An Assessment of Developing the Human Capital in Supply Chains Across Borders and Cultures in U.S. and Russia and CIS Government Programs

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Overview

This article outlines and assesses the programs focusing on human capital development in "Supply Chains". The supply chain future and current managers must be trained and educated to operate across national boundaries and differing economic, financial and social systems. The article focuses on the training and education in the Cochran Fellowship Program. This program began in 1984 and vastly expanded in the early 1990's as Russia and the CIS countries emerged from the communist command oriented "supply chain" systems. Both the East and West have much to gain by improving the human capital in supply chain human management. Regional and Rural Development increasing depend upon high quality and applied education. The Local development dynamics and potential in peripheral areas depend upon linking job and income opportunities locally with income and consumer market options in more established and developed areas. This means that the human capital must be trained and educated in new technology, transportation systems, planning processes, and trade related issues from differing systems. U.S. and European institutions are working together to develop rural and peripheral areas of Europe such as Russia and the CIS. This paper reports on the areas of joint cooperation to expand the understanding, training and education of Western and Eastern parts of Europe.

Improving Rural and Perifpheral Regions' "Supply Chain" Management: Education and Training

The human capital developments in the Cochran programs and similar European Programs are provided by the 1990 *Food, Agriculture, Conservation and Trade Act.*² Originally it was focused on a number of key objectives including:

- Education, training and U.S. technology diffusion
- Goodwill and Cultural Exchange
- Understanding Differences in Agribusiness and Other areas. Disputes and related training on such issues as Mad Cow and GMO's continue to critical to successful integration of regions.
- Managerial and Organization Change Education
- Understanding Emerging Democratic institutions related to trade, marketing and other key concepts of Western style supply chains and markets
- Strengthen and enhance trade linkages between eligible countries and agricultural interests in the United States."
- Agricultural Policy Reform
- Transportation, information technology and communications issues
- Enlargement and other sustainable issues.

- Mediation of Disputes across cultural and other differences.
- Financial Restructuring of Rural Areas

Each individual program has been tailored to the needs of each individual country by the U.S. Embassy and Consulate officers, professional trainers and educators and others working on institution building efforts for a particular country. A List of eligible countries is listed in Figure 1.

Figure 1: Countries of Early 1990 Cochran Programs

Russia	Kazakhstan	Uzbekistan
Bulgaria	Yugoslavia	Lithuania
Hungary	Poland	Czech Republic
Tajikistan	Georgia	Armenia
Turkey	Moldova	Turkmenistan
Macedonia	Montenegro	

For the first few years, the program was managed by the OICD (Office of International Cooperation and Development). Since the reorganization of the U.S. Department of Agriculture in the mid 1990's, the Foreign Agricultural Service (FAS) has managed these programs successfully. This article reviews the evaluations of some 450 participants who participated in the Arizona State University's programs since 1994. Each participant was given an evaluation form similar to the one provided in Appendix A. The purpose is to explore possible areas for improvement in the training and suggest ways to improve the training across the "supply chains" which have been developed.

Since the mid 1990's, the U.S. Senate and Congress have expanded the program objectives to include:

- 1. Trade Promotion and Issues related to GATT
- 2. Food and Animal Safety and WTO related issues
- 3. Emerging Market "supply chain management and development".
- 4. Mid Level Executive Training in key areas related to U.S. Export Markets
- 5. Industry Specific Training to meet U.S. government and congressional mandates related to emerging markets.
- 6. Providing Education and Trading for the Rural and Peripheral Regions
- 7. Linking U.S. Farmer and Rancher organizations with International Market participants and executives
- 8. Improving the Understanding of Regional Development and New Models of Growth

With this addition, the number of countries has grown significantly with little increase in funding in the mid 1990's. The U.S. Congress has funded these programs on the annual basis. Since the "1996 Freedom to Farm Act" the number of countries has expanded to nineteen as new countries have sought training and education in the U.S. The number of countries has reached 58 under the new "Freedom to Farm" legislation.

Figure 2: Expanded List of Countries under The "Freedom to Farm" Act

Russia	Kazakhstan	Uzbekistan
Bulgaria	Yugoslavia	Lithuania

Hungary	Poland	Czech Republic
Tajikistan	Georgia	Armenia
Turkey	Moldova	Turkmenistan
China	Indonesia	Pakistan
Brazil	Albania	Bosnia
Croatia	Estonia	Latvia
Macedonia	Montenegro	Romania
Slovakia	Slovenia	

As world food business linkages and supply chains expand, education and training must develop the human capital and individuals from different countries and different educational cultures. While agribusiness education has been expanded at the undergraduate and graduate levels, little attention has been placed on short-term professional education for emerging markets, such as Russia and CIS countries. The transition of educators and executives is a key part of the challenge of transitioning their economies from a command to a market-oriented economy. Both the European Union and the U.S. spend over \$20 Million annually in these areas to improve the linkages and understanding in agribusiness supply chains. Both the European Union and the U.S. have had education and training programs in place with Russia since the early 1990s, including over 150 separate education and training projects.

This paper discusses the strengths and weaknesses of such programs, the Cochran Fellowship and longer-term education programs funded by the U.S. department of Agriculture. The authors have either taught or participated in these programs. The article also highlights the evaluations the participants made, Arizona State University where ten years of evaluations will be analyzed. The participants from Russia and other emerging markets have been focusing on providing real linkage to the marketplace, understanding of the education process in Western Europe and the U.S. The linkage and training has been developed in several interesting areas related to the food chain.

In 1996, three professionals, Dr. Ikbal R. Chowdhury, Dr. Craig L. Infanger, and Dr. Micheal Reed evaluated these programs. ³

The authors highlighted the gains under education, training and U.S. technology diffusion. To assist this goal, over 7000 individuals have been trained under this program. This mid decade report highlights a number of milestones in this area. This includes that many participants felt this was the "single most important or useful part" of their experience.

The mid decade evaluation concluded that there were strong benefits for the Goodwill and Cultural Exchange components. The participants in the mid decade study highlighted the key importance of understanding the cultural and goodwill components of the U.S. and home country relationships. This helps develops products and services that can be better tailored to the customer.

The mid decade evaluation highlighted some of the managerial and organization change, which will impact supply chain management, which has taken place as a result of these trainings and educational efforts. Based on the participant interviews, the authors' experience, and secondary data, over 84 percent of participants agreed that organization change had taken place. Close to 90 percent of the participants have seen job changes,

promotions, and increased responsibility in their current jobs. Additionally, over half of the interviewed participants had reported better management of their farms, agricultural cooperatives, rural banks, agribusinesses or related subjects.⁵

Another area of focus of this training and education is the understanding Emerging of democratic institutions and governance of both the public and private sectors related to trade, marketing and other key concepts of Western-style supply chains and markets. This area of training and assessment is harder to document. The participants in the mid-decade study suggest changes in retail store management, importing U.S. technology or goods, test marketing of U.S. food products in grocery stores, adopting American-style food store management, privatization of state farm product marketing enterprises, auction of assets, reorganizing academic curriculum and initiating new research and pilots of rural banking and credit systems.

Another important aspect of this supply chain training has been to strengthen and enhance trade linkages between eligible countries and agricultural interests in the United States." Between 1991 and 2000, Agricultural Trade has grown by 45%according the FAS statistics. This overall growth has been in part due to the restructuring of global markets. Several segments, including grains and cattle, have declined due to lack of purchasing power and other disruptive factors associated with the transition to a market based economy. For example, training in rural credit and trade financing systems have allowed for trade to develop in the private sector.

The Agricultural Policy Reform in chain management has been an important area of human capital development. Since most managers in the Former Soviet Union have little or no experience, the training in national, regional and local policies to encourage consistent market oriented public and private policies and behavior. For example, one area taught by ASU has been in trade policy management including understanding grades and standards, WTO requirements and phytosanitary requirements of the U.S. and other WTO members. In the new millennium, food safety concerns will continue to drive new requirements on all countries as each country sources additional products from the other. The "safety of any chain" depends upon training, education, and technical knowledge. Another important area of the training and education has been the financial restructuring of rural areas. As collectives, private property, machinery and farm and rural assets are being developed and improved technically, it is important to understand the changes in financial structures in the rural areas.

Since the mid 1990's, another important area of training and education has been related to trade promotion and GATT issues. Managing supply chains under the new Ministerial declaration signed at the Fourth WTO Ministerial Conference held in Doha, Qatar] Trade Round will provide many challenges for Russia and the CIS countries. Meeting ISO standards, assuring grades and standards, GMO and residue management are areas where the U.S. government team has focused. Most Russia and CIS countries have found the CODEX Alimentarius standards and requirements hard to implement. Both the U.S. and Western Europe have had challenges explaining the requirements of agricultural commodities and products to Russia and CIS supply chain managers. Thus, Cochran training in this area has helped countries develop better export mechanisms and food safety for western markets.

Another area, which affects chain management, is food and animal safety and WTO-related issues. As a result, several of the programs have focused on helping the managers

of chains in Russia and CIS countries in these areas. For example, one program at ASU focused on Dairy and milk marketing management.

The focus of several of the training sessions has been on the Emerging Market "supply chain management and development" between the U.S. and Russia. Programs on Warehouse Receipts and Shipping and Port Management have focused on improving the chain management from farm to market. By improving the efficiency of both the imports and exports from Russia it can increase the efficiency of both countries agribusiness managers.

Another area of focus has been industry specific training to meet U.S. government and congressional mandates related to emerging markets.

This includes the linking U.S. farmer and rancher organizations with international market participants and executives. The authors concluded, "in terms of the stated evaluation criteria", it is clear that the training and education programs are doing an excellent job of goodwill and cultural exchange". In the mid 1990's major farm organizations including the Farm Credit System, Farm Bureau, National Cattlemen Association, U.S. Grains Council, and U.S. Wheat Growers have participated to improve the marketing potential and understanding by American farmers and ranchers of the dimensions of the global market. In the area of technical diffusion and understanding the programs have also been a success in expanding understanding of the chain. In the survey they conducted they noted that the participants highlighted that the most important part of the training experience was "things that they had learned about agricultural cooperatives, banks, agribusiness or related subjects". Participants in the Arizona State program suggest that additional focus on emerging areas such as rural tourism, value-added chain processing, transportation and logistics, grading and standards, and warehouse receipt financing would also be helpful in these programs.

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³ An Evaluation of the 1996. Dr. Ikbal R. C