

**BULGARIA
AN ASSESSMENT OF THE AGRICULTURAL
AND FOOD SECTOR
AND
RECOMMENDATIONS FOR SUPPORT (1)**

**Prepared for USAID/Bulgaria
Economic Reform and Growth Office**

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(1) This assessment does not address the tobacco or wine production sectors.

Bulgaria Assessment of Agricultural and Food Sector

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I. EXECUTIVE SUMMARY

Bulgarian agriculture today must be viewed in its post-Soviet era context. Collective farms and processors were privatized. Over the past decade, a lack of credit for both producers and processors, severe falls in input use, disruptions in domestic marketing channels and a lack of new investment resulted in a severe drop in output. These problems have been compounded by low commodity prices worldwide and the decline of the Soviet Union as a major market for processed Bulgarian foodstuffs. The collapse of the Russian ruble and banking system in 1998 was another blow to those Bulgarian exporters that still had Russian customers.

The foregoing gloomy state of affairs has a flip side, however. Significant progress has been made in Bulgaria in recent years to rationalize its agriculture complex. The EU and other international development agencies, including USAID, have been doing the right things to assist Bulgaria achieve a level of normalcy within the global economy. The Bulgarian banking crisis of 1996 – 1997 has resulted in a reformation of that critical sector, which is beginning to have positive effects on the whole of the agricultural sector. While much has yet to be done to improve the availability of credit, those steps are underway. The prospect of EU accession is leading to consolidations of suppliers and processors and resulting in improved quality of processed foods aspiring to compete in world markets. Food chain safety standards are being brought up to world market requirements although gaps still exist. USAID has been the driving force in the successful development of a warehouse receipts program, creating a new category of collateral available for securing credit. The World Bank has underway a program to develop a land cadastre system, which when completed will permit a land market to develop, thus capitalizing a major asset that heretofore has had little value as collateral. Another USAID project has organized a National Dairy Association, whose members include both producers and processors associations. The EU-Phare and SAPARD programs provide a level of resources that will help the sector move toward the efficiency needed for EU accession. In short, much of the needed framework for a growing sector is in place with a relatively good policy environment, the availability of needed inputs, a completion of land restitution, increasing processing capability, etc.

But just as there are strategic markets where Bulgarian products can and should be more competitive on world markets, there are also some strategic choices for continued USG assistance to make a significant difference in the development of the Bulgarian agriculture/agribusiness sector. Areas recommended for support are briefly outlined below. Although presented as discrete activities, in reality most are closely linked and should be viewed as a package of assistance aimed at increasing Bulgaria's competitiveness in agricultural trade. This assessment recommends that USAID:

A. Support the development of specific Development Credit Authority programs

with selected banks in Bulgaria to help marshal the capital required for short, medium and long term agricultural credit needs. The use of DCA programs may include the extension of credit guarantees to support the accounts receivable and leases of capital goods manufacturers. As the land market develops, the use of DCA guarantees to support mortgage backed bonds may also be considered.

B. Initiate a market-driven, integrated fruit and vegetable marketing activity. Among the key elements should be: grades and standards development, meeting international quality and safety requirements, technical assistance in the areas of processing/packaging technologies and cold chain management. USDA-led investment missions and technical expertise in standards development and cold chain management would be an important part of this activity.

C. Continue providing limited support for the warehouse receipts program. For reasons of experience and efficiency, we also recommend that ACDI/VOCA continue to provide this assistance with additional expertise provided by the USDA as appropriate and required.

D. Provide additional support for 1-2 years for the Trade Development Center established under FLAG to create a self-financing organization. Collaboration with the fruit and vegetable marketing activity outlined above, efforts to attract U.S. investment and with USAID/Bulgaria competitiveness activities would be desirable.

E. Supply modest support for a village-focused dairy development program, recognizing the dual benefits of income generation for thousands of the rural poor and product quality improvement.

F. Facilitate Bulgaria's E.U. accession and international competitiveness, with a specialized technical assistance, agricultural training and educational opportunities program. Most of the training and technical assistance should be linked with and closely complement the activities recommended above. However, limited assistance in other areas of U.S. interest would also be appropriate. The USDA is recommended as a source of this expertise.

The set of recommended agricultural assistance activities is fully consistent with and supports USAID/Bulgaria's S.O. 1, "Improved Investment Climate in the Bulgarian Economy." Specific targets under IR 1.1, "Improved Access to Credit," and IR 1.2, "Increased Productivity in Targeted Sectors," will be achieved. The recommended level of USAID investment for these agricultural/agro-business activities is \$3.0 million per year.

II. INTRODUCTION AND PROCESS

To assist USAID/Bulgaria in developing a new five-year strategy for assistance, a USAID/USDA agricultural and food sector team examined the systemic and policy elements of the agriculture complex in Bulgaria. All segments of the system, from the farmer, to the processor, to the consumer were reviewed and assessed. This process included a field trip through northeastern Bulgaria, visiting farmers, a flour miller, grain storage facilities, fruit and vegetable canneries, an oilseed processor, and a bank. In Sofia, meetings were held with the deputy ministers of both the Ministry of Agriculture (MOA) and the Ministry of Economy (MOE), staff from the Ministry of Health and with individuals from various departments in those ministries. Sessions with USAID agriculture project implementors, the World Bank, the European Bank for Reconstruction and Development (EBRD), other donors, an agricultural biotech research institute, the Sofia Commodity Exchange and others involved in the spectrum of agricultural activities were also held (2). Statistical data and reports from a variety of sources were reviewed.

As the assessment progressed, team members compared notes on their respective findings and a clear picture began to emerge. These preliminary conclusions were confirmed by subsequent meetings with other agriculture sector participants in Sofia and USAID/Bulgaria and USDA/Bulgaria staff. The conclusions and recommendations of this report reflect the consensus of the assessment team.

III. THE ROLE OF AGRICULTURE IN THE BULGARIAN ECONOMY

A. General

The agricultural sector in Bulgaria provides about 26 percent of employment and is a major source of present and expected future foreign exchange earnings. Bulgaria continues to be a significant (net) exporter of agriculture and food products in the region. In addition, the sector plays an important role as a social buffer to rising levels of unemployment. Clearly, increased production of high value crops and their processing for both internal and export markets, must be part of Bulgaria's economic growth strategy.

Bulgaria has made significant strides in land privatization and is a model for its break-up of state and collective farms. Trade and agricultural policy are on the right path. Still, farming operations are in great need of agricultural information services, inputs, machinery, credit, and markets.

In preparation for EU accession, Bulgaria is currently the first country that is actually implementing the SAPARD program, which will further facilitate the necessary adjustments in agriculture and rural areas to the internal European market. With open trade regimes and liberalized price policies, Bulgaria is well placed to advance

(2) See Annex VI for a list of meetings held.

efficiency and competitiveness in the agro-business sector in advance of accession.

B. Economic Importance

From 1989 to 2000, real GDP in Bulgaria fell by almost 30 percent. However, this overall decline masks at least four periods. For the first three years, there was a sharp decline followed by small gains in 1994-95. Weak macroeconomic policies and a lack of structural reform caused a further deep decline in 1996-97. Since 1998, stabilization and structural adjustment policies have allowed the resumption of positive growth with real GDP increasing by 11 percent in the three years through 2000. Recent projections indicate real GDP growth in 2001 will be 4-5 percent.

The economic importance of the agricultural production sector to the Bulgarian economy peaked in 1997 at nearly 27 percent of GDP. While overall GDP grew in 1998-2000, agricultural growth in 1998 and 1999 was flat and seemingly declined about 10 percent in 2000. As a result, agriculture's contribution to GDP in 2000 was about 14.5 percent. The Economist (EIU Country Report – Bulgaria, June 1, 2001) forecasts a resumption of agricultural growth in 2001 although as a percentage of GDP agriculture will probably continue to decline in relative importance. The inclusion of agro-processing, which is considered part of the industrial sector, would add several percentage points to agriculture's contribution to the economy.

C. The Livestock Sub-Sector

As with most other agricultural sub-sectors, the livestock industry declined sharply throughout the 1990s in terms of animal numbers and production. Except for sheep and sheep products, it appears these declines have now slowed or even stopped and milk production seems to be slowly increasing. Reasons for the declines included: a) transfers of animals to private owners without facilities or experience; b) declines in domestic consumption of livestock products; c) the loss of foreign markets for exports of pork, poultry, eggs, dairy products, sheep and lambs; and d) increased competition on domestic and foreign markets. Almost all livestock production – over 99 percent of dairy, sheep and goat output and over 95 percent of poultry and pork – now comes from private producers.

According to Land O'Lakes, over 98 percent of the dairy cows in Bulgaria are in herds of less than 5 animals (about 220,000 farms) with over 95 percent in 1-2 cow herds (about 210,000 farms). The total number of cows is around 420,000. For sheep over 61 percent of the animals are in herds of 5 animals or less (almost 299,000 farms) with the remaining 187,000 farms holding about 39 percent of the animals. Sheep numbers are about 2.29 million while goat numbers hover close to 1.0 million.

D. The Grain Sub-Sector

The most important grain crop in Bulgaria is wheat, grown on roughly 1.0 million

hectares and accounting for about half of total grain output and 18 percent of the total value of crop production. Corn is the second most important crop (10 percent of crop production value) followed by barley. Oilseeds, largely sunflowers, represent about 5 percent of crop production value.

The area planted to grains has not fallen significantly since the late 1980's, but total production has dropped by 30 percent or more for most grain crops. Sunflower production has varied and shows the least decline. Reasons for the decline in wheat production are lower uses of fertilizers, pesticides and herbicides. Corn production has fallen for the same reasons as well as low farm prices as livestock numbers contracted.

The development of a grain warehouse receipts system, now in operation for two crop years, has had a significant impact on the availability of short term credit to the grain production and processing sector. This USAID - ACDI/VOCA project, developed in conjunction with the EBRD and with USDA assistance and support, has trained the credit management staff of several banks in the use of warehouse receipts as collateral. As of this writing, over \$4 million of credit is being extended, secured by grain warehouse receipts.

E. The Fruit and Vegetables Sub-Sector

Fruit production in Bulgaria has declined substantially in recent years as markets have disappeared for fresh and processed products. Fruit production has declined the most, with overall output dropping 50 percent in recent years. Vegetable production has remained fairly steady, and area under cultivation has actually increased in recent years.

Processed fruits and vegetables are traditionally strong products for Bulgaria. In 1998, however, the Bulgarian canning industry suffered a sharp drop in output. Canned fruit production declined 61 percent and canned vegetable production declined 45 percent between 1996 and 1998. The downward trend is beginning to show signs of slowing, however, and even seems to be reversing for some product categories. A study of the processing sector by ACDI-VOCA completed in 2001 shows that declines in production of processed fruit has stabilized since 1998, while production of processed vegetables increased 15 percent between 1999 and 2000. The leaders in this upward trend in processed vegetable production were dried and low-acid canned products.

F. The Farm Input Sub-Sector

Mechanization: As is the case elsewhere in most of the former East Bloc, there have been large declines in the numbers of tractors, combines, drills and other farm equipment since the early 1990's. Much of the machinery inherited from the previous system is also of an inappropriate size and is now obsolete. Farm machinery manufacturing capacity and output has also declined. On the bright side, all agricultural equipment production enterprises have been privatized, have ceased to produce or are being privatized. Credit subsidies and tax breaks have also resulted in a

substantial increase in imports of combines and tractors, although more are needed. Dealers and suppliers are active and able to provide most of the required equipment. An improved financial sector that can provide medium and long term credit should have the effect of further mitigating this barrier to an improved agricultural sector. A consolidation of farm land into more economically rational units, combined with the establishment of service cooperatives would further assist progress.

Input Supplies: All previously state-owned fertilizer enterprises have been privatized. The only plant in Bulgaria that produces plant protection chemicals is also privately owned as are over 90 percent of the seed enterprises. The Government of Bulgaria has removed all requirements for registering new varieties for seeds that are listed in the EU Common Catalog. Fertilizer import tariffs have been reduced to 25 percent. In recent years fertilizer use and imports have declined substantially as have the use of crop protection chemicals. Nevertheless, several international seed and input suppliers are active in Bulgaria. Of related interest, one major seed producer told the assessment team that they intended to utilize grain warehouse receipts to collateralize their accounts receivable this coming crop year.

Irrigation: Before 1990 there were 1.2 – 1.3 million hectares of irrigated land. The area under irrigation has now fallen to less than 100,000 hectares, with an estimated 40 percent of the national system and about 80 percent of the field irrigation system beyond repair. The Ministry of Agriculture and Forestry (MAF) has prepared an irrigation development strategy and has begun to re-organize the subsector with an emphasis on decentralization and greater local control. An important step in beginning to rehabilitate the degraded complex of irrigation systems is the creation of 42 Water User Associations (WUAs). The GOB is also committed to using economic criteria to determine which schemes should be rehabilitated. The World Bank has provided assistance in drafting water use laws and policies to address the deficiencies in current irrigation management, regulations and practices.

Producer/Processor Organizations: The common interests of various groups have spawned the creation of many producer and processor organizations. For example, with the assistance of USAID/Land O'Lakes, dairy producers and processors have formed a National Dairy Association. This combining of interests has resulted in improved standards in both production and marketing of milk products. Water User Associations are having a similar positive influence on the development of water use policy. Other producer and processor groups are being developed, such as an association of fruit and vegetable processors. Driving these are both the desire for EU accession, and an awareness of the impact the EU's Common Agriculture Policy may have on Bulgaria's agriculture.

IV. LAND, LAND USE AND LAND MARKET DEVELOPMENT

Bulgaria has about 6.2 million hectares of agricultural land. This includes roughly 4.8 million hectares of arable land (77.5 percent) and 1.4 million hectares of permanent grasslands and pastures. Perennials cover about 218,000 hectares while field crops comprise around 4.3 million hectares.

Land reforms began in Bulgaria in 1991 with the process of restitution of private land ownership rights. The privatization of agricultural land in Bulgaria via a restitution process is now essentially complete with nearly 100 percent of the agricultural land subject to restitution restored to the former owners. Only a limited amount of land remains in state farms. By the end of 1998, private farms accounted for 81 percent of agricultural land, 96 percent of arable land, 97 percent of permanent crops and 29 percent of pastures. About 40 percent of the restituted land has been formally titled with large numbers of additional titles and new titles still to be issued as heirs divide property and all land is titled. It is expected that around 3 million, or perhaps more, Bulgarians will own land once the process is completed.

Currently, three types of private farm structures dominate agriculture: 1) individual farms, 2) private cooperatives, and 3) farming companies. Large-scale farms (run by companies, cooperatives, and individual farmers) farm almost 85 percent of agricultural land, while nearly 2 million small-holders farm about 15 percent of the land. The large number of very small or subsistence farms perform an important social function in rural areas, but their future viability as commercial agricultural producers is very limited.

On a more positive note, the *land use* pattern in Bulgaria is much less fragmented since much of the crop land is farmed in larger units created out of producer cooperatives and both formal and informal leasing arrangements. While the legal framework now exists for the functioning of a land market, an active land market exists only in a few regions.. Factors impeding a functioning land market include low profitability by farmers, high transaction costs, and the lack of collateral and credits to purchase land. As these factors are slowly overcome, land leasing can be expected to play a major role in the land consolidation process and the ability of farms to improve efficiencies and become profitable and competitive.

While some opportunities exist to assist in protecting land owner's rights and to support land market development, the Assessment Team believes that the systemic and costly measures required make this beyond the scope of assistance that should be provided and a low priority for USAID. The World Bank, through their Registration and Cadastre Project, is actively involved in this area and should be encouraged to continue.

V. FOOD PROCESSING SECTOR STRUCTURE AND PERFORMANCE

As a recent ACIDI/VOCA report indicates, food processing accounts for over 18

percent of total industrial production. Meat and dairy processing, fruit and vegetable canning, sugar and sugar products manufacturing, vegetable oil production, wine making, beer brewing, fish processing, tobacco production and grain milling are the key elements. A large over-capacity of agro-processing exists with only about 30-40 percent of installed processing capacity being utilized. Lack of investments during the 1980s and 1990s has left many of these plants with outdated equipment and inefficient processing techniques.

Over 95 percent of the food industry enterprises have been sold with both the dairy and brewing industries fully privatized. A small number of sugar and wine enterprises remain to be privatized and the tobacco monopoly, Bulgartabac, is currently up for privatization.

Opportunities exist in the food processing sector, especially the fruit and vegetable area, for Bulgaria to compete in international markets, especially the European markets. Bulgaria already exports high-quality processed fruits and vegetables to many European countries, with most products going to Germany, Italy, Greece and Austria. In 2000, zero-tariff quotas were negotiated with the E.U. for several processed products including tomatoes, cherries and plums.

Challenges to growth of the food processing sector include:

- Lack of grades and standards. Currently there are none for fruits and vegetables, but the Ministry of Agriculture now has a new unit to establish and implement grades and standards for the sector (see section on Grades and Standards below).
- Lack of a functioning market information system. This includes access to price information at all levels in the market chain. This problem is tied to grades and standards because transparent price information depends upon recognition of common product standards.
- Farm practices that contribute to low yields and poor quality.
- Lack of new technology adoption and foreign investment in new technologies for processing and packaging.
- Unreliable cold transport chain to protect product quality and minimize post-harvest loss.

The GOB has placed a priority on developing the fruit and vegetable sector because it sees a great export potential. In order to get there, however, greater attention will have to be paid to having more producers and processors meet the quality standards demanded by the export markets. The quality standards are constantly increasing and whether or not Bulgarian fruit and vegetable products will realize their potential in

international markets will depend on keeping up with the moving target.

VI. AGRICULTURAL FINANCE AND RURAL CREDIT

Based on conversations with bankers, processors, ministry officials, the Bulgarian American Enterprise Fund, and others, the assessment team identified the lack of medium- and long-term credit as being a major impediment to the development of Bulgaria's agribusiness sector. Short-term credit remains a problem, but progress is being made to satisfy this need: the USAID/EBRD supported Grain Warehouse Receipts program is being increasingly utilized as collateral for short-term credit. Commercial banks, although reportedly very liquid, remain reluctant to provide credit to agriculture.

The State Fund for Agriculture (SFA), created in 1995, was designed to provide guarantees to commercial banks for extending credit into the agriculture sector, as well as to provide short- and medium-term credit through commercial banks. A 1997 protocol even provides guarantees to commercial banks for providing purchase money credit for the acquisition of agricultural land. According to the July 2000 World Bank Technical Paper "Food and Agriculture in Bulgaria," most SFA programs do not achieve the objective of encouraging commercial banks to start lending in agriculture. Although somewhat successful, SFA credit facilities have not satisfied the need for short- and medium- and long-term credit to the agriculture sector.

At present, there are 33 credit cooperatives in Bulgaria. These were created in 1995 with assistance from EU PHARE. Credit cooperatives have a long history in Bulgaria, pre-dating the Soviet era. However, current legislation does not permit these to accept deposits or bank loans, thus restricting their growth and impact. The World Bank and other donors are addressing policy changes that would strengthen the credit cooperatives, but significant change has yet to take place.

EU's Special Accession Programme for Agriculture and Rural Development (SAPARD) provides a grant program that reimburses eligible grantees for 50 percent of the purchase price of capital equipment utilized in agricultural production or processing. Prior to receiving this subsidy, grantees must pay in full the purchase price of such equipment. The difficulty facing most potential grantees is the front-end purchase money. SFA serves as the paying agent for SAPARD. While there are provisions for SFA providing co-financing by SFA for eligible projects subsidized by SAPARD, this facility has reportedly not been utilized to date. Bridge financing is currently not available.

The market for agricultural land is still in its nascent stage. Until this develops, and it is developing, the use of agricultural land as collateral for credit, or even purchase money mortgages, has yet to take place.

Two USAID-supported credit facilities are proposed to address the most immediate and impacting missing types of credit in the system (3).

A. The first facility is designed to facilitate and complement the EU's SAPARD program. SAPARD reimburses an approved applicant an amount equal to 50 percent of the cost of processing or production equipment. This grant is paid only after the purchased equipment has been fully paid for by the buyer. In many cases, it is impossible for a buyer to produce that amount of front-end money. The purpose of the Development Credit Authority Loan Portfolio Guarantee (DCA LPG) is to induce banks to extend credit to the borrower in an amount equal to that to be reimbursed by SAPARD. The borrower would execute an agreement with the bank assigning their SAPARD proceeds. The LPG would be directed to agribusiness processors for production equipment, and to qualifying farmers. By its nature, this is a short term facility. It should probably be a hard currency facility, mostly likely euros. It is likely that the lending banks would finance these purchases with confirmed letters of credit to the sellers, which could reduce the cost of the credit to the borrowers.

B. The second LPG facility is designed to induce banks to extend medium or long term credit (3 – 5 years) (4) to qualifying agribusiness processors and producers for production equipment or facility up grades. It may work in concert with the first facility. This facility will be mixed leva/hard currency denominated. It would complement the first facility.

USAID Bulgaria currently has one MSED Loan Portfolio Guarantee (LPG) facility with a local bank to support SME credit with United Bulgarian Bank ("UBB"). The facility was designed to support SME development, working with FLAG. However, there has been very little activity under the facility.

VII. AGRICULTURAL TRADE

Historically, Bulgaria has been a significant net-exporter of agricultural and food products. This trend continued during the 1990's, although the size of net-exports have fallen by about 70 percent. Of all the CEE's, only Hungary and Bulgaria have remained net-exporters of food products. Bulgarian agricultural exports currently make up just over 15 percent of total exports. Bulgaria has specialized in the production and export of wine, tobacco, fruits, vegetables, and in some years, wheat and sunseeds. While in the past Bulgaria's exports were valued-added processed foods, trade today is mainly of commodity products.

Since the advent of reforms in Bulgaria, there has been a substantial reorientation of trade away from the CEE's and the former USSR, and towards OECD countries. The EU is currently Bulgaria's largest trading partner in agricultural and food products, accounting for about one-third of Bulgaria's total agro-food trade turnover. In 1993,

(3) See Annex II for additional details.

(4) At present, Bulgarian banks consider a 3 year term as long term.

Bulgaria signed the Europe Agreement with the EU, which provides for the establishment of a free-trade area through 2003. As a result of the signing of the Europe Agreement, almost two-thirds of Bulgaria's agricultural products are exported to the EU duty-free. The concessions made by the EU cover nearly 80 percent of Bulgaria's agricultural exports, including wine, fruits (plums, strawberries, cherries), and vegetables (potatoes, tomatoes, sweet peppers, preserved cucumbers, prepared tomatoes, apple juice). Most Bulgarian agricultural exports to the EU continue to run well below the preferential quota levels. In order to take advantage of the preferential market access offered by the EU, Bulgarian agricultural producers and exporters must increase output productivity, product quality and competitiveness, and to modernize the production and processing of agricultural and food products (5).

VIII. FOREIGN DIRECT INVESTMENT IN AGRICULTURE/AGRICULTURAL INDUSTRY

The cumulative stock of foreign direct investment (FDI) in Bulgaria's economy as of the end of 2000 totaled over \$2 billion, compared to Russia at about \$6 billion, Poland at over \$30 billion, Hungary at \$20 billion, and Romania at over \$5 billion. The main sources of FDI in Bulgaria include the United Kingdom, the United States, Germany, and Greece. Nearly all FDI in Bulgaria's food economy goes to the food-processing sector, with an insignificant amount directed at primary agricultural production. The attraction of additional FDI into Bulgaria's food sector will largely depend on the stability of the macro-economy and the political system. Other key determinants, many already in place, include the establishment of investor-friendly policies and institutions that effect taxes, foreign ownership rights, privatization, profit repatriation, availability of financing, labor laws, dispute resolution, rule of law, etc.

There is a critical need to raise the levels of FDI in Bulgaria's farm and food sectors. Such additional investment will allow Bulgaria to: 1) acquire foreign capital (financing and equipment); 2) gain access to foreign management skills to assist with enterprise restructuring; and 3) alleviate balance of payment constraints to ensure medium term economic stability and growth. Currently agribusiness enterprises suffer from low efficiencies caused by low productivity, high energy consumption, over-employment, weak management and financial skills, outdated equipment and lack of access to finances. One of the key means of addressing these shortcomings is through the attraction of foreign investment.

The Assessment Team recommends one low-cost means of attracting selected U.S. agribusiness investors to Bulgaria through a program run by USDA's Foreign Agricultural Service, which identifies targeted investment opportunities in host countries and promotes these potential ventures among U.S. agribusiness SMEs through specialized recruitment efforts and investment missions.

(5) It should be noted that many interviewees consulted by the Assessment Team mentioned that "organic farming" was an area of potential. It was the consensus of the team that such a focus may be premature as of this writing.

IX. AGRICULTURAL POLICY ENVIRONMENT

Bulgaria's current agricultural and trade policies are among the most liberal and market-oriented in all of the Balkans and former USSR. Market-based reform of Bulgaria's agricultural policies and institutions in the 1990's, especially after 1997, has led to one of the most liberal markets in the region driven by two primary objectives. These are: 1) promoting the development of infrastructure and institutions suitable to free markets, and 2) proceeding with Government intervention only in the event of market failure. Longer-term policy goals stress development of efficient and competitive export-oriented agriculture, improving farm and rural incomes, and preparing for EU accession.

Reform measures carried out in Bulgaria during the 1990's have included: 1) price liberalization, 2) abolishment of profit margins, 3) drastic reduction of agricultural subsidies, 4) land privatization, 5) farm and enterprise privatization and restructuring, 6) and reduced support to farms as outlined in the Agricultural agreement of the WTO.

Bulgarian policy reforms have had the least impact in the area of rural development. Such reforms must address the problems related to increased unemployment, reduced incomes and weak social services in rural areas. While the EU's SAPARD is making some effort in alleviating these serious concerns, more needs to be done. It is the recommendation of this Assessment Team, however, not to target the broader rural development issues through the agricultural strategy. These issues are better addressed through broader, national economic and social interventions. One avenue of intervention that might come under the agricultural strategy would be assistance with development of increased and more diverse producer and credit associations to improve the welfare of rural inhabitants. A key objective of these associations would be to interface more with policymakers at the center in order to pass laws that better serve their interests.

X. AGRICULTURAL MARKETING INSTITUTIONS, REGULATIONS AND INFRASTRUCTURE (6)

In 1991, the large state monopolies in agricultural inputs and in marketing and distribution were dismantled. Marketing channels have since been privatized, and in many areas, new forms of marketing have been evolving such as long-term contracts, formal and informal wholesalers, trading with warehouse receipts, etc. As in other transition economies, the majority of small and medium scale farms face the largest marketing hurdles due to their weaker market position. While marketing infrastructure (both physical and institutional) continues to improve, significant change lies ahead.

A. The Market Information System

(6) See Annex III for additional Details.

As a result of previous and ongoing assistance by ERS/USDA, NASS/USDA and the EU's PHARE, substantial progress has been made in developing certain segments of the country's market information system. However, numerous weaknesses in the system remain.

Collection of price data is rather limited and needs expansion. No collection or analysis of farm income is taking place. Interaction among the bodies producing market information is inadequate. Information as basic as crop area estimates remains inaccurate. Better analysis of the data to make it more usable by both producers and policymakers is needed. Longer-term production and price forecasting are relatively unsophisticated. But the weakest link in the market information system is the *lack of dissemination* of the data, prices and analysis to the end users. The Assessment Team strongly recommends targeted USDA assistance to promote the widespread availability of market information.

B. Food Safety and SPS (Sanitary and Phytosanitary) Issues

Recent changes in the food regulatory environment in Bulgaria have been driven by the E.U. accession agenda. New food laws, approximating E.U. legislation, have been enacted but specific regulations and implementation mechanisms are still a work in progress. Within the Ministry of Agriculture, two services have the authority for food laws and regulations. The Veterinary Service is responsible for all animal health and welfare issues, including border control and movement of animals within the country, and has responsibility for the sanitary inspections of all slaughterhouses, meat processing plants, dairy collection and processing facilities. The National Service for Plant Protection is a fee-for service and permit-granting agency responsible for phytosanitary control at customs stations, biological testing and pesticide registrations and the regulation of agrochemicals.

The greatest challenge to regulatory services will be implementation of Bulgaria's new food control legislation. A farm-to-table approach to ensuring food safety requires that all participants in the food system adopt practices that identify and control potential hazards and that regulators audit practices on a regular basis. Bulgarian producers and processors have little or no training in such systems and regulators are not yet organized and trained to conduct audits in a market economy.

Interventions must be strategic and complementary to the support of other donors to this sector. The E.U. is investing heavily in restructuring and equipping the border control facilities and supporting development of the disease reporting capability, in both the animal and plant sectors. Likewise, changing the legislation to meet E.U. and international standards will be supported as part of the accession process. There are significant gaps in the assistance planned by the E.U., however, and U.S. assistance can fill some of those gaps, thereby making the assistance of both donors much more comprehensive and effective. Possibilities include:

-Training for the Livestock, Dairy and Meat industries in the fundamental, international standard for food process control, HAACP (Hazard Analysis at Critical Control Points).

-Training for the Veterinary Service in conducting HAACP audits.

-Training for the Veterinary Service and the National Service for Plant Protection in the practice of Risk Assessment as a means of developing regulations and standards for ensuring safety of human, animal and plant health.

-A program of technical assistance and training to the dairy sector, aimed at improving the sanitary practices of small producers. This program would involve support for developing the network of dairy collection stations, investment in cooling facilities at the collection centers, training producers in practices that improve the safety and quality of their milk, and working with processors, retailers and exporters to provide a market-based incentive for higher quality.

Priority should be given to the HAACP training and the dairy program. Training in Risk Assessment will be needed, but could occur in a later phase.

C. Grades and Standards

Food grades and standards are in the process of change in Bulgaria as they proceed through the E.U. accession process. Where standards do exist (primarily in the bulk commodities) deviations from E.U. and international standards are common. Thus, Bulgaria is in the process of revising and/or establishing minimum quality standards for most food and feed products.

There are several major challenges in the area of Grades and Standards development in the fruit and vegetable subsector. Without transparent standards, the development of the fruit and vegetable market is constrained. Although the ministry of Agriculture has established a new unit charged with developing standards for the top 38 traded products, they are only in the early stages and see implementation of the standards within the industry as a long-term (5 years) proposition.

Linking standards and price information for producers is critical. Ensuring that Bulgarian standards are consistent with international standards (both public and market) and promote trade facilitation. Standards for components and formulations of animal feed are a new challenge for the National Grain Service. Conforming to international standards and the new E.U. traceability rules are a challenge for most feed mills in Bulgaria.

A program of training and assistance in formulating and applying fruit and vegetable standards, which could be provided by USDA, would support development of this

subsector in Bulgaria. Since a lack of standards are a key constraint to development of this subsector, speeding the adoption of international standards would hasten the growth of the subsector. This program should also help the GOB to work with industry in developing a market information system that ties price to grades and reaches farmers. This intervention should be part of a more comprehensive program to promote food industry development in the fruit and vegetable subsector.

Training for the National Grain Service in the area of standards for components and formulation of animal feed is also needed. Assistance should focus on development of science-based standards consistent with international standards, thus facilitating trade in the feed components and ensuring good manufacturing practices in the formulation of animal feed.

Priority should be given to the fruit and vegetable sector since lack of grades and standards is a key constraint to growth of this subsector.

D. Cold Chain Infrastructure

Although the Assessment Team did not have the opportunity to conduct a full assessment of the cold chain in Bulgaria, it is evident that there are serious problems that should be addressed. There are a number of large cooling warehouses used for cold storage throughout the country, mainly at the Black Sea port and in the major cities. It was reported that there is cooling capacity at the retail level throughout the country, but cooling capacity closer to the production level is very poor. In the dairy processing industry there is a severe lack of cooling at milk collection stations and cool transport for raw milk for processing.

Several major challenges in the cold chain should be addressed. There is no comprehensive analysis of the cold chain in Bulgaria. A thorough assessment by industry professionals is needed. There are identifiable gaps in the cold chain at all points, including immediate post-production cooling, transport and storage. The apparent lack of coordination and cooperation among firms supplying cooling and transport services is a constraint to establishing a strong, reliable cold chain.

Interventions are recommended in the following areas, many of which could be addressed by USDA's existing "Cold Chain Improvement Program":

- A comprehensive cold chain program should be initiated in Bulgaria, with assistance from the U.S. cold chain supply industry. Components should include an industry assessment, training of key firms, facilitation of investment and building an association.

- An immediate intervention targeted to the dairy subsector should be coordinated with the dairy industry intervention described above. Specifically,

this intervention should aim to provide cooling systems at milk collection stations and improve cool transport of milk to processing firms.

-Priority should be placed on an assessment of the cold chain industry in Bulgaria and immediate support to the dairy subsector.

XI. AGRICULTURAL RESEARCH, EDUCATION AND EXTENSION (7)

The state of Bulgaria's agricultural research, extension and education systems face serious problems. Funding constraints, overstaffing, loss of scientific contacts and unclear mandates are particular problems.

A. Research

The Ministry of Agriculture's Center for Agricultural Science, also known as the Agricultural Academy is the national scientific organization carrying out research activities and providing advisory services to policy makers in the fields of agriculture and food science. Established over 100 years ago, the Academy's primary responsibility is to manage and coordinate the many agricultural research academies and experimental stations set up through out Bulgaria.

The Center has resisted both internal and external pressures to restructure itself. The EU's PHARE program recently recommended that the academies be further reduced in number with five new centers of excellence replacing the traditional system. Both the Center and the Ministry flatly refused this recommendation. The research academies suffer from serious financial difficulties, which has led to a flight of talent and deterioration of facilities and equipment. Unable to provide funds for international travel, few researchers are able to benefit from international seminars or join professional societies. Consequently, the quality of research has declined.

It should be noted that a few of the academies stand apart from the rest of Bulgaria's research institutes, most notably the AgroBioInstitute. The distinguishing characteristics of these academies are a corporate approach to their management model, determination to establish strong linkages with Bulgarian and international universities, and market/customer service orientation.

Although there are obviously significant changes and upgrading needed in the Bulgarian research system, it is Assessment Team judgement that USAID should not devote scarce resources specifically for this purpose. The level of resources needed and the time required are simply outside what is considered realistic.

B. Education

(7) See Annex I for additional detail.

There are three agricultural universities in Bulgaria, each under the direction of the Ministry of Agriculture. There are also a number of universities, under the direction of the Ministry of Education, which specialize in agricultural related studies, such as agricultural economics, food processing and manufacturing, and agribusiness management. Under the current structure, universities continue to rely on the academies as bases for practical studies and laboratory research. However, a handful of progressive universities, frustrated by the academies' inability to quickly adapt research towards a new competitive market economy, have begun to develop their own research capabilities and are also designing more western style educational programs which incorporate applied research in the academic curricula. Although still heavily dependent upon the government for most of its funding, some universities are beginning to become more self-sufficient by generating their own incomes from tuition or fees collected for advisory and research services provided to both the public and private sector.

The major challenges facing Bulgaria's agricultural education system include:

- The University system must develop modern curricula that integrate traditional studies with more market oriented, applied and practical course work.

- Universities need to further develop their capacity to engage in independent research and extension while at the same time improve their linkages with state run research facilities and academies.

- Establishing closer links with the international community in order to effectively participate in and compete in a global economy. However, very few international donors are directing funds to support international collaborative research. The World Bank is funding research and extension grants programs in other Balkan countries, but to date, Bulgaria has been left out.

The Assessment Team recommends that support be provided for a limited program of training and technical assistance to improve agricultural education and research systems directed to the top 2-3 Bulgarian agricultural and agribusiness universities. USDA's Faculty Exchange Program should be included as part of any such assistance package. It might also include a Young Scientist Mentoring program.

C. Agricultural Extension

A national agricultural extension service (NAAS) was established in 1995 with EU funding as part of the National Agricultural Academy. In 1999 it was reorganized and placed in the Ministry of Agriculture as a separate unit. The mission of NAAS is to implement state policy in the agricultural sector giving up-to-date information, technical advice other services to agricultural producers so that they can effectively

participate in a competitive agricultural market. NAAS has 28 offices throughout the country with three employees - an agricultural economist, animal science specialist and agronomist - in each office.

The major challenges facing Bulgaria's extension service include:

- NAAS is not financially self-sufficient in its present state. Although NAAS claims to have knowledgeable staff and reasonably well-equipped central laboratory for basic analysis, it remains questionable whether the regional offices are capable of delivering the services they are mandated to provide.

- Many of the field agents lack basic training in adult education and extension.

- Although well equipped with computers, NAAS lacks a functional information network that links the central office to the field offices.

- There are no formal relationships linking NAAS with Bulgaria's agricultural academies, universities and other information services such as the semi-private market information system, SAPI.

The Team recommends one intervention – limited training and technical assistance to NAAS. Demonstrations in interactive extension and training materials currently used by USDA, state extension services and US universities would increase NAAS' capacity to develop innovative tools for implementing state policy and providing useful and more importantly, marketable information to Bulgaria's agricultural producers. A limited training-of-trainers program would elevate NAAS' reputation as a viable and self-sufficient extension service.

XII. AGRICULTURAL TRADE POLICIES AND WTO MEMBERSHIP

Like all of the other centrally planned economies of the former Soviet bloc, Bulgaria's trade policies and institutions were characterized by state monopoly of foreign trade, rigid export and import restrictions and a fixed exchange rate. At present, after significant liberalization of its trade system and policies in 1997-2000, Bulgaria's trade regime is one of the most open in all of Central and Eastern Europe. The state monopoly on foreign trade has been abolished. An array of trade-restricting export bans, taxes, licensing procedures, and special exemptions have been discontinued. In recent years Bulgaria has significantly reduced trade barriers, introduced a currency board, and adopted a new liberalized and transparent customs regime consistent with the WTO. Today most commodities are free of any substantial trade restrictions. Tobacco remains subject to special regulation.

The opening of the Bulgarian market primarily began after it joined the WTO in late 1996. While the Assessment Team does not recommend interventions in the area of trade policy, it is recommended that Bulgaria be assisted with its technical

commitments and compliance with WTO rules and obligations, including market access and export assistance. In this regard, USDA is well positioned to provide specialized support to Bulgarian trade officials in the MOA and the Ministry of Trade in meeting the requirements of the WTO's Agricultural, SPS and TBT agreements. U.S. trade and investment in Bulgaria will significantly benefit by having a partner that operates fully in compliance with WTO rules.

XIII. USAID AND OTHER DONOR ASSISTANCE IN THE AGRICULTURAL SECTOR

A. USAID

1. ACDI/VOCA

ACDI/VOCA has a Cooperative Agreement under the FLAG (Firm-Level Assistance Group) activity (other current FLAG members, also with Cooperative Agreements, are IESC and the University of Delaware). Within FLAG ACDI/VOCA is focused on the agricultural sector and is currently providing assistance in three often interrelated and generally complementary areas. These are: a) the provision of short-term technical assistance and training via volunteers to individual firms and groups of firms; b) the development of a warehouse receipts program; and c) support for agricultural activities of the FLAG Trade Development Center. The ACDI/VOCA elements within the FLAG program are currently scheduled to end in March 2002.

In each of these areas ACDI/VOCA activities have achieved results and can be considered successful. The volunteers supplied have provided relevant and quality assistance to individual firms and groups of firms. The impact of the assistance has been enhanced by the concentration on specific sub-sectors within the agricultural sector.

The Warehouse Receipts Program (discussed elsewhere in greater detail) started in 1998 by ACDI/VOCA with USDA assistance and support is highly successful. As of 10/30/01, there are four participating banks and 36 licensed warehouses with \$4,089,000 in outstanding credit.

The Trade Development Center was started in May 2000. In this Center ACDI/VOCA has concentrated on expanding exports of grains, dairy, wine, canned vegetables and fruits and honey. Support has been provided for Bulgarian participation in trade shows, direct business-to-business meetings and enabling Bulgarian firms to meet international quality standards. Results have been quite impressive with over \$2.6 million in trade linkages and contracts.

2. Land O'Lakes

The development of the dairy industry in Bulgaria continues to be the focus of Land

O'Lakes (LOL) assistance. Via a centrally-funded Cooperative Development Program, scheduled to end in June, 2001, assistance is focused on support to the Bulgarian National Dairy Association and its member associations. Some of the results of LOL assistance include: increased dairy exports, higher sales by assisted dairy companies, a national dairy association that unites dairy producers and processors, tax reforms from lobbying efforts and the introduction of a milk quality bonus program.

B. Other Donors

1. EU-Phare

EU-Phare has been providing assistance to Central European countries since 1989, and in 1997 the focus of these programs in Bulgaria shifted to focus on EU accession. EU-Phare provides 100+ million Euros annually for projects in many sectors and currently the EU-Phare assistance to the Agriculture sector is approximately 10 million Euros annually (for 2001 and 2002). In 2000 there was little disbursement of EU-Phare funds due to a lack of confidence in the Bulgarian government at the time. EU-Phare's assistance typically involves 30 percent institution building and 70 percent for financial investments in the *Aquis*(8). In Bulgaria, a high priority for EU-Phare has been the Sanitary (specifically veterinary) and Phytosanitary (plant protection and quarantine) areas. EU-Phare support has been provided to purchase equipment to upgrade laboratories (millions of Euros), to improve border control stations and to support several "Twinning" projects aimed at approximating EU legislation and providing technical support in several subsectors. Units within the Ministry of Agriculture that have received support are Veterinary Services, Plant Protection and Quarantine, and the National Agricultural Advisory Service (NAAS). Support to NAAS will be ending next month.

SAPARD, Special Accession Programme for Agriculture and Rural Development, is an EU investment program designed to fund projects that improve production and processing of agricultural products. The program mandates that an implementing agency be established within the country receiving support. The GOB has such an agency and has begun the process of soliciting and accepting applications for SAPARD assistance in May of this year. The first round of awards is not yet complete, so there is no official information about these awards. Total funding for SAPARD in Bulgaria is expected to be approximately 370 million Euros over the period of 2001-2006 (9).

2. World Bank

(8) 2000 Regular Report from the Commission on Bulgaria's Progress Toward Accession
http://europa.eu.int/comm/enlargement/report_11_00/pdf/en/bg_en.pdf

(9) SAPARD Annual Report 2000

http://europa.eu.int/comm/enlargement/pas/phare/pdf/sapard_annualreport01.pdf

Recent World Bank support to the agricultural sector has been via two Agricultural Sector Adjustment Loans. Agricultural Sector Adjustment Loan I (ASAL I) supported GOB policy reforms focused on changes in trade and price policies, land reform, privatization of state-owned agriculture and food industry enterprises and implementation of institutional and regulatory reforms aimed at strengthening private grain markets and rural finance. ASAL I was funded in 1999 at a cost of \$75.8 million.

The positive results of ASAL I led to the development of ASAL II which will be funded in 2002 at a level of \$50 million. This loan will support further reform of agricultural sector policies in the areas of land markets, cereals markets, agricultural enterprise privatization, irrigation institutions and legislation, agricultural subsidies and finance, trade and regulations and forest policy. A comprehensive set of specific policy conditions will have been met by the time of disbursement.

A Registration and Cadastre Project (\$37 million) to assist in land market development is also underway. The objective of the Project is to improve the coverage, completeness, accuracy and responsiveness of the cadastre and real property registration systems and thus contribute to the development of secure tenure of real property and an efficient real property market. The Cadastre Agency will be assisted to design and implement a unified national cadastre system while the property registration system component will support capacity building in the district courts and the Ministry of Justice for the implementation of the new real property based registration system. A third component, cadastre and property registration operations, will support mass registration and the joint conversion of parcels in the operation of the new property-based registration and cadastre systems, plus the creation of an effective data link. The project management and development of a policy and legal framework component will provide partial support for the project implementation unit, training activities, and technical assistance.

The World Bank is also in the early stages of developing a rural finance project. This could include technical assistance for banks in areas such as risk assessment, leasing, micro-credit and credit lines or credit guarantees for rural banks. Risk management insurance might also be considered. The earliest date for implementation would be November or December 2002.

3. Others

Many other donors including the UNDP, GTZ, the Dutch, Japan, DFID and FAO have provided and are providing targeted assistance of benefit to the agricultural sector.

The UNDP "Jobs" project aims to create sustainable jobs in rural areas. Under the program 24 rural business and business technology centers have been created along

with 11 business incubators. The focus has not been on agriculture although herbs and spices are an area of concentration.

The GTZ has been involved in several regional agricultural activities as well as the establishment of a network of modern wholesale and assembly market facilities. The Dutch have assisted with establishing seed potato cooperatives and the development of cooperative farms. Japanese assistance has been provided in dairy processing.

XIV. SUMMARY OF ASSISTANCE RECOMMENDATIONS

The Assessment Team concluded that continued USAID assistance to support Bulgarian agricultural trade capacity and competitiveness in several agricultural and processing areas was needed and appropriate. Other donor programs, the policy environment and USAID experience provide an excellent base and a high degree of confidence that significant results can be achieved.

At the same time, there are many areas where the Team concluded that assistance should not be provided. These include: irrigation where the infrastructure costs are beyond resources available, land reform where the World Bank is actively engaged, broad association development which is already underway and input supply which is being handled by the private sector. Only limited assistance to agricultural education development, agricultural research and agricultural extension is recommended due to the length of time needed to achieve results and the likely cost involved. The Team also recognized that veterinary and plant pest inspection at the major border crossings should be upgraded, but found the E.U. is providing this service and will continue to do so. However, as indicated below, training for veterinary services and plant pest control and quarantine staff, complementary to the E.U. investments in infrastructure is recommended. The Team also acknowledges that the focus on credit outlined below has the potential to impact to some extent each of the areas not recommended for assistance.

Areas of agricultural assistance need and recommended USAID intervention areas are as follows.

A. A lack of finance (both credit and investment) in Bulgaria restricts growth in the agricultural sector. Although Bulgarian banks are relatively flush with deposits, the short-term nature of these deposits, and the conservative lending policies of both banks and bank regulators, severely restrict the ability of both producers and processors to obtain the medium and long-term credit they require to improve and expand production. Even short-term credit needs, such as to satisfy the 100 percent financing requirements of SAPARD projects prior to receipt of reimbursements under the program, are not being met. We recommend the development of specific Development Credit Authority programs with selected banks in Bulgaria to help marshal the capital required for these short, medium and long term credit needs. The use of DCA programs may even include the extension of credit guarantees to support

the accounts receivable and leases of capital goods manufacturers willing to consider longer term credit. As the land market develops, the use of DCA guarantees to support mortgage backed bonds may also be considered.

B. An integrated fruit and vegetable marketing activity is proposed as a new initiative. Fresh and high-quality processed vegetables and fruits are among those products where Bulgaria is most likely to be able to compete successfully in international markets and where domestic demand will grow as incomes rise. The team recommends a support program to industry and the GOB as they grow this sub-sector. The program should be market-driven, addressing the entire market chain to meet the market demand for quality. Key elements should include: grades and standards development, meeting international quality and safety requirements, technical assistance in the areas of processing/packaging technologies and cold chain management. USG assistance in this area would benefit greatly by USDA-led investment missions and technical expertise in standards development and cold chain management.

C. The grain warehouse receipts program has demonstrated continuous growth in its two years of existence. Additional public warehouses continue to be licensed, additional banks are entering the program and additional credit is being issued. Bank utilization of the receipts as collateral is capitalizing a previously underutilized asset. Given the infancy of this program, and the potential (but not the expectation) for problems arising that could threaten the program, we recommend the continuation of limited support for the warehouse receipts program. For reasons of experience and efficiency, we also recommend that ACIDI/VOCA continue to provide this assistance with additional expertise provided by the USDA as appropriate and required.

D. The Trade Development Center established under the Firm Level Assistance Group (FLAG) appears to be a very efficient and cost-effective method of supporting small and medium size agricultural producers and processors wishing to enter export markets or to increase exports. Based on a goal of developing a self-financing entity that will expand agricultural trade, we recommend limited additional support for 1-2 years for this center. Collaboration with efforts outlined below (and possible expansion) to attract U.S. investment and with USAID/Bulgaria competitiveness activities is also recommended.

E. The dairy development program implemented by Land O'Lakes has been very successful in establishing an institutional base for the dairy industry in Bulgaria. While there is more that could be done at this level, the Team believes that the widespread ownership of dairy animals in Bulgaria offers an effective method to raise incomes in villages and to address rural poverty issues. Improving the network and operation of milk collection stations servicing small producers would also have very positive effects on milk quality and the quality of processed products available for international markets. We recommend the provision of modest support for **a village-**

focused dairy development program, recognizing the dual benefits of income generation for thousands of the rural poor and product quality improvement.

F. Bulgaria is actively seeking E.U. accession and must increasingly compete in international markets. To facilitate this process, the team recommends agricultural **training and educational opportunities** be provided in a selective and focused number of areas. Most of this training and technical assistance should be linked with and closely complement the activities recommended above. However, limited assistance in other areas of U.S. interest would also be appropriate. The US Department of Agriculture is recommended as a source of this expertise.

XV. RELATIONSHIP OF RECOMMENDED ASSISTANCE PROGRAM TO USAID/BULGARIA S.O. 1, “IMPROVED BUSINESS CLIMATE IN THE BULGARIAN ECONOMY”

At an overall level all the elements of the recommended agricultural sector assistance program closely link to and support S.O. 1.0. Each will contribute to increases in the productivity and efficiency of Bulgaria’s agricultural sector (an important part of the Bulgarian economy) via improvements in the performance of agri-businesses and market-oriented producers and processors that result from assistance provided. For individual IRs the relationship and expected impact of the different elements of the recommended program vary.

The recommended Development Credit Authority assistance and support for the grain warehouse receipts program will help meet IR 1.1, “Improved Access to Business Credit” and, in doing so, will assist in meeting IR 1.2, “Private Enterprises in Targeted Sectors Strengthened to Compete in Market Economy”. Both activities are directed toward increasing the supply of credit (capital) available to producers and processors in the agricultural sector - addressing the limited availability of credit that has been identified as a key constraint. In alleviating that constraint, USAID provided funds will be heavily leveraging both the actual credit that would be available from banks (a multiple of the actual USAID-provided funds will be available) and as these funds fill short-term gaps for borrowers seeking to use SAPARD funds for agricultural production or processing.

The integrated fruit and vegetable marketing and trade development activities recommended by the Assessment Team are directly supportive of IR. 1.2. These recommended activities will enable private businesses in the agricultural sector to better compete in international and domestic markets with higher quality products. Specifically, the grades and standards development, the introduction of international quality and safety requirements and the provision of technical assistance in processing/packaging and cold chain management will result in products and systems meeting international requirements. The trade development activity will assist Bulgarian exporters in demonstrating the quality and competitiveness of their products.

Firms and associations assisted will acquire and be able to demonstrate improved management and business operations and an enhanced ability to meet international industrial requirements.

The recommended dairy development program directly links to IR 1.2 in that Bulgaria has a vibrant dairy market and is now exporting milk-based products. This support would assist small farmers in supplying additional quantities of milk that can be sold to processors and that can be converted into higher value and exportable products. It would also be supportive of USAID/Bulgaria's Social Sector S.O. 3.4, "Mitigate Adverse Social and Economic Impacts of Transition" as the incomes of the small farmers are increased.

Finally, the training and educational element of the recommended assistance package supplements and complements the other assistance program areas. For each area, the transfer of skills and knowledge is critical to implementation and sustainability.

ANNEX I - AGRICULTURAL EDUCATION RESEARCH AND EXTENSION

A. Background and Current Situation

Like so many of its neighbors, Bulgaria's agricultural knowledge system was strongly influenced by, if not directly tailored after the Soviet system of agricultural research and education. During the communist period, Bulgaria's agricultural knowledge system was plagued by reliance on politics, a low rate of technology adoption, strict government control, inflated bureaucracy, absence of a consistent system of evaluation, disproportionate numbers of scientists to technicians and producers, and near complete separation between agricultural research and education. Very little research was conducted at the universities themselves, instead, the Ministry of Agriculture's numerous Academies of Agricultural Sciences employed thousands of scientists and researchers to conduct basic agricultural research, very little of which was applied research.

No longer under communism, the state of Bulgaria's agricultural knowledge system is still facing serious problems. Funding constraints and resistance to downsizing continue to plague efforts to restructure research and extension systems. Perhaps one of the most negative developments has been the disintegration of scientific contacts and projects established with the former Soviet Union and other COMECON nations. Although communication with and technical assistance from the West is gaining, Bulgaria must do more to establish closer links with the international community and re-tailor its agricultural knowledge system to one more compatible with a market economy.

B. Research: Agricultural Academies - Centers of Research.

Since the fall of communism, Bulgaria has attempted to implement modest reforms of its agricultural knowledge system. At the center of these reforms is the Ministry of Agriculture's Center for Agricultural Science, also known as the Agricultural Academy. The Agricultural Academy is the national scientific organization carrying out research activities and providing advisory services to policy makers in the fields of agriculture and food science. Established over 100 years ago, the Academy's primary responsibility is to manage and coordinate the many agricultural research academies and experimental stations set up through out Bulgaria. Once numbering over 80, the academies have been consolidated into 26 academies, each with a highly specialized purpose. The majority of all basic and applied agricultural research conducted in Bulgaria is carried out in these 26 academies.

Steeped in tradition, the Center has resisted both internal and external pressures to restructure itself. The EU's PHARE program recently recommended that the academies be further reduced in number with five new centers of excellence replacing the traditional system. Both the Center and the Ministry flatly refused this

recommendation. Weak linkages to Bulgaria's universities and the newly established national extension service, NAAS, further hamper the Academies. Although the Directors of Bulgaria's three agricultural universities sit on the board of the Center and the universities continue to rely on the Academies as bases for practical studies and laboratory research, few incentives exist to foster and nurture collaborative relationships between the research academies and centers of education. Very little international support, both in terms of technical assistance and direct investment is directed towards Bulgaria's research community. The research academies suffer from serious financial difficulties, which has led to a flight of talent and deterioration of facilities and equipment. Unable to provide funds for international travel, few researchers are able to benefit from international seminars or join professional societies. Consequently, the quality of research has declined.

It should be noted that a few of the academies stand apart from the rest of Bulgaria's research institutes, most notably the AgroBioInstitute. The distinguishing characteristics of these academies are a corporate approach to their management model, determination to establish strong linkages with Bulgarian and international universities, and market / customer service orientation.

The major challenges facing agricultural research in Bulgaria include:

- Changes in the structure of agriculture, such as from large collective farms to smaller privately owned ones, mean that the entire agricultural knowledge system (research, education and extension) needs to be reorganized in order to be responsive and effective.

- The lack of a sound research strategy to carry through the reform process. The strategy must take into account future demand for agricultural research as reflected in emerging local and international markets and be conditioned by the optimal utilization of the human, financial, and physical resources available. Presently, research academies are overly specialized and do not focus on national agricultural priorities, such as commodities with the best comparative advantage in a global economy.

- An excessive number of academies and scientist they employ. Although a number of agricultural academies have recently consolidated, the academies for the most part remain overstaffed, narrowly focused, often professionally isolated, and pay very little attention to extension.

- Research resides primarily within the Ministry of Agriculture and is only loosely integrated with areas of education and extension.

- Scientific literature and training materials in Bulgaria are largely out of date. Bulgaria lacks resources to fully reconstitute libraries with print journals and other western literature. Although the internet offers many possibilities for sharing of information and data, Bulgaria lacks the capacity to train its scientists in use of internet

and other distance learning technologies for gaining access to scientific information and modern technologies. This challenge also holds true for Bulgaria's agricultural education system.

While a restructured and revitalized agricultural research system is needed in Bulgaria, the Assessment Team believes that the needs in this area are beyond the scope of what is possible with the resources available. Consequently, except as members of the system participate in the training activities recommended elsewhere, no specific program of assistance in this area is recommended.

C. Agricultural Education

There are three agricultural universities in Bulgaria, each under the direction of the Ministry of Agriculture. In addition to these three universities, there are a number of universities, under the direction of the Ministry of Education, which specialize in agricultural related studies, such as agricultural economics, food processing and manufacturing, and agribusiness management. As mentioned above, historically there has been a great disconnect between education and research. Under the current structure, universities continue to rely on the academies as bases for practical studies and laboratory research. However, a handful of progressive universities, frustrated by the academies' inability to quickly adapt research towards a new competitive market economy, have begun to develop their own research capabilities and are also designing more western style educational programs which incorporate applied research in the academic curricula. Although still heavily dependent upon the government for most of its funding, some universities are beginning to become more self-sufficient by generating their own incomes from tuition or fees collected for advisory and research services provided to both the public and private sector. Perceiving the government's extension service to be weak and unsustainable, some of the universities have expressed interest in, and are thus beginning to position themselves as independent extension services. Fees charged for extension services are also expected to play an increasingly important role in university budgets.

The major challenges facing Bulgaria's agricultural education system include:

- The University system will play an important role in the continued development of market oriented agricultural sector. To do this, universities must develop modern curricula that integrate traditional studies with more market oriented, applied and practical course work.

- Additionally, in order to move towards a more self-sufficient existence, universities need to further develop their capacity to engage in independent research and extension while at the same time improve their linkages with state run research facilities and academies. The gap between agricultural education and research needs to be bridged.

-Establishing closer links with the international community remains a challenge for Bulgaria's agricultural knowledge system. In order to effectively participate in and compete in a global economy, Bulgaria faces the challenge of broadening its perspective on agriculture and agribusiness. International collaboration will encourage the introduction of modern technologies and ideas into research and extension where these technologies would have a comparative advantage. International collaboration would raise the standards and effectiveness of research and extension and improve dissemination of scientific and technical information. With that said, very few international donors are directing funds to support international collaborative research. The World Bank is funding research and extension grants programs in other Balkan countries, but to date, Bulgaria has been left out.

The needs again overwhelm the assistance resources available. However the Team does recommend that USAID consider the following:

Agricultural Education Capacity Building. A limited program of training and technical assistance to improve agricultural education and research systems directed to the top 2-3 Bulgarian agricultural and agribusiness universities. USDA's Faculty Exchange Program should be included as part of any such assistance package. A young scientist program might also be included.

D. Agricultural Extension

A national agricultural extension service (NAAS) was established in 1995 with EU funding as part of the National Agricultural Academy, but in 1999 it was reorganized and placed in the Ministry of Agriculture as a separate unit. The mission of NAAS is to implement state policy in the agricultural sector giving up-to-date information, technical advice other services to agricultural producers so that they can effectively participate in a competitive agricultural market. NAAS has 28 offices throughout the country with three employees - an agricultural economist, animal science specialist and agronomist - in each office. Prior to the creation of NAAS, most of the extension work was carried out by the various agricultural academies. Since the creation of NAAS, most of the Academies have lost their budgets for extension services and must rely on NAAS to reach out to the farmers and processors who were their direct customers. As mentioned previously, some universities are offering some extension services, but for the most part, NAAS remains the legal body responsible for agricultural extension in Bulgaria.

The major challenges facing Bulgaria's extension service include:

--EU funding to support NAAS is expected to end shortly. NAAS is not considered to be self-sufficient in its present state. Although NAAS claims to have knowledgeable staff and reasonably well-equipped central laboratory for basic analysis, it remains questionable whether the regional offices are capable of delivering the services they are mandated to provide.

-Many of the field agents lack basic training in adult education and extension.

-Although well equipped with computers, NAAS lacks a functional information network that links the central office to the field offices.

-There are no formal relationships linking NAAS with Bulgaria's agricultural academies, universities and other information services such as the semi-private market information system, SAPI. Without such linkages, NAAS has limited access to information about new technologies and is therefore unable to fully serve as an extension service.

The Team recommends one intervention:

Limited Training and Technical Assistance to NAAS. Many of the field agents lack basic training in adult education and extension. Demonstrations in interactive extension and training materials currently used by USDA, state extension services and US universities would increase NAAS' capacity to develop innovative tools for implementing state policy and providing useful and more importantly, marketable information to Bulgaria's agricultural producers. A limited training-of-trainers program would elevate NAAS' reputation as a viable and self-sufficient extension service.

ANNEX II - CREDIT PROPOSAL DETAILS

A. SAPARD FACILITY

Guaranteed party:	Selected Bulgarian banks.
Guarantee ceiling:	\$5 million total.
Guarantee percentage:	50%.
Maximum portfolio amount:	\$10 million.
Maximum guarantee per bank:	\$2 million.
Currency:	Euros.
Term of LPG:	Two years.
Term per transaction:	Six months maximum.
Amount per transaction:	\$250,000 maximum.
Estimated subsidy amount:	\$500,000

B. MEDIUM TERM FACILITY

Guaranteed party:	Selected Bulgarian banks.
Guarantee ceiling:	\$10 million.
Guarantee percentage:	50%.
Maximum portfolio amount:	\$20 million.
Maximum guarantee per bank:	\$5 million.
Currency of guarantee:	BGL and \$.
Term of LPG:	Seven years.
Term per transaction:	Five years maximum.
Amount per transaction:	\$250,000 maximum.
Estimated subsidy amount:	\$1 million.

ANNEX III - AGRICULTURAL MARKETING INSTITUTIONS, REGULATIONS AND INFRASTRUCTURE

In 1991, the large state monopolies in agricultural inputs and in marketing and distribution were dismantled. Marketing channels have since been privatized, and in many areas, new forms of marketing have been evolving such as long-term contracts, formal and informal wholesalers, trading with warehouse receipts, etc. As new marketing forms emerge, competition between the various forms is gradually resulting in closer and more efficient linkages between producers and consumers. As in other transition economies, the majority of small and medium scale farms face the largest marketing hurdles due to their weaker market position. While marketing infrastructure (both physical and institutional) continues to improve, significant change lies ahead.

A. The Market Information System

An essential element of a smoothly functioning market economy is the wide availability of accurate, timely, and regular market information (commodity prices and quality, volumes of supply and demand) to facilitate profitable decision making by producers, processors and traders. As a result of previous and ongoing assistance by ERS/USDA, NASS/USDA and the EU's PHARE, substantial progress has been made in developing certain segments of the country's market information system. The strengths of the system include an increasingly reliable system for certain types of data collection and professional analysis of the data. Data collection is taking place within the MOA and by the National Statistics organization. Data analysis is being conducted by the MOA's Economics Department and among a few private organizations. However, numerous weaknesses in the system remain.

Collection of price data is rather limited and needs expansion. No collection or analysis of farm income is taking place. Interaction among the bodies producing market information is inadequate. Information as basic as crop area estimates remains inaccurate. Better analysis of the data to make it more usable by both producers and policymakers is needed. Longer-term production and price forecasting are relatively unsophisticated.

But the weakest link in the market information system is the *lack of dissemination* of the data, prices and analysis to the end users. In most cases, while the information exists somewhere in Sofia, it is not reaching the producers in the field who have the utmost need for it. The Assessment Team strongly recommends targeted assistance to promote the widespread availability of market information. Such an intervention would involve bringing together (not increasing) the resources of the MOA, the Agricultural Statistics Agency, the Agricultural Advisory Service, the private sector, the University community, and the national media to ensure market information is made available in a user-friendly format and at a reasonable cost.

B. Food Safety and SPS (Sanitary and Phytosanitary) Issues

Recent changes in the food regulatory environment in Bulgaria have been driven by the E.U. accession agenda. New food laws, approximating E.U. legislation, have been enacted but specific regulations and implementation mechanisms are still a work in progress. The E.U. itself is in the process of adopting a new food safety regulatory framework¹, and uncertainty about what this will mean for accession countries like Bulgaria is a challenge for regulatory agencies. Within the Ministry of Agriculture, two services have the authority for food laws and regulations, the National Veterinary Service and the National Service for Plant Protection. The Veterinary Service is responsible for all animal health and welfare issues, including border control and movement of animals within the country, and has responsibility for the sanitary inspections of all slaughterhouses, meat processing plants, dairy collection and processing facilities. They have a strong national network of public and private veterinarians and with E.U. support have recently upgraded equipment in their laboratories and communication capability. The National Service for Plant Protection is a fee-for service and permit-granting agency responsible for phytosanitary control at customs stations, biological testing and pesticide registrations and the regulation of agro-chemicals. Their laboratories have also been upgraded with support from the E.U.

The greatest challenge to regulatory services will be implementation of Bulgaria's new food control legislation. A farm-to-table approach to ensuring food safety requires that all participants in the food system adopt practices that identify and control potential hazards and that regulators audit practices on a regular basis. Bulgarian producers and processors have little or no training in such systems and regulators are not yet organized and trained to conduct audits in a market economy.

Implementing new safety requirements that meet international standards without severely limiting domestic production will be a challenge. Most of the production in the livestock sector comes from many thousands of very small producers whose sanitary practices are often poor. The dairy sector is particularly vulnerable. High quality cheese products are a major component of processed agricultural exports and the quality of milk for processing is critical to this industry.

Interventions must be strategic and complementary to the support of other donors to this sector. The E.U. is investing heavily in restructuring and equipping the border control facilities and supporting development of the disease reporting capability, in both the animal and plant sectors. Likewise, changing the legislation to meet E.U. and international standards will be supported as part of the accession process. There are significant gaps in the assistance planned by the E.U., however, and U.S. assistance can fill some of those gaps, thereby making the assistance of both donors much more comprehensive and effective. Possibilities include:

-Training for the Livestock, Dairy and Meat industries in the fundamental, international standard for food process control, HAACP (Hazard Analysis at Critical Control Points). The U.S. food industry invented HAACP and it has become both a U.S. and international standard for ensuring the safety and quality of food products.

-Training for the Veterinary Service in conducting HAACP audits. Widespread use of HAACP in Bulgaria will enhance Bulgaria's participation in the global food trading system and provide a common standard for U.S. and Bulgarian regulators.

-Training for the Veterinary Service and the National Service for Plant Protection in the practice of Risk Assessment as a means of developing regulations and standards for ensuring safety of human, animal and plant health. Risk assessment is the science-based approach, approved by the Codex Alimentarius Commission and included in the new E.U. food safety framework, used by U.S. regulators to develop tolerances and standards that ensure food safety.

- A program of technical assistance and training to the dairy sector, aimed at improving the sanitary practices of small producers. This program would involve support for developing the network of dairy collection stations, investment in cooling facilities at the collection centers, training producers in practices that improve the safety and quality of their milk, and working with processors, retailers and exporters to provide a market-based incentive for higher quality. U.S. investment in equipment and training should be a part of the program.

Priority should be given to the HAACP training and the dairy program. Training in Risk Assessment will be needed, but could occur in a later phase.

C. Grades and Standards

Food grades and standards are in the process of change in Bulgaria as they proceed through the E.U. accession process. Recently, SAPI Ltd. (private market data firm) did a side-by-side comparison of E.U. and Bulgarian food standards. The comparison of approximately 70 products across all subsectors showed that Bulgarian standards exist for less than half of the products. Where standards do exist (primarily in the bulk commodities) deviations from E.U. and international standards are common. Thus, Bulgaria is in the process of revising and/or establishing minimum quality standards for most food and feed products. A new unit within the Ministry of Agriculture has been established strictly for establishing and enforcing grades and standards for fruits and vegetables. Currently there are no standards for these products and the GOB has placed a priority on this subsector. Grain standards, including standards for animal feed formulations, are established and enforced by the National Grain Service.

There are several major challenges in the area of Grades and Standards development in the fruit and vegetable subsector. Without transparent standards, the development of the fruit and vegetable market is constrained. Although the ministry of Agriculture has

established a new unit charged with developing standards for the top 38 traded products, they are only in the early stages and see implementation of the standards within the industry as a long-term (5 years) proposition.

Linking standards and price information for producers is critical. Currently the extension system does a poor job of getting any market information to farmers. Ensuring that Bulgarian standards are consistent with international standards (both public and market) and promote trade facilitation. Standards for components and formulations of animal feed are a new challenge for the National Grain Service. Conforming to international standards and the new E.U. traceability rules are a challenge for most feed mills in Bulgaria.

A program of training and assistance for fruit and vegetable standards would support development of this subsector in Bulgaria. Such a program would help Bulgaria's new standards conform to international standards and thus facilitate trade. Since a lack of standards are a key constraint to development of this subsector, speeding the adoption of international standards would hasten the growth of the subsector. This program should also help the GOB to work with industry in developing a market information system that ties price to grades and reaches farmers. This intervention should be part of a more comprehensive program to promote food industry development in the fruit and vegetable subsector.

Training for the National Grain Service in the area of standards for components and formulation of animal feed is also needed. Assistance should focus on development of science-based standards consistent with international standards, thus facilitating trade in the feed components and ensuring good manufacturing practices in the formulation of animal feed.

Priority should be given to the fruit and vegetable sector since lack of grades and standards is a key constraint to growth of this subsector.

D. Cold Chain Infrastructure

Although the Assessment Team did not have the opportunity to conduct a full assessment of the cold chain in Bulgaria, it is evident that there are serious problems that should be addressed. There are a number of large cooling warehouses used for cold storage throughout the country, mainly at the Black Sea port and in the major cities. A brief inspection of the main produce warehouse near the Sofia Airport revealed a mixed picture. On the one hand, the existing facility utilizes outdated and inefficient technology that is operating well below capacity. On the other hand foreign investment (German) is being used to build new storage capacity on the same site. It was reported that there is cooling capacity at the retail level throughout the country, but cooling capacity closer to the production level is very poor. In the dairy processing industry there is a severe lack of cooling at milk collection stations and cool transport

for raw milk for processing. There is no association of firms that participate in the cold chain and little understanding of the need for such an association in a market economy.

Several major challenges in the cold chain should be addressed. There is no comprehensive analysis of the cold chain in Bulgaria. A thorough assessment by industry professionals is needed. There are identifiable gaps in the cold chain at all points, including immediate post-production cooling, transport and storage. This poses a major challenge for both importers and exporters of perishable products, as well as processors that rely on perishable raw materials. There is no association of firms that participate in the transport and storage of perishable products. The apparent lack of coordination and cooperation among firms supplying cooling and transport services is a constraint to establishing a strong, reliable cold chain.

Interventions are recommended in the following areas, many of which could be addressed by USDA's existing "Cold Chain Improvement Program":

- A comprehensive cold chain program should be initiated in Bulgaria, with assistance from the U.S. cold chain supply industry. Components should include an industry assessment, training of key firms, facilitation of investment and building an association.

- An immediate intervention targeted to the dairy subsector should be coordinated with the dairy industry intervention described above. Specifically, this intervention should aim to provide cooling systems at milk collection stations and improve cool transport of milk to processing firms.

- Priority should be placed on an assessment of the cold chain industry in Bulgaria and immediate support to the dairy subsector.

ANNEX IV – SOURCES CONSULTED

Commission of the European Communities, “2001 Regular Report on Bulgaria’s Progress Towards Accession,” November 13, 2001

Commission of the European Communities, “2000 Regular Report From the Commission on Bulgaria’s Progress Towards Accession, November 8, 2000

Commission of the European Communities, “SAPARD Annual Report 2000,” July 3, 2001

Organization For Economic Co-Operation and Development, “Review of Agricultural Policies – Bulgaria,” 2000

World Bank, “Bulgaria-Crisis and Transition to a Market Economy,” August 1991

Bulgaria-American Enterprise Fund, “2000 Annual Report,” February 2001

World Bank, “The Dual Challenge of Transition and Accession,” February 2001

World Bank, “Proposed Second Agriculture Sector Adjustment Loan,” May 24, 2001

World Bank, “Technical Paper 481 – Food and Agriculture in Bulgaria,” July 2000

World Bank, “Sowing the Seeds of Reform – Secured Transactions, Financial Sector Development and Agricultural Finance in Bulgaria,” Undated

World Bank, “Bulgarian ASAL – Bulgarian Banking of the Agricultural Sector,” 1999

International Monetary Fund, “Bulgaria – Selected Issues and Statistical Appendix,” March 12, 2001

International Monetary Fund, “Bulgaria – Selected Issues and Statistical Appendix, March 20, 2000

The Economist Intelligence Unit, “EIU Country Reports,” April 1, 2001 and June 1, 2001

Land O’Lakes, “Agricultural Sector Analysis-Current Status of the Bulgarian Small Ruminant Sector,” Undated

Land O’Lakes, “Agricultural Sector Analysis-Current Status of the Bulgarian Dairy Industry,” Undated

Land O’Lakes, “Grant No. FAO-A-00-97-00009-00 Impact Assessment,” July 2001

ACDI/VOCA, "Agricultural and Food Processing Sectors," October 2001

USAID, "Strategic Options for USAID/Bulgaria In Support of Bulgaria's Agriculture Sector," by Jeff Lee, November 7, 2000

USAID, "Small/Medium Enterprise Assessment and Strategy Development," October 2001

Department for International Development (DFID), "Bulgaria – Strategy for Development for 2000-2001," November 2000

FLAG, "The FLAG Newsletter," May and July-September, 2001

FLAG, "Trade Development Center,"

Rural Development Institute, "Mortgage in the Bulgarian Agricultural Sector," April 1999

Ministry of Agriculture and Forestry, "Annual Report 2000

ANNEX V – TEAM SCHEDULE

Saturday, Oct 20 Arrival
Sunday, Oct 21 (accommodation at the Sheraton)

Monday, Oct 22 - Wednesday, Oct 24

Field trip around Northern and Eastern Bulgaria
(Russe, Silistra, Shumen, Turgovishte, etc.)
Detailed schedule and meetings with farmers and ag
processors arranged by ACDI/VOCA.
Krassi Kiryakov and Emil Darev.
Phone: 088 327529; 987-90-63

Monday, Oct 22

Liubomir Draganov, Manager
BONMIX Feed Mill,
Lovech, Bulgaria
Phone: 086 25967, 086 24097; 088 400 552

Dicho Dichev, President and Farmer
ET DIEM
Ruse, Bulgaria
Phone: 082 232212, 232214; 048 814891

Tuesday, Oct 23

Krassimir Denchev, Director
UNIONBANK Commercial Bank, Ltd.
Ruse, Bulgaria.
Phone: 087 230 429

Valeri Georgiev, Director
GALAX OIL
Silistra, Bulgaria.
Phone: 086 27896; 048 918522, 048 950508

Steel Silos
Silistra, Bulgaria

Wednesday, Oct. 24

Mariana Georgieva, Administrative Director
Shumen Hog Farm
Shumen, Bulgaria
Phone: 048 878162

Rumen Simov, President.
SOLVEX/MIRA/FRUIT
9900 Novi Pazar, Bulgaria
Phone: 02 9809410, 9818456; 088 772865

Emil Raykov, Executive Director
KRISTERA, PLC
Popova, Bulgaria.
Phone: 0608 7858; 088 780078

Thursday, Oct 25

Morning

Arrive in Sofia from field trip

13:00 - 15:30
(13:30 - 14:00)

In-brief with ERGO, USAID/Bulgaria
Meeting with Ms Debra McFarland, Mission Director
Location: USAID Office, 1 Bulgaria Sq., floor 5
Phone: 951 5637, 951 5670

15:30 - 16:30

In-brief with Brian Gogin (USDA/FAS)
Location: FAS Office, 1 Bulgaria Sq., floor 5
Phone: 951 5561, 951 5587

Friday, Oct 26

9:00 - 10:00

Ministry of Agriculture and Forestry
Andriana Tosheva, Deputy Minister (International Co
operation)
Location: MoA, 55 Hristo Botev Blvd.
Tel: 981 5537 Fax: 981 7167

10:30 - 11:30

Ministry of Economy
Mr. Kiril Kirkov, Chief Expert (food processing industry);
Location: USAID, Office, Conference room, 6th fl.
Tel: 987 6656

11:30 - 12:30 Sofia Commodity Exchange
Vassil Simov, Executive Director
Location: NDK Office Building, 1 Bulgaria Sq., floor 5
(USAID office building)
Tel: 954 9368; 932 6212

13:30 - 17:00 Land O'Lakes
Manuela Russeva, Country Rep.
Kamelia Bogdanova, Director, LOLBulgaria
Location: 1, Al. Zhendov St.,
phone: 734-361, 734-367, 734-485

Saturday, Oct 27 Report drafting

Sunday, Oct 28 Day off

Monday, Oct 29

9:30 - 12:00 Agricultural Research Center
Dr. Atanassov, Director, Institute of Genetic Engineering
Location: Kostinbrod, IGE
Tel: 721 2552; 088704243

13:00 - 14:00 National Grain Service
Mr. Boyan Velkov, Manager
Lilia Belcheva, Chief Expert (grain standards);
Location: 15 Vitosha Blvd., 5th floor
Tel: 980 5831

15:00 - 15:50 Pioneer Seeds
Brian Foster; Chavdar Dochev
Location: bul. Skobelev, No.62, entr. B, fl.5
Tel: 9802405; 088 330809

16:15 - 17:15 Hanna Ruczyk, UNDP
Jobs Project (Ag Centers)
Location: Tzarigradsko Sh., 7th km.
Tel.: 960 95 174

Tuesday, Oct 30

10:00 - 11:00 Magdalena Kowalska
SEAF (Trans Balkan Fund)
Location: 45, Oborishte Str.
Tel.: 943 4417; 943 4163

- 11:30 - 12:30 EBRD
Andy Ranitasi, Agriculture Specialist
Location: 17 Moskovska Str.
Tel.: 987-66-11 to 14
- SAPI Ltd. (Agricultural Market Information)
Svetla Batchvarova, Managing Director
- 13:00 - 13:45 National Agricultural Advisory Services
Dr. Margarita Nikolova, Manager,
Location: 136 Tsar Boris III Blvd.
Tel: 955 6473
- 14:00 - 15:00 National Veterinary Service
Dr. Iliyan Kostov, Chief Expert (veterinary inspection)
Location: 15A, P. Slaveikov blv.
Tel: 953 3103
- 16:00 - 17:00 Ministry of Health
Dr. Altunkova, Manager, Mr. Rizov and Ms. Ivanova
Health Policy and State Sanitary Control Department
Location: 39 Stamboliiski Blv.
Tel: 987 5234

Wednesday, Oct 31

- 9:00 - 10:00 World Bank
Anna Georgieva, Henry Gordon, Ag Sector Project Officer
Location: WB Office, 36 Dragan Tsankov Blvd,
Phone: 918 14 244

- 10:30 - 11:30 HankoVan Knobeldorf, GTZ
German Embassy
Location: 25A, Fr.J. Curie Str.
Phone: 965 1010
- 13:00 - 14:00 Antonina Stoyanovska, Project Coordinator
Halcrow, PHARE Project (SAPARD)
Location: MoA, 55, Christo Botev Blvd., room 405
Tel.: 952 5798; 985 11405
- 13:30 - 14:30 State Fund Agriculture (SAPARD disbursing agency)
Mr. Asen Drumev, Executive Manager;
Location: MoA, 55 Hristo Botev Blvd.
Tel: 980 0099
- 14:30 - 15:30 EU Delegation
Elena Artolachipi, Agricultural Sector Project Officer
Location: 9, Moskovska Str.
Tel: 933 5252

Thursday, Nov 1

- 9:15 - 10:00 Thomas Higgins, Denis Fieler
BAEF (BACB)
Location: 3, Shipka Str.
Tel.: 943 3077; 946 1656
- 10:30 - 11:30 Dr. Boiko Boev, Deputy Minister
Ministry of Agriculture and Forestry
Location: MAF, 55 Hristo Botev Blvd., room 207
Tel: 985 11 207; 980 0637
- 11:30 - 12:30 Miroslava Georgiev, Director Rural Areas Development
MAF, re SAPARD
Location: MAF, 55 Hristo Botev Blvd. (room 410)
Tel: 98 11 99
- 13:00 - 13:30 TV Producer
Location- Sheraton Lobby
- 13:30 - 14:15 U.S. Embassy
Mr. Roderick Moore, DCM
Location: Chancery, 1 Saborna Str.
Tel: 937 5100
- 14:45 - 15:30 (IK, BG) Plant Protection and Quarantine Service
Mr. Matev, Executive Manager,
Location: 17, Hristo Botev Blv.
Tel: 953 4149

16:00 – 17:00 Peter Sochan, Senior Advisor
CIME Endeavor Group
Location: USAID Offices

18:00 - 20:00 Informal Dinner hosted by Holly Higgins

Friday, Nov 02

9:00 - 10:00 Alexander Iotzev, Director Slatina wholesale market
(fruits and vegetables), head of the Association of fruits and
vegetables processors, part of the German project
Location: Slatina Wholesale Market

9:00 - 10:00 Prof. Plamen Mishev, Ag Economist,
University for National and Int'l Economics
Location: FAS Office, NDK Building, 5th floor
Tel: 951 5561 (Mr. Mishev mobile 088 328320)

11:00 - 12:00 Chavadar Damyanov, Vice Rector
University for Food Processing Plovdiv
Location: FAS Office, NDK Building, 5^h floor
Tel: 951 5561

11:00 - 12:00 York International, Eng. Talev
Location: FAS Office, NDK Building, 5th floor
Tel: 951 5561

12:30 - 13:30 Prof. Anguel Fikiin, Senior Expert, Cold Chain
Danail Vidolov, President, Klimat Inkom V&K Ltc.
Location: FAS Office, NDK Building, 5th floor
Tel: 951 5561

14:00 - 15:00 Grain Traders
Location: ???

15:00-17:00 USAID and FAS Staff
USAID Bulgaria
Location: USAID Office, 1 Bulgaria Sq., floor 5
Phone: 951 5637, 951 5670

Saturday, Nov 3 Departure

**ANNEX VI - BULGARIA AGRICULTURAL SECTOR ASSESSMENT
USAID STRATEGY DEVELOPMENT
(Scope of Work)**

BACKGROUND

Agriculture is an important sector in the Bulgarian economy. The country continues to be a significant (net) exporter of agriculture and food products in the region. In addition, Bulgaria has made significant strides in land privatization and is noted as a model for its break-up of state and collective farms. Still, farming operations are in great need of agricultural information services, inputs, machinery, credit, and markets.

The agriculture sector in Bulgaria generates more than 15% of GDP and 26% of employment and is a major source of present and expected future foreign exchange earnings. In addition, the sector plays an important role as a social buffer to rising levels of unemployment. Considering the resource base of the country, it is clear that increased production of high value crops and their processing for both internal and export markets, must be part of Bulgaria's Ag development strategy.

In preparation for EU accession, Bulgaria is currently the first country that actually implements the SAPARD program, which would further facilitate all the necessary adjustments in agriculture and rural areas to the internal European market. With open trade regimes and liberalized price policies, Bulgaria is well placed to advance efficiency and competitiveness in the agro-business sector in advance of accession.

Recognizing the importance of the sector an agriculture analysis is to be completed to define USAID's agriculture strategy over the next five years. It is expected that continued close coordination with the World Bank, USDA, EU and other donors would be an important feature of the program.

This Scope of Work (SOW) call for assembling a team of experts in selected areas to perform an economic assessment that will guide USAID programming about future funding in the agriculture sector. The assessment team should analyze constraints to growth and make recommendations about cost-effective USAID investments that promote economic growth.

To accomplish this, the assessment team must project expected benefits of current and proposed programs and activities of donors and GOB, as well as private sector investments and their contribution to future agriculture economic value. The assessment is to conclude by determining the potential for further USAID assistance in agriculture and agribusiness for the next five years and the expected economic rate of return.

USAID ASSISTANCE

Since the inception of USAID assistance to Bulgaria in 1991, resources have been targeted towards expanded private sector development of the Agricultural Sector. During the initial stage, USAID efforts were focused on assisting farmers and coops meet the challenge of restructuring and privatization. In addition, programs were providing support to different Agriculture Associations in the process of formation, development and institutional strengthening. All USAID Ag related projects extended a broad scale of technical assistance and financing towards Ag processing sectors such as

dairy, meat processing and fruit and vegetables.

USAID/Bulgaria has also been involved in the land reform in the early nineties by providing a \$10 MM grant to the GOB in support of the land restitution. Since 1996, USAID/Bulgaria's agricultural projects focused on the promotion of economic growth and improved competitiveness of Bulgarian companies through agricultural restructuring, development and strengthening of financially viable agricultural private firms. Currently, ACDI/VOCA project provides assistance in all areas of Agro-Industry including production, management, marketing, product processing, and export promotion coupled with in-country training programs and US study tours. Additionally, assistance provides a very comprehensive package of services to clients in the agricultural sector.

USAID assistance is provided in the following major agricultural sub-sectors: Grain and Feed Processing; Meat, Poultry and Fish processing industries; Fruit and Vegetable processing; Bakery and Confectionery; Honey production and processing etc.

In July 1998, the Grain Act was successfully adopted by the GOB and ratified by the Parliament with USAID assistance. This was accomplished in close collaboration among ACDI/VOCA, USDA, WB, and other multi-lateral donors. The passage law enabled USAID to successfully establish a nationwide Grain Warehouse Receipts System that introduced a new financial instrument that mobilizes scarce working capital for farmer's short-term needs. Currently, there are thirty-one licensed warehouses with 336,235 metric tons of capacity inspected and bonded. Additionally, under the Grain Warehouse Receipts System, banks have lent out more than \$2 million dollars against the warehouse receipts.

Under an Inter Agency Agreement (IAA) with USAID, USDA is implementing a project that supports policy reform, warehouse receipts system and the establishment of a pilot dairy-testing laboratory.

OBJECTIVES

The main objectives of this assessment are:

- To develop a five year strategy for USAID assistance in agriculture in Bulgaria.
- To assess the potential for economic growth in the Bulgarian agriculture sector and sub-sectors and to determine constraints to growth;
- To provide recommendations to the Mission for future agriculture sector interventions by USAID programs that will have the potential to produce substantial value to the Bulgarian economy; and
- To share analysis and develop recommendations for future programming.

SCOPE OF WORK

1. Review relevant background documents of the Government of Bulgaria, other donors and USAID.
2. Review current agriculture programs

3. Review tax, policy and other problems faced by private farmers
4. Review available credit and leasing schemes for farmers and recommend viable methods that may improve access to finance and investment capital for private Ag entrepreneurs
5. Analyze the relevance and potential impact of other USAID programs on the sector – i.e. DCA, micro-finance, commercial banker training, etc.
6. Review other aspects such as Ag imports to the country, existing marketing infrastructure, sub-sectors, commodity exchange markets, etc.
7. Meet with various USAID and USG officials in Washington and Bulgaria.
8. Meet with appropriate Government of Bulgaria representatives (Ministry of Agriculture)
9. Meet with private sector, bilateral and multilateral donor representatives in Washington and Bulgaria.
10. Meet with representatives of on-going USAID projects and others as may be appropriate.
11. Make field trips and site visits to on-going USAID and other donor agricultural, land reform and small business projects.

APPROACH

The assessment team shall analyze the potential for additional feasible investments by USAID in the Bulgarian agriculture sector. The analysis shall estimate the prospective future economic value of the agriculture sector, determine the constraints that limit realization of that scenario and suggest feasible opportunities for USAID investment in programming to address those constraints.

A substantial amount of research, studies, data and evaluation materials has been collected and is to be provided to the assessment team. Using this data as a foundation, the team shall gather additional field data, particularly from donor programs. The team shall estimate the economic value of the agriculture sector and assess the potential for further growth and contribution of the agriculture sector to the Bulgarian economy. The assessment shall include estimations of domestic and export market potential. The assessment will focus on those aspects of the sector that produce feasible and substantial economic benefits.

Economic benefits shall include value of agriculture production, agriculture trade balance, full time equivalent employment and related business income. Agribusiness is defined as any size private firms that derive income and employment from the production, processing, distribution, retailing and exporting of agriculture products including crops (grain and feed), livestock (milk, meat and egg) and fruits and vegetables.

The team shall work closely with the Bulgarian Ministry of Agriculture to define those priority sub-sectors. The assessment team will meet with the Min. of Ag officials several times during the Bulgarian part of the work. These meetings shall provide for the iterative development of Bulgarian agriculture investment recommendations. The team shall provide ongoing synthesis and analysis of existing and newly collected data and conclusions. USAID/Bulgaria ERGO team and FAS will

provide guidance and feedback to help shape the team's focus and investment recommendations. This process is critical to building a collaborative, integrated approach to agricultural development among donors and the GOB.

ANALYTIC PROCESS

The team should address the following substantive areas in the course of the assessment.

- Examine the current status of key external factors, including Ag financing, available leasing schemes, imports and exports, transport and irrigation infrastructure, energy, communications, taxation, labor pool, custom duties and land assembly that affect agriculture sector development;
- Project the status of the key external factors given any planned donor, private or GOB activities to address external constraints;
- Project status of remaining external factors where no activities are planned;
- Assess existing marketing and information dissemination systems;
- Examine the current status (efficiency, access, integration) of agriculture sector input and output markets;
- Analyze trade patterns, including primary sources and types of food and other agribusiness imports, types and trading partners for primary exports;
- Analyze potential for and constraints to import substitution for agriculture products and processed foods and products;
- Analyze current status and constraints to export market development , including ability to meet EU standards and WTO implications;
- Assess the effect of laws, regulations and GOB policies on agriculture development;
- Assess the potential contribution of donors supported agriculture development activities; and
- Suggest feasible, additional USAID activities that conform to SO 1.3, identifying likely economic contribution to the agriculture sector.

BACKGROUND MATERIALS AND RELATED DOCUMENTS

A list of relevant documents, reports and strategies will be attached. The documents will present available Ag reports, current sub-sector studies and assessments, strategies, economic and production data and different government analyzes. These become the foundation for the team assessment of the agriculture sector. The documents will be provided to all team members in advance.

FORMAT AND DELIVERABLES

The team shall produce an assessment report with findings and recommendations in English. Recommendations for future program directions should incorporate input by other donors and

indicate relationships of various donor and GOB programs particularly those of the EU such as SAPARD and others. The final report (electronic and three hard copies) is to be provided to the Mission by October 31, 2001. The Mission will disseminate the final report.

The report should outline a strategy for USAID/Bulgaria agricultural assistance. The report should include but not be limited to:

- Description of the current agricultural environment in Bulgaria.
- Description of constraints and problems facing the agricultural sector in general and small farmers in particular.
- Description and assessment of current agriculture, ag finance, marketing and land privatization assistance activities.
- Recommendations and description of proposed strategy, rationale and linkages/complimentarities with broader Mission strategy and SOs, and with other donor programs.
- Expected benefits from the recommended strategy.
- Resource requirements to implement the strategy.

TERMS OF WORK

The estimated terms of work are 2 weeks in Bulgaria (October 21-November 3, 2001) and 1 week in Washington. The estimated completion date 10/31/01.

TIME SCHEDULE

October 14, 2001: Initial meeting in Washington DC of assessment team. Documents will be distributed according to team member interests. Country clearance requests by e-mail and cable should be in the Mission by this time.

October 17– 21, 2001: Review documents and present findings to other team members. Prepare assessment work plan and schedule. Delineate team individual assignments.

October 19-20,2001: Travel to Bulgaria.

October 21-November 1, 2001: Assessment development. Briefing of the team by USAID and Ministry of Agriculture. Initial meeting of team with Bulgarian stakeholders. Other meetings with implementers and counterparts to be scheduled in keeping with work plan.

November 2: Team presentation of recommendations. Draft report delivered to USAID.

January 29, 2002: Final report received by Mission.

TEAM COMPOSITION

The assessment team shall be comprised of Ag professionals, 3-5 individuals with previous SEE experience in the agricultural sector development and strategy preparation.

The team shall represent a combination of USAID/W (EE/MT and Global Bureau) staff and other experts from USDA and other USG agencies as it deemed appropriate.

The team shall be structured as follows:

Team Leader: (USAID/EE/MT) Strategic planning experience and leadership in agriculture sector assessments and USAID programming.

Small and Medium Business Development (USAID/EE/MT) Business planning, financing and business skills training.

Agricultural Economist (USAID/Global) Experience and skill in fiscal, monetary, trade, tax, customs and other policies and laws affecting the agriculture sector. Skill and experience in determining infrastructure and other externalities required for sector development.

Food Production and Processing Technology (USAID/USDA/Contractor) Experience and skill in agriculture production, processing, cost structures and input/output marketing.

Agribusiness Marketing and Exporting (USAID/USDA/Contractor) Experience and skills in agribusiness market assessments, marketing strategies, WTO trade issues and exporting opportunities.

The Mission will provide logistic and workspace assistance to the extend possible (USAID staff only).

ANNEX VII - SUBSEQUENT USDA COMMENTS

TO: USAID/SOFIA & USAID/WASH

**FROM: Christian Foster
International Cooperation and Development
Foreign Agricultural Service
USDA**

RE.: USAID/USDA Agricultural Assessment Report for Bulgaria

As per your request, I have described briefly below several “ready-to-go” FAS technical assistance programs that could be implemented in the short-term to address critical gaps identified in the Agricultural Assessment Report submitted previously to USAID/Sofia. I look forward to speaking with you next week to answer any questions you may have regarding these proposed interventions. I can provide a 1-2 page description of each of the programs listed if necessary. While all of the programs are meant for intervention in Bulgaria, they can be easily tailored to target a group of countries in the region.

Grades and Standards & Market Information Systems Improvement

Assistance with improving and upgrading grades and standards and market information systems is provided by FAS with USDA’s Economic Research Service, Ag Marketing Service, and NASS for direct training of economics and statistics offices, as well as representatives of public and private organizations involved in the collection of price data (market news), market analysis, and market information dissemination. Training will be conducted at USDA and in-country, and will particularly focus on critical commodities and livestock and horticultural products. Easily accessible, user friendly and accurate market information and analysis will dramatically improve decision making by producers, consumers, processors, policymakers and other agribusiness representatives. Market information that remains in the hands of a few, or exclusively with government officials, does not allow for a market economy to function properly or efficiently. A major effort will be made to ensure even the smallest agricultural producer has increased access to essential price, demand, and commodity grades

and standards information. *Cost: \$250,000; delivered in multiple phases, both in Bulgaria and the U.S.*

· **Food Safety Systems Enhancement**

This program is directed to appropriate agricultural ministry technical representatives specifically concerned with the development and enforcement of regulations regarding food safety and labeling issues, including SPS and CODEX regulations. Intensive and interactive training will occur at USDA and in-country in collaboration with USDA's FAS, APHIS, and FSIS, as well as the FDA and EPA. This assistance result in rules, regulations and procedures that are more consistent with U.S. and international regulations, more transparent and enforceable, and allow for growth in private business activities and trade. Consumers will benefit from more nutritional and affordable foods, producers will benefit from lower transaction costs and programs that support their sales, and retailers will benefit from products that meet consumer preferences and demand. As part of this, training is provided on **Agricultural Biotechnology** which helps improve local understanding of the issues surrounding agricultural biotechnology and fosters a more balanced discussion while improving trade ties. It is designed to assure that science-based, user-friendly information on agricultural biotechnology is available to key stakeholders in emerging markets. *Cost: \$150,000; delivered in multiple phases in Bulgaria and the U.S.*

· **WTO and Agricultural Trade Policy Training**

Provides intensive programs for policymakers and their advisors on key agricultural issues pertaining to WTO commitments and compliance, as well as critical agricultural and trade policy developments. It is a successful tool in educating U.S. trade partners from emerging markets and benefits U.S. bilateral agricultural trade relations through an improved understanding of technical issues. USDA's FAS, in coordination with the USTR and the U.S. Department of Commerce, will provide training to Bulgaria's chief analysts and negotiators involved with the WTO's agriculture agreement. Key topics will include proposal rules regarding submissions, AMS's/domestic support, export assistance, etc. Bulgaria's economic growth is dependent on the country's integration into the world economy and the competitiveness of Bulgarian farm exports. USDA's assistance will facilitate Bulgaria's work within the WTO and help reduce barriers to trade. Increased trade will benefit both U.S. and Bulgarian ag producers and their incomes. *Cost: \$75,000; implemented in the U.S.*

· **Cold Chain Improvement Program for Perishable Foods**

Provides training and technical assistance to stimulate local and foreign demand (imports and exports) for perishable food products handled within the cold chain. By educating and assisting market constituents on proper practices and key linkages from port refrigeration through retail display, the quality and profitability of food merchandising is enhanced. *Cost: \$125,000; a three phase program in Bulgaria.*

· **Agribusiness Investment Missions**

Informs U.S. companies of agribusiness opportunities in Bulgaria and matches them with potentially promising firms. Bulgarian firms are carefully pre-screened for U.S. investors, and U.S. firms are recruited to ensure viable business partnerships. U.S. agribusiness benefits from increased sales and stockholder value, while Bulgaria gains through new investment in capital, technology transfer, improved business management, and increased job opportunities. *Cost: \$80,000; U.S. Investment mission to Bulgaria*

· **Animal Disease Prevention/Border Control/Vet. Training**

Provides training and study programs to assist Bulgarian vets, researchers, border control agents, and policymakers in the development of norms and practices that mitigate and prevent animal diseases, control borders, and establish regulations consistent with U.S. international standards. *Cost: \$125,000; several phases in Bulgaria and the U.S.*

These programs are ultimately designed and coordinated by FAS to promote ag growth and trade in Bulgaria, accelerate Bulgaria's integration in the world economy, encourage the reduction of trade barriers, and foster agribusiness linkages. The reduction of trade barriers is achieved through assistance with regulatory framework development, trade and agricultural policy development and improvement of host-country market infrastructure and institutions. Agribusiness linkages are fostered during investment and trade missions which identify agribusiness opportunities for small- and medium-sized enterprises and through programs to improve local business and investment conditions.