism. My team project in the U.S. compared the U.S. and Europe's opportunities in rural tourism.

As a student, this was my first experience studying and doing a team project in the U.S. It was followed by my participation and graduation with an International MBA in food and agribusiness.

In this program, the students are earning many very important lessons. Most important, I feel, is the the contact with different people and cultures. The students and faculty, are learning to work in teams, with people from other countries and cultures. Each of these students have different views, The students learned to respect these differences that are more

difficult to learn in some other way. I think the Phoenix Project and international MBA students have learned it the best way—working together and learning together. It made all of us growing as individuals.

During the international MBA, I have had studied many important questions in today's more interconnected and global world. I gained a deeper insight on trade block regulations, namely the North American Free Trade Agreement while studying in the U.S., and the European Union while studying in the United Kingdom. As a Portuguese citizen, already belonging and understanding the European common space, it was interesting to see it from the British perspective.

Besides this, I've developed precious managerial skills, learning how all the components of a company function. Now I feel prepared to manage one for real. The practical application of these managerial skills helped develop a team project as part of the MBA program. The objective of this "real world" experience is to provide students with management tools that go behind the academic knowledge and a classroom. In addition to my U.S. team projects, I did one in Europe.

My European team project was developed in Valencia, Spain, working for a British company that commercializes organic fruit. The company is considering expanding its activities to the Spanish market. Our project was to analysis and make a "real" recommendation to the top management. Our job was to develop a market research centered in the distribution channels in southern Europe. The team included U.S. and European students. Both brought different points of view.

All the academic and agribusiness skills I had the opportunity to develop will certainly be very important, not only for my career, but also for my life as a human being.

My current project is my thesis for my international MBA. It focuses on improving the marketing the wine industry of the Duoro region in today's electronic age. I'm sure it can be very helpful in breaking down many of the barriers to global trade. The thesis looks at new ways to improve the competitiveness of a group of Douro Valley wine producers, who produce the world famous Porto wine. More than 40% of the jobs of the region are related to the wine industry. If Europe is going to improve jobs, income and opportunities for my generation, we must do things differently in many respects from previous generations.

For those of you not familiar with it, I'll use the designation Porto, instead of Port. The first is the designation the U.S. government recognizes as referring to the original product produced in Portugal. Despite several attempts in different parts of the world to produce and commercialize imitation wines of Porto, we in Europe feel our wine is best. The particular characteristics of the region where it is produced makes it simply not able to be grown and produced elsewhere. These unigue characteristics have to do with the Duoro region's very dry climate in the summer and cold climate in the winter.

Porto makers also have a unique way of working the land. The steep hills surrounding the Douro River form terraces in the landscape where vines are planted.

The Porto wine activity is very important for the Portuguese economy representing 67% of the country's wine exports, 20% of the total agricultural export and 4% of the Portuguese Gross National Product (GNP). This activity is very dependent on external markets, with 86.4% of Porto sold to foreign markets.

As an agribusiness, this is key to our future, including income and jobs. Porto's main markets, in order of importance, are France, Holland and Portugal. Due to the specifications of the U.S. market—ranking seventh on volume of trade and sixth in value—this is presently one of the most important markets for Porto.

U.S. consumption has been following a continuous expansion of sales and consumption especially since 1992. Much of the increase in consumption is of special, rare types of Porto, that are higher priced

and produce more revenue. These products differ from the average Porto by both superior quality and price.

The U.S. market is strategically seen as a huge and preferential growth area for the Portugese wine industry. The industry needs more marketing information about America. My thesis will help expand products, jobs and income opportunities in both Europe and North America. The Portuguese market share of fortified wines in the United States has risen 10% over the last year; Portugal is the first supplier of fortified wines to the U.S. A rise in price of 173% over the last five years, confirms the importance of the United States in the Porto trade.

There are difficulties in this market. A lack of further penetration in this market is related to low consumption per capita of fortified wines like Porto. Increased production and consumption of imitations of the original Porto are coming from California. We in Europe feel that these are not as good as ours, but few know the differences.

This is even more important in light of the trends of very nationalistic consumption. Eighty-nine percent of fortified wines consumed in the United States are American brands. Lack of consumer fortified wine knowledge is another constraint for further penetration of Porto in the United States.

Recently a study developed by a U.S. consulting company on the American consumer of Porto wine revealed that another major barrier to the consumption of Porto is lack of what one may call Porto "culture." That is, the lack of understanding the differences in Port wine, where Porto comes from, how it should be served, when to drink it and what to eat with it. The Internet can have an important role in this matter, as it allows for an extended reach of consumers and may work as an information medium per excellence.

Another challenge is related to the focus of U.S. consumers in the vintage type of Porto, which despite being a top quality Porto is also the most expensive. This may also work as a constraint for the expansion of Porto consumption, but could be overcome with further promotion of other special types that, although less expensive, are still of excellent quality. ■

Diversity in the Classroom

By Natalia Usmanova, Graduate Student, Morrison School of Agribusiness and Resource Management, Arizona State University, Mesa, Arizona, U.S.A.

Over the last 15 to 20 years, education worldwide has become increasingly global and international. Student mobility around the world has grown dramatically. The United States is one of the leaders in terms of international student population.

Indeed, the number of international students in the U.S. from 1976/77 to 1996/97 has more than doubled/ At the graduate level, the percentage of foreign students has gone from 5.4% to 11.6%; at the doctorate level, from 11.3% to 24.95% (National Center for Education Statistics).

Increasing diversity trends have affected not only the student body, but also U.S. faculty: female professors enter areas formerly dominated by males and there are large numbers of Asian and Indian professors, especially in fundamental sciences and technology.

Arizona State University's student population reflects the national trends:

- 15% are from ethnic minority backgrounds, with Hispanics having the largest representation;
- 51% are women; and
- 17% are international students from 101 countries, with the largest representation from India (ASU statistics).

Business students should be taking advantage of the internationalization of their universities. U.S. universities have some of the most international classrooms. Students can have classmates from a number of different countries. But do they know how to deal with them?

High Context vs. Low Context Cultures

Learning from or even communicating with somebody from a different country may be a challenge. Some cultures are more open than others; it is usually easier to understand those cultures that are similar to yours.

You may sit in a class with a few international student and never learn anything about their culture because they do not socialize in the same way as Americans do. Often, they are shy about their English; they are not used to speaking out and expressing their opinions.

International students may present challenges to instructors, as well. At the ASU Morrison School of Agribusiness and Resource Management we do have a lot of international students, yet few instructors actually have experience effectively dealing with foreigners. Most assignments–case studies, discussions on marketing and management strategies–are based on U.S. culture and business practices. This puts some international students at a disadvantage because they may not be as familiar with the U.S. culture and business practices as are American students.

Example: ASU had a few Thai students, some of whom were quite "Americanized". One of them is now doing an internship with a U.S. company, as a field marketing representative in the industrial goods division. She is a very bright and out-spoken student. She has completed her coursework, except for the capstone case studies class, which is required for her program of study. She is absolutely petrified about taking this class. Her English is excellent, she has been in this country long enough

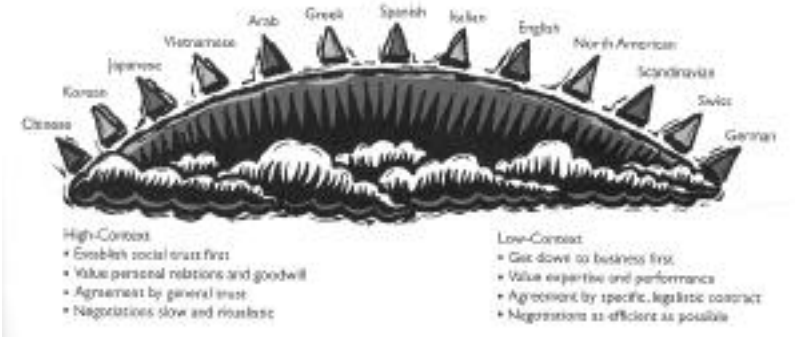

Figure 1. Contrasting High-Context and Low-Context Cultures (Munter, 1993)

to become familiar with cultural issues and she is very successful in her internship. Unlike some of her countrymen, she is not afraid to express her opinions and speak in front of an audience. She had attempted to take the class and ended up withdrawing from it–apparently the class was too American for her.

Not communicating effectively with international students in the classrooms does not serve American students well, as they are not taking advantage of the cultural experiences of their classmates' experiences, an interaction that may be useful in their own careers.

Facilitating better cross-cultural communication may be done through in-class and out-of-class activities. In-class activities would call for more flexibility on the part of the instructor: adjusting assignments for foreign students and giving them a chance to talk about their countries and culture. Examples may include

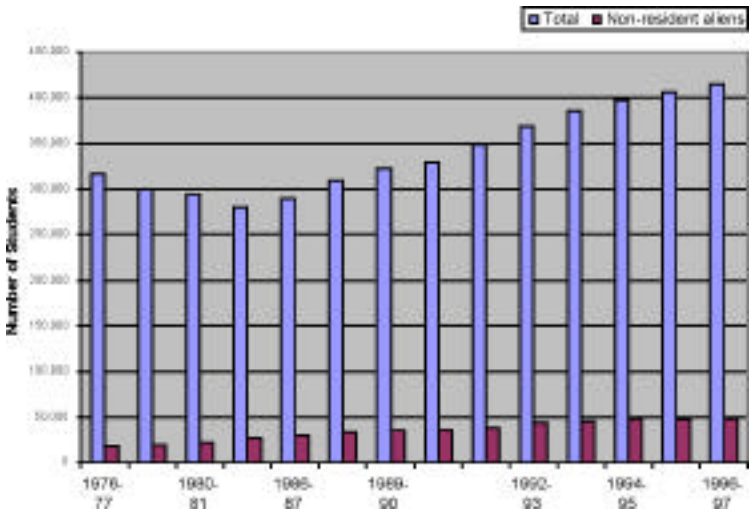

Figure 2. Master's Degrees Granted by U.S. Universities

case studies on companies that do business in their country, discussion of their national currency challenges, general overview of history, geography, language and culture, and how history affects the present situation in their home countries.

In order to ameliorate linguistic challenges for international students, some professors may need to better monitor their language while lecturing, through minimizing usage of idiomatic expressions and U.S. specific slang. In some cases instructors should make an effort to speak slower and clearer

European Students in the U.S.

Since the roots of American culture are primarily European, Europeans are easier to understand than other foreigners. The U.S. has had a long trading history with Europe, which now is a popular destination for American tourists. Most Europeans speak English. Essentially, Europe is not much of an unknown land.

[Western] European students communicate quite effectively in a classroom. They will actually talk and debate, especially if there are several of them in a class. And instructors can usually relate to the European culture.

However, the percentage of European students in U.S. universities is not high. There are few incentives for Western European students to seek a degree from a U.S. university as the costs and quality of education in their home countries and in the U.S. are comparable. Short-term, three- to five-month exchange programs are quite effective in attracting more European students to U.S. universities. By the same token, U.S. students can benefit from exchange trips to the EU universities–they are not likely to experience major shocks in cultures that are not drastically different from their own.

Students at the Morrison School of Agribusiness agree that they benefit from having European exchange students in their classes. EU students have a different perspective on many issues and voice their opinions in the classroom, especially on highly debatable issues, such as genetically modified foods and Common Agricultural Policy (CAP) in the European Union.

Many graduate students at The Morrison School acknowledge that they were attracted to the program because of great student diversity and opportunities to get to know and work on team projects with people from virtually all over the world. The Phoenix Project allows ASU students to host Europeans and to travel and study in Europe. Participating in the project helped expand horizons and even led to some lucrative job opportunities for those who took advantage of the program. Even those students who have not participated would like to see such programs continuing and expanding. ■

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Agribusiness Education and Graduate Research

Karen Novak, Coordinator for the Agribusiness MBA Program, University of Nebraska

When I moved from Pennsylvania to Arizona and began the Agribusiness master of science program at Arizona State University, I knew I would be exposed to a different culture and have new experiences. I did not know that most of classes would be populated by international students, mainly from the European Union (EU). But I am glad it turned out that way. I was able to receive an internationally focused education based on my classmates from the EU and professors dedicated to giving U.S. students an international education. I worked full-time during the agribusiness program, so an international exchange was not available to me.

Funded in part by the U.S. Department of Education's FIPSE program, the Attacking Global Barriers, or Phoenix Project, provided a steady stream of EU students from the Royal Agricultural College to the ASU campus at Mesa, Arizona. These students became my classmates, collaborators and friends. The advantages I received in this program are enormous.

I could count on an internationally diverse makeup in all my classes. Group projects always had a global perspective. I learned about my classmates' cultures and they learned about mine. A certain Frito-Lay case study in advanced agribusiness marketing had me explaining what "chips and dips" are. A Harvard Business School case study had my EU classmates teaching me French wine appellations.

The area where I felt it was most valuable was learning the world view of genetically modified organisms. In the advanced agribusiness marketing class, I was involved in a group project with another American, a Russian and a Vietnamese.

This class was a true mixture of American and international students. Part-time American students included the state 4-H director, the state director of the Department of Agriculture, two employees of Delta Pine, two employees of Shamrock Milk, and a dairy manager whose operation regularly used BST. ■

Advanced Agribusiness Marketing

FIPSE (Phoenix)

Spain	2
France	2
Portugal	2
Germany	1

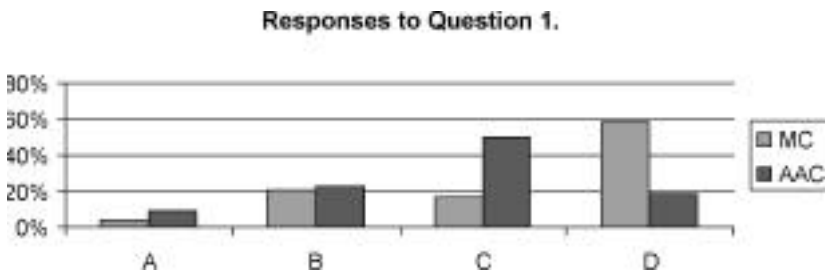
Other Internationals

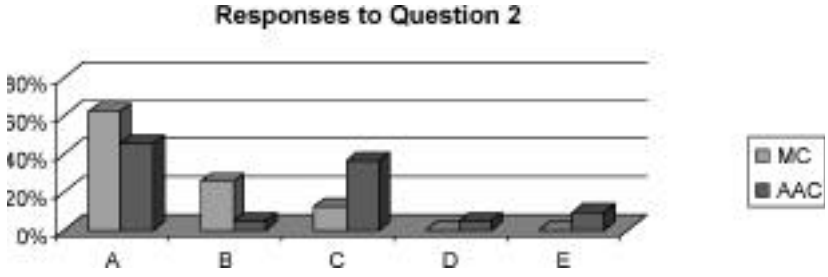
Mexico	1
China	1
Russia	1
Thailand	4
Vietnam	1

U.S. Students
11

To illustrate the difference in consumer views between international and U.S. students concerning organic and GMO foods, our group administered a simple survey to an undergraduate marketing class comprised of 23 Americans. We tabulated our results and then conducted a survey in our graduate-level advanced agribusiness marketing class to facilitate discussion among our classmates. The charts with this paper illustrate the percentages of the marketing class [MC], and the advanced agribusiness marketing class [AAC], taken by a combination of FIPSE students, international students and American students.

The results of the survey facilitated a class discussion that broke down cultural misunderstandings and expanded the world view of U.S. students. The international team formed in this course has led to presentations and posters being accepted at International Food and Agribusiness Management Association 2000 and 2001 Symposiums in Chicago and Sydney, the Western Agricultural Economics Association 2001 at Utah State University, and the International Family Strengths Symposium 2001 at the University of Nebraska-Lincoln.





Question 1

Given the choice between a genetically engineered tomato and an organic tomato, would you choose:

A. the genetically engineered tomato
B. the conventional tomato
C. an organic tomato
D. don't care

This chart shows that the majority [almost 60%] of MC respondents answered "don't care," while half the AAC respondents answered "an organic tomato."

Question 2

Would you be willing to pay more money for choice your choice?

A. No must be priced the same as other choice
B. Would be willing to pay 1-5% more
C. Would be willing to pay 5-% more
D. Would be willing to pay 10-20% more
E. Would be willing to pay 20 –30% more

The majority of both classes [MC almost 60%, AAC over 40%] answered "No, must be priced the same as other choice." The majority of both groups are not willing to pay a premium for a choice of organically or commercially produced products. However, roughly 36% of the respondents from AAC indicated they would be willing to pay 5% more for their choice.

Question 3

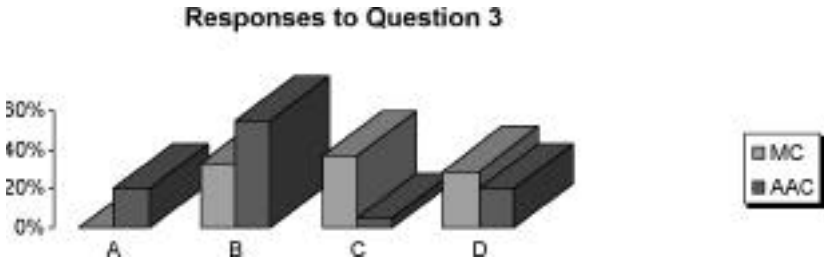
Which would you buy for your baby or child?

A. BST milk
B. BST free milk
C. Don't know
D. Don't care

Almost 60% of the AAC respondents indicated they would feed their children BST-free milk. Of the MC respondents, 37% did not know and 33% indicated they would feed their children BST milk. In addition, 29% of the MC respondents and 20% of the AAC respondents indicated they did not care if the milk they fed their children was BST free or not.

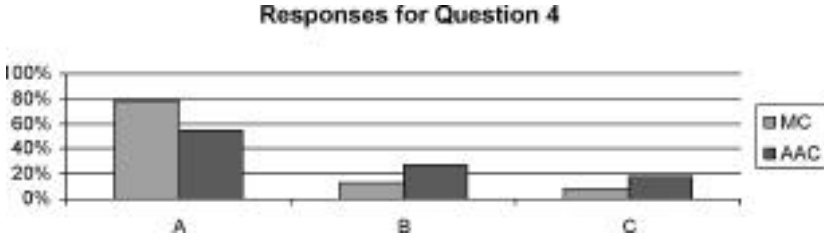
Question 4

Do you think food should be labeled to give consumers the choice between genetically engineered, organic and conventionally produced food?



A. Yes
B. No
C. Don't Care

Seventy-nine percent of MC respondents and 54% of AAC respondents indicated they thought food should be labeled to allow a choice between genetically engineered, organic and conventionally produced foods.



Appendix

Conference Agenda

Organized by:

Our thanks and appreciation to the following organizations for their participation in the development of the 2001 Leadership for Attacking Global Food & Agribusiness Barriers Conference:

- Rural Mediation and Finance Training Unit (RMFTU), Arizona State University East
- Institute for Conflict Analysis and Resolution (ICAR), George Mason University
- Royal Agricultural College (RAC), United Kingdom
- Phoenix Project Consortium, a U.S. and EU Coalition

Location:

Johnson Center
George Mason University
Fairfax Campus
Fairfax, Virginia

Dates:

March 12th – 14th, 2001

Day 1:

March 12th
Morning: Meeting Room C, Third Floor, Johnson Center

9:00 a.m. – 4:00 p.m.
Phoenix Consortium Meeting
(Consortium Members)

Evening: Multi-Use Room, Ground Floor, Johnson Center

6:00 p.m.–7:30 p.m.
Opening Reception
Delegates from Europe and the Americas
An informal reception will welcome arriving participants, speakers and Phoenix Consortium Members.

March 13th
Morning: Multi-Use Room, Ground Floor, Johnson Center

7:45 a.m.
Coffee/Tea

8:00 a.m.
Welcome
Mr. Frank Blechman, MS Field Program Coordinator of the Applied Practice and Theory Program, Institute for Conflict Analysis and Resolution (ICAR), George Mason University

8:15 a.m.
Challenges for Leaders
Chaired by Dr. Jonathan Turner, Dean, School of Business, Royal Agricultural College, United Kingdom, EU Director of Phoenix Consortium
Lord Henry Plumb, Member of the European Parliament (MEP), Governor, Royal Agricultural College (RAC), and European Phoenix Consortium Advisor

- The Need for Change in Future Leaders
- Failure to Address Confrontation
- Barriers to Global Earnings, Sales and Employment Growth
- Policy Break-up

9:00 a.m.
The U.S. Attacking Global Barriers Overview
Dr. Eric P. Thor, S.A.M., Professor at Arizona State University (ASU) and U.S. Director of Phoenix Consortium: Outline of the Results of the Attacking Global Barriers Project in the Context of Transatlantic Trade.

- Europe's and U.S. Largest Trading Partners
- Differences in Leadership and Needs
- Barriers to Trade
- Dispute Resolution and Conflict Analysis

Questions and Remarks

9:20 a.m.
Coffee/Tea

9.30 a.m.
The Future of Global Leadership: The challenges of the new millennium to food and agribusiness management.
Chaired by Pr. Frank Blechman
Ms. Jean Heilman Grier, Senior Counsel for Trade Agreements, U.S. Department of Commerce

- Leadership of national governments and global institutions
- The hallmarks of leadership: transparency, accountability and integrity
- Managing complexity in the international trade arena
- Balancing the interests of stakeholders

Questions and Remarks

10:15 a.m.
Challenges from an EU Government Perspective
Chaired by Dr. Jonathan Turner, Dean, School of Business, Royal Agricultural College, United Kingdom, E.U. Director of Phoenix Consortium.
Mr. Tony Van der haegen, Minister-Counselor, European Commission Delegation to the United States: Challenges in Negotiating Trade Barriers and the Realities of Politics.
Questions and Remarks

11:00 a.m.
Discussion

12:15 p.m.
Lunch – Sponsored by Harris Nesbitt
Introduction by Dr. Eric Thor, S.A.M., Professor and U.S. Director, Phoenix Consortium
Luncheon Speaker: The Honorable John Block, President & CEO of Food Distributors International (FDI), Former Secretary of the U.S. Department of Agriculture, Former Director of Agriculture for the State of Illinois

Afternoon: Meeting Rooms A-B, Third Floor, Johnson Center

2:00 p.m.
Concurrent Sessions:

Session A: International Food Safety and International Standards
Moderator: Dr. DeeVon Bailey, Professor, Utah State University
International Food Issues: BSE, Traceability, GMO's, Residues, and Consumer Grading Standards:

- Professor Alan Ebringer, King's College, University of London: BSE – an Auto-Immune Disease
- Dr. John F. Wiemers, National Animal Identification Director, Animal and Plant Health Inspection Service (APHIS), USDA
- Dr. Tim Moruzzi, Professor, Royal Agricultural College [Rapporteur]

Session B: Alternative Trade, Conflict and Dispute Resolution
Moderator: Dr. Eric P. Thor, S.A.M., Professor and U.S. Director of Phoenix Consortium

- Dr. Frank Blechman, Institute for Conflict Analysis and Resolution (ICAR)
- Mr. Chet Bailey, United States Department of Agriculture (USDA), Mediation Service
- Dr. Jean-Yves Roy, Professor, Ecole Superieure D'Agriculture D'Angers, France
- Dr. Richard G. Wilcox, Professor, Nuertingen University, Germany [Rapporteur]

4:00–4:15 p.m.
Tea

4:15–5:15 p.m.
Chaired by Dr. Eric Thor
Speaker: The Honorable Ann M. Veneman, Secretary of the U.S. Department of Agriculture (Invited)

Evening:
6:30–8.30 p.m. Reception hosted by British Deputy Head of Mission
Mr. Tony Brenton
(2934 Edgevale Terrace
NW, Washington D.C.)

Day 3:

March 14th
Morning: Multi-Use Room,
Ground Floor, Johnson Center

7:00 a.m.
Coffee/Tea

7:15 a.m.
Future Leaders and Student Views – Panel with ASU and Other Students
Chaired by Ms. Natalia Usmanova, Project Coordinator, Rural Mediation, ASU

- American students' educational enrichment from having European Union (EU) students in their classes.
- Marketing class analyzing market entry for branded beef (Nebraska Corn Fed Beef) in Poland in light of the BSE scare in Europe.
- Indonesia project and cultural barriers involved with technology and training the trainer.

8:00 a.m.
Break/ Informal Discussion

8:15 a.m.
What Do We Need to Do as Businesspersons and Educators to Increase Government Understanding and Improve Leadership in Global Business and Education?
Chaired by Dr. Eric Thor

- Ms. Mary Thompson, Business Editor, Farm Journal: Leadership and CEO Skills in the Future
- Mr. Ken Peoples, Chairman and CEO, The Peoples Group
- Mr. Ken Smith, President and Director, Strategic Directions LLC: Business Innovations and Change

Questions and Remarks

9:50 a.m.
Coffee/Tea

10:00 a.m.
Three Discussion Groups Meeting Rooms A-C, Third Floor, Johnson Center

Group A: Globalization of Education and Trade Issues

- Leader and opening statement: Dr. Ceslav Ciobanu, Professor and Ambassador from Moldova, Black Sea Common Market and Eastern Europe
- Mr. Maman Rifai, M.S., Senior Advisor, Human Resource Development, Ministry of Agriculture, Indonesia
- Mr. Ron Laskin, Allfield Associates, Inc., New York: Globalization, Countertrade and New Technologies
- Mr. Kenny Dan, Salt River - Pima Maricopa Indian Community, Arizona

Group B: Future Education Endowments and Needs of the Transatlantic Region

- Leader and opening statement: Pr. Ioannis Kazazis, Technological Educational Institute (TEI), Greece
- Dr. John Bednar, Director of Language and International Trade Program, Clemson University
- Dr. Collien Hefferan, Administrator of Cooperative State Research, Education, and Extension Service (CSREES), USDA

Dr. Francisco Diniz, Universidade de Tras-os-Montes e Alto Douro (UTAD), Portugal [Rapporteur]

Group C: New Directions: Where Do We Go From Here?

- Leader and opening statement: Dr. Jonathan Turner, Dean, School of Business, Royal Agricultural College
- Dr. Eric Thor, S.A.M. Professor and U.S. Director, Phoenix Consortium

- Ms. Ann Jorgensen, Chairperson, Farm Credit Insurance Corporation
- Pr. Daniel Conforte, Head of Agribusiness, Universidad ORT Uruguay, Uruguay

11:00 a.m.
Break/ Informal Discussion

Multi-Use Room, Ground Floor, Johnson Center

11:15–12:15 p.m.
Plenary: Reports from discussion groups identifying the requirements for future leaders

12:30 p.m.
Lunch Hosted by Harris Nesbitt
Introduction by Dr. Eric Thor, S.A.M., Professor and U.S. Director, Phoenix Consortium
Speaker: The Honorable Dr. Rod Paige, U.S. Secretary of Education (Invited)

2:00
The Impact of Transatlantic Education on Skills Provision for Future Leaders.
Chaired by Dr. Cassandra Courtney, Fund for the Improvement of Postsecondary Education (FIPSE), U.S. Department of Education

The International MBA in Food and Agribusiness:
2.15 p.m.
Dr. Jonathan Turner: Objectives, Structure and Outcomes of the International MBA Program

2.30 p.m.
Dr. Eric Thor: Achievement and Impact on Partner Countries

2.45 p.m.
Dr. Francisco Diniz, Universidade de Tras-os-Montes e Alto Douro (UTAD), Portugal

3.00 p.m.
Ms. Mary Anne Normile: Overview of Trade Barriers Research by USDA Economic Research Service
Questions and Remarks

3.40 p.m. Future Leaders' Views
- Ana Sampaio: Hands-on Classroom Projects
- Sterling Liddell: New Educational Experiences
- Natalia Usmanova: Cultural Diversity in the Classroom

4.15 p.m.
Discussion

5:00 p.m.
Final Informal Negotiations and Resolutions – Enlargement and Discussion of Issues. Speaker and Participant Closing Reception. French Wine, British Grog, German Beer, Portuguese Port, and American Coca Cola

Speaker Biographical Data

The following information was submitted by the speakers or their offices and summarized by the Phoenix Consortium staff for the purposes of this conference document.

Dr. DeeVon Bailey. DeeVon Bailey is a professor in the Department of Economics at Utah State University (USU). He coordinates the FIPSE program at USU and teaches agribusiness marketing. He is an extension economist and also has an active research program. His recent research has been in the area of traceability in red meat markets.

Chester A. Bailey. Chester Bailey is the manager of the United States Department of Agriculture (USDA) Agricultural Mediation Program. Bailey has a B.S. degree in agricultural economics from the University of Maine and a Master's degree in Public Finance from the American University in the College of Business Administration. Bailey has been employed with the USDA for more than twenty-nine years and has worked at both the state and federal levels. Bailey was responsible for writing and clearing the regulations on the USDA Certified State Agricultural Loan Mediation Program.

Dr. John Clay Bednar. Dr. Bednar is Director of Language and International Trade Program at Clemson University. His area of expertise is language and culture, with an emphasis on French-speaking and American-speaking nations. In addition to his academic activities, he has worked in the private sector and served as a consultant and translator to corporate and political clients. Bednar has extensively published and produced a number of documentary and educational videos. He received his B.A. in English from Princeton University and his "licence" and "doctorat" in French from Université de Besançon, France.

Frank O. Blechman. Frank Blechman is Field Coordinator for the Applied Practice and Theory Program of the Institute for Conflict Analysis and Resolution of George Mason University. Presently, he directs a team studying racial and ethnic conflict in schools and worldviews in environmental policy dialogues. Blechman has extensive experience in conflict research and analysis, conflict intervention, mediation and conciliation of public issues, designing conflict-resolving processes and systems, and providing training in conflict resolution to policymakers, public and private officials and citizen leaders. He has led interventions in disputes involving land-use, transportation, historic preservation, church procedures, educational structures, ethnic rivalry and governance, and worked in public policy as a community and political organizer and activist for fifteen years.

The Honorable John Rusling Block. Farmer, soldier, administrator and Cabinet officer, John R. Block is the president and CEO of Food Distributors International, a trade association based in the Washington, DC area. Before joining Food Distributors International, Block served five years as secretary of the U.S. Department of Agriculture and four years as director of agriculture for the State of Illinois. He graduated from the U.S. Military Academy at West Point, NY, in 1957 and served for three years as an airborne infantry officer, and then returned to Illinois to form a farming partnership with his father. As a member of the Reagan Cabinet and a key member of the Economic Policy Council, Block dealt with difficult tax and domestic farm program issues. Reflecting his commitment to opening world markets for U.S. agricultural products, Secretary Block visited more than 30 foreign countries. As agriculture secretary, Block played a key role in developing the 1985 Farm Bill and establishing a Conservation Reserve Program. Block currently has a syndicated weekly radio commentary broadcast by more than 200 stations in 30 states. He serves on corporate and advisory boards for domestic and international organizations.

Cassandra H. Courtney. Courtney has served as Program Officer for the Fund for the Improvement of Postsecondary Education (FIPSE) since 1994. She came to FIPSE from Wilberforce University in Ohio where she had worked for nearly 14 years as a faculty member and administrator, six of those years as Vice President for Academic Affairs. While in Ohio she was an active member of the Accreditation Review Council and the consultant-evaluator corps of the North Central Association. She is a 1989 graduate of Harvard's Institute on Educational Management. Courtney earned the Ph.D. in educational psychology at the Pennsylvania State University with a concentration in applied statistics and educational assessment. Her undergraduate degree was completed at Wilson College, a liberal arts college for women, also in Pennsylvania. She is currently one of four program officers assigned to FIPSE's international projects. In FY 2000 she was coordinator of FIPSE's largest competition, the Comprehensive Program.

Mr. Kenny Dan. Kenny Dan began work with Salt River Pima Indian Community in Scottsdale, Arizona as Economic Development Financial Analyst in 1999. He is responsible for commercial and lease development, and conducts regulatory compliance. In addition, he oversees most agricultural projects for the department. Presently, he is project manager for a farm audit, development of a new 4-H cooperative extension program, and farm leases. Prior to this, Mr. Dan worked for the Navajo Agricultural Products Industry in New Mexico from 1993-1999. He worked on all aspects of farm operations, new business ventures, and conducted industry research. Mr. Dan has been working with the ASU East Rural Mediation and Finance Training Unit since 1994 assisting with special presentation and projects related to global trade barriers and cultural diversity in agriculture. He traveled to the Royal Agricultural College in 1999 as part of the ASU FIPSE program. He was certified as a State Agricultural Mediator in November 2000. Mr. Dan received both his B.S. and M.S. Degree in Agribusiness from ASU School of Agribusiness and Resource Management. Mr. Dan takes special interest in livestock, horsemanship and rural living.

Dr. Francisco Diniz. Dr. Diniz is Associate Professor of Development Economics at Universidade de Trás-os-Montes e Alto Douro (UTAD), Portugal. He received his B.S. in Business Administration from Institut Superior de Economia da Universidade Técnica de Lisboa and both his master's equivalent and doctorate degree in Economics from UTAD. His research interests include rural tourism and rural development, and linear programming in farm management.

Alan Ebringer, BSc, MD, FRCP, FRACP,FRCPath. Ebringer is Professor of Immunology at King's College, in the University of London. He has published some 150 papers, dealing mainly with autoimmune diseases. He graduated in Medicine from the University of Melbourne, in Australia and since 1970 he has been working in the University of London. His group has shown that ankylosing spondylitis is an autoimmune disease caused by exposure to Klehsiella infection of the gut and rheumatoid arthritis by Proteus infection of the upper urinary tract. Since 1996 his group has been working on "bovine spongiform encephalopathy" (BSE) trying to demonstrate that this condition is an autoimmune disease following exposure to Acinetobacter microbes, bacteria which are commonly found in soil, sewage and muddy waters. If it is confirmed that BSE is an autoimmune disease, then this would mean that it cannot be passed on by eating meat and therefore the culling of cattle is unnecessary.

Ms. Jean Heilman Grier. Grier serves as a senior legal adviser to the International Trade Administration in the U.S. Department of Commerce and to U.S. interagency committees on a wide range of issues, including the World Trade Organization; Japanese regulatory and trade issues; government procurement; Section 301 of the Trade Act of

1974; the North American Free Trade Agreement; trade agreement monitoring and compliance; and international dispute resolution. She has had major responsibilities in the negotiation and drafting of NAFTA and a number of bilateral trade agreements with Japan. She has also worked extensively with the NAFTA Advisory Committee on Private Commercial Disputes. Currently, she a member of the U.S. negotiating teams for the U.S.-Singapore Free Trade Agreement and the U.S.-Chile Free Trade Agreement. Ms. Grier received her LL.M. in Japanese law from the University of Washington and J.D. from the University of Minnesota.

Dr. Colien Hefferan. Dr. Hefferan became Administrator of Cooperative State Research, Education, and Extension Service (CSREES) on October 7, 2000. She joined USDA in 1979 as an economist with the Family Economics Research Group, Agricultural Research Service. She transferred to the Cooperative State Research Service in 1988, where she served most recently as Deputy Administrator for Natural Resources, Food and Social Sciences. With the establishment of the CSREES, Hefferan was named the Deputy Administrator for Competitive Research, Grants, and Award Management, and has also served as the Associate Administrator and Acting Administrator of CSREES. Prior to joining USDA, she served on the faculty at The Pennsylvania State University, as an adjunct faculty member at the University of Maryland, and as a research fellow at the Australian National University in Canberra. She has authored more than 60 research articles and chapters, edited several books on economic issues and trends influencing families and consumers, and spoken widely on issues related to advancing agricultural research and education. Hefferan has a Ph.D. and a M.S. Degree from the University of Illinois and a B.S. degree from the University of Arizona.

Ms. Ann Jorgensen. Ann Jorgensen serves on the Farm Credit Administration Board and chairs the Board of Directors of the Farm Credit Insurance Corporation. She is the first woman to serve as Chairman of the Corporation. Ms. Jorgensen has extensive experience in production agriculture and accounting and has served on a number of boards for the State of Iowa, including the Board of Regents, the Iowa Department of Economic Development and the Iowa Rural Development Council. A native of Iowa, Ms. Jorgensen holds a B.A. from the University of Iowa. She, her husband, and son continue to operate their family farm in her home state.

Pr. Ioannis Kazazis . Kazazis is Professor of Food Quality Control/ Quality Assurance and Institutional ECTS Coordinator at the Technological Educational Institute (TEI) of Athens, School of Food Technology and Nutrition, Department of Oenology and Spirits Technology. He is also Councillor at the Institute of Technological Education (ITE) with the Greek Ministry of Education in the areas of educational policy, curriculum development, and quality assurance, among others. He is also involved in the transnational coordination of European programs. He got his Master's in Food Science from Reading University, UK and his doctorate in agricultural sciences from Agricultural University of Athens.

Ron Laskin . Mr. Laskin is a seasoned operations executive with over 35 years multi-industry experience directing geographic expansion, global supply chain management, countertrade and project finance activities. Currently, he is Executive VP of Allfield Associates, a firm that has specialized in countertrade management and global sourcing services since 1982. Prior to that, he served as Senior VP of Active International (a leading corporate barter company), Managing Director of Colgate Palmolive's in-house trading company, Corporate Manager of Venture Projects at ABB, Director of Operations for Combustion Engineering and Project Manager in manufacturing research for Boeing. Mr. Laskin holds a MBA and BS (mechanical engineering) from Drexel University. He has spoken

on the subject of countertrade at World Bank, EBRD and various international chambers of commerce.

Mary Anne Normile. Mary Anne Normile is an agricultural economist with the Economic Research Service of the U.S. Department of Agriculture. Throughout her career at USDA, she has done extensive work in the area of agricultural and trade policy. She is currently working as coordinator of research and analysis related to the WTO. Prior to her current assignment, she was Team Leader of the Europe Team, where she led a program of research and analysis on the agricultural and trade policies of the European Union. During the Uruguay Round, she participated in a USDA task force that provided analytical support to officials involved in the negotiations on agriculture. Ms. Normile has also worked on analysis of Canadian agricultural policy, where she provided technical expertise and analysis of Canadian agricultural policies for the U.S.-Canada Free Trade Agreement negotiations. In 1996-97, Ms. Normile was a Congressional Fellow with the Brookings Institution's LEGIS program, where she worked on agricultural and trade issues for Sen. Bob Kerrey of Nebraska. Ms. Normile is the recipient of several USDA awards for her work. Ms. Normile received her B.A. from Daemen College in Buffalo, N.Y., her M.A. in Economics from Penn State University, with additional graduate studies in Economics at the University of Maryland.

The Honorable Roderick Paige, Ph.D. Rod Paige was confirmed by the United States Senate as the 7th Secretary of Education on January 20, 2001. Secretary Paige earned a bachelor's degree from Jackson State University in Mississippi and a Master's degree and a doctorate from Indiana University. Secretary Paige has spent decades working in education, including his positions as Dean of the College of Education at Texas Southern University, officer and superintendent of schools of the Board of Education of the Houston Independent School District (HISD); he has served on review committees of the Texas Education Agency and the State Board of Education's Task Force on High-School Education, and has chaired the Youth Employment Issues Subcommittee of the National Commission for Employment Policy of the U.S. Department of Labor. His outstanding contributions to the development of education were marked with numerous awards, including the Richard R. Green Award as the outstanding urban educator of 1999, the Harold W. McGraw, Jr., Prize in Education and the National Association of Black School Educators' Superintendent of the Year award.

Kenneth Peoples. Mr. Peoples provides financial and management consulting services for domestic and international clients in banking and agribusiness development, restructuring, joint venture development and privatization in developing markets. In addition to his extensive international experience, Mr. Peoples served as President and CEO of the Farm Credit System Assistance Board, senior attorney with the Farm Credit Administration and in private practice as a member of DC and Virginia bars. Mr. Peoples graduated from the University of Virginia School of Law, has a Master's degree from Tufts University's Fletcher School of Law and Diplomacy, and a Bachelor's degree from Duke University.

The Lord Plumb of Coleshill DL FRAgS. Lord Plumb, farmer and politician, has been a name, associated with Agriculture for over forty years at both national and international level. He was the second longest serving President of the UK National Farmers Union, President of the European Parliament, and he was Co-President of the EU-ACP Joint Assembly for five years. He was elected, and four times re-elected, as Member of the European Parliament for the Cotswolds (comprising seven Westminster Constituencies), a mandate he held for 25 years, and retired from this post, which coincided with a change in the electoral system for the European Elections in 1999, viz. into a system of proportional representation. After his retirement from the Cotswolds

Constituency as its one and only MEP, he resumed his seat at The House of Lords and continues to play an active role in current debate. In addition, he continues an active interest in many national and international organisations. He is also the first Chancellor of Coventry University, President of the Campden & Chorleywood Food Research Association at Chipping Campden and Governor of the Royal Agricultural College, Cirencester.

Maman Achmad Rifai. Mr. Rifai is currently Senior Advisor of Directorate General of Agriculture Human Resource Development, Ministry of Agriculture, Republic of Indonesia. Mr. Rifai holds a Master's of Art degree in Agriculture from Sam Houston State University (SHSU), Texas, and an MBA in Human Resource Management. He has worked in agricultural development and education both domestically and internationally and held the following positions: Director of Agribusiness and Agroindustry Development Project (GTZ-Germany); Manager of Technical Cooperation among developing Countries Program (UNDP); Project Coordinator, Agriculture Teacher and Youth Farmer Training Project (JICA-JAPAN); Project Supervisor, Small Holder Training Project (FAO-UNDP) and headed Chief Division of Planning, Ministry of Agriculture, Indonesia.

Ken Smith. Mr. Smith is Managing Principal of the firm Strategic Directions, LLC, (SDL) which assists public and private organizations in their efforts to achieve performance, financial, and policy results. Prior to joining SDL, Smith completed a term as Executive Assistant to the Chairman of the Farm Credit System Insurance Corporation (FCSIC) and the Farm Credit Administration Board (FCA) where he played major roles in the regulatory "reinvention" efforts. He also served as Deputy Administrator for Management and Policy Support at the Rural Electrification Administration (REA) and Assistant Deputy Administrator for the Farmers Home Administration (FmHA). His academic credentials include the completion of the prestigious Program for Senior Government Managers at Harvard.

Ms. Mary Thompson. Mary Thompson is the Business Editor of Farm Journal, the largest nationally circulated farm business publication in the United States. In addition to business issues, she is responsible for coverage of the food industry and international news shaping global markets. Prior to joining Farm Journal in 1991, she was editor of Agri Finance magazine and worked for 14 years in daily newspapers. She is a graduate of Iowa State University.

Dr. Eric P. Thor. Eric Thor, State Agricultural Mediator, specializes in global finance, Alternative Dispute Resolution, project finance, cooperatives, and trade. He is director of Rural Mediation and Finance Training Unit and professor at Arizona State University, U.S.A., and Royal Agricultural College, U.K. He was chartered by Queen Elisabeth II in 1998. He has co-authored Anatomy of American Agricultural Credit Crisis, published by U.C. Davis in 1994. He earned his Master's degree in agricultural economics and his Ph.D. in economics at the University of California, Berkeley. Thor has been involved in both research and management of a number of public and private entities, including Bank of America, Crocker National Bank, the U.S. Treasury, and the U.S. Department of Agriculture. He has supervised or participated in settlements of over 20,000 cases. Thor helped draft the 1987 Credit Act, which set up a series of local mediation services. He also has worked internationally in over thirty countries on a wide variety of financial challenges and dispute resolutions.

Tony Van der haegen. Tony Van der haegen is Minister-Counselor in the European Commission's Washington Delegation. He was appointed to this position in August 2000, after serving in the Directorate-General for Health and Consumer Protection (SANCO) of the European Commission since 1990. From

1995 until his arrival in the U.S., he was responsible for the Directorate General's International Relations, including consumer policy, food safety and Codex issues. He joined the European Commission in 1968. He did most of the groundwork to bring together 62 consumer organizations from both sides of the Atlantic, which gave birth in September 1998 to the Transatlantic Consumer Dialogue (TACD). Tony Van der haegen holds BAs in both interpretation and translation, with specialization in economics, from the University of Antwerp, Belgium. He is a native of Belgium; he is married and has one son and three daughters.

The Honorable Ann Veneman. Ann M. Veneman was unanimously confirmed by the U.S. Senate and sworn in as the 27th Secretary of the U.S. Department of Agriculture (USDA) on January 20, 2001. She served as USDA Deputy Secretary from 1991 to 1993. From 1989 to 1991, Veneman served as Deputy Undersecretary of Agriculture for International Affairs and Commodity Programs. She joined the USDA's Foreign Agricultural Service in 1986 and served as Associate Administrator until 1989. Veneman was actively involved in the Uruguay Round of GATT negotiations, NAFTA, and the U.S.-Canada Free Trade Agreement. From 1995 to 1999, Veneman served as Secretary of the California Department of Food and Agriculture (CDFA), managing agricultural programs and services for the nation's largest agricultural production state. Secretary Veneman, an attorney, was raised on a peach farm in Modesto, California. She earned her bachelor's degree in political science from the University of California at Davis, a master's degree in public policy from the University of California at Berkeley, and a juris doctorate from the University of California, Hastings College of Law.

John F. Wiemers. After obtaining a DVM degree from Iowa State University in 1977, Dr. Wiemers practiced food animal medicine in Iowa for nine years. In 1986 he left private practice to work for USDA's Food Safety and Inspection Service (FSIS) as a supervisory meat inspector. Two years later he began working for Animal and Plant Health Inspection Service (APHIS), USDA as Swine Epidemiologist in Illinois. In 1993, Dr. Wiemers completed a master's degree in Integrated Food Animal Management Systems at the University of Illinois at Champaign/ Urbana. Since that time he has served on the USDA, APHIS, VS, Animal Health Programs Staff. He is now on a special two year assignment to work with the State, Federal, and Industry representatives to develop a national livestock identification system that will meet the needs of all sectors. Dr. Wiemers is a member of the Animal Identification committees of the National Institute for Animal Agriculture and the United States Animal Health Association. He serves as chairman of the Interagency Committee on Animal Identification.

Dr. Richard G. Wilcox. Dr. Wilcox is Professor of International Management and Intercultural Communication at Nuertingen University's School of Business Administration. He left Southern California as an undergraduate to study German & English Cultural Studies, Applied Linguistics, and Philosophy at the J.W. Goethe University in Frankfurt Main, Germany. After receiving his doctorate he went into HRM at a major Siemens subsidiary where he worked on several major international projects in the energy sector. He later became head of intercultural communication and top-management-English training and managed several strategic internationalization projects at the Siemens HQ in Munich. After serving for over 15 years in international management assignments at Siemens, he accepted a professorship at Nuertingen University, a public institution of tertiary education in southwest Germany. Dr. Wilcox's interests include intercultural negotiation and arbitration skills, political risk, international trade, and strategic international management issues.

U.S. Trade Representative Robert Zoellick

Editor's note: This is a transcript from a 13 June 2001 press briefing in Brussels at which U.S. Trade Representative Robert Zoellick discussed United States-European Union (EU) disputes and trade liberalization. The main subject of the press conference was the June 14 and 15, 2001, U.S.-EU Summit in Sweden. This summary of briefing and transcript were distributed by the Office of International Information Programs, U.S Department of State, Web site: http://usinfo.state.gov.

Summary of briefing: Trade Representative Ambassador Robert Zoellick, while conceding that trade disputes have created some impediments to the U.S.-European Union (EU) relationship, said that both sides still try to focus on larger economic and security issues.

"Each of us have political environments in which we must operate," said Zoellick. "If you look at the economic gains to our countries" of freer trade, "they're enormous," he said, adding that it was "important to keep the liberalization process moving forward."

"It will be an inevitable fact of life that we will have these trade conflicts," Zoellick said, citing on-going U.S. concerns about the EU's failure to implement a new regime for imports of U.S. hormone-treated beef and the European Commission's "inability" to provide approvals for biotech products. "That has stopped a great deal of our industry sales," he said. At the same time, Zoellick noted the resolution of the dispute over the European banana import regime that had gone on for nine years.

Zoellick defended recent U.S. actions to protect the domestic steel industry, noting that the measures were consistent with U.S. obligations under the World Trade Organization (WTO) and added that Europe could benefit from an examination of the worldwide over capacity for steel production. "We think it would be appropriate to try to have international discussions on capacity and some of these longer-term problems, and we'll just see how that goes."

He also defended the Bush Administration's decision not to join the Kyoto agreement on global warning, citing such reasons as the exclusion of major developing countries from accord's requirements. "You have a fundamental problem," he said, "if you don't have key greenhouse gas producers as part of the process."

Following is the transcipt of Zoellick's press conference from the White House Office of the Press Secretary:

MS. COUNTRYMAN: Hi. We're going to do an on-the-record briefing at this time by Ambassador Zoellick, USTR. He's going to preview for you tomorrow's U.S.-EU Summit, and then take your questions. Thanks.

AMBASSADOR ZOELLICK: Thank you, Mary Ellen. Well, as you all undoubtedly are aware, today's primary focus was on NATO and the exchange on transatlantic security issues. Tomorrow we turn to a different Euro-Atlantic relationship—that of the U.S. ties with an evolving European Union.

This is the 21st U.S.-EU Summit. This was a process that was launched in 1991, with something called the Transatlantic Declaration, which was an early post-Cold War effort to adjust institutional ties to a new Europe. Just so you have a sense of the logic of that declaration, at the time the European Union was then called the European Community, the EC as opposed to the EU. It was clear that it was developing particular institutions of a European-wide nature. So the prior Bush administration thought it was useful to develop additional special ties with the institutions with that new Europe, at the same time that it would maintain its ties with the nation states—or in this context, called the member states.

Let me give you a word of explanation about the European Union, because I understand people have different backgrounds—some of you here are from the states. Most Americans struggle to understand exactly what the European Union is. That's okay, because most Europeans do, as well. I find that it's helpful to keep in mind the notion of a shared sovereignty, because what one has going on in Europe today is a question of a mixture of sovereignty at the nation state level and the European institution level. And it's an ongoing process.

It started with the whole notion of trying to promote the recovery of Europe through economic ties that would also

have a political dimension. A key cornerstone of this is the Franco-German reconciliation. Over the years there have been various treaties that have created a set of legal structures and European institutions. One of the most significant [is] the Treaty of Rome, which is, in a sense, the basic Constitution. Another [is] the single market, which was launched in 1992.

Together this has created a mixed political structure. The reason I'm explaining this is it's going to affect a little bit your understanding about what's going on tomorrow. The European Union includes something called the European Council, which is an intergovernmental body dealing with the member states. That happens at the ministerial level across a series of topics. It also happens at the head of government level.

Then there's the European Commission, which is, obviously headquartered in Brussels and which many Americans associate with the European Union. That, in effect, is the executive branch that develops and executes the policies. Then there's the European Parliament, which meets both in Brussels and Strasbourg—this week in Strasbourg. Over the course of the 1990s, it has been developing a stronger role; under something called the Treaty of Amsterdam, it was given some co-decisional authority.

Then there's the European Central Bank, coming out of Maastricht. Again, to give you a sense of the period of time—you're all familiar with the euro, but starting next year, the euro will be transformed to an actual currency, with about 14 billion notes and 50 billion coins. Then there's the European Court of Justice.

The point of this is that you have a model of a political structure that's a continuing integration process. In some ways, this is a particularly interesting time in Europe because a couple of things are happening—you have the 15 member states dealing with the question about 12 new possible members over the next couple years. The institutions of this structure have to evolve because many of them were built originally for six members and then 12 members and then 15 members.

So, in effect, from a U.S. point of view, you've got a constitutional debate going on in Europe. There have been speeches in recent months given by Chancellor Schroeder or Foreign Minister Fischer of Germany that are engaging in this debate about the future structure of Europe. There are questions similar to what you would have in the United States about [at] what level of government should various functions be performed; although in Europe, this is called a question of subsidiarity as opposed to one of federalism.

Another term that you may hear batted around tomorrow is the question of competency. This is the issue of who within this system has authority for responsibility. Now, the lineage that has the longest authority here really dates back to the economic area, and particularly from that the trade area, which is the one I obviously deal with. My counterpart in this system is Commissioner Pascale Lamy [who] works with the Council of Trade Ministers for his mandate.

There are other key areas like the Common Agricultural Policy, which creates an integrated agriculture policy or competition policy. Then in 1993, there was the launch of something called the Common Foreign and Security Policy, which was an effort to coordinate foreign policy. Later in the 1990s, there was the European Security and Defense Identity, which intersects with the whole NATO discussion you went through.

I just thought it would be useful for you to be sensitive to some of the undercurrents of this process. One is, all of this is developing a sense of European identity at the same time people have a member state identity. For many, this identity needs to be defined with respect to the United States. That's understandable, because the United States is obviously large, influential and important to Europe, and so in the debate you hear, sometimes it will be a tone of contrast of identity, and sometimes it's a sense of

shared identity. There is no doubt there is a great number of shared interests and values, but there is also sensitivity to European distinctiveness.

Second, there is a particular sense of pride and importance where the European competency is the greatest. For example, in the area that I deal with, in trade, because it's been developed over time and Europe is, no doubt about it, a very serious player in terms of the overall trade scene. Where in some other areas it isn't as well developed.

A third element is figuring out the borders of Europe. This, I think, will also be part of the President's discussion, because everybody knew what Europe meant before the end of the Cold War. Now the question is where do you enlarge, where do you stop, where do you have other relationships, what are your relationships with Russia, Ukraine and Turkey.

Fourth, again, is the security issue as highlighted by the Balkans, where there is a sharp reminder of the limitations in the 1990s and the topic that was discussed today.

Now, I went through this because I wanted to give you some backdrop for the Swedish stop. An interesting bilateral piece of this is that President Bush will be the first American President in office to visit Sweden. But the reason that he's going to Sweden is that as part of this structure I mentioned, every six months there is a change in what they call the presidency country. [The] six months before that it was France; this six months, it's Sweden; the following six months it will be Belgium.

That country plays a coordinating role in this inter-governmental process. I distinguish this presidency from the presidency of the Commission, which is obviously held by Mr. Prodi.

So starting in 1991, the United States agreed to have a presidential-level meeting with the presidency country and the president of the Commission, reflecting, in a sense, the changing European structure. So, tomorrow the President's party will be meeting with the Swedish Prime Minister, the Foreign Minister, the Trade Minister, but also the presidency of the Commission, Mr. Prodi; the Trade Commissioner, my counterpart, Mr. Lamy. The reason I mention the foreign policy is that you also have the Commissioner for External Affairs there, who is Chris Patten. . . and another position which was created which is called the Secretary General of the Council and the High Representative of the Common Foreign Security Policy. This is a man named Javier Solana, who, prior to this post, was the NATO Secretary General. He had the post that Robertson had before.

So you have it set up for a combination of trade and economics and some foreign policy discussion. Then in the evening, the President will have a discussion with the heads of the European governments.

Now, some of the topics that I expect will be covered tomorrow: first, on trade and investment you have a certain irony in that on the one hand, you have an extraordinarily deep economic relationship across the Atlantic. You have two-way investment of about $1.1 trillion supporting about 3 million jobs on either side of the Atlantic.

The introduction of the euro has actually enhanced this integration process because it's created a competition across European countries on top of the single market, in part because companies could no longer fudge on exchange rates. They were forced, as they did their benchmarking of costs or their consumer prices, to sort of face the competition. You've seen over the past couple of years a very interesting development of European countries sort of restructuring along lines of business models…Part of their strategy was to acquire companies in the United States as part of their global position.

You look at the business pages, obviously, this continues today with the boom of sort of mergers and acquisitions. So at one level, you have an increasingly deep integration. This will also be reflected tomorrow in a session of something called the transatlantic business dialogue, which parallels on this process.

In my area, I've been having a series of discussions, as recently as Monday, and I'll have some again tonight with Commissioner Lamy about launching the new global trade round, [scheduled] to occur is in November of this year in Doha. This is what the United States and other countries were unable to do in 1999 in Seattle.

Commissioner Lamy who has been in office now since a little bit before Seattle, has been working on this issue pretty much since that time. I'm obviously newer to office, but a couple of weeks ago, I came to Europe for some meetings around the OECD [Organization of Economic Cooperation and Development] to try to emphasize the President's commitment to trade and launching a new round. Together, Commissioner Lamy and I have been trying to push that process forward. Last week I was in Shanghai where I was dealing with the East Asian counties, again trying to get a sense of sort of momentum for this process. As you probably saw, we also were fortunate, building on my predecessor's work, to move forward the process of China's accession to the WTO (World Trade Organization). That will be another sense of positive movement for the other countries. One part that was particularly interesting to see was, China was not only interested in getting into the WTO, but they want to help this launch of this round.

So what Commissioner Lamy and I are now doing is having a rather sort of in-depth dialogue about U.S. and European interests—see how we can try to reconcile differences enough to move forward the process overall.

The trade world we now live in is one where these things can no longer be done by the United States, Europe and Japan or the quad countries, adding Canada. It is a critical role for developing countries.

But the other key point that I think both Commissioner Lamy and I felt is that if the United States and EU are not trying to work together on this, the odds of a successful launch would be very small. If we are successful in doing it, it enhances the odds, doesn't make it certain, and so, frankly, after the effort we had in the Western Hemisphere with the FTAA [Free Trade Agreement of the Americas], I've tried to focus much of my time on this effort working with him.

In addition, we obviously have a bilateral relationship, and we have a series of disputes, as you would expect in part because of the deepening of the economic relationship. There is something that's interesting going on here that I saw, having come back after eight years, and that is because the economies are actually becoming more deeply integrated, issues that used to be considered more in the area of domestic regulation now are affected the international economic environment. Topics like health and safety or genetically-enhanced materials or privacy or tax issues. So it changes the nature of the challenge of how we sort of manage these issues.

As probably all of you know, Commissioner Lamy and I were fortunate to try to resolve this bananas problem that had been kicking around for nine years. That set a useful tone, frankly. Right before I went to China, we were able to resolve another one dealing with wheat and corn gluten.

While each of these may seem sort of small in their sector, they end up affecting the overall tone. Another idea that you may hear about tomorrow is to explore whether we can draw on some experience of dispute resolution in other contexts, particularly a median process, still consistent with the WTO.

Again, just to give you a sense of some of the technical work that goes on, we also hope to be able to move forward with a mutual recognition agreement in a particular sector. In this case, it's marine safety equipment…What will be interesting is the precedent of having the EU and the United States determine that if the other side meets its own safety standards, that will be acceptable in the other country—or in this case, the European Union. So while it's obviously just one

sector, it's something that we hope we might be able to build on.

And then, fitting the larger sort of theme of this visit about the overall U.S. relationship with Europe, we also have trade issues related to the central and eastern European enlargement. You'll probably hear a little bit more about that on the Poland stop.

Because the relationship is more than economic and also foreign policy, there will be discussion about southeastern Europe. Obviously, some of that took place in the NATO context, but there is an economic and foreign policy component, there is something called the stability pact that has been developed by the Europeans and the United States to create an economic basis for support. We've also worked on trying to open and improve the economic and trade and investment environment.

Another topic will be the enlargement of the EU, just as the President spoke about the enlargement of NATO. At the dinner, I expect that this will be more of a strategic conversation about the overall context of the change in Europe, including relations with Russia, Ukraine and the South Caucasus.

Then there [are] the non-European aspects of regional foreign policy. This is something, again, that was sort of launched about 10 years ago, so there will be certainly some discussion of the Mideast and, obviously, it's good news, the cease-fire that the President talked about. There will be discussion about North Korea and interests there from dealing with inter-Korean cooperation, nonproliferation, human rights issues, the U.S. recent proposal for discussion on a broad agenda.

Then there will be the transnational agenda—that will include, obviously, global climate change; also HIV/AIDS, which is an issue that involves everything from financial support to health prevention activities to, in my area, the whole question of intellectual property and how one deals with intellectual property in a pandemic, something that Commissioner Lamy and I worked on.

In summary, backing from this, just as the U.S. relationship with NATO is an important institution relationship, so the U.S. relationship with an evolving EEU is important. As you undoubtedly know, Sweden is not a member of NATO, but it is now the presidency of the EU. So while you have some overlap, it's not total.

There is no doubt that there are differences, as there have been, in this relationship in the past, but my sense is that one thing that will come out of this and was clear from the President's press conference, was an overall U.S. commitment to working with friends and allies in Europe.

I think, having been through these meetings at other times, another important element would simply be a chance for these individuals to get to know each other at a personal level. So, I think basically, there will be a lot of focusing on the one hand, the U.S. doing some listening, explaining U.S. views, having a discussion, and laying the groundwork for four, and I hope eight years of relationship with Europe. As you probably know, the President will be back in Italy, in Genoa in July for the G-7/G-8 Summit. So that's the context, and I would be happy to try to take your questions.

QUESTION: What we saw in Quebec appeared to indicate that the forces that turned out in Seattle opposed to this WTO round have not dissipated, but remain galvanized somewhat. Can you tell us from your standpoint what has changed in how you're planning to accommodate or confront those views, such that you might be able to get started now what the previous administration wasn't able to get started in Seattle?

AMBASSADOR ZOELLICK: Yes. First off, in a way, I think Quebec City showed that demonstrators are, and have been for many decades, a fact of life. That doesn't necessarily mean that they need to disrupt the discussions, or necessarily prevent the process from moving forward.

Obviously, we were very pleased in

Quebec City to launch the FTAA process and have a schedule and deadlines. I personally believe that the problem in Seattle was less the demonstrators and more some of the challenges that the key countries had in terms of trying to come together on a launch.

It's one of the reasons why Commissioner Lamy and I are trying to work closely on this, one of the reasons that I was in Asia, one of the reasons why the Chinese role, I think, can be important, and the reason that Commissioner Lamy and I are keenly interested in trying to reach out to key countries in the developing world, like South Africa and others, that can play a role in this process. Mexico is another one.

So…at one level, you have to separate the hard work of sort of putting the agenda together, recognizing that the objective is to launch the negotiation, not to complete the negotiation. This was obviously last done at Punta del Este in 1986 for the Uruguay Round, which took a number of years to complete. Then, when it comes time to the demonstrators more generally, I think they at least have become a symbol of a series of concerns.

Now, one of the challenges is obviously—is that moving for the trade system at a time of economic slowdown. The point the President has made and that I have resonated is, in many ways, there is no more important time to be able to keep the liberalization process going forward.

Then there are things that I think are important in terms of trying to deal with specific concerns. For example, the transparency and openness of the process. The Canadians, for example, in Quebec created a special discussion, bringing in a number of NGO [non-governmental organization] groups.

In the case of the United States, we've tried to open up some of our process by instituting a series of environmental reviews, not only for the FTAA but for starting the round process. So there's clearly a lesson about different constituencies about bringing them into the process and having a dialogue. Frankly, I think it's going to be a responsibility for all of us to try to make the case on the benefits of openness and trade.

Again, just to give you sort of one summary, is that if you take the economic benefits for a family of four from the Uruguay Round and NAFTA [North American Free Trade Agreement] together, and this is the combination of the growth, but also the lower tariffs, it amounts to about $1,300 to $2,000 a year for a family of four in the United States, and that's a conservative estimate. That is very, very significant, but most people don't have a sense of it, so we have to do a better job of explaining it. On the other hand, there has also been some research by the World Bank that pointed out that over the course of the past 20 years, developing countries that have had open systems have grown on average by about five percent; those that weren't open fell by about one percent. Interestingly enough, for the growing countries, you saw the income gains all across the income distribution and a decrease in the absolute poverty levels.

So, frankly, if one is concerned about developing countries, both history and recent studies would suggest an open system is going to be the formula for them. I think you have to work on this on different levels, at the level of sort of the technical trade diplomacy, but also the communications process. It's one reason why, as you can tell, President Bush has emphasized the importance of trade as part of his growth agenda along with taxes and energy and education.

QUESTION: Ambassador Zoellick, to what extent do you expect the issue of global warming to feature in the discussions tomorrow during the day or during the dinner? And do you expect the President to take a lot of criticism from his counterparts?

AMBASSADOR ZOELLICK: The question was, to what extent do I believe that global climate change will be part of the

discussion, and to what degree would the President expect to be criticized. We'll find out tomorrow, and I think I'm supposed to give you a background at the end of that process.

But having done this for a number of years,…I think that the likelihood of criticism is, frankly, not high. I think the likelihood of discussion, you know, is very high, because that's one of the reasons that the President is here to talk about these topics.

Let me just step back on that a little bit, because I had a little bit of experience in this in that I ran the process for the United States in the Rio summit in '92.

You know, part of what the United States has been trying, I think, to communicate is that, on the one hand, there is a serious recognition about the importance of this problem. On the other hand, Kyoto was not going to be a successful way of dealing with this. Having dealt with this issue in the past, I frankly have maintained a lot of ties with the environmental community, and even during the course of the campaign; many people came to me and said they were actually worried that Kyoto was going to stymie some developments that might actually occur.

Now, why is that so? I think part of the challenge is to recognize that how does one link some of the research and science and analysis and changes in technology with a policy regime? Frankly, what was lacking in the Kyoto process was a link between the time frame and the specific, the timetables and the targets, and a connection with recognizing uncertainty and the nature of an insurance policy, what was supposed to be achieved.

Now, you know, as others have said, you have a fundamental problem as well if you don't have key greenhouse gas producers as part of the process. That wasn't going to work. We also had had a problem in that a 95-0 vote in the Senate is also an indicator that there is rather broad based concern about this.

You can look at different studies—traveling a lot around the world, I have to tell you, the place that I think we get a most intense sense of this is in Europe. I don't hear about it elsewhere. In Europe you get different views about their ability to be able to meet those targets and timetables. There was an official study done in the year 2000 that raised serious questions. There is a more recent, separate consultants study in 2001 that suggests that they might.

But the reality is for the nature of these problems, no one country or group of countries is going to be able to handle it. I just think, as a practical matter, the Kyoto regime was not going to be successful. What the. . . the President is doing on this trip is communicating his interest, his knowledge, the commitment of his administration, offering a hand to say, here are ways we can engage on the topic. Frankly, it will depend somewhat on Europeans' own sense of their policy preferences, their political constraints.

I believe that for all the to-ing and fro-ing, this is a critical aspect of restarting the dialogue, because Kyoto wasn't going to go anywhere in the United States or many other countries. So I'm actually somewhat optimistic about this, knowing how diplomatic processes work. It will go through a phase, and the United States needs to be sensitive about some of the aspects of this in the European political scene. But, really, there is no alternative than countries trying to work together on this, because no one country can do it by itself.

QUESTION: I'm from Cleveland, so you can probably anticipate what I'm going to ask you about, and that is the situation with LTV Steel Corporation on the ropes, a lot of jobs at stake, not only in Cleveland, other communities—100,000 retirees and their benefits. In talking to some of the representatives of the European steel community, they say it's not imports, it's the over capacity situation in the U.S., it requires a major investment from the government or a painful restructuring process, which they don't believe this Section 201 investigation will lead to, or some of the other ini-

tiatives you've started.

So my questions are, can LTV be saved? What will take? Is the government willing to put some substantial money into saving it and some of the other steel companies that are in bankruptcy? Is the European Commission threatening some trade retaliation for the Section 201, such as, say, nuisance complaints at WTO or some other—well, they wouldn't call it that—but some other, you know, not dealing with things in the way that you've been dealing with them in the past?

AMBASSADOR ZOELLICK: I'm a little jet lagged here, so if I miss pieces, let me know and I'll come back. On the individual companies, I'm not really in a position to say. But let me explain then the policy context. First off—and this has been a little bit, I think, misunderstood—just to make sure everybody understands what a Section 201 investigation amounts to, this is a provision of U.S. law that is within the WTO rules, so this is acceptable under the international trading system. It doesn't require findings of unfair actions, as antidumping and countervailing duty cases does. Instead, it has standards that the International Trade Commission will examine in terms of whether imports are a substantial cause or cause of a substantial injury, recognizing there could be other factors. That is the process that the ITC will review, in accordance with U.S. statute that is in accordance with the WTO rules.

Now, simultaneously, we have talked with countries around the world about having negotiations to deal with what we think is the underlying problem, which is one of overcapacity in a decentralized industry. When I was in Asia, I talked about this with the Japanese [and] the Koreans. I've talked about it with Commissioner Lamy, and this in part reflects, frankly, a rather special history of the steel industry.

If you look at European reconstruction, there was the concept of commanding heights industries that many socialist governments thought were part of their strategy. So the steel industry in this country—or in Europe in general, as well as in, frankly, many Asian countries, [was] part of a larger development strategy. So the market itself has been skewed for decades and that's reflected in different ways.

Just to distinguish something, there is--Commissioner Lamy, to the best of my knowledge, which I think is pretty good on this, has complained about the action. He recognizes that a 201 is within WTO rules and I do not believe that he has said that they are going to take any WTO action as long as we obey the rules. He's not happy with it, but that's an important distinction.

There's a separate effort that deals with some past antidumping cases that deal with privatization of European companies, where the United States had antidumping findings. He has talked with Secretary Evans in the Commerce Department about the need to resolve those and, if not resolving them, then going to the WTO. But just—you know, I apologize—it's a technical area and it's important to distinguish those two different things. Now, as for a couple of the facts that you talked about, you know, obviously, in terms of the 201, this is for the ITC [International Trade Commission] to determine. It did turn out that in the year 2000, U.S. imports were the second highest in U.S. history, both as a percentage of consumption and also in absolute terms. As a percentage of consumption, about 27 percent. In absolute terms, about 34.4 million metric tons.

The OECD and other groups have done studies that underscore this basic point I made about the widening gap between productive capacity and demand and what has gone on in the United States has been a combination of things you talked about. On the one hand, U.S. capacity has fallen about 17.5 percent since 1980, and the United States steel industry has lost about 300,000 jobs. On the other hand, there have been investments in more productive capacity using new technologies. In terms of technological productive methods, many of the U.S.

companies are the top-of-the-line globally. And over this 20-year period, U.S. productivity has been raised over 300 percent.

Now, one of the reasons the Europeans are anxious about this is that they know the same thing that I've just described about the rest of the world. In other words, if there is a safeguard action, the finding is made, the United States does determine that it needs to take some breathing space action in terms of safeguards, then, frankly, the Europeans, who don't at this point import as much steel as the United States does, is worried that some of these other countries that produce the steel under the same provisions I've outlined will come to Europe. Frankly, that's one of the reasons why we've urged many parties to try to come together, because we have said that if the 201 findings are made, we believe an important part of this has to be an ongoing restructuring of the U.S. industry. And there's a recognition of this by U.S. steel companies, because, frankly, the more efficient ones also suffer from the fact that if capacity continues to be producing and putting them in a difficult position.

The last piece of this puzzle—and this is, again, one of the effects of the end of the Cold War—is you have countries like Russia and Ukraine [that] also have steel productive capacity that's obviously built under a whole totally different system of command economy, and so how does that factor into the process.

So I apologize for the length of it, but you asked a number of questions there. I've had a number of conversations with Commissioner Lamy about this; it's a sensitive issue in Europe, no doubt about it. But I think the U.S. process here, using 201 is WTO consistent. We believe it's important for the industry for its long-term, and frankly, we think it would be appropriate to try to have international discussions on capacity and some of these longer-term problems. We'll just see how that goes.

QUESTION: Can you say, though, whether the United States government would be willing to put some money into the restructure process?

AMBASSADOR ZOELLICK: Well, on that, it's really premature in terms of you have to go through a 201 and, as you may know, what happens with a 201 is you have these findings, and then there's a recommendation by the ITC about what set of actions may be taken. Then the President has the right or has the option to determine sort of what action is taken.

I will say this, is that it's the proclivity of this government not to be investing in U.S. industries but, instead, to create the environment in which they can restructure themselves and return to competitiveness as we just did, for example, with another industry dealing with wheat glutin.

QUESTION: On the same subject, I mean, the subject is sensitive in Europe because there is the perception that there is a double standard. On the one hand, the free market, on the other hand, Section 201 is really a protectionist measure. And there are some other issues that are coming up. On pasta, for example, they're at about 75 percent. And I think in about 20 days your administration will have to decide whether to renew some other decision that had been made a few years ago about imports of pasta. Then we have the Helms-Burton Act that will expire soon, which applies extra territoriality, which has been the subject of dispute with Europe. So you're coming with some luggage here which doesn't send quite the right message in Europe, and that's why…some people are sensitive. What can you tell us about this?

AMBASSADOR ZOELLICK: I can say that it will be an inevitable fact of life that we will have these trade conflicts. We have one dealing, for example, with beef hormones, where the WTO decided in the United States favor again and again and again and Europe has not come into compliance with the WTO.

We face a very frustrating problem with the European Commission's inabili-

ty to have biotechnology approvals. That has stopped a great deal of our industry sales. That is why we have a WTO system. [Those] things that I mentioned, for example, in steel are WTO-consistent. I think, to the degree that we can, Commissioner Lamy and I are trying to work things within that system of rules. It has its flaws, but it also has its benefits, in terms of trying to manage potential trade conflicts.

Frankly, we're trying to keep our eye on larger issues, as well, which is why we need to manage these and try to resolve these. Each of us have political environments in which we must operate. If you look at the overall economic gains to our countries, as well as the system of the Uruguay Round, they're enormous. It is also important to keep the liberalization process moving forward. And that's one reason why, when we get on the phone—which we regularly do—we talk about the common things we're working together, we talk about ones we're trying to resolve, and we make good faith efforts to do so.

At least in a relatively short time, I mean, it wasn't a small thing to resolve a nine-year-old problem with bananas that people thought we couldn't get done. So we'll work on it—we'll be successful with some, not with others. All I can tell you is, when I talk to U.S. audiences, they think there is a fair amount of protection in Europe. I also understand the complaints about Europe with the United States. That's one of the reasons they appointed me for this job, I guess.

QUESTION: Are you going to review the Helms-Burton and the tariffs on pasta in the next 20 days?

AMBASSADOR ZOELLICK: The Helms-Burton is a congressional decision. That's something that is going forward with the administration, as part of that process. I can't preview exactly what's going to happen on that. On the pasta one, frankly, I apologize, I'm not 100 percent familiar. I apologize.

QUESTION: I want to ask you about the disputes procedure that you mentioned. How soon do you think such a disputes procedure could be put in place, and do you have any disputes, particularly, that you could put in there?

AMBASSADOR ZOELLICK: It's really just an effort on the part of the United States and EU, in a sense—picking up on your question, sir—is that to recognize that maybe there are ways that we can draw from experiences in other contexts. For example, now in U.S. court system we are normally required to go through a mediation process before you move to litigation. And to see whether that might work in some cases.

So it's really early in our discussion. We're trying to see how one would try to structure it. It's probably more likely to work in an environment where it's a fundamental commercial problem, as opposed to a legislative problem. Sometimes, mediation processes in the private sector can identify solutions that it's hard for the parties to identify.

On the other hand, obviously, I think people like myself believe we're trying in our good faith to identify those on our own, but I'e certainly got no objection to try to get some suggestions and help on these. Some of these are small in terms of economic effect, but they add to the political dimension. I think the key point for me, having done this for 20 years in both the public and private sector, is you have on the one hand, an incredibly integrated economic market, transatlantically, that I've just seen, frankly, explode in terms of its possibilities.

So, one shouldn't lose sight of that, which I saw in the private business sector, but you need ways to manage disputes, just as you have internal to the EU. That's what we're trying to explore and we'll take it step by step…Thank you. ■

Economy, ecology and agriculture

By Risto Volanen
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Editor's Note: This paper is based on a speech Mr. Volanen made at AGRO-FOOD 2001, in Tampere, Finland, on July 2, 2001.

The new BSE crisis has provoked an extraordinary agricultural debate. The obvious land marks in this discussion have been German Chancelor Gerhard Schröder's declaration and 42 German professors' criticism of it. The German Chancelor said at the Bundestag that a new perspective for agriculture should be developed and industrial agriculture should end. The professors, among them well-known agricultural economist Professor Tangermann, responded that today there is no real industrial agriculture in Europe but in future concentration is unavoidable for trade reasons.

The new high-level green wave was earlier initiated by President Chirac last November when he demanded a total ban of meat and bone meal and when he soon after that at the Hague Conference took a strong position on climate change. Chancelor Schröder was followed by new German minister Künast who demanded that in ten years time 20% of agriculture should be organic.

Agriculture Commissioner Fishler also went on ecological tone when he at the Berlin Grüne Woche declared empathetically that we must not make cows cannibals. So we hear now from the Commission, that MBM is safe on scientific grounds, it is forbidden because of bad business management, it cannot be forbidden in import products on WTO grounds, and it is wrong on ethical grounds. A week later the ariculture Commissioner went further in the European Parliament blaming the EU Member States and the farmers' unions for the problems in the Common Agriculture Policy.

There are also several recent statements that Europe should work both for further liberalisation and for tighter environmental and safety regulations in agriculture. This divided approach was to be found some time ago in a European Commission memo, which responding to the German discussion. After praising the Commission's recent policy for "promoting environmentally friendly farming," the note states: "The term "industrialised agriculture" is often used in a negative way, although it is far from clear what it actually means. If it means increased productivity, it should be remembered that this is a main feature of market economies not of policy." "Higher productivity means more prudent use of scare natural resources," the Commission says.

So, we have now high level arguments for several options. First, for ecological reasons we should return to more extensive production. Secondly, for economic reasons we should continue concentrating structures and intensifying production. Thirdly, we should do both at the same time.

Only four years ago, at the end of the first BSE crisis, we all thought that the nightmare would stop soon so that we could go back to normal business. Then more and more "new issues" started to surface on the agriculture political agenda: hormones, antibiotics, nitrates, new environmental regulations, cross-compliance, animal welfare, biodiversity, veterinary medicines, pesticides, dioxin, sludge, etc. It is important to recognise that the second BSE turmoil is the worst step in our economic and ecological problems, but it is not the only one.

It is now necessary to seek the basic structural reasons for the accumulating challenges —in order to find the structural solutions. This search is now urgent also because the present debate will shape much of the opinions that will decide the European agriculture policy in the next few years in the context of WTO, eastern enlargement, financial perspective and much more.

Farmers' Story

So where to start? Perhaps from the beginning. It all started roughly 10,000 years ago somewhere around the Eufrat and Tigris rivers. The early millennia of agriculture were continuous cycles of ecological and social catastrophes. Better yields increased the population and that demanded more production. But this led to the degradation or salinization of land because of overwork on it. In mountain regions new fields led to erosion because of losing forest coverage. Modern archaeology has found the same process all over the world from the Mediterranean regions to old China or the Easter Island. Needless to say, this pattern reminds us of what has happened in modern days in several developing countries. To say the least, agriculture has from the very beginning had multiple functions: food production and land management has been two sides of the same coin.

In this historical perspective the later European history is—not a unique but an unusual success story. Two major events seem to have been decisive for protecting the productivity of land or living nature. First, Charlemagne's the three field farming systems since the 9th century meant that much of our fields did not become degraded. Secondly, the practical management of natural resources took place at local community level, although long time under feudal regime.

Although most of the European agroecosystem survived to our times, it should not be forgotten that daily life of most people was for centuries full of hunger and suffering. It was only the British and German Enlightenment of the late 18th century that recognised that you don't need only protect the productivity of the land or animals - you can also improve it. Then Adam Smith proposed a further solution. He said that, if farmers were made free from the feudal regime, they would have an interest to develop the productivity of their land. It took some revolutions and European farming was put into motion until our days.

Quite soon after Adam Smith, his compatriot David Ricardo foresaw that increased productivity or capital intensity would be accompanied by concentration of capital ownership in all the sectors of the economy. For industry workers, Ricardo promised a salary just making it possible "to subsist and to perpetuate… race." For farmers the Ricardian concentration of capital promised exit from the farm and also from the stage of history.

But there was also another development from Smith to Ricardo that today seems to have been fatal. The French Physiocrats, the German Enlightenment agriculturists and Adam Smith himself recognised the productive and fragile character of land or living nature. Therefore, they even argued that a rent of land must be paid as a compensation of its productive work. However, against Smith's opinion Ricardo defined all nature "indestructible" and in this way he deported ecology from economy — until recent times.

Needless to say, as to production factor "work,", Ricardo got his counterforce in Karl Marx and this led to the epoch-making conflict between capital and labour. But both Ricardian liberals and Marxist socialists had a common problem: what to do with the farmers who were not willing to leave the farm and who united on their farms all the production factors: work, capital and land — although their theories said that these production forces should be separated.

Ricardo went to politics to fight for free trade, and he got the British corn import tariffs abolished in 1846 in the name of his celebrated theory of comparative advantage. Two years before this, Marx predicted that forthcoming free trade would force farmers out of farm and they would then support revolution. But when this did not happen Marx demanded in his 1848 Manifest socialisation of land and active industrialisation of agriculture. After a long debate also German Social Democrats — like most other European socialist

parties—accepted in their 1892 Erfurt programme concentration or industrialisation of agriculture.

In practice political development has been more complicated. In the beginning of last century all European societies had 50-70% of population in or close to agriculture. In those conditions the socialist ethos and tactics became inside the rural communities a pro small farmer movement. This again developed a socialist double agrarian strategy on national level for both "industrialisation" and for support to small farmers. The same ideological dilemma created much of the political drama of the 20th century, from the tragedy of the Soviet collectivisation of agriculture to policies of "popular front." Reflections of this history—and its re dramatisation in the 1960s—can still be found in today's discussion about European agriculture. Globally enlightenment, science and technology as well as liberalism and socialism set the stage for the first modernisation wave in Europe. Society asked more, cheaper and safer food and farmers responded to this request. Farmers organised their unions and their cooperatives to defend themselves but also to adapt themselves. This first phase of change was driven by the market and supported by mechanical innovations. It ended after the First World War in the crisis of the 1920´s.

Developing the CAP

The second phase of modernisation was policy driven. The post-war European Common Agriculture Policy learnt a lot from pre-war President Roosevelt's New Deal policy. For forty years, both European and American agriculture policy made their best to balance market and policy and they were supported by new technologies, chemistry and cheap energy.

In the historical perspective, the 1957 Rome Treaty was a compromise between the different European interests of agriculture. The CAP was set up to increase productivity, to stabilise the market, to guarantee both farmers' reasonable income and reasonable consumer prices.

The phases of the Common Agriculture Policy (CAP) are well known. It took 10 years since the 1958 Stresa Conference to establish common prices and common markets for main the products. Then Commissioner Mansholt made the productivity target a priority and in March 1968 proposed a radical structural policy plan "Agriculture 1980." The Council rejected it and therefore the Commission angrily froze the annual price decisions.

In 1971, COPA and COGECA organised a 100,000 farmers' demonstration which got out of control. A few areas in Brussels were badly damaged, the Council building was envaded and one farmer died. In 1972, the Council finally accepted Mansholts´ directive but decided on its own a high price increase of 8-12%.

Higher prices led to increased production. After several phases of production ceilings and 1984 milk quotas the Commission published in 1985 its Green Book that led to the 1992 CAP reform. The grand targets of 1992 Reform were to get production, stocks and the budget under control in the face of the changing international trade landscape. The grand instruments were the price cuts, partially compensated by direct payments. Compensations were mostly financed by the savings from the instruments no more needed for financing the imbalances.

In addition to internal overproduction and increasing budget problems the international trade landscape shaped the great turn from developing prices to restrictive price policy. The 1992 reform also opened the way to the 1994 GATT Agreement.

In many ways, the Agenda 2000 Reform was a continuation of the basic ideas of the 92 reform and it also paved the way to the next WTO Agreement. The effort to develop competitiveness through restrictive price policy is dramatised by an example that after the 92 and 99 reforms, EU cereal prices are 40% and beef prices 32% lower than at the beginning of last decade.

So, the key target of the 1992 Reform was competitiveness through price cuts but it also included environmental and extensification as well as rural and regional policy elements. Slight ecological aspect fitted well to help the overproduction problem of the day and the rural aspect paralleled with the well-known structural effects of restrictive price policy. Rural development or the second pillar was largely dealt with also in the Agenda 2000 discussion, but without any major financial consequences in the final Berlin package.

Simultaneously with the Agenda 2000, the effects of the first BSE crisis were felt in constructing the new President Prodi Commission. Most of the food safety issues were moved from DG Agriculture and Rural Development to DG Health and Consumer Affairs. This has further dramatised the in-built problem of the 1992 and the 1999 reforms: there has never been an in depth analysis or discussion about the relation between the economic and ecological targets of the agriculture policy. This has for years reflected as an inconsistency in the Commission and the whole EU policies. This inconsistency is now dramatised also in the high-level BSE debate asking agriculture to go simultaneously the economical way of price cuts and ecological way of cost increases.

Where are we?

As a result of this modern history, the share of farmers in society has decreased from 70-90% in the early 19th century and from 30% in 1950 to 7 million, and 5% today. Roughly 5 million of the 7 million farmers live in Southern Europe.

European agriculture daily feeds EU's 370 million people, who pay annually on the market roughly 750 billion EUROs for their food. This is a GNP of a nation of roughly 35 million people.

Somewhat more than a quarter of these 750 billion EUROs, 210 billion EUROs come to agriculture, while 33 billion come also from the EU budget. When farmers have paid their costs, 180 billion EUROs, the income of 7 million farmers makes roughly 70 billion EUROs a year. This is 9% of what consumer-citizens pay for their food.

Today European consumers pay 17 % of their income for food, while fifty years ago consumers paid 30%. This means that the farmers' income takes 1,5% of the consumers' disposable income.

Europe exports and imports now food for more than 50 billion EUROs. This makes one quarter of the value of agriculture production. Europe is the largest importer and the second largest exporter of food in the world.

This progress and these massive figures should not veil the fact that European agriculture is economically very fragile. In the late 1990´s figures, the direct payments from the EU budget to agriculture are roughly 33 billion EUROs. But we should not forget that the market prices include price support for roughly 40 billion—a figure that makes the difference between European and world market prices.

Price supports and direct payments are together 70 billion EUROs and incidentally this is roughly the same as the farm income in Europe. So, take away EU budget and liberalise the market and you lose European farm income. Of course some farmers might still continue, because some others´ support is now more than their net income - covering also costs.

This fragile construction was already under attack in the context of the Agenda 2000, before the Berlin Conference two years ago. However, at that time Europeans accepted multifunctional European model of agriculture. The idea is that in addition to food, agriculture creates plenty of positive externalities of public goods that are worth financing from the public budget. However, today our problems are the real and scared negative externalities that now risk putting into the shadow both our basic normal production function and our multiple additional positive functions performed by farmers.

What Next?

Given this history and this situation, where do we go now? The German professors are right that we don't have in Europe a real industrial agriculture, but they forget to tell that their own liberal globalisation programme would create it.

Out of 7 million European farms, 5 million are still less than 10 hectares. Our average size is by any measure modest and our largest farms are on the low side of average American farms. After two hundred years of hard pressure and productivity development, European farms—with very few exceptions - are still family-run farms integrating in the same hands land, capital ownership and some aspects of work in the farm. On 7 million European farms, there are 15 million working people—including the farmer's family—creating annually roughly 7 million working years.

With the grave problems of today we should not forget the fundamental problems of tomorrow. Any honest and informed observer can say that solely in a competitive market—without regulating policy—the production structure will be determined by the market and the available technology giving highest return on investment. During the last decades only the CAP or the European model of balancing market and policy has prevented markets and new technology to speed up radically technological intensity and capital concentration that goes far beyond family-run farms. The same honest and informed observer also knows that solely competitive market production will concentrate not only company-wise but also regionally to countries and continents where - natural and technological - productivity is high and costs are low.

The closest possible vision on "industrialisation" can be seen on the other side of the Atlantic. In the U.S., there are already corporate owned clusters of 80,000-100,000 beef lots or pig units as well as 4,000-5,000 cows dairy units. But much more is now behind the corner.

Those who developed today's concept of agribusiness in Harvard Business School are now developing strategies for "life science" or "bio-material" industries. The vision is that the global market and newest technologies will integrate agriculture step by step to control the globally concentrating clusters of food processing, medical and chemical industries—roughly in the same way as what is happening in communication, banking, car or air plane industries. These visions say that in future life science industries and some parts of the genomically controlled biomass productions will be detached from the land. In this case the primary biomaterials are recomposed in processing industries to remind us of historical grandmam´s time products. If you follow today´s most chic life style magazines you can learn that in future only the very richest people will be able to afford natural food from their private pig, cow or vegetable lots.

It is natural and necessary to restart the agricultural debate from our current problems, but it is also now necessary to recognise that the next forthcoming WTO Agreement, enlargement, the EU budget, the CAP, food safety, environmental decisions do not only influence our present problems but also decide our long range future.

In the neo-liberal vision, the future should be clear and bright. Professor Tangerman and his colleagues are not so concerned — as farmers are — about short-term problems in Chancelor Schröder´s or Minister Künast's statements. The professors are concerned about the long-term effects of the increasingly ecological attitude of the political leaders.

Professor´s Blind Spot

In the case of food, the main-stream professor Tangermann's and his colleagues' neo-classical economics seem to have a blind spot in the beginning and at the end of the food chain: in the understanding of the production factor "land" or "nature" and in the understanding of the modern food consumer.

As mentioned above, the first found-

ing fathers of modern agriculture from the French Physiocrats to British and German enlighteners and to Adam Smith recognized the special productive and fragile character of nature in agriculture production. They even said that this should be compensated to the owner by a rent of land.

Then David Ricardo with his followers defined nature as "indestructible" and made the economics of living nature equal with economics of dead nature. He tried the same kind of trick to production factor "labor," but labor reacted quite quickly—creating the epoch-making conflict of the last two centuries. Land, however, does not speak.

The Enlightenment and Modern strategy of agriculture—that you should not only protect but also increase productivity of land and living nature—has created so far a quite great success story for mankind. The Malthusian vision of permanent famine has been avoided as well as new ecological catastrophes in Europe. In the last century, the world population quadrupled while farmland only doubled—making it possible to save lots of forests. Europeans' quantitative and qualitative nutrition have never been as high as now. For the starving 800 million people in the developing countries, it is the decent modern methods of production and modern trade that can give hope.

But now we have got BSE, dioxin and tens of other "new problems." Some of them are measured or they have triggered technology risks which create more and more precaution and even food scare in society.

In analysing our present problems, main-stream economics is a good start. We have added some two hundred years technology inputs to the European agro-ecosystem and it seems that we are now in some parts of Europe getting diminishing returns especially if externalities—as valued by citizens—are also counted. One step forward in the analysis could be that both in the BSE and dioxin case, we had an industrial technology input from outside the farm and its technology risk triggered when matching with fragile living nature on the farm.

In economical terms our growing problem is now that the 1992 and 1999 reforms as well as WTO pressures decrease the prices and press a farmer either to give up his activity or to increase his productivity through intensifying production. In several parts of the European food system there is still room for this. But in some parts of the system, increasing intensity manifestly leads to diminishing returns because of risks, precaution, or food scare. If a risk triggers, this leads to further precautionary measures, higher regulation costs and lower productivity.

So, consumer retail chains and trade policy demand lower prices. Lower prices demand higher productivity but this leads to political pressure to decrease productivity. Farmers face pressures to decrease and to increase their productivity at the same time. The more society, retail chains or trade policy put price pressure on agriculture the more they either force farmers to stop their activity or to develop more intensive production including its risks.

The European Dilemma

A usual response to the recent problems has been that there is no such thing as zero risk. It is true amd it is also true that European consumers have never had as safe food as now. In any other sector 0.1 promille risk of mistaken product or 2 grams wrong material in thousands of tons would be a good record, but not in agriculture. Food consumers are not economists' quasi-rational risk takers like smokers or car drivers. After hundreds of years of famine and natural food risks we have now some generations that have experienced that you can have enough safe food at a reasonable price. The consumer now says that it is not reasonable to take new risks.

What holds at farm level is relevant also at European level. We have the European agro-eco system that we cannot basically change. In modern times, we have changed our strategy from protect-

ing its productivity to increasing its productivity through increasing technological inputs. So far we have been able in this way to serve better and better the European consumer and the whole society. We have now these "new problems" that our science or economics have not been able to predict or even to explain.

The obvious thing is that through the foreseen successive agriculture trade liberalisation rounds, we simply cannot intensify—some people say industrialize—the European agro-ecosystem in such a way that it could be competitive with those who don't care about European ecological or safety concerns or who have by nature an agro-ecosystem of higher productivity—often accompanied by lower labour costs.

Let's face it. The European agricultural model would not survive economically or ecologically in a global free trade.

This would not underestimate the vital importance of trade for the hungry world, for European consumers or for European farmers. We should underline that we have a now well functioning global trading system. It should be developed pragmatically step by step on the basis of real mutual interests - not on the basis of neo-liberal theoretical experiments, which have immediately after first dose pushed American agriculture to a crisis. Hungry world as well as Europe need necessarily well organised trade in food sector, but food is a special case. We should contain the neo-liberal extremism as the opposite extremism was contained after the Second World War.

Consumers and farmers have now the same basic interest: to demand consistency from the political decision-makers. Our political leaders have got the message, now they should act really on it. We should ask first Chancelor Schröder, President Chirac and Minister Künast to discuss with Commissioners Lamy, Verheugen, Schreyer and Fischler to ask them to adapt their policies to find a balance between economy and ecology in order to ease the economic pressure on farmers—so that they would not be compelled either to leave the farm or to pass the pressure to nature. This is not just a rhetoric remark but very concrete real life, a real time question.

Today's Policies

Europe doesn't work by sitting down and deciding where to go. The future of agriculture will be decided in forthcoming years through several processes. The stakes are highest in WTO, in Eastern enlargement and in the EU budget.

Only two years ago, the European Summit decided in Berlin on agriculture until 2006. The decision gave straight instructions for the WTO negotiations. It did not reserve resources for agriculture policy in an enlarged Europe, but it mandated the Commission to submit a report in order to make any adjustment deemed necessary". In addition to this, there were clauses for reports and reviews on cereals before the season 2002/2003, oilseeds in the first half of 2002, dairy in 2003 and expenditure in 2002.

For the time being, the market development - for most sectors other than beef—does not show any major needs for changing review reports to premature reforms. However, there is now an accelerating pressure against the Berlin Summit conclusions, because so many are trying to use the BSE crisis to correct what they did not like in the Berlin Summit. There will be a tough debate, possibly a tough fight. This time we can see a situation where consumers and environmentalists will understand that it is not in their interest to press the farmers more.

In addition to this, the Commission's road map for the CEECs agriculture negotiation plans to finalise this process before mid 2002. In Eastern enlargement, there are all possibilities to live till 2006 within the limits of the present financial perspective, if the timing and transition processes are formulated in the common interest of both the new and the old member countries.

As to the financial perspective, the main serious concern is financing the BSE crisis, because we see already that the available 1,2 billion EURO margin is

not enough. For this basically new public health question, we ask new funds without changing the existing commitments.

In our European timetables, it is also important to take into account the American plans. Their present agriculture legislation expires in April 2002. Therefore, the Congress must decide on a new bill in very early 2002.

In spite of the big words, the Americans have in the last few years come closer to the European approach. In 1996, they planned to cut their agriculture budget from US$8 billion to US$2 billion. In fact they have increased their farm budget in three years from US$8 billion to US$29 billion. They cannot change their policy and budget overnight. A cool analysis would tell that we should after tough talks have a reasonable solution—but we don't know yet. In Europe, we have inconsistency between economy and ecology in agricultural policy. The American policy is also inconsistent. They have supportive policy for themselves and liberal for the others.

So far the EU position in the WTO negotiation process has been inline with the Berlin commitments — only unfortunate exception has been commissioner Lamy's as called "everything but arms" initiative.

As I mentioned before, the European farmer income—70 billion EUROs—is roughly the sum of price support—difference of EU and world prices—and direct payments from the budget. In WTO jargon, almost all of the price support 40 billion EUROs is so called yellow box and direct payments so called blue box. There is no new money easily available to compensate price support or the yellow box. At the same time this yellow box depends strongly on the production coupled supply management instruments - financed by blue box direct payments as well as on the import and export mechanisms. Touch one part and the whole house shakes.

One more argument for respecting the Berlin agreement is that it is difficult to believe that Germany and the Heads of States and Governments would accept a weakening of the credibility of the Summit decisions by changing them immediately after they have been taken. When governments think how they could take into account the ecological needs of consumers, citizens, and the agro-ecosystem, the first and in the short term most important conclusion is to strongly defend the results of the Berlin Summit.

The Solution

Who could have thought some years ago that the 21st century would start in Europe with an agricultural debate?

We are now in some position in a long-term cycle that started two hundred years ago. The first modern wave was characterised by emerging market forces and it ended in the 1920's crisis. At the beginning of this period, agriculture productivity increased but its structure divided from the feudal regime to family farms. After the Second World War the second modern wave—CAP—has been based on balancing market and policy. This wave increased productivity and concentrated structures, while keeping them in Europe mostly within family-run farm. With all its problems, the Common Agriculture Policy has been and must be in future the corner stone of the European agriculture. The question is now, what is really progress in its development. If there is a change in the change outside the CAP there should be a reform of reform inside it.

Since the fall of the Berlin Wall and the 1992 CAP reform, many observers have understood that the third wave of modernity has started integrating agriculture into general neo-liberal globalisation. Farmers have strongly resisted, but—in order to survive—they have had to adapt and to prepare for the next step.

But now the Americans have completely failed in the very beginning of their neo-liberal experiment, and in Europe completely new counter forces have emerged.

In Europe, for the first time in modern history we have now important powers—social democratic and green—outside agriculture and its traditional politi-

cal allies that also put questions on eternal concentration and intensification of agriculture. First this new situation reflects painfully on farmers as a simultaneous economic price pressure and ecological cost pressure. But we should not fall in the trap to resist economic pressure by using an ecological argument and to resist ecological pressure by using economic argument. In that case, we would continue to lose on both sides.

I believe that it is important to respond to new messages by an open and frank dialogue both with socialists and with greens—about the future of European agriculture and its multifunctional family-run farm.

Our first replica could be, that we ask from European governments and the Commission consistency between food safety, agriculture, trade, enlargement, environment, and budget policies. Now farmers are pushed simultaneously by these policies to opposite directions.

Our second replica could be, that every consumer must have an access to safe, sustainable food at reasonable prices. Policy or market should not be polarised to serve elite or specific market segments to the detriment of this basic principle of the European model.

Our third replica could be, that the European model of multifunctional family-run farms is the ideal strategy and structure to reconcile the ecological, safety, and economic interests in agriculture. The only alternative to the European decentralised family-run model is capital driven industrial concentration—possibly decorated by some special productions or special regions.

But we can already now see what the new messages ask from farmers. One question concerns the farmers' responsibility in the food chain.

The "family-run farm" is not just a nostalgic epithet. Historically, it means that a farmer has a double function on the farm. His or her production responds to the immediate need of the consumer and his or her land management takes care of sustainability in the interest of the next family generations. So far farmers have trusted the public authority to rule and control the rules outside the farm. Now they have got a message to take a broader responsibility for the whole food chain and its environment. I believe that farmers accept this and we want to invite the other partners in the food chain to share this mission.

The whole idea of multifunctionality means that agriculture through its multiple functions responds also to needs that cannot be satisfied through the market. Now farmers' immemorial land management function is also more and more recognised as a public good. It has always accompanied the production function in order to manage farm land´s nature in good shape for the next generation. I believe that farmers respond positively to this emerging recognition. Otherwise there are other active people in society who try to take over the task of farm land management.

We can see that in the future decentralised and—through co-operatives - networked European agriculture a farmer will be a professional expert like a doctor or psychologist because he or she needs highly complex expertise in food production and in land management under exceptionally high professional and moral standards.

But the farmer's job is today undervalued and underpaid if compared to his job description. Something went wrong in the early modernity when Ricardo and his followers dismantled living nature from its unique creative but fragile characters - and therefore from something worth of positive rent or compensation. Today we should find a way to finance increasing needs for guarantees of food safety or quality and for solving the tension between economy and ecology.

Therefore I suggest that we again revitalise and revise the historical positive rent of land in such a way that the farmers' land management function reflects—directly or indirectly—in the value of the product. This could practically mean for instance that when the citizens increase through political decision farmer's ecological land management costs they could pay this through global budget or through a specific element in the final product. ■

Highlights of EU-U.S. Cooperation Under the New Transatlantic Agenda

During the Swedish presidency, we have acted together under the New Transatlantic Agenda (NTA) to promote peace, stability, democracy and development, respond to global challenges, expand world trade, develop closer economic relations, and build bridges across the Atlantic. We will continue this cooperation under the Belgian Presidency and, in order to achieve greater results, we have decided to focus on the limited number of strategic themes and immediate priorities agreed in the Göteborg Statement today.

As reflected in our statement, we are cooperating closely to promote peace and stability in South East Europe. We will work closely together to make the Stability Pact Second Regional Conference in October in Bucharest a success.

We are also closely cooperating to further the process of reconciliation on the Korean Peninsula and to pave the way for a resumption of peace talks in the Middle East. Both sides have reaffirmed their continuing support for the peace process in Colombia.

We have worked together more intensively in the Baltic States and Northwest Russia, within the frameworks of the EU Northern Dimension and the US Northern Europe Initiative. Specifically, we have identified a number of cooperative activities to undertake in the field of the environment in the coming months, focussing on watershed management, the impact, control and eradication of invasive species, and enforcement/compliance. We are continuing to explore further cooperation in the areas of law enforcement, public health and strengthening civil society.

We have assisted Russia in implementing its non-proliferation and disarmament commitments, particularly regarding weapons-grade plutonium and increased international funding for chemical weapons destruction programs, such as Shchuchye. The March Non-Proliferation and Disarmament Cooperation Initiative conference, held in Brussels, allowed further progress in donor coordination with Russia and other Newly Independent States (NIS), and noted the specific role of the International Science and Technology Centre. We are cooperating closely to reach an agreement with Russia on the Multilateral Nuclear Environmental Program in the Russian Federation (MNEPR).

We have actively supported the efforts of the UN Secretary General to achieve a comprehensive settlement on Cyprus consistent with relevant UNSC resolutions. We urge renewed effort by the parties to reach a comprehensive settlement and a prompt restart of talks under the good offices of the Secretary General.

We will continue our cooperation in Africa, in addition to confronting the spread of communicable diseases. In Central Africa, we will support negotiated settlement of the conflicts and national reconciliation, and help establish with international organizations an action plan for peace and development in the region. We will support the peace process between Ethiopia and Eritrea on the basis of the Algiers Agreement, to which we have effectively contributed.

We have worked to combat the spread of weapons of mass destruction, missiles and other weapons of mass destruction delivery systems. We reaffirm our support for strong non-proliferation and export control regimes, international arms control and disarmament measures.

As agreed at our December 2000 Summit, the EU and U.S. are developing a draft international arms exports declaration, with a view to initiating a process of broader international participation in the final development of this instrument. We confirm the importance of combating destabilizing accumulations and uncontrolled spread of small arms and light weapons. In this context, we agree that

this year's UN Conference on Illicit Trade in Small Arms and Light Weapons in All its Aspects should provide a new impetus for collective action on this front. We commit to a successful outcome of the Conference.

We continue to attach high priority to promoting respect for human rights, rule of law, and democracy. We reaffirm the importance of close EU–U.S. coordination and cooperation to furthering our mutual goals in this area. We will work together to help make the World Conference Against Racism and the UNGA Special Session on Children forward-looking, constructive and action-oriented.

We are committed to strengthening and revitalizing the United Nations, and to pursuing the improvement of the financial situation of the Organization on the basis of the reform of the scales of assessment adopted by the UN General Assembly in December 2000.

Conscious of their importance for our bilateral relationship, we confirm our commitment to honor and fully implement the various understandings and agreements reached at the 18 May 1998 London Summit.

We signed the Stockholm Convention on Persistent Organic Pollutants. We support universal ratification of this Convention, as well as of the Basel Convention on Transboundary Movements of Hazardous Waste and their Disposal. We are already acting in the spirit of these conventions and, with respect to the Basel Convention, note the US firm intention to seek ratification. We will work together to promote a forward-looking World Summit on Sustainable Development in September 2002. Environmental health threats, especially against children, and environmental crime are areas of particular concern to us.

We are committed to continuing work on the full range of issues of concern on biotechnology, including addressing regulatory issues and market access, and identification of subjects raised in the Consultative Forum report on which the two sides would like to work.

We have cooperated on Justice and Home Affairs, combating child pornography on the Internet, supporting the expansion of the 24-hour contact point network, enhancing understanding for each other's system for data protection, and encouraging third countries in their efforts to combat organized crime and consolidate a society based on the rule of law. We jointly sponsored a resolution at the UN Commission on Narcotic Drugs to facilitate international monitoring of chemical products used in the manufacture of "ecstasy" and other illicit synthetic drugs.

We have agreed to share information, research and best practices on asylum, resettlement, and rehabilitation programs for traumatized refugees, prevention and combating illegal immigration, integration practices and responses to situations of mass influx of refugees and displaced persons.

We have initiated a EU - US dialogue in the field of good governance and combating corruption, and will continue to explore areas where transatlantic cooperation could provide added value to ongoing work in international organizations.

We continued our close cooperation on Information Society issues. We have reviewed regulatory developments for electronic communications in an era of technological convergence, discussed respective initiatives on critical infrastructure, network security and electronic signature, and reviewed progress on e-confidence and alternative dispute resolution. We exchanged ideas on ways to measure better the digital economy. We discussed the internationalization of the organization and management of the Internet infrastructure. We have identified boosting consumer confidence, facilitating access to the Internet for the disabled and deepening e-government, including linking EU and US government websites, as priority areas for joint cooperation.

We have consulted within the framework of the Transatlantic Economic Partnership (TEP) to avoid the development of disputes and stress the importance of the consistent use of the Early Warning Mechanism. Also under the

TEP, we have initiated a Mutual Recognition Agreement (MRA) on marine equipment, which will allow EU and U.S. products to be certified to their respective domestic technical regulations for approval in both the EU and U.S. markets. We continued discussions with regard to mutual recognition and regulatory cooperation in other sectors. In addition, we reaffirmed our commitment to making the 1998 MRA fully operational as soon as possible, in particular with regard to the annexes on Electrical Safety, Pharmaceutical Good Manufacturing Practices and Medical Devices.

We have continued to strengthen our science and technology cooperation and increased the opportunities for scientists on both sides of the Atlantic. Recognizing the importance of developing clean and secure energy, including alternative sources, we have signed an implementing arrangement on non-nuclear energy research and have renewed our nuclear fusion agreement.

We have continued to consult on issues of interest to consumers.

We participated in discussions with consumer organizations on a range of issues at the 4th conference of the Transatlantic Consumer Dialogue (TACD), and in the Transatlantic Business Dialogue's (TABD) mid-year meeting. In the next six months, we will further promote dialogue between different sectors of society. In particular, we will continue our interaction with the TACD and will participate in the annual Transatlantic Business Dialogue CEO conference. We support the Transatlantic Environment Dialogue and the Transatlantic Labor Dialogue in their efforts to rejuvenate their activities. We look forward to receiving recommendations from all the dialogues on key issues of joint concern as well as their input in shaping the agenda for our future discussions. We welcome efforts to strengthen the Transatlantic Legislators' Dialogue. ■

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