

PD-ABL-287

ISN 98206

FINAL REPORT

**STUDY OF SMALL SCALE AGROBUSINESS
IN GEORGIA**

by

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**Agricultural Cooperative Development International
for**

Save the Children Foundation

and

Financed by the US Agency for International Development

**Study Conducted
February 4 to March 4, 1995**

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STUDY OF SMALL SCALE AGROBUSINESS SECTOR IN GEORGIA

This is the report of a study by Dr. William R. Furtick carried out between February 4 and March 4, 1995 in the Republic of Georgia for Save the Children Foundation through a sub-grant with Agricultural Cooperative Development International (ACDI). The purpose of the study was to analyze the current status of the small scale agrobusiness sector in Georgia and determine what interventions might be utilized to expedite development. The report on this study is presented as a proposed project and the findings are described in the problem description and background sections of the project document and it's annexes that follows:

I PROJECT INFORMATION

Project Title: ASSISTANCE TO THE SMALL AND MEDIUM SCALE PRIVATE FARMS AND AGROBUSINESSES IN THE REPUBLIC OF GEORGIA

Location: Republic of Georgia

Project Duration: Initial Phase Completed September 30, 1995

PVOs/NGOs: CARE, IFC, TVG, ACDI

Total Project Budget \$2,531,023

SCF/USAID Budget \$1,228,508

II EXECUTIVE SUMMARY

The economy of Georgia including, the agricultural sector, collapsed after the break up of the Soviet Union. The privatization process has been lead by agricultural land with over one-half already distributed to create an estimated 300-400,000 small private farms averaging about one hectare in size. These new small farms have rapidly returned to production and currently produce about ninety percent of agricultural production and have been the only growth area in employment. Their further expansion of production is inhibited by lack of technical knowledge and management skills. They also lack inputs and financial resources to purchase them and to cover start-up and operating costs. If they could overcome these constraints, their production could probably more than double. If this occurred, they would face problems of finding markets and transportation for products. Similar constraints are faced by a small but growing number of larger commercial farms that have been privatized. The remaining unprivatized land is largely in large State Farms that occupy much of the most productive land. They used to produce large quantities of poultry, beef, dairy, swine, grapes, vegetables, fruit, tea and other export crops. Most of them have not yet been privatized and are largely inoperative due to lack of funds to pay for inputs and operating cost and loss of their former export and domestic markets. They represent large scale intensive high input agriculture and require imported production inputs and in many cases the output was largely marketed in Russia and other former Soviet

states. The processing and marketing structures are also largely closed down and still state owned. The blockage of rail transportation to Russia also makes import and export difficult. Until privatization occurs and the economy recovers to provide greater purchasing power the revival of large scale production will be limited.

Since the purpose of this study was to identify potentially successful interventions that could be implemented by PVOs, NGOs and other collaborators, an assessment of other donor assistance was carried out first. The largest provision of technical assistance is being provided by the European Communities under their program of Technical Assistance to Commonwealth Independent States (TACIS). They are implementing a large project to help restructure the Ministry of Agriculture and Food Industries, agricultural higher education, research, extension, cooperatives, information systems and land survey and titling. The Federal Republic of Germany is providing a small amount of technical assistance, a significant pilot program to provide credit and a loan for purchase of machinery. The Peoples Republic of China is providing a loan for purchase of tractors, Israel is providing technical training courses in both Israel and Georgia along with establishing a model farm for the courses in Georgia and the World Bank and the European Development Bank (EBRD) are each negotiating large agricultural sector loans. EBRD is focusing on refinancing State Farms as privatized.

Based on this assessment, it is proposed that USAID immediately authorize implementation of a package of humanitarian and technical assistance to help establish and develop the small to medium scale private farming and agrobusiness sub-sector. Initial efforts concentrate on humanitarian and development efforts that lays the base for follow-up development activities that can have an impact during the remaining six months available in the current funding cycle. Part of the focus would be on means to get displaced persons and others with access to land to initiate agricultural production or improve productivity. Four extension centers would be provided to give technical and other assistance. For the small and medium scale farmers already producing commercial surpluses, the project would emphasize improving the delivery of inputs, marketing, processing, transportation, machinery services and other requirements. The assistance would also focus on helping farmer organizations and businesses organize and provide technical and management information and training to their staff, client farmers and a group of interns being trained as future farmers, agrobusiness staff and leaders. The local intern training program would select a cadre of agricultural university graduates who would be trained by the project in up to date management and technology methods through formal training and hands-on experience in the work place. The project is structured to have a high pay-off even if it is not continued after September 30, 1995. The major loss in this case would be not fully capitalizing on the base laid for technical assistance that should have even higher levels of impact.

The initial phase of the project, ending September 30, 1995, is proposed to have four elements. Each will be implemented by different organization with a management unit to provide overall project management and coordination. Tri Valley Growers will work primarily with the Union of Private Farmers on a nation wide basis and will provide, and share with other activities, technical assistance from it's Farmer to Farmer USAID contract. CARE will work on potatoes in the Svanetia region. The International Rescue Committee will implement a program to help displaced persons and low income groups, primarily host families with access to land, to initiate farming activities and receive technical and other assistance. The local intern program will be managed

by Agricultural Cooperative Development International (ACDI) along with overall management and coordination of the project for SCF. ACDI will also provide any requested assistance that will help USAID determine the potential for longer term follow-on activities. The significant impacts the project would have even if it should not be extended are outlined.

III PROBLEM DESCRIPTION:

The collapse of the Georgian economy after the break-up of the Soviet Union resulted in major reductions in food and other agricultural production. The Soviet central planning system had provided many of the industrial and agricultural inputs and created markets for the finished products. The resultant food shortages caused by the collapse of this central planning and barter system led to major international provision of food aid that is continuing. Production from the large scale State Farms that include large areas of the best quality farm land is currently at a low level. However, privatization of the State Cooperative Farms and other agricultural lands resulted in the creation of 300-400,000 new small private farms that are increasing in their agricultural production. They currently cover about fifty percent of the total farm land and contribute an estimated ninety percent to current national agricultural production. Most of their production is consumed on the farm, provided to extended family members or bartered in the local community. There are also a small, but growing number of commercial scale private farms and agrobusinesses. Many of them are producing at a low level due to lack of access to credit to cover start-up and operating costs and unavailability of needed inputs. Many of these new farms of medium to large scale are owned (presently on a lease and purchase option basis) by an individual or small group without any previous farming or even business experience.

As used in this study, small scale farms are considered to be those whose production is primarily devoted to family subsistence with any small surpluses used mainly for barter or sale to buy other family essentials. In most parts of Georgia these farms are one-half to five hectares in size. Medium to larger scale commercial farms refers to those whose production is primarily intended for sale and usually range from 5 to 50 hectares in size for the medium size and above 50 hectares for larger scale. Size is less a determinant than the use of the products produced.

The problems and needs of the agricultural sector of Georgia have been studied in detail by both long and short term consultants and consultant teams. The most extensive was a very comprehensive multi-year study sponsored by the Commission of the European Communities, under their Technical Assistance to the Commonwealth of Independent States program (TACIS). The most recent was a study by a World Bank team completed in September 1994 with a preliminary report available. The large scale sector was studied in mid 1993 by this consultant. These and other studies are in agreement on the major problems of the agricultural sector. These include the lack of land survey and titling that is needed to give the multitude of new private farmers the assurance of ownership they need to make longer term investments and as the basis to obtain credit. The reluctance of the Government to privatize the approximately 1,200 large scale state owned farms and agrobusinesses, only a small percentage of which have so far been privatized, is leaving much of the best farm land idle and the processing and marketing structures unused. Other major problems include

unavailability of inputs including credit, lack of management skills and inadequate technical knowledge among the large number of new small farmers and the absence of marketing structures. The ability of small farmers to market any surpluses is also hampered by lack of transport and theft of produce by banditry or bribery. This is one area where there is general agreement that the situation is improving. Lack of income by most of the population reduces market potential for most surpluses except by barter. The lack of management skills and technical knowledge or experience in either farming or business management is particularly acute among the new small farmer who were previously laborers on the State Cooperative Farms or did not have previous agricultural experience. These categories comprise the majority of the new small and larger scale farmers.

Although Georgia has an extensive agricultural research system, it was primarily designed to support intensive large scale farming operations carried out on State Farms. Extension activities were largely limited to extending the research results to these large scale operations, and a network of State Cooperative Farms that were more diversified in their production. The large scale farming sector was centered on poultry, dairy, swine and other meat animals, grapes, processing vegetables and fruit, tea and other export crops. These enterprises have not been privatized and are largely non operative as they are based on high input farming. Many of the inputs are available only through importation. The State enterprises have not been allocated money to purchase either imported or locally available inputs. The marketing structures they previously used are inoperative and access to former markets in the Ukraine and Russia can not be re-established because the rail system is blocked. The small farmer sector is without access to sources of technical and managerial assistance and knowledge about the latest technology, thus the small farmer sub-sector is confined largely to very low input agriculture. This drastically reduces the production potential and quality of products produced. The various consultants that have examined this sector conclude that by utilizing the latest technologies and with adequate inputs, production could easily more than double. For this to happen, there would need to be the availability of the required knowledge, inputs and markets for the surpluses.

The small scale farmers and potential farmers are far from a homogeneous group. They might be divided into three broad categories. The first would be those with access to land that are either not using it or only in a very limited way. The second is a group that are farming small holdings, usually one hectare or less that are at or below subsistence level in their production. The third group are those that have access to enough land to provide all the needs of the family with a surplus to either barter or sell.

The problem is thus to find cost effective ways to overcome the constraints that are preventing these various small and medium scale farming groups and supporting agrobusiness sector firms from reaching their potential and thus increase the availability of locally produced food. Because the large scale enterprises have an entirely different set of problems, they will not be the target for assistance being proposed initially.

IV BACKGROUND

There has been a reluctance by some donor agencies to provide agricultural technical assistance to Georgia for several reasons. These include the complexity of the

problems in the agricultural sector, the longer time frame required to have measurable impact, the urgency of food aid and humanitarian assistance and the resistance to change by the entrenched agricultural bureaucracy. The situation is changing and becoming increasingly favorable for agricultural technical assistance. The World Bank is in the process of negotiating a large agricultural sector loan that will require the structural adjustments needed to overcome some of the major constraints inhibiting agricultural development. As a result of considerable early privatization that created a major small scale farming sub-sector, agriculture is leading other sectors in re-establishing production and employment. It thus is in a position to immediately profit from appropriately targeted technical and other assistance. The continuing high level of food aid and other humanitarian assistance is leading donors to more seriously examine alternatives. Continuing food aid will also start impeding development by distorting the market..

One of the Government structural reforms needed is a complete modernization and rationalization of the Ministry of Agriculture and Food Industries (MOAFI) and the Georgian National Alliance of Consumer Cooperatives (TSEKAVSHIRI). A large scale technical assistance program is being initiated for this purpose under TACIS. Much of the preparatory work was completed through a contract by the Overseas Development Administration of the United Kingdom with the Know How organization that designed a restructuring plan for the MOAFI. The TACIS project will also provide assistance in a more limited way to the agricultural higher education, research and extension systems. In addition, assistance will be provided with land titling and survey and establishing data and information gathering and management systems. They will also help develop and implement a new national cooperative law.

The agricultural assistance intentions of all bi-lateral and multi-lateral donors was assessed. The documentation on their proposed or on-going programs are attached as annexes. These include the statement of the Minister of Agriculture and Food Industries presented to the World Bank Donors Meeting in Paris last year, an Aide Memoire of the World Bank team, the plans of TACIS, the Federal Republic of Germany (FRG) and of a donor meeting hosted by FRG and TACIS in Tbilisi last year. Israel did not attend, but are giving forty Georgians one month technical training each year in Israel and establishing a model farm in Georgia for three two week training courses for farmers provided in Georgia each year. Turkey is also providing significant aid, largely by supporting joint ventures in the private sector, particularly in bakeries. The European Development Bank is assessing a potential credit project directed at re-capitalizing the State Farms and Agrobusinesses as they privatize.

Save the Children Foundation (SCF) under an umbrella grant from the US Agency for International Development (USAID) has filled a supporting role with the private voluntary organizations (PVOs) and non government organizations (NGOs) in the provision of food aid and other humanitarian assistance to Georgia. SCF, in their periodic program reviews, identified the opportunity to invest in pilot efforts to stimulate the recovering agricultural sector as a means to reduce the need for food aid. This study is for the purpose of detailing potentially successful interventions that might accomplish this goal.

The current needs for agricultural technical assistance can be segmented into several categories that have differing requirements. The large scale farms and agrobusinesses

offer little opportunity until privatized, re-capitalized and markets re-established. Macro economic adjustments in the overall economy need to be far enough along to provide increased income for food purchases at market prices. There has been great reluctance to move forward with privatization and the removal of subsidized inputs, such as fertilizer, that was provided at no cost to all farmers in 1994 and sale of basic food items at market prices. Recent deregulation of bread prices indicates a start in this direction. This may change under the World Bank loan, but will take some time. There are a considerable and growing number of medium and larger scale privatized farms and agrobusinesses that need both technical and managerial assistance along with operating capital. Until land and property titling is completed, it will be difficult for them to get the credit required for maximum development. They would profit from the establishment of an Enterprise Fund and other agricultural credit sources. Their development will be severely handicapped until credit is available. Currently the FRG has contributed 20 million Deutsche marks in a pilot program. Half the credit will be loaned for agricultural production and the other half for processing. At present this program does not appear to be linked with adequate technical and management assistance, but is proving to be very popular with medium and larger scale operations. This leaves the small scale farming sector that now comprises more than half the farm land and several hundred thousand families as a ready target for assistance. Therefore the major focus will be on the interventions that can impact on the small to medium scale private farms and agrobusinesses. The various segments of this group require different approaches.

V PROJECT DESCRIPTION

1. Objectives:

1.1 The longer term objectives of USAID funded technical assistance for the agricultural sector of Georgia should be to help in the development of privatized farms and agrobusinesses with initial emphasis on those of small to medium size. Emphasis will be given to helping farmers and private individuals or groups to establish and provide effective management of farm enterprises and agrobusinesses. This can range from providing small tools, vegetable seed, poultry, small animals and elementary knowledge on how to farm for those with access to unused land to helping commercial scale farmers. For the commercially oriented small and medium scale sub-sector, they would be helped to develop farmer and privately owned agrobusinesses to provide input supply, processing, marketing and other needed services. The larger sized private agrobusinesses will be encouraged and helped in the establishment of indigenous extension training program designed to transfer technical and management skills to their staff and client farmers. The project will concentrate on developing enterprises that provide input supply, marketing, processing, transport and machinery services including repair and in some cases credit. These businesses and organizations should provide technical assistance to their clients by developing their own extension staff and programs. As they develop, the larger organization could also carry out some adaptive research such as testing and comparing new varieties, breeds and products through maintaining close links to the national research system which is to be rationalized with help from TACIS.

Activities directed toward achieving these goals would be through a project that would have a series of activities directed at developing successful models that could be replicated. During the six month phase, based on the current funding cycle ending September 30, 1995, initial activities would be based on some of the concept papers submitted to SCF and USAID. These were selected because the preliminary steps necessary for rapid implementation had been taken and significant impact could be made in six months. This impact could be built upon, but is not dependent upon continuation beyond the first phase. These would include a program to strengthen the Private Farmers Union which is the largest farm organization to emerge after privatization. It has over 25,000 members nation wide and acts as a supply and marketing cooperative with regional centers. It already is emphasizing extension type educational services for its members. This activity has a humanitarian aid component, but is primarily technical assistance oriented. Two other activities are primarily humanitarian assistance oriented with development components. They deal directly with farmers in a more localized area. One deals with helping displaced persons and their host families initiate farming activities and the other in overcoming problems in the production of potatoes among small farmers in the Svanetia region. This also includes the host families of displaced persons. These farmers would also be helped to organize into farmer and individually owned businesses. An overall coordinating mechanism will be established to manage the project. This unit will insure that common use will be made of external technical assistance, training and commodities as appropriate. When conditions are satisfactory, through privatization and structural adjustment, future assistance could be extended to the larger scale sub-sector as technical and management support under credit systems, but this would be under a follow-on project and decisions on assistance from EBRD.

1.2 An important objective of the project is to identify, employ and train, as an integral part of project activities, a group of indigenous technical and management interns to provide or supplement the staff of the organizations identified for assistance under the project. They will become a continuing resource during and after the close of the project as potential employees/owners of the organizations assisted. The agricultural faculties in Georgia have turned out thousands of university graduates, most of whom are currently unemployed. Their training has given them basic knowledge about agriculture, but no training in the management skills needed in a market driven economy and the technology learned is out of date. The project would provide them the updated skills needed along with work experience. By participating in the technical assistance and training programs initiated by the project, those selected as interns can develop the appropriate knowledge and experience to build on their formal training to become an important resource in the rebuilding of Georgian agriculture. Experience with the initial group of approximately 15 interns for three months training will provide guidance on employment opportunities upon completion to determine future program needs or directions. Potentially, they could become future leaders who fully understand the requirements of a market driven agricultural economy. During the project they will become an increasingly important resource for the project through the learning by doing approaches in their intern training program.

This objective will be implemented by identifying and planning an intern training program that will be based on the number of interns that can be handled by the staff of the various activity elements of the project during the work experience part of their training. They will have common formal training programs along with the staff of the

Georgian participating organizations. These will be provided by Farmer to Farmer volunteers and other technical assistance inputs from the project. The intern candidates will be identified with the collaboration of the university faculties and other mechanisms and the best and brightest selected based on their application and an interview system much like candidates for participant training abroad programs.

1.3 Another objective of the project will be to work closely with other donors to maximize the impact of all assistance provided to the Georgian agricultural sector. For example the project could include those receiving FRG loans in their management and technical training programs. TACIS staff might be included as trainers and project staff might interact with them on policy issues to draw on experience useful in their revitalization of MOAFI and other institutions including research, higher education and extension. There may be a number of useful interactions with the World Bank to influence policy decisions, based on field experience, as they finalize the use of their loan funds.

1.4 The project, when requested by USAID, would provide information and assistance helpful in the design of an Agricultural Sector Strategy for the Republic of Georgia. This project, as currently proposed, uses the mechanism of a humanitarian assistance umbrella grant to initiate a project that covers a continuum from primarily humanitarian assistance to mainly technical assistance. The future strategy will need to address whether future activities should address one or both of these areas and whether they should be separated in mode of implementation or under a common project as now proposed, if both are continued.

2. Analysis of Economic, Institutional, Social and Environmental Effects

Although the time frame for the initial phase of the project is only about six months, it is expected to have considerable measurable impact. The management and technical training provided to the PFU by Tri Valley Growers should have an immediate impact on the quality of services they provide to their 25,000 members and the readers of their monthly newsletter, *Our Country*, which is read by about 10,000 people. This institutional strengthening should have significant impact far beyond the life of the project. The distribution of hybrid maize and other improved seed will significantly increase the 1995 crop yield and the pay back in kind required of recipients will be used to provide food for a significant number of displaced persons and other needy individuals. The intern training program will utilize the management and technical training programs for PFU staff as part of the program to develop well trained future staff for the developing private sector. The program provided by CARE will have a significant impact on the potato yield of the Svanetia region, and through creating surpluses, for Georgia as a whole in 1995. The farmer organizations created will help sustain this gain in future years. The IRC provision of technical training, small tools, vegetable seed, canning jars and poultry or small animals to a significant number of displaced persons and their host families will increase food availability, create productive activities and restored feelings of self worth that will have a continuing impact. The associated tree replanting activities to replace trees cut for fire wood will have long term benefits. This will be one step in reversing the environmental damage caused by shortages of fuel.

The project will utilize integrated pest management practices on potatoes that includes application of a biological insect control agent paid for and supervised in its use by CARE/Austria. The TVG activities include distribution of seed and possibly fertilizer, herbicides and other products. All these will be used in accordance with environmentally safe practices, but an early decision should be made on whether an environmental impact statement and clearance will be needed from USAID.

3. Implementation Plan

Because of current time and funding constraints, it is proposed that USAID authorize SCF to immediately fund this project through their umbrella grant which currently ends September 30, 1995. During this initial phase, a longer term project would be developed for multi year funding either through SCF or other mechanisms. If the longer term project could not be developed and implemented by the end of the current funding period, those activities relevant to the longer term project could be extended to maintain continuity.

Because of the short time frame available and in order to make an early impact while building an experience base on which to develop a longer term project, it is proposed that three concept papers already submitted to SCF and USAID be utilized for initial pilot activities under this initial phase of the project. These build on activities already underway, so could be immediately implemented.

The concept paper of TVG would be used as the basis for a focused effort for supporting the development of the PFU. Through their Farmer to Farmer program, TVG would take the lead in providing external technical and management assistance that would be shared where appropriate with the other components of the project. The proposal of CARE, which has both a single commodity (potato) and local area approach (Svanetia), has both humanitarian aid and development objectives that emphasize technical assistance and the identification and development of local farmer owned or private business organizations and on intern and staff training. The International Rescue Committee (IRC) proposal would be tested as a means of reaching and helping the very poor consisting of displaced persons and their host families. This is a model based on similar activities conducted successfully in Afghanistan and through initial experience in Georgia. It would be directed toward developing greater self sufficiency by giving extension services, small tools, seed, poultry or small animals and canning supplies to selected recipients. It also has an environmental component focused on reforestation to replace trees cut for fuel. This component should be more clearly focused on sustained wood lot management should this activity carry over into a longer term project.

To the extent possible, through the management sub-grant, close coordination between activities would be maintained to maximize the use of technical assistance consultants, training and provision of commodities. The project management unit would also manage the intern program, and coordinate closely with USAID, other donors, interested PVOs, NGOs and with staff of Government Ministries when appropriate. Responsibility would also be taken to coordinate with USAID for environmental and other needed clearances. The project management would also be responsible for insuring oversight, evaluation, reporting and financial management. It is proposed that ACDI provide overall project management for SCF. Description of each project

component along with inputs, expected outputs and budget requirements for the individual components follow. An aggregate budget is found in the budget section.

4. Detailed Proposals

4.1 Tri Valley Growers' Proposal

Technical and Commodity Assistance to the Republic of Georgia

Submitted by	Tri Valley Growers
Date of Submission:	January 27, 1995
Project Duration:	1 April to 30 September 1995
Contact person:	Mr. Paul Heinzen Director Tri Valley Growers 12, T. Orbeliani Street Tbilisi, 380000 Republic of Georgia fax/tel. 995-8832-932865

A. Description of Need:

Agriculture production in Georgian has plummeted in the last three years as a result of internal conflicts at the same time that the country attempted transition to a free-market economy. These disruptions have also severed many of Georgia's traditional trading links, cutting off imports of grain and other food-stuffs, as well as exports of foreign exchange generating products. The lack of locally available food supplies has necessitated the emergency shipment of critical commodities by international agencies serving the humanitarian needs of the Georgian population. If Georgia is to emerge from dependence upon humanitarian relief, agriculture production increases will be "essential for improving the domestic food supply" (World Bank; "Aide-Memoire", 1994).

Decreasing agriculture output in Georgia stems from a current lack of inputs including seed, fuel and fertilizer, poor production practices on newly privatized farms, and fledgling marketing channels and other infrastructures. Despite these significant challenges, the agriculture sector can benefit from well timed and targeted development interventions. A 1994 World Bank draft report suggested that utilizing improved seed stocks (alone) could more than double cereal crop yields.

Improving production practices and marketing outlets for Georgia's emerging private farming sector will result in larger quantities of domestically produced food available in local markets. With improved training and inputs/markets access, these new (primarily subsistence) farm enterprises can supply much of the rural and urban sector food requirements of Georgia.

B. Identification of Target Beneficiaries

Primary beneficiaries of the program will be the approximately 25,000 Union of Private Farmers (PFU) members and their families, located throughout Georgia. Direct

beneficiaries of the commodity assistance portion of the program will be 2,000 farm families (averaging 5 members per family) who receive seed inputs, as well as an estimated 10,000 vulnerable individuals from the same communities who qualify for humanitarian distribution of the crop yield in-kind payment by seed beneficiaries. Qualifying vulnerable individuals will be identified by local PFU representatives and municipality leaders, and will include persons in officially recognized vulnerable categories such as internally displaced persons (IDPs), pensioners, and orphans. Secondary beneficiaries will be residents of other communities who have access to this food.

C. Program Goal

The program goal is to increase local private sector capacity to produce and market food commodities.

D. Program Objectives

1. *Improve Food Production in 1995*
2. *Build/Support Long-term Indigenous Seed Production Capacity*
3. *Foster Indigenous Marketing/Advisory Services*
4. *Introduce Genetic Vigor and Improved Management Techniques into the Meat and Dairy Livestock Industry*
5. *Maintain Comparative Advantage Markets in Cash Crops*

E. Program Description

The program is structured to provide technical, commodity, and credit assistance to Georgian non-government institutions and farmers. In the short term, distribution of imported seed and other inputs, as well as provision of technical assistance by US agriculture professionals should increase yields of selected cereal grains in the 1995 harvest season. In the long term, technical assistance and training along with limited commodity assistance will strengthen Georgian farms' and non-government institutions' abilities to access agriculture inputs and advisory services. All commodity inputs will include pay-back components, initially an in-kind contribution of benefits.

Objective One - Improve food production in 1995

During February and March, 1995, Tri Valley Growers (TVG) will distribute 105 metric tons of hybrid seed corn donated by the US based, Brother's Brother Foundation. Distribution will be carried out in conjunction with the PFU. The PFU is a private farmer cooperative with over 25,000 members, whose mandate is to provide technical information, training and inputs to members. The PFU has 16 full-time staff and 13 part-time consultants, and has worked with GTZ on a vegetable distribution program in 1994.

The planned distribution will reach about 2,000 farm families in 18 districts throughout Georgia. Each beneficiary farmer will sign a contract agreeing to donate twice the amount of seed he receives, in the form of food grain (at harvest time), to vulnerable groups within their own (or nearby) communities. PFU regional coordinators and

community managers will collect the in-kind payments and distribute the proceeds in coordination with municipal governing bodies.

Advisory seminars/services and extension materials relevant to the husbandry of the donated seed will be provided by TVG and PFU. Seed will be targeted toward farmers with knowledge of hybrid seed culture. Farmers will also be urged to plant indigenous seed corn varieties to ensure the availability of seed in subsequent seasons (1994 was a drought year, resulting in exceptionally poor quantity/quality of 1995 indigenous seed stock). This strategy will also facilitate better comparisons between indigenous and imported varieties.

Objective one output indicators:

- * Timely arrival of the seed, in Georgia, and repositioning at 26 distribution centers throughout the Georgian corn belt. 90% complete on the date of this submission.

- * Distribution to 2,000 small, medium and large private farmers will occur between 13 March and 31 March. A distribution seminar will be conducted from 5-8 March for all 26 distribution managers to review methodology and documentation procedures. TVG will conduct spot monitoring of each distribution center during the distribution process.

- * Selection of one seed beneficiary farm per distributor will be made, at each of which 4 random plots per variety will be managed by the relevant distributor for the purpose of measuring and comparing yields among the 3 varieties and the dominant local variety. At harvest time, sample plots will be hand-harvested and measured for yield. These yield figures will be applied to the total hectareage (based on recommended seeding rates and farmer statements of intended hectareage) seeded to the relevant variety, to estimate the impact on cereal grain production.

- * Inventory and distribution lists will be compiled by each distributor, indicating the quantity of food/grain repayment (1 to 1 ratio) achieved, and to which vulnerable persons this food grain is delivered as humanitarian assistance.

Objective Two - Build an indigenous seed production capacity

TVG will initiate a second pilot seed distribution (for multiplication) program on four to six developing private seed farms in Shida Kartli, Kvemo Kartli and Kakhetia regions of eastern Georgia. These seeds may include (internationally sourced) wheat, barley, oats, hybrid corn, and/or vegetable seed, all of which have been requested by the PFU. Locally and externally sourced fertilizer and herbicides will also be provided to these (Basic) seed beneficiaries. Training and technical assistance will be extended to these farmers, as well as to educational and research institutions engaged in seed selection efforts, throughout the growing season, funded in part by TVG's Farmer-to-Farmer (FTF) program. Georgia linkages with U.S. research/educational institutions, including several already established, will be strengthened through volunteer work and training opportunities in the US.

Objective number two output indicators:

- * Timely arrival (for autumn 1995 planting of wheat, oats, and barley) of Basic seed and related inputs, in Georgia, and its intact delivery to the relevant farms.

- * Timely and appropriate seed storage facilities establishment and seed-bed preparation by seed multiplication candidate farmers

Objective Three - Foster indigenous marketing/advisory services

Throughout implementation of other program objectives, TVG will provide technical assistance and training to farm associations. Technical training will be provided to the PFU's in-house staff and consultants, as well as targeted PFU members. Training will encompass agriculture production (i.e. feed grains, vegetable and livestock), extension, and cooperative development and marketing.

a. Production Assistance

Agronomists and other agriculture specialists, sponsored in part by TVG's FTF program, will collaborate with the PFU agriculture advisors. These technical volunteers will also work directly with PFU members, particularly recipients of donated seed. Assistance will focus on improving production practices/developing PFU advisory corps technical skills.

b. Institutional Strengthening

Agriculture extension and communications specialists will work with the PFU to further develop their in-house capacity for collecting and publishing extension information. Small scale computer and duplication equipment will be provided to the association to aid in the publication of the PFU monthly newsletter "My Land" and related extension publications. Currently, "My Land" has a circulation of about 10,000. It covers agriculture production topics, carries announcements of educational courses offered by the PFU, and presents other topics of interest to the farm sector.

c. Cooperative Development and Marketing

As efficient supply and marketing channels are absent in the present Georgian economy, technical assistance missions will also focus on promoting marketing and supply cooperatives. Fledgling farmers' associations are beginning to appear throughout Georgia, allowing farmers to pool resources in the production and distribution of their crops. While barter transactions presently dominate the rural economy, agriculture supply and marketing cooperatives will be critical (especially given the high proportion of small holdings) to bring rural farmers into the cash economy and to build efficiencies into the agriculture sector.

Small supply and marketing cooperatives should allow farm families to improve their access to agriculture inputs and to increase their incomes through better access to urban and international markets. TVG's technical assistance mission will focus heavily on cooperative development within the broad framework of PFU membership.

Objective number three output indicators:

- * Number of FTF volunteers in Georgia, and the number of farmers attending seminars presented by volunteers.
- * Number of RFTF (Reverse Farmer-to-Farmer) candidates sent from Georgia to the US for short-term technical training.
- * Increase in the circulation of "My Land" periodical.
- * Increase in the number of farmer associations in Georgia.

Objective Four - Introduce genetic vigor and improved management techniques into the meat and dairy livestock industry

For the past few years livestock have reverted to foraging for their own fodder for most of the year, throughout Georgia. While livestock numbers have increased significantly, there has been a decrease in the quantity/quality of meat and dairy products appearing in local markets due to disarray in the agriculture ministry and a dearth of private market mechanisms.

Milk processing plants stand idle as traditional supplies of imported powdered milk evaporate. Home-made butter and cheese (of indeterminate sanitary quality) are the only dairy products reaching local markets. TVG proposes to support two or three model dairy production units, either through farmers associations or larger individual private enterprises which demonstrate a propensity for responding to the need for an expanded line of commercial dairy products. The project will begin with introduction of subsidized genetic material which will set the stage for increased production. The pilot stage of this project (dissemination of genetic material) can be completed and assessed before the end of the grant period, though the results are clearly longer term. Meanwhile FTF volunteer dairy production, management, processing, and marketing technicians will devise a long-term plan with pilot project farmers and/or farmer dairy associations to process and market products as unit production increases over the next three to four years.

Much of the poultry and red meat available in Georgia's markets is imported through Black Sea seaports. TVG proposes to introduce hybrid vigor into selected poultry operations in Georgia through importation of fertilized eggs.

Objective number four output indicators:

- * Number of successful ovary transplants/inseminations.
- * Number of farmers attending seminars presented by the proposed FTF veterinarian.
- * Number of live chicks resulting from imported (fertilized) eggs.

Objective Five - Maintain comparative advantage in special crops

Georgia has a comparative (climatic) advantage in the production of a wide variety of cash crop fruits and vegetables, and indeed has been a (historic) primary supplier of such commodities to the former Soviet Union. Orchards and groves are being removed at an alarming rate as farmers convert orchards to cereal crop production. While some orchard areas are better suited to cereal production, much agricultural land in Georgia is (environmentally) suitable only for perennial cropping. It will be much more costly to re-establish groves and orchards in the years to come than to preserve and up-grade many of those already existing.

Improved fruit seedlings will be introduced into existing nurseries to provide a base for the next generation of fruit bearing plants. Present varieties produce generally inferior quality fruit to that available in international markets. Upgrading is therefore necessary to compete successfully in international markets. FTF volunteers will present farmer seminars on appropriate management of existing species, and offer advice on supporting local produce markets.

While increasing production of cereal grains is the primary short-term objective of TVG, it will also be important in the long term to preserve comparative advantages in cash crops production and diversity in product mix.

Objective number five output indicators:

- * Increase in product processing by targeted processing plants.
- * Quantity of imported (improved) fruit seedlings and rootstock.
- * Number of farmer participants in FT. seminars.

F. Program Monitoring

The PFU will maintain a complete record of all seed corn recipients. Spot checks will be conducted by TVG staff and FTF volunteers to confirm that distribution is conducted appropriately. On-going monitoring of activities at the selected seed multiplication sites will be conducted by PFU and TVG staff, jointly. Monitoring of seed corn distribution sample plots will be compared with historic corn yield data for Georgia.

Quarterly reports will document all recommendations made to participating farm groups and will include records of all extension materials provided to recipients of seed and other inputs. The technical assistance and training component of the program will be evaluated through individual project reports by technical assistance (FTF) volunteers and participant feed-back. Project reports will include the number and description of beneficiaries, training topics covered, local constraints, recommendations to host and grantor for follow-up activities, and institutional developments (e.g. formation of farmer associations). Reports will be available to Georgian project hosts and subsequent technical assistance volunteers participating in the program.

G. Relationship to SCF Country Strategy and Regional Priorities

SCF/USAID priorities in the Caucasus encompass humanitarian relief/food security, income generation/business development and energy. The proposed program of technical assistance and training supports the following two of these regional objectives in a direct and focused manner:

Food Security - Increasing domestic food production is a crucial step in attaining food security for Georgia. Providing seed stock and technical assistance can have an immediate impact on the quantity and quality of domestic food supplies, reducing dependence on humanitarian relief. Moving beyond meeting basic needs, the resources spent on technical assistance and training will have the additional effect of stimulating sustainable growth.

Income Generation/Business Development - Despite the devastated economy, agriculture and food processing industries employ a greater number of Georgians than any other sector (at least 27% of the work-force). This sector has the potential for generating new businesses and providing incomes to an even greater share of Georgia's labor force. Providing farmers, farm associations and new agro-businesses with technical and business assistance will increase incomes and assist in long term economic growth.

The TVG program also supports two of the priority sectors defined in SCF's Programming Strategy of 1995: "Rural income generation and agro-business activities", and "Strengthening the capacity of indigenous PVOs in Georgia". While constrained by the macro-economy, increases in domestic food production through the provision of technical assistance and inputs should contribute to increases in rural incomes. Assistance to the PFU and other fledgling farm associations should assist in creating sustainable models of agriculture supply and marketing cooperatives and private extension/advisory services. Continuation of funding beyond the proposed grant period is crucial to attain maximum (long term) benefit from the above set of interventions.

H. Concept Budget

	SCF	Other*	in-kind	Total
Salaries & Benefits				
United States	\$ 4,320	\$ 37,530	\$ 147,420	\$ 189,270
International	\$ 14,000	\$ 17,500		\$ 31,500
Local	\$ 4,050	\$ 7,500		\$ 11,550
Travel				
International air-Monitors/Volunteers	\$ 23,000	\$ 30,000		\$ 53,000
Ground Transport-Montr./Volunteers	\$ 1,375	\$ 2,000		\$ 3,375
Per diem - Monitors/Volunteers	\$ 14,650	\$ 14,500		\$ 29,150
Visas & Insurance	\$ 540	\$ 600		\$ 1,140
Capital Assets				
Photocopier	\$ 4,000			\$ 4,000
Computer Printer	\$ 600			\$ 600
Operating Costs				
Rent and Utilities	\$ 5,000	\$ 7,600		\$ 12,600
Communications	\$ 2,700	\$ 1,800		\$ 4,500
Printing & Duplication	\$ 600	\$ 400		\$ 1,000
Vehicle rental/Fuel	\$ 4,000			\$ 4,000
Supplies	\$ 500	\$ 200		\$ 700
Other Direct Costs				
Seed/Fertilizer/Herbicide	\$ 80,000		\$ 480,000	\$ 560,000
International Shipping	\$ 30,000		\$ 100,000	\$ 130,000
Semen, Ovaries & (poultry) Eggs	\$ 100,000			\$ 100,000
Orchard/Grove/Arbor maintenance	\$ 20,000			\$ 20,000
Hosting local seminars	\$ 2,000			\$ 2,000
Local Shipping/Storage/Handling	\$ 14,000			\$ 14,000
Printing & Duplication	\$ 1,000			\$ 1,000
Equipment	\$ 12,000			\$ 12,000
Sub-total Direct Costs	\$ 338,335	\$ 119,620		\$ 1,185,385
Indirect costs @ 18%	\$ 60,900	\$ 21,533	N/A	\$ 82,434
GRAND TOTAL	\$ 399,235	\$ 141,163	\$ 727,420	\$ 1,267,819
	31%	11%	57%	100%

* Refers primarily to FTF funding, but also Food Systems Restructuring Project (FSRP) and Cooperative Program Support Agreement (CPSA)

4.2 IRC Proposal

Food Security/Agricultural Assistance for IDP and Host Families

Submitted by The International Rescue Committee
 Date of Submission: 17 February 1995
 Project Duration: 1 April to 30 September 1995
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A. Introduction

The collapse of the Georgian economy caused by the break-up of the Soviet Union resulted in major reductions in food and other agricultural production. The resulting food shortages have led to the large-scale provision of international food aid. The privatization of the State Cooperative Farms has resulted in the creation of a large number of new small private farms and a small but growing number of commercial-scale private farms and agro-businesses. Studies by the European Community, the World Bank and Save the Children-USA of this new sector have identified key constraints facing small private farmers and agro-businesses. These constraints include unavailability of inputs, lack of management skills and inadequate technical knowledge.

Concurrent with this decline in agricultural production there has occurred another emergency--the displacement of large numbers of Georgians due to armed conflict. Following the collapse of the Soviet Union, the Ossetians and Abkhazians, ethnically and linguistically unrelated to Georgians, reacted to the re-establishment of the Republic of Georgia's statehood and the dissolution of the Soviet Union in December of 1991 by invoking separatist claims for self-determination. These separatist ambitions, fueled by area politics, created a dramatic outburst of armed conflict delineated along ethnic lines in the autonomous regions of southern Ossetia and Abkhazia, which eventually resulted in a mass displacement of approximately 300,000 people (primarily ethnic Georgians) by the close of 1993. Further exacerbating the ethno-political conflicts was the outbreak of a civil war between Georgians at the end of 1991 and which continued intermittently through 1993. Many of these IDP's now live in crowded communal centers relying largely on international food and in-kind assistance; others live with host families whose ability to support the IDP's is growing increasingly limited.

A third crisis is emerging throughout Georgia in the form of large-scale deforestation. This deforestation is closely linked to the increasingly limited access to imported

cooking and heating fuels, and to population displacement. In Georgia, the cold climate combined with poor housing conditions, especially for IDP's, requires substantial amounts of fuel for heating as well as cooking. Both the host and IDP populations are resorting to using wood, which can often be scavenged at no cost, as the most feasible means of providing essential heating/cooking facilities on a significant scale. Government and municipal forestry departments, maintain large nurseries of forestry seedlings but do not have the resources to plant them.

B. Overview Of The IRC/Georgia Program

Since November 1993, IRC has been providing basic relief assistance and family support to internally displaced persons (IDP's) primarily in Tbilisi and western Georgia. Emergency assistance for IDP's has included the winterization and rehabilitation of IDP collective centers and the distribution of winter clothing, bedding, solid-fuel heating and cooking units, and hygiene articles.

Since mid-1994, IRC has been supplementing emergency aid with income-generation and agricultural assistance. IRC has found that a great many IDP's have marketable skills and often require only start-up assistance, such as carpentry or auto mechanic tools, handlooms, sewing machines, etc. to begin supporting themselves and their families. Others, especially those living with host families, have access to some amount of land. With minimal training and material assistance, they can produce small livestock and/or crops to augment both food resources and income for themselves and their hosts. The scale of assistance has been kept small, usually at the family level. Tool kits and other materials provided are portable and can be easily transported if/as families relocate or repatriate. As an adjunct to agricultural activities, IRC has been supporting reforestation in areas of high IDP populations.

Under its ongoing water supply and sanitation program, which targets urban areas housing large IDP concentrations, IRC provides critical emergency repairs and water purification chemicals to municipal water supply systems, cleans and repairs urban sewerage systems, and supports vector control.

Specific accomplishments of the IRC/Georgia program are detailed below:

- Distribution of 15,185 wood stoves, 67,043 kg of soap, 14,850 kitchen sets, 11,969 articles of clothing, 14,477 pairs of winter boots, 5,888 blankets, 500 cots and 1,290 mattresses to IDP families. An additional 51,896 kg of soap, 1,650 kitchen sets, 830 water jars, 9,213 blankets, 500 cots, and 1,289 mattresses were procured and are stored for distribution in Abkhazia.
- Rehabilitation of 83 IDP collective centers primarily in Tbilisi and western Georgia, plus an additional seven in Abkhazia.
- Procurement and storage of 1,104 m³ of construction lumber, 1,400 bags of cement, 4,800 roofing tiles and 274 tool kits for reconstruction of houses in Abkhazia.
- Rehabilitation of municipal water supply systems in Kutaisi and Senaki; partial rehabilitation in Poti and Tbilisi.
- Distribution of two metric tons of water purification chemicals (chlorine) to water authorities in 20 municipalities throughout Georgia.

- Distribution of 11,000 kg of chlorinated lime and 6,000 kg of chlorine cleansers for use as household disinfectants in IDP collective centers in eight cities.
- Distribution of 8,390 kg of vector control chemicals (chlorophos, ratindan and zacumarin) with sprayers and protective clothing to 171 IDP collective centers; training of 33 fumigators.
- Provision of start-up assistance to five IDP-operated factories producing buckets, shoes, linen, and women's stockings.
- Provision of income generation "kits" (tools and start-up materials) to 60 IDP artisans and trades people.
- Provision of gardening tools and canning supplies to 2,500 IDP and host families.
- Equipping of two schools and one medical laboratory.
- Distribution of 79,000 chicks to over 6,000 IDP host families in western Georgia.
- Procurement of 85 metric tons of maize seed (45 donated by Brothers Brother organization and 40 purchased locally) for distribution to IDP and host family farmers in March 1995.

An integral part of IRC/Georgia's operating strategy for all sectors is to support the development of local businesses and institutions through procurement within Georgia of all possible services and materials. To this end, all agricultural inputs and supplies will be procured, using a competitive bidding system within Georgia, if possible, and preferably within the specific locales of each extension center. Certain procurement orders may exceed \$5,000 and prior approval is acknowledged with the approval of this proposal.

Primary donors for the IRC/Georgia program to date have been SCF/USAID, UNHCR, Stichting Vluchteling and UNICEF.

C. Project Proposal

a. Current Situation and Needs:

The future of IDP's remains uncertain, with negotiated agreements for peaceful repatriation to Abkhazia and Ossetia now being obstructed. It is clear, however, that the international community cannot indefinitely continue emergency assistance at current levels. The challenge to donors and to NGOs like IRC is to use assistance now available to increase the self-reliance of IDP's and host populations, but without limiting the choice of IDP's to stay or repatriate. They must be provided with appropriate means to earn income and/or to produce food.

IRC has been responding to this need since mid-1994, when it began programs focusing on increasing the income generation and agricultural production capacities of IDP's and host families. Several activities piloted during 1994, including provision of poultry, gardening tools and canning supplies, have proven popular and effective. IRC proposes to consolidate these activities with a new pilot farmer extension program in 1995.

b. Project Objectives:

1. To increase IDP and host-family small-scale commercial agricultural production through establishment of a pilot agricultural extension program incorporating

demonstrations, key farmer participation and training, and provision of agricultural inputs.

2. To improve IDP and host family nutrition, food security, and income levels through the provision of livestock to up to 2,000 host-family households for home consumption, sale, and breeding.
3. To improve IDP and host family nutrition and food security by increasing the availability of fruit and vegetable stores for 5,000 IDP and host families through provision of gardening tools and canning materials.
4. To mitigate the environmental damage from deforestation due to the lack of alternate fuels by supporting the planting of 900,000 forestry seedlings in areas where there are significant IDP populations utilizing wood for heating and cooking.

c. Proposed Activities:

Objective 1: To increase IDP and host-family small-scale, commercial agricultural production through the establishing of a pilot agricultural extension program incorporating demonstrations, key farmer participation and training, and provision of agricultural inputs.

IRC's pilot extension program will operate out of four agricultural extension farms, three of which will be situated in the Samegrelo region and the fourth in the Kutaisi/Tskhaltubo area. These farms, which will be located in highly visible, central locations, will serve as bases for district-wide extension activities and for demonstrations and training in various agricultural activities. Each extension farm will be staffed by a university trained extensionist, a farm manager, and up to four laborers. The major demonstration and extension activities include maize seed distribution, bee-keeping, poultry raising, vegetable production, composting, food processing, and agro-forestry. Prospects for establishing an integrated pest management program will be explored.

Extension staff will provide both technical and economic information required for local farmers to select activities appropriate to their own resources and needs. In addition to technical training and material assistance, staff will advise farmers on the pros and cons of each option: land requirements; start-up and maintenance costs; available marketing information; long and short-term benefits; and compatibility with other agricultural activities. In short, IRC will assist the farmer in selecting and implementing appropriate agricultural options.

Under the key farmer strategy, IRC agricultural staff will select a limited number of progressive farmers from the IDP and host-family community and provide them with technical training and inputs required to carry out one or more of the activities targeted above. These key farmers, in turn, will provide a multiplier effect by demonstrating and promoting the new crops or techniques to neighboring farmers, and by serving as a local source of technical advice and assistance, thereby forming a major part of the extension process. This key farmer program, limited to 100 farmers during this six-

month grant period, will be extended to additional farmers and activities in future phases of the project.

Planned Activity 1: IRC's agricultural manager will identify and rent land to establish four small farms to serve as training and district extension centers. Suitable farm sites of one hectare and with at least one habitable building will be rented by April 30 from local farmers in three Samegrelo districts and the Kutaisi/Tskhaltubo area. Each farm will be staffed with an IRC agriculturist, a farm manager and up to four IDP laborers; IRC's Agricultural Supervisor will coordinate the program out of Zugdidi. IRC presently has an agricultural manager; all additional staff will be recruited by April 30. Land will be prepared for crop cultivation, a forestry woodlot will be established, and a small structure suitable for fertilized poultry production and incubation renovated or built. All equipment and inputs including vegetable seed, poultry breeding stock, egg incubators, bee colonies, forestry seedlings, biogas production and food preservation equipment for demonstrations will be procured in Georgia, if available, or in Turkey or Russia.

Planned Activity 2: Demonstration projects in vegetable and vegetable seed production, beekeeping, poultry and egg production, seed and produce storage, agro-forestry, composting and low-technology food preservation will be designed and carried out at each farm. A small kiwi nursery will be established to produce seedlings for farmers; kiwi is currently produced in small quantities in western Georgia and draws a much larger price than traditionally grown fruits. A small biogas combustor, based on a design currently used in Kutaisi in western Georgia, will be constructed, tested and demonstrated. Local farmers, including IDP's, will be encouraged to visit the farms to observe demonstrations and receive technical advice.

Planned Activity 3: Preparation of a basic "core" farmer training package for each activity will be supervised by the agricultural manager and carried out in conjunction with field staff, Georgian government agricultural authorities, Tri-Valley Growers technical consultants, and possibly, Rodale Institute. Training materials in poultry, vegetable and kiwi production, beekeeping, and composting will be prepared by August 31. Development of integrated pest management and food processing training materials will begin during the project period.

Planned Activity 4: Each IRC extensionist will develop a corps of at least 25 "key" farmers in his district. Key farmers are progressive farmers willing and able to devote resources to innovations; they serve as natural extension agents through the examples they set in their communities. IRC field staff will identify key farmers from the IDP and host family community for each activity. Each key farmer must attend a training program at an IRC extension center and meet certain eligibility criteria that include openness to new ideas, access to land, and ability and willingness to make investment and absorb risk.

Planned Activity 5: IRC will procure and distribute to key farmers the input packages they require to begin the activity they have chosen. These packages are described below:

poultry production: Ten farmers in each district will be selected. Each key farmer must have or construct at his own expense, a chicken coop before receiving inputs.

After monitoring the existence of a suitable shelter, IRC extensionists will provide each key farmer with a minimum of 50 45-day-old, vaccinated chicks (46 female and four males). Each set of chicks will come with two feeders and two waterers. The poultry key farmers which are most successful may become eligible for assistance in establishing commercial hatcheries in a future phase of this project.

beekeeping: Five farmers in each district will be selected. Each farmer will purchase from IRC ten bee colonies at a subsidized cost, and may purchase additional colonies through IRC at full market rates. With each set of bee colonies IRC will provide protective clothing, a smoker, and a honey extractor.

vegetable production: Ten key farmers capable of commercial-scale production (minimum XXX m²) will be selected in each district. Each farmer will receive seeds and seedlings along with a set of tools. Farmers who are most successful may be encouraged to produce seeds and seedlings and assisted in establishing greenhouses in a future phase of this project.

To the extent possible, IRC will procure critical inputs (vegetable seeds and seedlings, fertilized eggs and chicks, bee colonies, etc.) in Georgia. IRC field staff will identify local commercial producers for each item and contract out to them, on a competitive bidding basis, for the provision of required inputs. Where local producers are not available, IRC will encourage and assist potential producers to establish or re-establish input production capabilities. For example, there are many chick hatcheries in western Georgia which have closed, yet can be readily reopened if there is business. Existence of local producers and local availability of required inputs is critical to the longer-term sustainability of these activities. Food processing equipment for demonstrations may be procured from Turkey or Russia.

IRC extensionists will visit each key farmer at least once a month for the first three months, and bi-monthly thereafter. IRC independent monitors will visit each farmer at least twice during the grant period to confirm that training was done and inputs received and properly used, to measure output and to assess the success and potential impact of each activity. Monitoring forms will be developed for each activity.

Planned Activity 6: IRC will actively cooperate with other agencies involved in the agricultural field. IRC is already collaborating with Tri-Valley Growers in the distribution of 45 tons of maize seed and with World Vision in distributing over 500 kg of vegetable seed. During the project period, IRC will participate in Tri-Valley Grower's staff training programs and request their technical assistance, as required. In addition, IRC will establish a correspondence with Rodale Institute for technical assistance, and investigate the possibility of setting up a consultancy in July or August to evaluate ongoing activities, further assess agricultural opportunities for IDP's and host families, and make recommendations for future expansion of the project.

beneficiaries: At least 100 key farmers and their families (approximately 500 people in total) will benefit directly during the project period; several hundred more IDP's, host families and general population will receive technical advice.

Objective 2: To improve IDP and host family nutrition, food security and income levels through the provision of livestock to up to 2,000 host-family households for home consumption, sale, and breeding.

During a 1994 pilot project, IRC distributed 79,000 chicks to approximately 6,000 IDP and host families in western Georgia. IRC proposes to expand activities under this objective to include provision of chickens, ducks, turkeys, pigs, and rabbits to up to 2,000 host-family households (representing 10,000 individuals) to raise for home consumption, sale, and breeding. All these animals are scavengers and can produce meat from the normal household food scraps and a wide variety of vegetation. Each beneficiary family will receive one set of the following: 20 chicks, five ducklings, five turkeys, five rabbits or two piglets. Identification of beneficiaries and distribution will be jointly carried out by IRC's field extensionists and general distribution staff. All livestock will be procured locally under contracts.

Planned Activity 1: By April 30, IRC field staff will identify suppliers of chicks, ducklings, turkeys, piglets and rabbits throughout Georgia who are able to provide significant quantities of livestock. Production capacities and prices will be recorded for each supplier.

Planned Activity 2: IRC field staff will select 2,000 IDP and host families interested in raising livestock. Selection will be based on technical knowledge and availability of space for raising the livestock, and on need (measured primarily by size of family and perceived poverty). Each selected family will choose the type of livestock it wants.

Planned Activity 3: IRC staff will revisit selected livestock suppliers, solicit formal bids from them, and, under a multiple bidding system, contract for the supply of livestock requested by chosen IDP and host families.

Planned Activity 4: IRC field staff will receive the livestock and distribute them in a timely manner to selected families. Distribution will be done on a rolling basis, as livestock becomes available, and will be completed by August 31.

Planned Activity 5: By September 31, 1995, IRC field monitors will visit a minimum of ten percent (200) beneficiary families to determine survival of the livestock and assess their impact on the family. Monitoring forms will be developed for this purpose.

beneficiaries: Two thousand IDP families and their hosts (representing between 10 and 20,000 persons) will directly benefit under this objective.

Objective 3: To improve IDP and host family nutrition and food security by increasing the availability of fruit and vegetable stores during the winter months for 5,000 IDP and host families through provision of canning materials and tools for kitchen gardens.

Since April 1994, IRC has provided 10,000 IDP and host families with sets of canning jars and lids, plus basic tools including hoes and shovels for the cultivation of backyard or "kitchen" gardens. This simple activity was initiated to increase the availability of fruit and vegetables during the winter months. Canning is practiced throughout Georgia, and many IDP's and host families have access to small areas of land for cultivation. Each family will be provided with a set of tools including a spade, hoe,

rake, and sickle, and two cases (24) canning jars and lids. During 1995, IRC field staff will provide these supplies to 5,000 additional IDP and host families.

Planned Activity 1: By March 31, IRC will contact known local suppliers of canning jars with lids, and gardening tools, to solicit multiple bids for these items. Suppliers will be selected on a competitive bidding and procurement contracts signed by April 15.

Planned Activity 2: IRC field staff will select 5,000 IDP and host families interested in vegetable production and canning. Selection will be done in conjunction with local refugee committees and based on IDP and host family technical knowledge and availability of space for small gardens, and on need (measured primarily by size of family and perceived poverty).

Planned Activity 3: Upon receipt of the jars, lids and gardening supplies, IRC field staff will begin distributing them to the families selected. Distribution will be completed by May 15 so that recipients are able to plant in time for the summer vegetable season.

Planned Activity 4: By September 31, 1995, IRC field monitors will visit a minimum of ten percent (500) beneficiary families to determine whether gardens were cultivated and canning done, and to assess the impact of this assistance on the family. Monitoring forms currently in use will be revised for this purpose.

beneficiaries: Up to five thousand IDP and host families (representing between 25,000 and 50,000 persons) will directly benefit under this objective.

Objective 4: To mitigate the environmental damage from deforestation due to the lack of alternate fuels by supporting the planting of 900,000 forestry seedlings in areas where there are significant IDP populations utilizing wood for heating and cooking.

In the absence of alternative energy sources, trees are being cut at an alarming rate throughout Georgia. NGOs and their donors are contributing to this problem through the provision of wood-burning stoves to tens of thousands of IDP and host families. Since late 1993, IRC alone has provided nearly 17,000 locally manufactured, wood-burning stoves to IDP's in communal shelters and to IDP host families; IRC staff will distribute an additional 7,500 stoves in early 1995.

While accepting the overriding necessity for fuel for cooking and heating, IRC is concerned that the increasing number of wood-burning stoves in use in Georgia will accelerate deforestation. IRC will therefore support the planting of 900,000 seedlings (approximately 225 hectares at 3-5,000 seedlings per hectare) of fast-growing varieties in areas where there are significant refugee populations utilizing wood for heating and cooking. Building on the experience of working with the Forestry Department on five reforestation projects in 1994, IRC will identify ten to fifteen new project sites primarily in the Samegrelo region. Projects will focus on replanting of heavily cut areas through collaboration with local forestry departments. Limited re-establishment of windbreaks and replanting of parks will also be considered in areas where serious depletion of wooded areas has occurred. IRC will procure the seedlings through

forestry department divisions in each project district which will, under contract to IRC, supervise land clearing and planting by mostly IDP laborers. Approximately one-third of the seedlings will be planted during the spring months, and the remainder will be planted in the fall. Ongoing and completed work will be monitored by IRC agricultural and field staff.

Planned Activity 1: During March and April, IRC staff will contact forestry departments in Tbilisi and western Georgia to select appropriate varieties of trees, determine available stocks of seedlings on government woodlots, and select suitable locations for replanting. Priority will be given to areas of high IDP populations in western Georgia.

Planned Activity 2: Following site selection, IRC will contract with the forestry department and/or participating municipalities to prepare fencing and organize labor brigades for planting of seedlings. Contractors will be encouraged to employ IDP's in these activities.

Planned Activity 3: IRC will contract with the forestry department and/or participating municipalities to prepare fencing and labor brigades. Final payments will be made only after work has been determined to be complete by IRC monitors.

beneficiaries: Assuming that a family cooking and heating with wood uses an average of XXXX m³ per year, and that each tree planted will produce XXXX m³ after five years, this activity will benefit XXXX families (or XXXX persons) after five years.

d. Monitoring and Evaluation

Monitoring of ongoing and completed activities will be provided by IRC technical staff and, independently, by IRC monitors. Proposed monitoring indicators for each objective are provided below:

Objective 1.

- Timely establishment of extension farms
- Farmer interest, as evidenced by visit records
- Appropriateness, cost-effectiveness and quality of procured inputs
- Quantities of inputs distributed
- Number of farmers trained/quality of training
- Number of key farmers participating
- Key farmer production

Objective 2.

- Number/appropriateness of selected recipients
- Cost effectiveness & timeliness of livestock procurement
- Livestock survival rates, as based on results of follow-up monitoring of random samples
- Average per-beneficiary livestock production, as based on results of follow-up monitoring of random samples

Objective 3.

- Number/appropriateness of selected recipients

- Cost effectiveness & timeliness of materials procurement
- Number of garden tool/canning sets distributed
- Amount of preserves canned per family

Objective 4.

- Numbers of contracts signed/sites established
- Number of seedlings planted
- Survival rates of seedlings

D. Relationship to SCF country strategy and USAID priorities

SCF's country strategy identifies IDP's and host families as priority vulnerable groups, and emphasizes the necessity of increased focus on bridging activities that serve a dual purpose of meeting immediate relief needs while establishing a foundation for sustainable economic self-sufficiency. The activities described above specifically seek to address these issues, and fall into two of the major sectors identified in the SCF and USAID strategies: family food security and income generation.

E. Conclusion

None of the proposed activities are new to IRC, and all have been piloted in Georgia or elsewhere. IRC has implemented family-level agricultural assistance in Georgia since mid-1994 through the provision of poultry, gardening and canning supplies to IDP and host families. The described reforestation activities are sorely needed and have also been piloted in Georgia by IRC. The proposed key farmer extension program is based on a similar and highly successful program implemented by IRC in Afghanistan since 1991.

While the stated recipients of assistance are IDP's and host families, the potential beneficiaries of these activities, especially extension and reforestation, far exceed that select group. Georgia desperately requires a new agricultural paradigm and with it new methods and systems more suited to small-scale, privately owned production. This change will require innovative models, access to new and preferably local sources of inputs, and a cadre of agricultural extensionists possessing both technical and management skills. This project will, in a modest way, contribute to all three requirements while providing tangible and significant benefits to at least 7,100 IDP and host families (35,000 individuals) members in the forms of food security and self-reliance.

F. Proposed Budget for 1995 (in US\$)

	TOTAL	SCF Agriculture (proposed)	Other Sources
A. PERSONNEL			
-expatriate	204,152.00	0.00	204,152.00
-local	76,469.40	5,791.20	69,492.60
B. TRAVEL	36,800.00	200.00	36,600.00
C. OCCUPANCY AND RELATED	39,600.00	150.00	39,450.00
D. COMMUNICATIONS	9,000.00	0.00	9,000.00

	TOTAL	SCF Agriculture (proposed)	Other Sources
E. SUPPLIES & EQUIPMENT			
-computer equipment	5,000.00	2,500.00	2,500.00
-office supplies	9,000.00	0.00	9,000.00
-water/sanitation	556,200.00	0.00	556,200.00
-shelter assistance	447,143.00	0.00	447,143.00
-rehab. schools & hospitals	305,000.00	0.00	305,000.00
-vector control	136,000.00	0.00	136,000.00
-household support	690,000.00	0.00	690,000.00
-income generation	300,000.00	0.00	300,000.00
-agriculture	601,000.00	421,000.00	180,000.00
-transportation	132,000.00	10,400.00	121,600.00
F. VEHICLE OPERATIONS	114,600.00	13,200.00	101,400.00
G. PROFESSIONAL FEES	10,000.00	0.00	10,000.00
H. OTHER EXPENSES	14,000.00	0.00	14,000.00
Contingency*	9,996.00	912.00	9,084.00
TOTAL DIRECT EXPENSES	3,695,960.40	455,338.80	3,240,621.60
INDIRECT COST RECOVERY**	75,984.07	23,637.77	52,346.30
GRAND TOTAL	3,771,944.47	478,976.57	3,292,967.90

* 5.29% of costs, excluding capital assets

** local staff taxes (20% of salary)

Detailed Budget

RC	February 23, 1995	Months	Units	Cost per Unit	Subtotal Line-Item	Total Line-Item	SCF Agriculture (proposed)	Other Agriculture
5100 A. PERSONNEL								Source is
5110	Expat Staff					112,800.00		
	Director	6.00	1.00	3,300.00	19,800.00		0.00	0.00
	Deputy Director	6.00	1.00	2,500.00	15,000.00		0.00	0.00
	Financial Manager	6.00	1.00	2,000.00	12,000.00		0.00	0.00
	Program Officer/Admin	6.00	1.00	1,600.00	10,800.00		0.00	0.00
	Field Coordinator	6.00	1.00	2,000.00	12,000.00		0.00	0.00
	Field Managers	6.00	2.00	1,800.00	21,600.00		0.00	10,600.00
	Engineers	6.00	2.00	1,800.00	21,600.00		0.00	0.00
5140	Expat. Benefits, Insurance @34%					38,352.00		
5120	Local Staff					49,650.00		3,672.00
	Office Manager I	6.00	1.00	200.00	1,200.00		0.00	1,200.00
	Office Manager II	6.00	1.00	150.00	900.00		0.00	0.00
	Field Manager	6.00	1.00	250.00	1,500.00		0.00	1,500.00
	Admin Asst./Translator	6.00	1.00	120.00	720.00		0.00	0.00
	Admin Asst./General	6.00	1.00	180.00	960.00		0.00	0.00
	Office Asst. I	6.00	2.00	110.00	1,320.00		0.00	0.00
	Office Asst. II	6.00	1.00	75.00	450.00		0.00	0.00
	Accountant	6.00	1.00	170.00	1,020.00		0.00	1,020.00
	Liaison Officer	6.00	1.00	120.00	720.00		0.00	0.00
	Engineers	6.00	4.00	250.00	8,000.00		0.00	0.00
	Project Asst.-Eng.	6.00	1.00	130.00	780.00		0.00	0.00
	Sanitation Manager	6.00	1.00	180.00	960.00		0.00	0.00
	Project Asst.-Income Gen.	6.00	1.00	180.00	960.00		0.00	0.00
	Agriculture Officer	6.00	1.00	200.00	1,200.00		1,200.00	0.00
	Farm Extensionists	6.00	4.00	140.00	3,360.00		3,360.00	0.00
	Procurement Manager	6.00	1.00	200.00	1,200.00		0.00	600.00
	Logistics Manager	6.00	1.00	200.00	1,200.00		0.00	0.00
	Distribution Managers	6.00	2.00	190.00	2,280.00		0.00	1,140.00
	Data Manager	6.00	1.00	175.00	1,050.00		0.00	0.00
	Monitoring Manager	6.00	1.00	210.00	1,260.00		0.00	1,260.00
	Field Monitors	6.00	8.00	125.00	4,500.00		0.00	3,000.00
	Warehouse Supervisors	6.00	3.00	180.00	2,880.00		0.00	900.00
	Warehouse Assts.	6.00	8.00	140.00	5,040.00		0.00	1,680.00
	Housekeepers	6.00	5.00	80.00	1,800.00		0.00	0.00
	Watchmen	6.00	5.00	70.00	2,100.00		0.00	0.00
	Driver I	6.00	3.00	140.00	2,520.00		0.00	1,680.00
	Driver II	6.00	3.00	110.00	1,860.00		0.00	0.00
5153	Local Social Security Tax (26% of salary)				12,983.60	12,983.60	1,185.00	3,850.40
5150	Field Benefits (27% of salary)				13,482.20	13,482.20	1,231.20	4,452.41
5151	Medical Benefits		10.00	2,000.00	20,000.00	20,000.00	0.00	2,000.00
5152	Expat. Housing	6.00	10.00	550.00	33,000.00	33,000.00	0.00	500.00
	SUBTOTAL PERSONNEL						6,976.60	30,114.81
5200 B. TRAVEL								
5212	Local Meals & Lodging	180.00	1.00	10.00	1,800.00	1,800.00	200.00	100.00
5233	International Travel					35,000.00		
	Round trip for staff		10.00	3,000.00	30,000.00		0.00	2,000.00
	R&R for staff		10.00	500.00	5,000.00		0.00	500.00
	SUBTOTAL TRAVEL						200.00	2,600.00
5300 D. OCCUPANCY & RELATED								
5310	Office Rent	6.00	3.00	1,000.00	18,000.00	18,000.00	0.00	0.00
	Warehouse					12,000.00		
	Tibisi Warehouse	6.00	1.00	1,000.00	6,000.00		0.00	0.00
	Kutisi Warehouse	6.00	1.00	500.00	3,000.00		0.00	0.00
	Zugidi Warehouse	6.00	1.00	500.00	3,000.00		0.00	0.00
5512	Equipment Maintenance	6.00		300.00	1,800.00	1,800.00	0.00	0.00
5320	Utilities	6.00	3.00	400.00	7,200.00	7,200.00	0.00	0.00
6830	Reference Materials	6.00	1.00	100.00	600.00	600.00	150.00	0.00
	SUBTOTAL OCCUPANCY & RELATED						150.00	0.00

February 23, 1995							
IRC	Months	Units	Cost per Unit	Subtotal Line-Item	Total Line-Item	SCF Agriculture (proposed)	Other Agriculture
E. POSTAGE & COMMUNICATION							
	8.00	1.00	1,000.00	8,000.00	4,000.00	0.00	0.00
	8.00	1.00	500.00	3,000.00	3,000.00	0.00	0.00
SUBTOTAL POSTAGE & COMMUNICATION						0.00	0.00
F. SUPPLIES AND EQUIPMENT							
5515					5,000.00		
		2.00	2,000.00	4,000.00		2,000.00	0.00
		2.00	500.00	1,000.00		500.00	0.00
	8.00	3.00	500.00	8,000.00	8,000.00	0.00	0.00
				558,200.00	558,200.00	0.00	0.00
				447,143.00	447,143.00	0.00	0.00
				305,000.00	305,000.00	0.00	0.00
				138,000.00	138,000.00	0.00	0.00
				890,000.00	890,000.00	0.00	0.00
				801,000.00	801,000.00	421,000.00	160,000.00
				300,000.00	300,000.00	0.00	0.00
				60,000.00	132,000.00		
				50,000.00		10,000.00	50,000.00
				2,000.00		0.00	20,000.00
						400.00	100.00
SUBTOTAL SUPPLIES & EQUIPMENT						433,900.00	250,100.00
F. VEHICLE OPERATIONS							
					48,000.00		
5531	1.00	35,000.00		35,000.00		0.00	0.00
5531	1.00	7,000.00		7,000.00		0.00	0.00
	4.00	1,500.00		8,000.00		8,000.00	0.00
5532	6.00	8.00	500.00	24,000.00	24,000.00	3,000.00	0.00
5533		8.00	1,200.00	9,600.00	9,600.00	1,200.00	0.00
5535	6.00	11.00	500.00	33,000.00	33,000.00	3,000.00	0.00
SUBTOTAL VEHICLE						13,200.00	0.00
G. PROFESSIONAL FEES							
5311				5,000.00	5,000.00	0.00	0.00
				5,000.00	5,000.00	0.00	0.00
SUBTOTAL PROFESSIONAL FEES						0.00	0.00
H. OTHER EXPENSES							
	6.00	3.00	500.00	9,000.00	9,000.00	0.00	0.00
				5,000.00	5,000.00	0.00	0.00
SUBTOTAL OTHER EXPENSES						0.00	0.00
5153				9,972.00	9,972.00	912.00	2,808.00
TOTAL DIRECT EXPENSES					3,695,752.80	455,338.80	294,822.81
INDIRECT COST RECOVERY @ 5.22% (excluding capital assets)					75,940.15	23,837.77	15,585.55
GRAND TOTAL					3,771,692.95	479,176.57	310,208.35

4.3 CARE Proposal

Georgia Agricultural Initiative for Small Farmers (GAIN) *Phase One: Emergency Pest Management in Svanetia*

Submitted by: CARE International in the CIS
 Date of Submission: 25 February 1995
 Project Duration: 1 April to 30 September 1995
 Contacts: CARE International in the CIS
 Georgia Program
 G.L. Dutt, Country Administrator
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 Tbilisi, Republic of Georgia
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A. Background and Problem Statement

The isolated and mountainous region of Svanetia has for centuries maintained a high level of self-sufficiency and independence. Over the past few years, however, the region's isolation has been increased due to ethnic conflicts in adjacent areas. Troops loyal to the ousted president Gamsakhurdia blocked access to the region during 1993 and widespread banditry blocked the access routes during early 1994. The conflict in Abkhazia also impacted the region, sending more than 100,000 displaced persons through the valley in search of safe haven. During this mass migration of September-

October, 1993, the population of less than 20,000 persons supplied food from their winter stocks to the passing displaced persons and supported 5,000 of these displaced people throughout the next two winters.

Svanetia is traditionally an agricultural region; primary crops are potatoes, apples and barley, with some wheat and corn grown at the lower elevations. Prior to the break-up of the Soviet Union, the Svanetia region was supplied with government wheat, allowing farmers to devote a large amount of their land to potato cultivation. Now that wheat supplies are severely limited, potatoes remain the priority cash crop (before 1992 accounting for 25-75% of household income) and have become a critical source of dietary carbohydrates. In the past two years these communities have suffered both man-made and natural disasters which have severely impaired their capacity to produce and market potatoes, including:

- temporary closure of the Svanetia borders by Gamsakhurdia forces in 1993, preventing access to traditional West Georgia markets and triggering an influx of displaced into the Svanetia region. (As a result of limited market access and a doubling of the population, Svanetians were only able to sell approximately 30% of their potato crop);
- drought (June-August) and infestation of the Colorado Beetle in 1994, compounded by the continued burden of supporting the displaced further resulting in minimal yields; and,
- since 1993, increased banditry on the Svanetian roads and poor road maintenance have continued to limit market access.

The six districts (Etseri, Becho, Latali, Lenjeri, Mestia and Mulakhi) most severely affected by the potato beetle (on average 66% of crop destroyed) are also the most dependent on potato sales for their livelihoods/income. While the majority of the farmers in these regions managed to harvest enough potatoes in 1994 for their household requirements (about 1 ton), few, if any, harvested enough to market. The potatoes that survive the Colorado beetle are typically shriveled and of extremely poor quality, and it is likely that even those farmers that may have been able to harvest a surplus could not command adequate prices.

Potato farmers in the Upper Svanetia regions, have, in course of the last two years, lost a critical income source that cannot be easily replaced. Few, if any farmers engage in alternative income-generating activities and most are entirely dependent on agriculture for their livelihoods. The government allowances that some families do receive are considered virtually worthless and are not adequate to even supplement household income. Faced with no alternatives, some of these farmers will not plant potatoes at all in 1995. Others will continue to invest in the potato crop, but without assistance, risk losing a significant portion of their harvest to the Colorado Potato Beetle. As families in this region increasingly draw down on limited household resources, while continuing to support the displaced remaining in Svanetia, it is likely that many will not have the capacity to store adequate food supplies for the 1995/96 winter, much less purchase critical non-food items such as medicines and soap.

CARE International has been operational in Georgia since 1992, targeting food and non-food relief supplies to the displaced, isolated rural populations and the urban poor. Since December 1993, CARE-USA and CARE-Austria have jointly provided

assistance to the Georgian people in the form of food and non-food relief supplies. In addition to relief assistance, CARE Austria has experience in the implementation of agricultural projects in other republics of the former Soviet Union (Kyrgyzstan and Ekaterinburg, Russia).

CARE International continues to address the emergency needs of the Svanetian people through the Georgia Nutritional Supplement Project (food supplements for women and children), the Transcaucasus Project (family packages), CIK: Woolen Blankets and Shirts (IDPs) and the CARE Austria Assistance to Svanetia project (soap procurement and distribution).

Through this work, a considerable knowledge base has been developed, particularly regarding the present socio-economic status of the Svanetian people. Equally important are CARE's established relationships with local government representatives and communities, built over one and a half years of collaboration. Now that the emergency situation in the region has stabilized, CARE International will continue to work to assist this mountain population to rebuild their livelihoods -- moving from livelihood *provisioning* in the form of pure relief assistance to livelihood *protection and promotion* -- focusing on sustainable development projects in the agricultural and small economic activity sectors.

B. Project Objectives

CARE International proposes the following final and intermediate goals to be achieved by Phase One of Gain:

Final Goal:

Improve the household food and livelihood security of approximately 3,000 rural families in the isolated mountain region of Svanetia.

The Intermediate Goals of this project are to:

1) Increase potato crop production in the Upper Svanetia region by reducing the incidence of the Colorado Potato Beetle.

Indicators:

- 90% of participant fields showing Colorado Beetle infestation effectively treated;
- 75% of treated fields show insignificant presence of adult Colorado Beetle and larvae two months after spraying;
- Pre-harvest survey show that 75% of participant farmers expect increased yields (over last year given similar growing conditions).

2) Develop a network of trained facilitators and point farmers through which technical assistance can be channeled into Upper Svanetia.

Indicators:

- Five CARE national field staff trained in the fundamentals of farmer-owned group organization, integrated pest management, and marketing techniques;

- Fifty point farmers identified and trained in farmer-owned group formation, integrated pest management, and marketing.
- 3) Strengthen links with national agricultural associations and technical resources and with other agricultural development initiatives in the country.

Indicators:

- At least ten field visits are facilitated between Svanetian farmers groups and national agricultural organizations such as the Private Farmers Union, the Plant Protection Institute, and the Agricultural Department of the University of Tbilisi
- 4) Identify areas of strength and weakness in agricultural practices, and potential for further collaboration in improvement of agricultural and marketing techniques.

Indicators:

- Assessment carried out throughout the 1995 growing season including contact with national and local organizations, farmers, and government officials;
- Project proposal developed for post-pilot, longer-term agricultural initiative.

C. Project Description

A key concept of this project is that the current crisis in Svanetia -- destruction of, on average 66% of the potato crop in 1994 -- would, through Phase One of GAIN, become an opportunity for individual farmers in Svanetia to mobilize as communities in a united effort to eliminate the Colorado Beetle. It is hoped that by working with these farming communities in Svanetia, CARE will also set the stage for agricultural/income generation pilot projects that would further address the household food security needs of small farmers in 1995.

As an initial step, CARE will work with local communities to develop a coordinated pest control program focusing on eradication of the Colorado Beetle. Activities will include:

- organizing a simultaneous application of Novodor or Decis at the appropriate stage in the planting cycle (April/May),
- providing education on alternative methods of pest control such as barrier crops, straw mulching, hand crushing egg masses, Vee ditching, and propane flaming.
- developing and disseminating a Georgian language bulletin describing the life cycle of the beetle, stressing non-chemical methodologies of control (noted above), and explaining the hazards and safety precautions required with regard to pesticides.

CARE will also work with farmers to improve tillage and seedbeds to promote increased yields, and to develop improved storage methods to decrease post-harvest losses.

Farmers are now producing nearly enough potatoes to meet their home consumption needs. It is expected that the project interventions will, even in the first harvest, increase yields by an amount significant enough to provide surplus for marketing. CARE will assist farmers to augment local market outlets through association with the Georgia Union of Growers, and identifying other marketing options. Marketing assistance under this objective will be limited by the time-frame of the grant, which

currently ends at the peak harvest period in September. Extension of the grant would enable CARE to more fully develop marketing strategies and assess impact.

CARE will channel the technical assistance of this project through a network of trained staff and point farmers. These people will serve as the resource to the local farmer-owned groups developed during the coordinated spraying and post-spraying monitoring.

Additionally, there are several potential agricultural resources in the country with which Svanetian farmers have had little or no contact. These include:

- the Georgia Union of Growers (Private Farmers Union), an indigenous farmers' association of 25,000 members which supports activities in crop and livestock development, finance and marketing, and international relations,
- the Agrobiotechnology Institute, which is currently conducting research in cultivation of resistant varieties and development of new genetic stocks for potatoes and other crops,
- the Georgia Plant Protection Institute division of the Academy of Science, and,
- the Agricultural Department at the University of Tbilisi which has a specialist in control of the Colorado Beetle on staff.

CARE will facilitate field visits by representatives from these organizations, identify key agricultural personnel/farmers in Svanetia who could benefit from exchange visits to these institutes in Tbilisi, and facilitate distribution of available printed materials. The project will also coordinate and, where possible, collaborate with GOG and other international NGO initiatives. For example, Tri-Valley Growers is sponsoring a farmer-to farmer exchange and has indicated a willingness to share expertise from these consultancies with CARE.

CARE will assess current agricultural practices, disease and pest problems, and operational constraints and develop recommendations regarding further potential interventions. Preliminary assessment has indicated that improved seed and breeds of livestock, development of leather handicrafts, timber management and harvesting, marble production, and processing of mineral water resources are possible directions for further development. Recommendations will be incorporated in the end evaluation.

During the course of relief project implementation in Svanetia, CARE staff have discussed the Colorado Beetle infestation with local officials and farmers in order to develop strategies to fight the pest in 1995.

CARE staff also consulted a Tbilisi-based agricultural specialist familiar with the Colorado Beetle and, in Austria, investigated European methods of beetle control. As a result of this research, CARE has identified two possible approaches; use of an imported biological remedy and/or use of a locally available low-toxicity pesticide.

CARE-Austria has proposed the use of Novodor (*Bacillus Thuringiensis*), a biological remedy which is environmentally safe and highly effective. The Austria mission would assume responsibility for purchase and transport of the remedy. This approach would be preferable in terms of ecological issues and safety, in that pesticides have never been used in Svanetia, and the environment has previously not been chemically

contaminated. CARE-Austria would contribute both financing and technical expertise for implementation of this option.

A second alternative identified by the Austria mission would be purchase of Decis, a chemical pesticide produced in the Ukraine which is inexpensive and locally available. If it is determined that Decis is environmentally acceptable, this option may be preferable in terms of reduced project cost and sustainability. Some combination of the two approaches may also be considered.

In order to be effective, it is critical that the selected treatment be applied correctly and simultaneously, within a very limited time-frame, in all of the affected communities. In the first stage of the project local CARE staff will work closely with the Upper Svanetian farmers to prepare for treatment application. During the period when the Novodor or Decis is applied, an agricultural expert will travel to Svanetia to oversee the process to ensure efficacy. The CARE team will further:

- Determine Colorado Beetle prevalence in region, pre and post-treatment
- Work with farmers to strategize on ways to prevent future infestations
- Identify strengths and weaknesses of current farming and marketing techniques

From May to July, CARE staff will continue to monitor the success of the treatment application in the region through site visits and dialogues with farming communities. In August, as the potato harvest commences, the agricultural expert will return to Svanetia to evaluate the efficacy of the intervention on crop yields. As farmers prepare to transport and market potatoes in August and September, the CARE team will work with farmers in improving distribution and marketing methods.

D. Monitoring and Evaluation

All project inputs will be monitored according to standard procedures implemented in CARE-sponsored projects worldwide, in place through previous CARE program operations in Georgia.

A project evaluation, conducted in August-September 1995, will determine the extent to which CARE has accomplished project objectives. Indicators for these objectives will include:

- 1) Prevalence of Colorado Beetle in Svanetia;
- 2) Estimated Potato yield for 1995 in Svanetia significantly improved over the 1994 yield;
- 3) Increase in household income in sampling of project beneficiaries
- 4) Assessments of farming and marketing techniques performed, recommendations provided
- 5) Contacts established with national agricultural agencies and support systems

E. Relationship to SCF Country Strategy and USAID Priorities

Both SCF and USAID have identified rural income generation and support for small-scale economic enterprise as priority areas of assistance to Georgia. The proposed interventions are designed to help restore former levels of productivity and marketing

of the primary staple/cash crop in the project area, and to identify potential for further small enterprise development.

CARE-Austria will serve as a donor partner in this proposal, providing both leveraged funds and technical expertise.

F. Budget Summary

The total budget requirement for the six-month life of GAIN: Phase One is \$284,226 CARE-International can provide \$113,350 of this amount, and is seeking funds for the remaining \$170,376. Please refer to the attached budget for detailed expenses.

	Qty.	Cost (\$)	Months	USAID	CARE International
A. PERSONNEL					
<i>International Staff</i>					
Mission Director (10% Salary & Benefits)	1	600	6	3,600	
Country Administrator (20% Salary & benefits)	1	880	6	5,280	
Agri. Consultant (Associations)	1	6000	1.5	0	9,000
Agric. Consultant (Pesticides) Program Mgr. (30% Salary & Benefits)	1	6000	1	6,000	
Project Manager (100% Salary & benefits)	1	1200	6	7,200	
	1	4000	6	24,000	
Subtotal: International Staff:				46,080	9,000
<i>Local Staff</i>					
Logistics Officer	1	330	6	1,980	
Pest Mgt. Technician	1	330	6	1,980	
Team Leaders	2	330	6	3,960	
Monitors/Community Facilitators	4	250	6	6,000	
Interpreters/Translators	2	248	6	2,976	
Administrative Assistant	1	248	6	1,488	
Accountant	1	330	6	1,980	
Provision for Social Security & Pensions @ 30%				6,109	
Subtotal: Local Staff:				26,473	
SUBTOTAL PERSONNEL				\$72,553	\$9,000
B. TRAVEL AND ACCOMMODATIONS					
R/T Airfare (Vienna-Tbilisi)	1	600	4	1,800	600
R/T Airfare (Atlanta-Tbilisi)	1	2500	1	2,500	
Lodging	2	700	6	8,400	
In-country Travel (@ \$7/day * 90 days)	7	630		4,410	
SUBTOTAL T & A				\$17,110	\$600

	Qty.	Cost (\$)	Months	USAID	CARE International
C. EQUIPMENT AND ESTABLISHMENT					
Office Rental					
Tbilisi office (@ 20% rental)	1	400	6	2,400	
Svanetia offices	2	100	3	300	
Procurement/Administration	1	500	6		3,000
Communications and Office Supplies (Faxes, copiers, phones, office heaters, etc.)	1	1000	6	6,000	
Computer sets (laptop, spare batteries, printer)	2	2500	1	5,000	
Copying/Printing				1,000	
UHF Radios	4	500	1	2,000	
HF Radios	2	5000	1	10,000	
SUBTOTAL E & E				\$26,700	\$3,000
D. OPERATING COSTS					
Biological Remedy (Purchase)					100,000
Remedy Transport to Tbilisi					1,250
Sprayers (Purchase)	280	85	1	23,800	
Sprayer Transport to Tbilisi				1,000	
Truck rental (transport to Svanetia)	2	200	1	400	
Cars/Drivers	5	500	6	15,000	
Fuel (liters)	3,000	0.50		1,500	
SUBTOTAL OPERATING COSTS				41,700	101,250
DIRECT COSTS: Summary					
A. Personnel				72,553	9,000
B. Travel and Accommodations				17,110	600
C. Equipment and Establishment				26,700	3,000
D. Operating Costs				41,700	101,250
SUBTOTAL DIRECT COSTS				158,063	113,850
Indirect Cost Recovery @7.79%				12,313	0
Total				\$170,376	\$113,850
GRAND TOTAL				\$284,226	

5. Monitoring and Evaluation Plan

Each of the implementing organizations have provided a monitoring plan for their component consistent with their organizational procedures. The management unit will provide oversight for these monitoring and evaluation efforts.

6. Management Structure

At least the initial phase of this project would be implemented by SCF who would provide oversight for project implementation managed by ACDI under a sub-grant. ACDI would provide an experienced project manager responsible for coordinating all fiscal and technical management activities including oversight, monitoring, evaluation and reporting. ACDI would manage the intern component including developing the training program in collaboration with the staff of the other components, recruiting interns and providing day to day management and intern evaluation. ACDI, in close consultation with USAID and other concerned parties would develop the necessary documents for longer term follow-on to this project, should AID desire. In addition to the project manager, ACDI will utilize locally hired administrative and technical staff to satisfy the project and intern program management needs.

7. ACDI Budget

	Quantity	Cost(\$)	Months	SCF/US AID
A Personnel				
<i>International staff</i>				
Project Manager (Salary & Benefits)	1	\$13,883	6	\$83,300
<i>Local staff</i>				
Office manager	1	330	6	1,980
Administrative assistant	1	250	6	1,500
Training officer	1	300	4	1,200
Interpreter	1	250	6	1,500
Interns	15	100	3	4,500
Provision of Social Security & Pensions @30%				3,204
<i>Sub Total Personnel</i>				97,184
B. Travel & Accommodations				
R/T Airfare Calif.-Tbilisi)	1	3,600		3,600
In-country travel 20 days @ \$70				1,400
Temp. quarters 30 days @ \$100				3,000
Office/residence	1	800	5	4,000
<i>Sub-total</i>				12,000
C. Equipment/Office establishment				
Office Equipment (computer sets, printer, copier, fax, telephone, heaters)				6,540
Generator				3,490
<i>Sub-total</i>				10,030

VI. BUDGET:

Aggregate budget requests

Organization	SCF/USAID	Other Sources
Tri Valley Growers	\$399,235	\$868,554.00
CARE	170,376	113,850.00
IRC	478,977	310,208.00
ACDI	179,920	9,903.00
Total	1,228,508	1,302,515
Total Project Budget		2,531,023

ANNEXES**Persons Visited****Donor Representatives**

1. Baruch Ben-Neria, Embassy of Israel, Ambassador.
2. Tevfik Ufuk Okyayuz, Embassy of Turkey, Ambassador.
3. Jakob von Wagner, Embassy of Germany, Referent.
4. Gladwin, Integrated Technical Assistance to Georgian Agriculture (EC-TACIS), Agricultural Economist/Team Leader.
5. Albert Wetering, TACIS, Coordinator for Georgia.
6. Boris Eizenbaum, UNDP.

PVO Representatives

1. Paul Heinzen, Tri Valley Growers (TVG), Country Director.
2. Tamaz Turmanidze, Tri Valley Growers (TVG), Consultant.
3. Tom Alcedo, CARE, Director of Emergency Assistance Unit.
4. Bill Huth, CARE International in CIS, Director.
5. Lutful Gofur, CARE International in Georgia, Assist. Mission Director.
6. Allen Jelich, International Rescue Committee (IRC), Director.
7. Loren Willy, International Rescue Committee (IRC), Deputy Director.
8. Emily Rees, International Orthodox Christian Charities (IOCC), Budget Manager.
9. John Heers, International Orthodox Christian Charities (IOCC), South Georgia Coordinator.
10. Lucy Mangham, OXFAM, Program Officer.
11. Meri Japoshvili, "Catharsis", Director.

Government of Georgia

1. Roin Liparteliani, Agricultural Commission of the Parliament, Head.
2. Emir Jugeli, Ministry of State Property Management, First Deputy Minister.
3. Robert V. Andguladze, Academy of Agriculture, Vice-President.
4. George Maglakelidze, Ministry of Agriculture and Food Industries (MOAFI), State Councilor.
5. Ednar Mikanadze, Ministry of Agriculture and Food Industries (MOAFI), Head of the Department of Agricultural Development.

USAID

1. Fred Winch, USAID Regional Representative/Caucasus
2. Glen Anderson, USAID Deputy Regional Representative/Caucasus.
3. Bruce Grogan, USAID, Regional Special Projects Officer.
4. Raymond H. Morton, USAID, Development Officer.
5. Kent Larson, USAID, Program Manager.

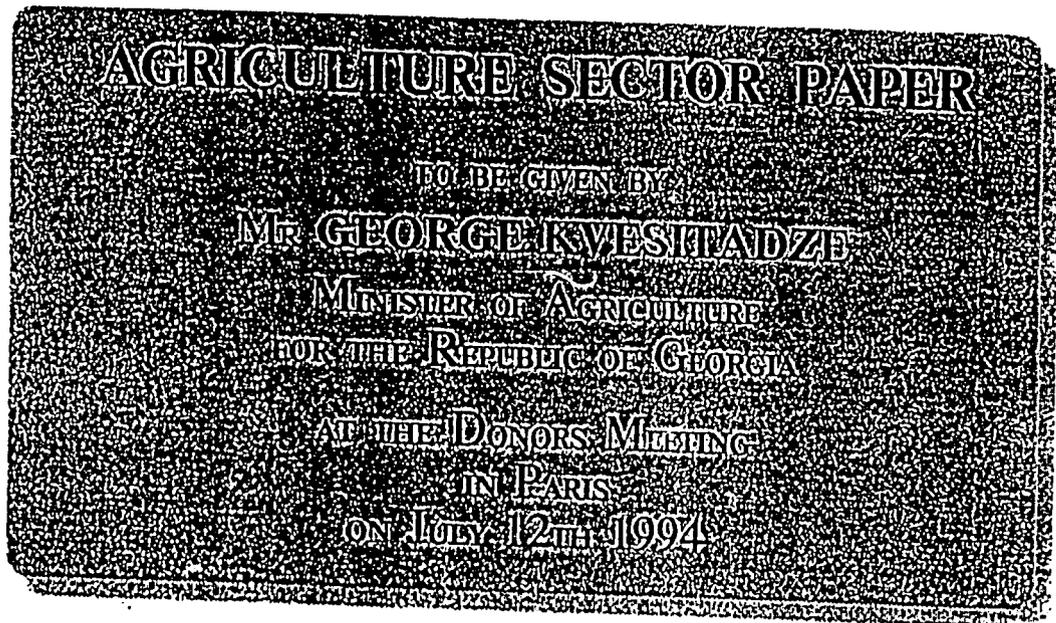
Georgian Farmers, Farm Organizations and Businessmen

1. Raul Babunashvili, Private Farmers Union (PFU), President.
2. Koba Kobaladze, Private Farmers Union (PFU), Vice-President.
3. Anton Jakobashvili, Member of the Private Farmers Union, Professor, Specialist of herbicides.
4. Otar Liparteliani, Mtskheta Selection Farm, Director, Member of Agricultural Academy.
5. Murman Arjevanidze, Rustavi "Azot" Plant, General Director.
6. Merab Berdzenishvili, village Dmanisi, Tetrtskaro region, Farm Manager.
7. Nugzar Chelidze, village Assureti, Tetrtskaro region, Firm "Original", Manager.
8. Murman Buidze, village Gamarjveba, Gardabani district, Farm Manager.
9. Zurab Menteshashvili, village Chandala, Marneuli district, Farm Manager.



Republic of Georgia
Ministry of Agriculture and Food Industry

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**PAPER TO BE GIVEN BY MR GEORGE KVESITADZE - MINISTER OF
AGRICULTURE FOR THE REPUBLIC OF GEORGIA AT THE DONORS' MEETING**

IN PARIS ON JULY 12TH 1994

1 INTRODUCTION

I am glad to have this opportunity of addressing this donors' meeting. I am at present in the middle of a study tour of agricultural institutions in the United Kingdom with some of my ministry colleagues so both events have coincided well.

During this short address I wish to highlight:

- some of the progress we have made;
- basic policies that we are going to pursue;
- the problems and issues we still face; and
- some of the priority investment, institution building and rehabilitation areas.

I will not dwell too much on the past we are all quite aware of the economic upheavals that the Georgian economy has experienced in the last three years. Agriculture has suffered badly with production in some sectors having fallen by 40-80%. However we must now be positive. The conditions within Georgia are beginning to improve - albeit slowly. Almost all the agricultural land has been cultivated this year and is supporting crops. In 1993 the estimated proportion was only 60-70%.

2 PROGRESS TO DATE

Privatisation: in the agricultural sector we have now approximately 600,000ha of privatised land which represents around 55% of the arable and perennial crop land. We use the term privatised but this land still awaits the issuance of proper land titles, and the application of cadastral surveys.

Almost 60 businesses attached to the Ministry have been privatised - in the sense that they have either been sold off completely or that more than 50% of the shares are now in private ownership.

Agricultural Production: this year agricultural production is expected to far exceed last years low levels. The poor performance last year was due in part to less land being cultivated, a shortage of basic inputs and poor weather in the case of vines. It is expected that agricultural production overall will be 30-50% higher. Noticeable improvements are expected in tea, grapes and citrus.

Reorganisation of the Ministry of Agriculture: as part of an ongoing technical assistance programme provided by the British Government's Know How Fund proposals have been made for the restructuring of the ministry. This process, which will start in August, naturally reflects the new role expected of the ministry namely one of supporting agriculture on behalf of the mainly 300-400,000 new farmers that have recently been created in the last 2 years.

3 POLICY

Georgia's basic agricultural policy is straightforward - it is the strategies to achieve the policy objectives that require detailed attention.

Georgia is committed to market oriented policies. This being so crop and enterprise policies and strategies must be geared to supporting those crops and enterprises which are inherently economically viable. Self sufficiency therefore is only relevant if it is economic to be so. In the last two years there have been many voices echoing a self sufficiency policy for cereals, often harkening back to the early part of this century when Georgia was a net producer of cereals - however though there is much scope for improving cereal production the ultimate policy determinant will be one of comparative economic advantage. It is more than likely that the country will become self sufficient in meeting its human grain requirement - whether it eventually meets all the animal feed grain requirements; as I have just said, will depend on market economics. At present for the large farms cereal production should be relatively attractive. World prices reign in Georgia, and these together with production costs and physical requirements falling below those of the other local crops, make cereals, at least in the short-term, an attractive crop. However the stability and convertibility of our currency, together with marketing difficulties, prevent the full benefits from being realised.

At the same time maximising agricultural employment is important, as the rest of the Georgian economy is expected to take longer to recover.

Boosting Georgia's exports too are seen as critical, not only to meet the large foreign exchange needs to rebuild the infrastructure of the country, but to maximise value added (Georgia's agricultural land is very limited) and thus the gross earnings for the agricultural sector.

Though environmental issues tend to be a subject of great intent for the more affluent nations, Georgia can certainly not ignore this area. Georgia has a small area of agricultural land (arable and perennial crops cover only 15% of the land area) and thus there could in the future be much pressure on the more marginal hilly areas.

The restoration of output levels, consistent with market requirements, is also seen as important - not simply within the production frame - but from the standpoint that it is easier to effect rationalisation from a position of strength rather than one of approaching collapse.

4 ISSUES AND PRIORITIES

We have a number of serious issues and priorities that are affecting the rate of recovery in the agriculture sector:

Government Barter Trade: such trade restricts the freedom of the agricultural sector and it depresses returns to the producer. The country needs an effective and fair taxation system and improved trading arrangements to generate revenue and foreign exchange. Agriculture is paying an exceptionally high price for these constraints.

Privatisation: this is proceeding relatively slowly. The lack of privatisation is holding up the redevelopment of the economy. My ministry is vigorously committed to supporting the privatisation programme. There are still some 1,200 businesses, including the wine and tea industries, that are in need of privatisation. In exceptional cases a few key businesses should be retained for the short-term by the Ministry. It is essential that where possible in the case of processing plants privatisation mechanisms are linked to optimising producer ownership.

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Price Policies: fixing of prices is not a normal feature of a market economy. Appropriate privatisation will ensure in many cases that farmers receive fair prices - as I have already just mentioned.

A lack of funding in the Grain Corporation, which is at present the main and only buying agency for domestic grain, has hindered the redevelopment of the arable sector. The corporation only purchased 13,000 tons of wheat in 1993 (simply due to a very low price being offered) when it could have bought at least 150,000 tons. This problem has been recognised for a long time. Proposals were submitted to overcome this problem but because of the strictures of the bread price policy in the country were not taken up by the government. It is absolutely essential that this issue is addressed as the arable sector will continue to be held back.

Grain was sold on to the open market last year, some filtered through to neighbouring countries. The difficulties in marketing this way will have eroded much of the benefit. Less wheat this year is being grown by the private sector producers - instead they are preferring to grow maize - an easier crop for them to handle.

Farmers Associations: these must be fostered at grass root levels. The government has no means of communicating at present with the estimated 400,000 newly created farmers. This is crucial to any positive development within the new private sector.

Reorganisation of the Ministry of Agriculture: proposals have been made and accepted in principle for the restructuring of the Ministry so that it can respond to its new role of supporting farmers. However detailed privatised and rationalised structures for the tea, wine and tobacco industries still have to be introduced. An important component of this new structure is the development of a Policy Unit which will provide the critical analysis work and policy papers that the Ministry at present lacks.

Extension: extension services as such do not yet exist. The strategy for development here will focus on supporting small private initiatives with good extension material. Research activities must clearly relate to extension needs.

Marketing: this will be a challenging area for some time until major trade associations become effective. There is a short to medium-term role for the Ministry in helping to facilitate export initiatives - at least to the former Soviet Union. In the longer-term markets further afield will need to be identified. In this respect support for private marketing initiatives would be relevant.

National Agricultural Policy Council: a council (comprising all relevant agricultural bodies) and using mainly policy initiatives from within the Ministry itself, is proposed as the main policy review agency in the country.

Land Legislation: it is clear that without effective legislation in this area, agricultural development will be held back. We hope that satisfactory legislation may be in place by the end of 1994. An effective cadastral programme will require a significant investment in land surveys.

Credit: there is no mechanism to provide credit to the estimated 400,000 farmers in the country. Many processing plants will need competitive lines of credit to help with restructuring. In some cases just working capital is needed (to fund raw material purchases). Clearly it is important to be able to pay farmers promptly for produce to ease the cash flow problems. For many of the small farmers supplying processing industries the short-term solution would suitable lines of credit to the organisations themselves who would then supply inputs to their growers. Almost all the perennial crops could fall into this category.

Input Supplies: the supply of crop inputs as well as machinery spares has been severely disrupted as a result of the disintegration of the former economy. In the short term there is no reason why the former supply lines should not be assisted (while they are being transformed into independent private businesses) so as to help restore production levels. This, as I have said, is a major objective.

Irrigation: is an important input in the drier areas. Rationalisation and much reinvestment is required in this sector. Originally some 500,000ha were irrigated it is likely now that this figure has fallen to less than 100,000ha.

Mechanisation: there is now a large need for small scale equipment. Georgia has spare facilities which could offer the possibility of joint venture assembling activities.

Research: this is a sector that needs much rationalisation. There is considerable spare capacity which Georgia no longer needs or importantly can afford. It may well be that we have some research activities that are compatible with other activities elsewhere in the world. Before reducing these facilities international collaboration and funding should be explored. In view of their past and current activities close cooperation with the world Bank may well be relevant here.

Education: this is another sector needing rationalisation. A review of needs and the existing facilities is required. For, like research, there is now an overcapacity for the requirements of the industry. Georgia's agricultural education must now be redirected to satisfying the needs of its new 300-400,000 farmers.

5 AGRICULTURAL SECTOR SUPPORT PROGRAMME

By way of summary I would now like to indicate briefly some of the areas of requiring further assistance:

On the Institutional Side:

The privatisation programme must proceed as quickly as possible.

The land legislation being prepared must be given high priority.

Restructuring of the Ministry of Agriculture. This is essential if it is to start demonstrating that it is aware of, and beginning to respond to, the needs of the new 400,000 farmers. The establishment of both a policy unit within the ministry is seen as vital, as well as the formation of the National Agricultural Policy Council.

Restructuring of the main tea, wine and tobacco industries are required prior to privatisation.

Removal of the barter constraint. A mechanism must be found to remove the constraints imposed by the barter agreements.

Encouragement of farmers' organisations. Extension activities and the organic development of farmers' groups must be fostered.

The Main Funding Requirements are:

The Grain Corporation. Failure to provide funds for this organisation has held back the recovery of agriculture. As a major grain organisation a possible linkage with an international grain organisation may be feasible.

Input Supplies. During the interim period before commercialisation and subsequent privatisation of existing supply lines, the funding of crucial inputs is to these organisations is required.

Credit will be required for newly privatised businesses with approved business plans.

A Credit System is required for the large number of small farmers.

Extension. Funding will be required to update or produce new extension information appropriate to the needs of the new farming community. In addition some funding can be directed towards helping to foster a private sector extension service. Research activities must be allied to extension needs.

Rehabilitation of the Veterinary Service. Proposals have already been made under a TACIS project. Funding is needed for the maintenance of prophylaxis treatments.

Marketing. Assistance is required for the establishment of a system of wholesale markets in the country starting with Tbilisi. In addition export marketing assistance is expected to be needed in the short to medium term until strong processor organisations are established.

Irrigation. A study is required to assess the current, future and rehabilitation needs of the country.

Agricultural Research. The research sector needs complete rationalisation. Association with international institutions should be explored.

Agricultural Education. Like research, education is an area that also needs rationalisation to ensure that the training given is appropriate to the needs of the country.

BRIEF AGRICULTURAL STATISTICS OF GEORGIA

	All Georgia		Excluding Abkhazia ¹⁾	
		%		%
TOTAL AREA (ha)	6,949,400	100	6,083,380	88
Agricultural land:	2,977,200	43	2,751,600	40
Arable	796,400	11	750,400	11
Perennial	332,300	5	289,100	4
Pasture/Hay	1,869,600	27	1,732,200	25
Other land:	3,972,200	57	3,331,780	48
Forests	2,750,000	40	2,260,000	33
Mountains, urban land, etc	1,222,200	17	1,071,780	15
POPULATION	5,500,000		5,300,000	
Population density	79 per sq. km		87 per sq. km	
Rural population	2,420,000 (44% of total population)		2,620,000 (47.6% of total population)	

Handwritten notes:
 2,977,200
 332,300

LIVESTOCK NUMBERS, '000 (estimates)	Late 80's		1994 ¹⁾	
	Total	Private	Total	Private
Cattle	1,200	800	1,000	850
Pigs	700	600	450	370
Sheep and goats	1,600	700	1,200	700
Poultry	20,100	5,000	6,000	5,000

PRODUCTION (estimates)	1992			1993
	Total, '000 tons	Private sector, %	Average yield, t/ha	Total, '000 tons

Annual crops

<i>Handwritten notes:</i> Wheat, Barley, Oats, Maize, Rye				
Cereals				
Wheat	206.4	0.9	1.8	n/a
Barley	80.8	2.8	1.8	n/a
Oats	10.8	2.8	1.1	n/a
Maize	220.0	84.9	0.9	200.0
Rye	1.2	0.0	1.3	n/a
Sub-total cereals	519.2	37.3	1.6	440.0
Beans	7.2	89.2	0.3	n/a
Sugar-beet	25.6	0.0	17.1	n/a
Sunflower	8.1	0.0	0.7	6.0
Potatoes	255.3	65.2	10.0	190.0
Vegetables	308.3	98.2	7.7	270.0
Tobacco	0.4	15.6	1.2	n/a
<i>Handwritten notes:</i> Perennial fruits - Seed, Stone, Grapes, Citrus, Other				
Perennial fruits				
Seed	212.8	91.2	5.9	n/a
Stone	65.3	95.5	3.1	n/a
Grapes	328.4	71.2	4.1	n/a
Citrus	138.1	87.0	10.4	n/a
Other	68.7	99.7	3.2	n/a
Tea (green leaf)	146.3	27.8	4.4	n/a
Meat ²⁾	176.9	78.1		128.9
Milk	469.6	82.2	1.5 (t/cow)	393.9
Eggs (millions)	297.3	63.0		138.0
Wool	4.0	62.6		2.9

¹⁾ Includes KIP project estimates
²⁾ Beef and poultry only

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FINANCIAL INDICATORS

Estimated National Product
of Georgia in 1990-1991

Fields of activity	1990		1991	
	M Rbe	%	M Rbe	%
Agriculture	5,199	22.6	6,630	20.5
Agro-food Industries	4,521	19.7	6,952	21.4
Agricultural machinery Industry	53	0.3	53	0.2
Fertilizer Industry	123	0.5	302	0.9
Subtotal all agriculture	9,896	43.1	13,937	43.0
Other sectors	13,073	56.9	18,483	57.0
All Georgia	22,969	100.0	32,420	100.0

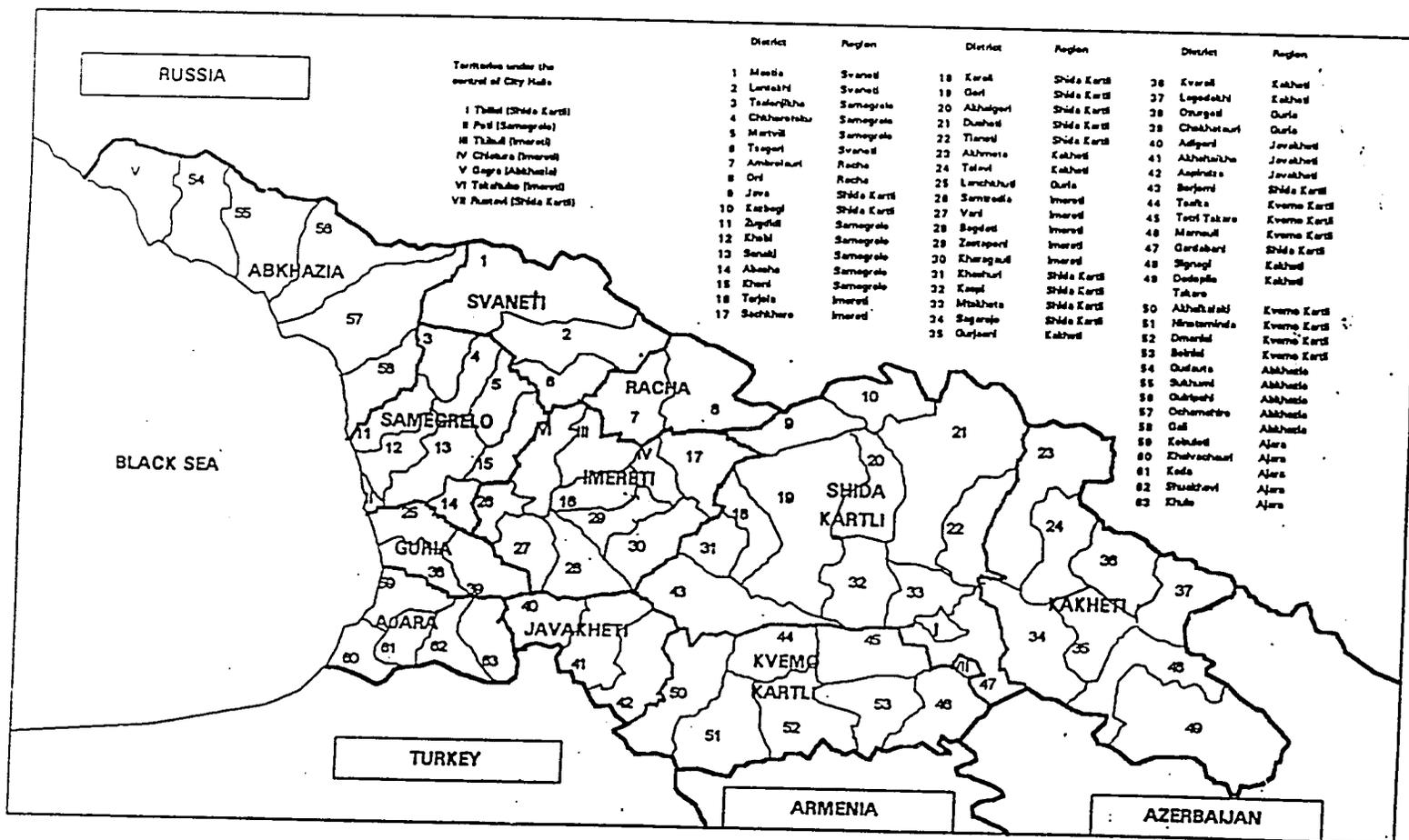
Source: Socio-Economic Committee

Currency Rate

Date	US\$	Roubles	Coupons
1.07.91	1	60	-
1.01.92	1	100	-
1.01.93	1	420	-
1.04.93	1	700	700
1.06.93	1	1,050	6,000
1.09.93	1	1,100	12,000
1.01.94	1	1,200	90,000
28.03.94	1	1,800	376,000
8.04.94	1	1,780	410,000
11.04.94	1	1,780	420,000
15.04.94	1	1,800	630,000
26.04.94	1	1,810	900,000
11.05.94	1	1,900	1,000,000
13.05.94	1	1,910	1,000,000
9.06.94	1	1,940	1,000,000
19.06.94	1	1,970	1,000,000
29.06.94	1	2,020	1,000,000

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General map of the Republic of Georgia



GEORGIA
AGRICULTURE AND FOOD SECTOR REVIEW

AIDE MEMOIRE

Prepared by
the World Bank Mission to Georgia

September 3 - September 24, 1994

GEORGIA
AGRICULTURE AND FOOD SECTOR REVIEW

AIDE MEMOIRE

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GEORGIA

AGRICULTURE AND FOOD SECTOR REVIEW

AIDE MEMOIRE

I. INTRODUCTION

1. A World Bank Mission visited Georgia between September 3 and September 24 1994, within the framework of the Agriculture and Food Sector Review of Georgia. The objectives of the review were:
 - a. to assist the Government in implementation of an agricultural strategy and policy reform program to transform Georgian food and agriculture into a more productive market-based system;
 - b. to broaden the Banks' understanding of Georgia's agriculture and food sector, including environmental aspects and the Government's agriculture policy beyond the information gathered and the analysis carried out already;
 - c. to provide a foundation for the formulation of Bank sectoral lending operations for supporting the transformation of Georgia's food and agriculture sector, and for the forthcoming rehabilitation loan preparation regarding critical agricultural policy issues;
 - d. to facilitate donor coordination by identifying high priority food and agriculture related technical assistance activities.
2. The Mission, headed by Mr. Csaba Csaki, consisted of 7 experts. Mr. Geoffrey Fox, Chief of the Natural Resources Management Division in the Bank joined the mission during the last few days of its stay. The Mission members and the specific areas of responsibility are listed in Annex 2. The agriculture and food sector review is organized as a joint effort of the World Bank and the Government of Georgia. The Georgian Ministry of Agriculture and Food Industry was the main contact for the Mission, facilitating the Mission's work with other related ministries and agencies, organizing field trips, and providing technical support. All the assistance received from the Ministry of Agriculture and Food Industry and other Georgian institutions is highly appreciated and special thanks are extended by the Mission to all the Georgian counterparts. At the final meeting held on September 20, 1994 the Mission briefed the relevant Government officials on its activities and tentative findings.
3. The major field work conducted by the Mission completes the first part of the preparation of the agriculture and food sector review of Georgia. This Aide-Memoire summarizes the initial findings and tentative proposals of the Mission, which will be subsequently refined through discussions and further analyses at the World Bank. The Aide Memoire is focused on policy recommendations and possible areas of the Bank financial assistance while technological observations and proposals and some details are covered in the attached annexes. Based on the work in Georgia, the World Bank team will prepare a comprehensive report for the Georgian Government and the World Bank. The study will be ready for discussion with the Georgian Government during the first quarter of 1995. The preparation of the first

lending operation, will start immediately as an agreement is reached between the World Bank management and the Georgian Government regarding the objectives and scope of the first operation.

II. CURRENT STATE OF AGRICULTURE AND THE FOOD SECTOR

4. Georgia was among the first of the republics of the former Soviet Union to declare independence in 1991. It is a small country with a population of 5.5 million and an area of about 70,000 km². It has about 3 million ha of agricultural land, including about 800,000 ha of arable land and 330,000 ha of perennial crops. In addition, the country has substantial resources of forestry (40% of the total country). Agriculture traditionally has been one of Georgia's most important sectors as the country's diverse climate and relatively good soils have permitted the cultivation of a wide variety of crops. Official data suggests that nearly one third of the labor force was employed in agriculture in 1993 and the contribution of agriculture to the net material product (NMP) was about 30 percent in 1992 increasing, according to the IMF estimates, to about 50 percent in 1993 (in constant 1990 prices) and to 87 percent (in current prices).
5. In recent years substantial changes have taken place in land use and land tenure. As a result of a Government decree of January 1992, over 50 percent of arable and perennial crop areas were distributed for private use. The state and collective farming system has undergone substantial changes, but still operates on the remaining agricultural area, especially for tea. Land privatization and farm restructuring have been more spontaneous than in most of the former Soviet Union (FSU). Political conservatism, fear of ethnic problems, and exceptional high population density in some parts of Georgia slowed down land privatization, prevented legal settlement of land ownership issues and the completion of land reform.

Major Disruption of the Production System

6. The agriculture and food production system has experienced a sharp decline in output since 1991. Following nearly 35 percent decline in 1992, agricultural production further declined by more than 42 percent in 1993. The sharpest declines were recorded in horticultural and grain based livestock production. Projections for 1994 show some signs of recovery in primary agriculture. The overall output is expected to increase by about 10 to 15 percent, mainly as a result of increase in the grain producing areas (mainly maize) and increased livestock population in the private sector (cattle, sheep and goats). Notwithstanding a substantial early contraction in production, primary agriculture remains the only currently viable functioning production sub-sector in the Georgian economy.
7. Some of the subsectors are having serious difficulties due to loss of markets. Among them citrus production has the most immediate problems. A reasonable harvest of about 200,000 tons is expected this year, commencing in the second half of October. Domestic demand accounts for about 20 percent of production, whilst another 20 percent can be processed. The prospect for finding markets for the remaining 100,000 tons is very bleak due to the fact that neither routes nor adequate transportation seem to be available to deliver the products to the traditional FSU markets. Further, trading organizations have no experience in marketing citrus outside the region. Immediate technical assistance is needed to help the country to find solutions to the problem.

8. The food processing sub-sector is in a deep and unprecedented crisis. According to mission estimates the output of the subsector in 1994 will be only about 10 percent of the late 1980s level. Some elements of the food processing industry, such as meat, vegetable oil, sugar and confectionery has virtually stopped operating. Exporting industries, such as wine, citrus and tea, are operating at about 10 to 15 percent capacity.

The Emerging Private Sector and Rublelization of the Domestic Food Market

9. Although private agriculture is operating under legally uncertain land ownership, its activities now play a central role in primary agriculture. Private farmers, produce mainly for their own consumption, their surplus production becoming the dominant source of domestic supply, with the exception of bread. There has been a recovery of grass-based livestock throughout the country and private cattle ownership has tripled in some areas. According to some estimates, there has been an overall increase in the cattle and sheep population. There has been a move toward production of grain, mainly maize, at the expense of perennial crops.

10. The domestic market for food and agricultural products has undergone major changes. The traditional state procurement system has almost totally disintegrated. The State still tries to maintain a system of state orders for state owned companies and offers fixed coupon prices to producers. As a result of delayed payments and increased depreciation of coupons, even state owned farming enterprises have become reluctant to deliver their production for state procurement. The mission believes that, as of the summer of 1994, coupon-based state procurement had been able to attract no more than 10 percent of total primary agricultural output. Practically no deliveries were made by the private sector.

11. In parallel with the collapse of the state procurement system, private marketing of food and agricultural products has become dominant. This market is based on the Ruble, without Government intervention. Prices are determined in supply/demand interactions and seem to be transparent throughout the country. Transportation difficulties, insufficient protection by law enforcement against organized crime, and underdeveloped physical structures of markets represent serious impediments to trading of private agriculture products. However, this market offers private agricultural producers the best alternative for disposing of their products.

The Main Factors Underlying the Present Difficulties in the Agriculture Sector

12. Georgian food and agricultural production has been hit hard by the collapse of the Soviet economic system. This country, which was the only supplier of citrus fruit, tea and a major supplier of wine, horticulture and fruit products inside the Soviet Union, has now virtually lost that market, at least for the short term. At the same time the supply of vital inputs to agriculture has been interrupted. Recent political difficulties aggravated by civil war, prevented the country from finding alternative markets.

13. The lack of a macro-economic stabilization policy is a very serious impediment to recovery in agriculture. In the absence of a functioning domestic currency in the sector, relationships between producers and processors are difficult to re-established and further growth in private agriculture remains constrained. Rampant inflation, a very weak fiscal position, corruption, no possibilities of credit

assistance to banks or to enterprises, create an economic environment in which a formal legal agricultural economy cannot fully develop.

14. The lack of macroeconomic stability and external markets is turning agriculture into an informal economy, which operates in rubles mainly through barter operations, having a premium towards on-farm consumption with surpluses going to domestic markets and little to exports. Such conditions imply extraordinarily high transactions costs which, unfortunately, given that (a) historically agricultural production has been highly tradeable internationally, (b) it is spatially dispersed and thus highly dependant on effective transport services, (c) it is predominantly organized around small economic production units (except for tea and citrus plantations). In other words, *vis-a-vis* most other economic sectors, the Georgian agricultural economy must be paying an exceptionally high price in terms of efficiency losses due to the extremely unfavorable economic environment.

15. Present problems are also related to Government policy toward agriculture and its sub-sectors. In general, Government maintains its efforts to preserve some of the remaining elements of the central planning system, such as state orders and price controls. The Government's inability to finalize land legislation and to implement a clear and effective privatization strategy in processing and marketing also have adverse consequences. The agricultural administration is still focused on the traditional state and collective farming organizations, whilst the private sector, which provides the bulk of production, does not receive enough attention and support.

16. The export sectors are impacted negatively by a strong anti-export bias in Georgia, including: (a) the foreign exchange surrender system, equal to 32 percent of their foreign exchange returns; (b) a system of state orders and procurement, which is closely connected to Georgia's trade agreements with other republics of the FSU; and (c) explicit export taxes. The major activities affected by these conditions are tea, citrus, and wine, although the latter has more flexibility as it can turn to on-farm processing (i.e. is less dependant on processing by the agro-industrial plants). Although in principle requirements for an exporters surrender system is not a tax, in practice, however, it results in a large implicit tax because of delayed payments in non-cash coupons.

III. SHORT AND MEDIUM TERM STRATEGIES

17. As present economic and trade difficulties have led the country to turn towards supplying the domestic market rather than towards export potentials, it is fully understandable that this objective dominates the thinking of policy makers at present. Justifiable concerns regarding a secure domestic food supply should, however, not result in overall self-sufficiency orientation. Efforts to increase the level of food self-sufficiency as a short term strategy are justified only by the current situation. The negative impacts of short-term emergency adjustments upon the potential to create an open, internationally competitive, food and agricultural system need to be minimized. The ultimate objective should be the integration of Georgian agricultural production and processing into international food markets. This requires the creation of an open food economy by fully utilizing the potential comparative advantages of Georgian agriculture. The recovery of food and agriculture should be driven by market forces and market opportunities and not by illusions to return to production levels and structures of the Soviet period.

18. In the short term, production increases in grains, cattle and milk are essential for improving domestic food supply. Changes in prices at the farm level should be allowed to reflect this advantage, so that producers will respond. The conditions outlined will continue to turn farmers away from the traditional horticultural products of Georgia and limit the number of products available for export.

19. In the longer term it will not be economically efficient for the country to produce all the food required for domestic needs. Domestic endowments and traditions favor labor intensive horticulture, production of vegetables, viticulture, with livestock production suited to domestic feed resources provided by higher altitude pastures and meadows. Longer term adjustment for field and horticulture crops should include: rehabilitation of irrigation systems compatible with private farming; privatization and modernization of processing; and introduction of techniques to improve product quality. The livestock sector should continue to remain a supplier mainly for domestic markets. Local feed availability provides a basis for recovery in cattle, sheep, and goat husbandry. There is no alternative for grain based pig and poultry production other than further contraction beyond what has already taken place. These adjustments will be facilitated by letting pork and poultry prices reflect international prices of grain. Later, production in these sub-sectors might recover as private sector activity improves and the domestic economy and personal incomes begin to grow.

20. In the long term, Georgia definitely can be a significant agricultural exporting country. Potentials exist for improvement of efficiency and production increases under private ownership as the overall economic environment becomes more supportive. The privatization and rehabilitation of agro-processing is an important precondition for any sizable food and agricultural export to developed markets. The traditional products of the country, such as citrus fruits, tea, wine, canned vegetables, and fruits provide a good starting point. Improvement in production efficiency and a more active participation in international trade, however, should be guided and managed by the private sector, supported by appropriate government policies and infrastructure.

21. In the emerging market system the Government cannot, and should not, directly engineer the recovery and growth needed in Georgian agriculture, even if it were to have at its disposal greater resources than are currently available. The Government needs only to provide an enabling environment and to permit enterprises/farms to be the decision makers to create growth themselves in the agriculture and food economy. The key components of further reforms in Georgian agriculture are therefore: a) macro-economic stabilization; b) creation of a proper incentive framework for farmers that provides motivation for development on the basis of the right to retain sizeable farm profits; c) continuation and completion of land reform; d) consolidation of private farms; e) reform in agro-processing, input supply, production services, and input marketing that creates reliable input supply and competitive markets for farm products; and f) further regulatory reforms establishing the framework for a working market in food and agriculture.

IV. PRIORITIES

22. The most immediate priority is to develop, and to agree within the Government a comprehensive set of policy actions to complete reforms in agriculture. This program, whatever its elements, must be consistent and coordinated with the overall program of stabilization and privatization. In the absence of

a credible program of macroeconomic stabilization it is hard to envisage any sizeable recovery in the sector. We recommend Government focus its actions in the near future on the following:

- creating a new incentive system for agriculture;
- completing land reform and supporting emerging private farming;
- restructuring the agriculture supply, distribution and service systems;
- demonopolizing and privatizing agro-processing;
- redefining the role of government in agriculture and restructuring public administration of agriculture; and
- adapting agricultural technologies according to changes in farm ownership and management.

Creating a New Incentive Framework for Agriculture

23. External Trade Policies. For a relatively small economy such as Georgia's, a primary goal of its economic strategy should be to maximize its comparative production advantages and integrate itself into the world economy. The alternative, a strategy favoring highly diversified inward-oriented agriculture, would result in proportionally large economic losses. To achieve trade integration will require a relatively open trade regime, not merely with respect to the FSU but to the rest of the world. Georgia must begin to expand its exports to third countries. This will have to be accomplished by an explicit commitment to letting price signals (domestic *vis-a-vis* border prices at the appropriate exchange rate) become a vital link with external market conditions. It is submitted that, in the long run, there is great potential in Georgia's agriculture to become a competitive exporter of a variety of high value products if the right policies and necessary institutional changes are successfully implemented.

24. It is recognized, however, that during transition to an economy with well-functioning markets, it is critical to preserve the inter-republic trade which currently represents Georgia's largest trading base. For agriculture today, the FSU is by far the major receiver of Georgia's agricultural exports. Unfortunately, the current breakdown of traditional trade routes and lack of alternative marketing channels, and the virtual collapse of most of the domestic agro-processing industry formerly exporting, suggest a bleak outlook for the agro-industrial export sector in the near future. How to jump-start these trade flows is a major challenge in the short-term.

25. On the import side, Georgia maintains an import regime which is relatively open (uniform 2 % duty and no import quotas), and firms are free to import if they can find the means of making payments, in rubles or dollars or in goods. *Vis-a-vis* some other countries, this open import regime is of great economic advantage to Georgia's export sector - including agriculture. The alternative, protection for the import competing domestic sector would *de facto* result in an implicit tax on exports, directly by raising

the cost of intermediate inputs, and indirectly by lowering the coupon/dollar exchange rate¹. It is suggested that Georgia remains committed to this open import policy, and that it does not yield to pressures likely to emerge for higher tariffs on imports.

26. On the export side, restrictions on exports are pervasive and constitute major impediments for the development of a dynamic export sector. Major reforms are necessary. Today, a substantial part of Georgia's exports from agricultural related products is governed by bilateral treaties between Georgia and other FSU republics. These treaties were a mean to restore the inter-republican trade which has broken down. These treaties should be viewed as strictly transitional, and should allow maximum flexibility to the export enterprises to negotiate prices and orient their exports world-wide.
27. As mentioned above, Georgia's export sector is faced with a strong anti-export bias, in the form of export prohibitions and licenses, a system of state orders and procurement, explicit export taxes, and foreign exchange surrender requirements. In practice, export licenses can be required for all exported goods, whether listed or not. This is a very restrictive policy which creates economic uncertainty and lack of transparency, and inhibits the development of export channels by the enterprises themselves. While in the past export controls played a role in order to implement domestic price controls, the current liberalization of domestic prices makes this argument redundant. The other argument for state orders was to comply with bilateral trade agreements. During the transition, until state orders are eliminated, export licenses should be restricted to goods that remain under the state order system and for specific goods covered under bilateral trade arrangements; licenses should be automatically granted after the quota is fulfilled, and export licenses and prohibitions should be removed for the remaining goods.
28. In addition, exports to non FSU countries are subject to a 8 percent tax. As it is most unlikely that Georgia has any monopoly in its foreign export markets, the only argument for retaining this tax is related to fiscal revenues. The removal of this export tax should be considered in conjunction with the government's current fiscal reform and price deregulation that should result in a healthier fiscal position.
29. The foreign exchange surrender requirement needs to be revised to eliminate the implicit "export tax" that results from its practical application. Considering Georgia's foreign exchange needs, the surrender scheme might be inevitable during the immediate future. However, during this period, exporters should be allowed to retain full control over their earnings until the coupons are actually reimbursed to them, and the restrictions regarding the convertability of coupons to cash should be gradually removed.
30. The government should decrease and eventually eliminate the quotas that agricultural-related exporters are required to sell under the state order system. During the transition, the government should adjust its procurement mechanism for goods under the state order system so as to offer market prices for these quota products. Reduction and eventual removal of subsidies on energy supplies should have a favorable fiscal impact but will result in a substantial increase in production costs, making the price adjustments for quota products even more necessary. This is particularly important for the agro-processing export sector.

¹ For the economy as a whole, if the Government were to raise import duties, this would result in a reduction in the overall demand for imports, which, in turn, would reduce the "coupon/dollar" exchange rate.

31. Difficulties regarding payments arrangements and uncertainties about currency values have led producers to an increasing reliance on barter trade and bilateral agreements. A failure of macroeconomic stabilization would impose an extremely heavy burden on foreign trade transactions, severely affecting the normal supply of intermediate inputs and raw materials, as well as generating great uncertainty for an export-oriented sector such as agriculture. All things considered, macroeconomic stabilization is the most pressing need for the development of an economically efficient structure of incentives for agriculture conducive to recovery in agricultural growth.
32. Domestic price interventions for agriculture. In the long-run, the main force influencing the structure of incentives for agriculture in any country in the world is the external trade and foreign exchange regime of a country. This is because agriculture is a highly tradeable sector, particularly in relatively small economies such as Georgia. By structure of incentives we mean the domestic relative price structure for agriculture *vis-a-vis* the rest of the economy and *vis-a-vis* foreign competition. It is crucial to recognize this simple fact, and to avoid falling into the trap that by tinkering with direct, agriculture specific price interventions, the government will be able to have a sustainable influence on relative prices (e.g. incentives) for agriculture. It could do it only at an enormous fiscal cost to the Treasury, which is not in the realm of the possibility for the Government of Georgia in the foreseeable future.
33. For agriculture outside the export subsector, a very important positive element of the present situation is that there are no direct price interventions on agricultural markets, other than the subsidies for bread and milk, which are in the process of being dismantled. The absence of direct interventions in agricultural markets for the non-export products have facilitated the resurgence of a dynamic private market for domestically traded agricultural products. This is, for example, the case of meat, vegetables, some grains, wine outside the export orders systems, and others. Any effort by the government to try to interfere directly in these essentially private informal markets would be counterproductive for their future growth. They have enough problems dealing with a high rate of inflation, input shortages, getting through road blocks, fuel shortages, and the lack of a domestic currency. Moreover, the experience of agricultural price policies in most countries, in both developed and developing countries, has been that even under more "normal" conditions, they have failed miserably with respect to their initial objectives. This is not an experience to take lightly.
34. We strongly recommend that the Government of Georgia abstain from becoming involved in direct agricultural price policies, that is, in sector-specific price interventions. On the one hand, because they are not powerful enough to counteract the influence of price and foreign exchange policies, except at a very high fiscal cost. On the other hand, because price policies are an inefficient instrument to deal with social objectives, such as income transfers to particular segments of the population. The social safety net to protect the most vulnerable segment of both the urban or rural population - unquestionably a most legitimate goal for the government - should not be a burden on agriculture. It should be covered by the overall economy through direct subsidies from the Treasury. The key to deal with prices of tradeable inputs and final products should be determined by the trade and foreign exchange regime, and not by sector-specific price policies.
35. Taxation. Agricultural taxation is also part of the incentive structure. The paradigm in the long run is to have a tax system which does not discriminate across economic sectors. A uniform value-added tax and a standard profit tax system across all economic sectors should be the norm. However,

considering the practical difficulties of implementing such a tax system in Georgia (as well as in many other countries), a reasonable option is to develop a land tax system - as a proxy for a value-added and a profit tax system - which would allow the government to capture a fair share of the profits from agricultural production and processing firms. What is fair, in our view, is a non-discriminatory rate of taxation at the margin. Although no precise rates of taxation can be suggested at this stage, the underlying principles are simple. The assessed tax rate on land should try to approximate what would be the sum of the value-added tax and the profit tax rate for small firms in the non-farm sector.

Completion of Land Reform and Support of Private Farming

36. The completion of land reform is one of the most pressing issues of the sector. This should include: (a) legal settlement of land ownership; (b) completion of land privatization; (c) creation of a land and lease market; (d) real restructuring of large scale farming; and (e) measures to support private farming and establishment of farmer's service cooperatives.
37. Legal Settlement of Land Ownership. Distribution of land has taken place without settling the legal framework of land ownership. Legally all land is still owned by the state. Private farmers have no clear defined user and owner rights. The legal settlement of agriculture land ownership is one of the most pressing needs to facilitate further development of the agriculture sector. A draft land law is under consideration by parliament, however, the time and the final outcome of the parliamentary decision is not clear. It is recommended that a land law be legislated with the following provisions: (a) creating full unrestricted ownership of agricultural land with the right to sell and inherit; (b) providing land already in private use to farmers as their own property; (c) extending privatization to the remaining agricultural land or creating a system of long term leasing with the right to sell it. Any restriction on user rights, such as a moratorium on sale/lease markets, will impede agricultural development.
38. Completion of Land Privatization. Based on the new land law, land privatization should be completed: (a) land should be provided for private use and ownership based on the principles of the 1992 Land Privatization Decree in those areas where land distribution was not done or completed. Present conditions should allow proper procedures of distribution; (b) land of state and collective farms and large scale plantations should be privatized in the overall process of large scale farm restructuring and privatization; (c) only land for agricultural research and experimental farms should remain in state ownership at the end of the privatization process; (d) pastures should be transferred to municipal ownership and used in an environmentally sustainable way; (e) major infrastructural facilities such as water reservoirs and canals supplying multiple users should remain in State ownership.
39. Land and Lease Market. A market for land should be established after the land law is effective together with creating necessary regulations. Market agriculture cannot function without a land market, but overall environmental and social objectives require land market regulation as well. Land registration offices and cadastral surveys are required immediately to facilitate the establishment of the market where buyers and sellers could meet and trade title for land. Development of a land market will permit commercial banks to accept land as collateral for investment and working capital loans and, hence, provide an essential element in the development of market based agriculture.

40. Unless very early steps are taken to create a modern property registration system by reorganizing, equipping, and training property registration offices in each rayon for all real property, urban and rural, the advantages of a market oriented economy will be difficult to realize. As time passes, unclear property rights will mean that the marketability of land will decrease, mortgages will be difficult to acquire, and the likelihood of conflicts over ownership and boundaries will increase. The security of tenure required for the level of investment that the country needs will be difficult to achieve. Moreover, without a systematic and comprehensive system for incorporating changes in rights, the present extreme fragmentation of land holdings will remain a constraint on the consolidation of landownership through the land market and thereby on the abilities of the farmers to take advantage of economies of scale.

41. The mission proposes that a Land Market Action Plan should be programmed with the following objectives:

- i) to create as soon as possible a modern property registration system to record, display and protect rights to real property;
- ii) record as soon as possible the newly created property rights as well as public rights to real property in this system;
- iii) Establish programs and institutions of a land market which will support: a) the accurate valuation of real property; b) improvement of information about the supply and demand for land in the market; c) land use zoning to guide urban and rural development; d) preservation of agricultural land; e) access to the land market by capital poor families.

42. New Farming Structure. Decisions regarding further restructuring of large scale farms should be made by farmers, and the newly created structures should remain open to amendment or change (even dissolution) as decided by the owners. It is not possible to predict precisely what structure of agriculture will emerge and what the mix of larger and smaller enterprises will be, nor is this the key issue. In all probability, there will be a mixture of smaller, family farms, larger corporate-type farming and variations of cooperatives and looser associations emerging out of the existing large scale farms. However, in all cases, the key to creating an efficient structure is the clarity of the definition of ownership rights, the lack of restrictions on use (except for environmental regulation), and the efficiency of transferability of titles or leases to the more efficient farmers.

43. The private farming sector is expected to evolve gradually from subsistence farming to commercial oriented farming as farmers gain experience and accumulate capital, and as the input and output marketing systems improve. However, even with modest growth in number of commercial farms it can be expected that farms may run into financial difficulties within the first few years of their formation. This will constitute a natural "weeding out" process and should not be regarded as a "waste" of resources. More important, it should not be considered a reason to expand government subsidization of agriculture in general or for newly emerging farmers in particular. This would only lead to the creation of a new class of inefficient, dependent farmers.

44. Promotion of Private Farming. Support of private farming should have high priority. The most important measures, for promoting viable independent family farms include: (a) a competitive land mortgage system for financing investments, including purchasing equipment as well as land; (b) a

competitive bank credit system for financing investment and working capital; (c) development of competitive input and output markets; (d) development of infrastructure, transportation, roads, and public services; and (e) individual farms should not be limited, in size or system, for private transactions in land to be authorized.

45. Role of Farmer Cooperatives. In Western Europe 60 percent of agricultural marketing and 30 percent of rural finance is handled by cooperatives. In Georgia, however, cooperatives have a poor reputation, because in the past the idea of cooperation had been misused. Genuine agricultural service cooperatives are established by independent farmers for the purpose of jointly purchasing inputs, marketing, processing of agricultural products and related services. Georgian farmers have both desperate needs and significant potentials for establishing such cooperatives. However, the development of farmer cooperatives in Georgia requires two measures: (a) the development of a legal and policy environment conducive to the establishment and operation of these organizations, and; (b) the active promotion of these forms of self-help organizations.

Restructuring the Agricultural Supply and Distribution System

46. The recovery of the agriculture sector, the growth of commercial and private farming will depend upon the development of the farm support sector-- material/technical supply, agricultural services, and marketing of agricultural commodities. Without the establishment of competitive markets for inputs and outputs, farms will remain dependent on local authorities. Rapid demonopolization of input supply and product marketing systems should start immediately, beginning with privatization of small shops, and encouragement of the creation of other private marketing channels, including commodity exchanges, private transport companies, and service and marketing cooperatives.

47. Expanding Market Facilities and Services. A private-based commercial system is the most suitable way for supplying inputs and machinery services. A network of farm supply shops should be created soon by privatizing the existing network and by promoting establishment of new firms. Development of private retail, wholesale and input supply trading systems for agricultural products requires:

- privatizing existing state and municipality owned food shops by lease or sale to the present managers and workers, without restriction on the resale of facilities and equipment;
- promoting and encouraging private sector entry at the wholesale level;
- designing programs and timetables to privatize or restructure and divest larger enterprises operating at the wholesale and product assembly levels;
- establishing a legal and regulatory framework to encompass: (a) anti-monopoly regulations; (b) competition policies; (c) corporate law, property law, and contract enforcement; and (d) legislation (and its enforcement) related to quality standards;
- strengthening supporting services, notably: (a) price and market information; (b) technical assistance and training services; (c) financial services to assist in establishing

new businesses or rehabilitating existing enterprises; and (d) food inspection and phytosanitary standards;

- facilitating investments in a new market structure including: (a) improved physical facilities such as auction halls, city markets, regional cooperative packing and grading facilities, and transportation equipment; (b) increased market information services; (c) an enlarged commodity exchange; and (e) commercially based export marketing organizations.

48. Extension and Advisory Services. The breakdown of the state order and the collective and state farm system has increased the need for information services and farm management advice. New private farmers will have to learn the skills associated with organizing and running cooperative endeavors. The basis on which to build a modern agricultural extension service exists. There are large numbers of well trained, experienced agricultural specialists. In addition, there are the other formal and informal information communication channels such as TV and radio, farmers clubs, associations, local government institutions, schools that play some of the traditional functions of extension. Approaches to extension and research would emphasize the shift from existing specialist technological approaches to systems methodologies developed within the disciplines of the market economy, with the express purpose of addressing overall farming system improvement. Existing heavily-staffed government research and technical services should be rationalized, with special training provided. Agricultural, veterinary and commercial education would be adjusted to reflect these changes. Encouragement of the establishment of specialist services for both smallholder and commercial producers would be directed to the private sector, who would receive various financial and other incentives to alleviate the many risks involved in these early development stages.

49. Financial Services. Because of the high inflation rate, it is not possible for the rural financial system to function properly. Deposits are difficult to mobilize at the present highly negative rates while loans would not be acceptable at positive rates. The loan portfolio of banks has been severely eroded and they are unable to even maintain the same level of lending in real terms especially since they have been used to lending government funds which were not related to financial or economic considerations. Mobilization of new resources by the banks would depend on the success of the stabilization program agreed with the IMF.

50. A possibility which should be explored is to provide credit under any of the following options: (a) local currency loans indexed to the price of a basket of agricultural commodities; (b) local currency loans denominated in dollars; and (c) hard currency loans particularly to enterprises which would need to import equipment and would generate foreign currency earnings.

51. *In the meantime, some initial work can be done in reforming the rural financial system.* Technical assistance should be provided to Agrobank in establishing a capability for retail lending to private farmers, auditing, business planning, reorganization, credit criteria, lending procedures, accounting systems, etc. In addition, the legal framework should be established and a program to organize local savings and credit societies should be initiated utilizing private sector volunteers.

52. By completing the on going privatization Agrobank should achieve independence from the government by increasing the participation of the private sector in its equity. The bank should implement a business plan, increase savings and time deposits, and expand lending to all types of private rural

enterprises. A national cooperative bank should be formed to serve as the apex bank of savings and credit societies although these societies should be free to invest in Agrobank or any other bank. Technical assistance to such a cooperative bank could be sought from cooperative banks in the West.

53. The development of the rural financial system should support the banking sector reform program. It is recommended that the lending of Agrobank be linked to international standards which establish a ratio of about 10 percent between equity and risk assets and that a policy of provisioning based on quality of the loan portfolio be adopted. Ultimately, the interest rate policy should be rationalized to ensure that deposit and lending rates are competitive and that interest rate spreads adequately cover the full cost of banks.

Privatization and Demonopolization of Food Processing

54. Establishing a market economy with increased competition will lead to improvement of the agro-processing sub-sector performance and functioning of enterprises and the market infrastructure. Consequently, the key priority is to encourage competition and to help the market function. This will be achieved by:

- privatizing all state enterprises in the food chain (including foreign trade organization);
- promoting the establishment of new private ventures and processing cooperatives owned by the farmers;
- implementing antitrust regulations and monitoring competitive conditions;
- reducing barriers to entry by foreign firms by encouraging joint ventures; and,
- improving general marketing services.

55. The entire agro-industry subsector should be privatized. Existing monopolies should be broken down into smaller concerns to promote competition. This should not be confined to the regional level restructuring but should apply to the organization of production activities of the enterprise. Under the present system there is cross-subsidization between different units of the agro-kombinats at the cost of overall efficiency. The conglomerates should be divided into profit centers capable of and allowed to operate independently.

56. The Georgian Government has begun to privatize the food processing industry. The privatization has been implemented by using three techniques: (a) leasing; (b) auctions or competitive bidding; and (c) transformation into closed type joint stock companies. Decisions regarding the method of privatization is taken by the Ministry of State Property Management. Use of the leasing privatization technique has been recently discontinued. The privatization process is proceeding relatively slowly. Out of about 300 food processing enterprises, about 60 have been privatized so far. Most of the buyers represent management and employees and purchase values are surprisingly modest due to inappropriate valuation procedures. Foreign investors have been virtually absent from the privatization process.

57. It is recommended to revise the present practice of food processing privatization along the following principles: (a) a clear timetable should be developed for privatization; (b) privatization should begin with the most export-oriented companies and those with more modern technologies; (c) competitive bidding should become the major technique of privatization in order to generate revenues for the treasury; (d) privatization through establishment of closed joint stock company form should be discontinued immediately in the competitive sector, such as wine, citrus processing and canning; (e) list of food processing enterprises intended to remain in state ownership should be revised; (f) privatization should be aimed to bring additional capital into the newly established company, therefore a non discriminatory legal framework should be created as soon as possible.

58. A system of modern accounting and auditing, capable of clearly measuring profitability of enterprises needs to be adopted. Public enterprises not yet privatized or subject to immediate privatization should apply this new system as soon as possible. Private enterprises should also be obliged to conform to the new system because their tax liability should be determined on the basis of standard accounting governing all enterprises. A modern accounting system will also provide management with information needed to make decisions on manufacturing activities, product lines and marketing channels.

59. Special attention should be paid to the demonopolization and privatization of the grain sector. Presently the state corporation of bread making and poultry industry is the largest state monopoly in the food and agriculture sector, operating independently from the Ministry of Agriculture and Food Industry. This corporation carries all the feature of practices established under central planning and as an addition to the whole grain sector including milling and bakeries it also incorporates state owned poultry farms and poultry processing factories. As such this organization is not consistent with the free market economy and should therefore be dismantled as high priority. The grain corporation, firstly should be organized into independent profit centers and then those should be commercialized and privatized individually. The units of the corporation need to be privatized independently in order to avoid changing a state monopoly into a private one. An action plan should be elaborated in the near future for reorganizing and dismantling the corporation, probably by using foreign technical assistance. Privatization of bakeries should begin immediately while inefficient and non operating poultry farms need to be closed down. The reorganization should cover grain trading as well, creating competition in this area.

Adjustment of Public Administration in Agriculture.

60. The completion of reform in agriculture requires a fundamental change in the role of the Government in agriculture. Direct government intervention in the agricultural economy, such as establishing mandatory targets for production and/or delivery of goods and central distribution of investments and inputs must be ended. The Government's role should be to establish the general rules and to facilitate smooth operation of markets and independent business organizations. This role is no less important than the previous one; however, it requires a different philosophy, as well as different means and institutions. The Government of Georgia needs make a high level commitment to changing the structure and scope of government organization for management of agriculture. The overall principles driving this change should be: (a) the establishing of a single locus of responsibility; (b) dismantling of the current "agroindustrial complex" type governmental management structure; and (c) a simplification of the structure of governmental organizations corresponding to the reduced role of public sector responsibilities in agriculture.

Adjustment of Production Technologies

61. It is essential that government recognize the fundamental change in the country's agriculture that has occurred with privatization of the former Kolkhoz farms. Small farmers now own most of the livestock, much of the vineyards, a significant proportion of the deciduous fruit and much of the arable farm land. Each farmer is therefore manager of a small, but complex, integrated farming system, who will respond to market forces. Providing advice and extension to such farmers is very different to supplying technical information to the former sovkhōz and kolkhoz specialists. The "new" farm families need farm management advice based on financial criteria and maximization of benefits to individual farm families. Gone are the days of maximizing production at any cost. The skills to be developed by an appropriate extension service have changed markedly.

62. Similarly the market-oriented farmer should no longer expect subsidization of inputs, not even irrigation water, which in the past has been supplied free at considerable cost to the nation. The present reality is that the state-owned Water Enterprises operating reservoirs, pump stations, diversion structures and main supply canals are virtually bankrupt, and are no longer maintaining their infrastructure. Many pump houses are out of action and many components in non-functional irrigation networks have been damaged. A charge for water payable by all users according to volume supplied, would fund the Water Enterprises, and at least allow them to undertake basic maintenance. It is strongly suggested that a law or decree be proclaimed making payment of water charges obligatory, not only by irrigators, but also by domestic and industrial users. Irrigators should group into small water users associations (WUAs), and accept ownership and full responsibility for operation and maintenance of the part of the irrigation network falling within their farms, and collect and remit water fees directly to the Water Enterprise delivering water. A similar arrangement should apply in drainage areas.

V. PROPOSED SHORT-TERM AND MEDIUM-TERM ASSISTANCE PROGRAM

63. Georgia has embarked on a historic and courageous effort to transform its economy from a centrally planned to a market-oriented system. This reform will, under the best of circumstances, be a long process accompanied by economic, social and political difficulties. To ensure that this transition process is efficient and effective, and to minimize the transition problems, external assistance will be essential. In the agriculture and food processing industries the assistance most needed in the short and medium-term would include:

- food aid and critical inputs for agricultural production to avoid serious food shortages;
- technical assistance to help formulate and implement a consistent transition program in food and agriculture;
- development of institutions and support facilities needed to implement the transition program; and
- capital investments for the development of competitive production, processing and marketing.

64. Technical Assistance and Institution Building. Many difficult policy, technical and institutional issues are emerging during the transition and skills are generally not available in Georgia to deal with them effectively. Technical assistance and training covering broad areas of food supply and agriculture are needed to facilitate the transition. The topics identified below are indicative only. In many of these areas a number of multilateral institutions, governments and private organizations are already involved. But their support, in general, meet only a fraction of the need. Most urgent technical assistance requirements include:

- Land reform implementation: modern cadastre and land reform information system; establishment of a land market and land bank; Western-type agricultural cooperatives; and farmers training and demonstration farms.
- Competitive input and output marketing systems: auction halls; commodity exchange; market regulations; food safety and quality control; market information system.
- Enterprise privatization: privatization strategy and procedures; pilot projects; modern accounting practices; management of corporatization, demonopolization and privatization.
- Policy analysis and policy development skills: reorganization of public administration in agriculture; adjustment of statistical information services.
- Rural financing: modern banking practices; design of an efficient rural credit system; training and retraining of bank employees.
- Research, education and extension: concentrate on transfer of technology and adaptive research; design an extension system; design new curriculum; retrain university personnel; retrain large scale farm technicians.

65. Bank assistance program. Following the review and initial analysis of the agricultural and food processing industry, the Mission will recommend to the World Bank management a short- and medium-term assistance program for Georgia to facilitate three objectives. One, to sustain agricultural and food production under the present difficult and economic conditions; two, to increase export potentials and hard currency earnings of food and agriculture; and third, to assist the Government in the transformation of agriculture and food processing from a centrally planned economy to a market oriented, independent national economy. The proposed tentative assistance program is subject to approval by World Bank Headquarters. It would aim at providing support for three crucial components of the transformation process: (a) privatization restructuring of food processing; (b) support for primary agriculture and private farm development; and (c) land reform implementation and institution building.

66. It is envisioned that under the proposed Bank rehabilitation project, to be appraised in October 1994, many of the key policy concerns raised above will be addressed. Based on the outcome of that work the Mission sees two alternatives for the first lending operation: Alternative one: support for an agriculture sector loan based on Government's agreement to a second tier of agricultural policies fostering the enabling environment for the recovery of the sector. Such a loan would provide assistance through

the Government to accelerate land cadastre, titling and registration; investment in export oriented agro-processing utilizing modern technologies to improve the quality and range of products; support for the development of external and domestic marketing and rural financial intermediation services; development of critical productive infrastructure and institutions. Such a loan would need to be phased in a manner that builds on the results of the agreement of the rehabilitation loan. In the absence of an agreement on macroeconomic and key agricultural reforms, the prospect for lending under Alternative two are greatly reduced. The Bank would only consider direct investment in support of land reform and the development of land markets and in production systems whose performance is not dependent on macroeconomic stabilization and adjustment program.

GEORGIA

AGRICULTURE AND FOOD SECTOR REVIEW

**AIDE MEMOIRE
TECHNICAL ANNEX**

TECHNICAL ANNEX

- A. LIVESTOCK PRODUCTION**
- B. ANNUAL CROP PRODUCTION**
- C. HORTICULTURAL AND IRRIGATION SUB-SECTORS**
- D. AGRO-PROCESSING SUB SECTOR**
- E. ENVIRONMENTAL ISSUES**

GEORGIA

Aide Memoire - Annex A

LIVESTOCK PRODUCTION

I. ASSESSMENT

Livestock Management and Productivity

1. Present Situation. Since the collapse of state controlled agricultural production, the provision of input supply, processing and marketing services, livestock have become an essential element in maintaining the viability of Georgian agriculture. More than 80 percent of Georgian agriculture is now derived from smallholder private farmers largely dependent on these services, which are now being provided from farmers' own resources and to a limited extent by the private sector. With the loss of benefits and regular income, the recently privatized farmers, who compose about half of Georgia's smallholder farmers, lack the agricultural credit and have serious shortages of critical farm inputs such as fertilizer and machinery hire. For this reason, livestock is becoming increasingly important in providing food for farm householders' daily subsistence, manure and draft power for crop production, and thereby, regular income for the purchase of food, fuelwood and other household items, and a relatively secure, readily liquidated asset unaffected by land tenure security provisions.
2. In spite of a sharp decline in pig and poultry production in the past five years, due to lack of grain and other inputs, livestock production generally has declined far less than most other agricultural and industrial production, thereby substantially increasing its relative contribution to the economy. From contributing only 23 per cent to agricultural output in 1988, and about 7 per cent to NMP, it is estimated that livestock now in 1994 contributes more than 25 per cent to Georgia's NMP, a situation which is expected to continue for at least the next decade.
3. Mixed farming based on livestock and annual and perennial cropping on about 400,000 smallholder farms can be expected to become the mainstay of the nation's transition economy, with livestock playing a predominant role. Previously adopted high input but largely economic livestock production systems should be abandoned and replaced with more traditional low input technologies presently being adopted by the private sector.
4. In 1989, it is estimated that 20 to 30 per cent of livestock were raised by private individuals in the informal sector. Following the transfer of state owned livestock to private ownership by state employees and collective farm participants and the lifting of statutory limits on the number of livestock private individuals could raise, individual private farmers raise more than 90 per cent of Georgia's livestock.
5. State livestock ownership was further reduced by the high slaughter rates and mortalities experienced in the intensively managed pig and poultry enterprises resulting from lack of feeds and veterinary drugs and chemicals. Cattle, buffalo, sheep and goat numbers initially declined as slaughter rates increased in response to farm household income needs immediately following privatization, but are suspected now to be increasing as their value to smallholder farm enterprises becomes better understood.
6. Although not officially recorded, it is estimated that about 20-25 per cent of Georgia's livestock production before the collapse of the state controlled farming enterprises was derived from the

informal private sector. The low input technologies of smallholder farming adopted at that time are being continued in the expanded private sector, which now accounts for more than 90 percent of livestock production. Owing to the existence of this informal traditional livestock production system the transition from state controlled production systems to smallholder production methods has been relatively fast and easy as smallholder farmers readily grasp the traditional methods.

7. The collapsed dairy processing industry was replaced by the cottage dairy industry, where smallholder farmers adopted long known cheese and other traditional dairy production technologies to add value to their farm products and derive income from their sale in local markets. Rural households raised more than their usual few chickens and an occasional pig, to take advantage of the available household scraps, crop wastes and other farm products to produce meat and eggs under a very low cost, low input system.

8. This is while poultry, pig and cattle operations on state controlled farming enterprises mostly collapsed through the system failing to provide essential feedgrain and other inputs. High producing state owned poultry and pig stock were mostly slaughtered, while ruminant livestock capable of surviving under low input production systems were transferred to the private sector. Although some high producing pigs mainly of the Landrace, Large White and Duroc breeds were also transferred, their numbers have further declined as shortages of subsidised, low priced feedgrains and other inputs increased. A small number of specialist private producers have established small piggeries with these modern breed pigs, to take advantage of an emerging high priced meat market. Such piggeries grow their own feedgrains and pay international prices for other inputs.

9. Generally, however, low input smallholder pig production is increasing as market forces encourage farmers to grow some supplementary feed to take advantage of underutilized farm lands and products such as damaged grain and crop and household wastes. Traditional pig breeds and their crosses are increasing in numbers as a result.

10. As modern poultry breeds are dependent on high input technologies, there has been a rapid increase in the numbers of traditional household poultry since the change. Nevertheless, this has not been sufficient to make up for the devastation of the country's poultry population - which is estimated to have declined from 20m in 1987 to 1m or less by 1993. As household poultry is mostly left unrecorded, no official estimates have been made for the increase experienced in the numbers of traditional flocks in recent years. As household poultry productivity is typically 25 per cent the level of modern poultry, the loss of poultry products in Georgia has been substantial since 1991.

11. In spite of this, with the loss of critical inputs and markets, overall crop production has declined far more extensively than livestock production, which is now estimated to be increasing. The cattle and buffalo populations are increasing in response to vibrant local markets for dairy products and meat. Smallholder producers process their own and neighbors' milk into cheese and other dairy products. Sheep, previously raised primarily to produce wool and meat are now being more extensively milked, particularly as the local market for carpet wools has all but ceased owing to the closing down of even the vestigial cottage industry through lack of wool dyes and other critical inputs. Goats are also being increasingly milked for local processing and consumption, although yields are low. Smallscale butchers are emerging, who buy a small number of ruminant livestock for backyard slaughter and sale on roadsides and in local markets.

12. In the immediate years ahead, ruminant numbers and production (cattle, buffaloes, cattle and sheep) can be expected to increase due to the strong local demand for milk and dairy products and because ruminants are more efficient converters of the domestically available, low energy, low protein feedstuffs available, and of resources such as grass and herbage derived from the natural resources.

Feed Availability from Cultivated Forage and Natural Grasslands

13. In the past, production of forage crops has received low attention compared with directly marketable field crops. In addition, cultivated forage and permanent grassland were much less subsidized and received few input allocations and research attention than the field crops, thus making them comparatively expensive feedstuffs. As a result, heavily subsidized concentrate feed was overused, and forage technology was little developed.

14. The country's grazing resources in the valleys are composed mainly of the unutilized cultivated lands including roadsides and periurban lands, which are grazed as common lands by local communities. In the hills and mountains, grasslands around villages and settlements and on forest lands are also utilized as common lands, while the extensive grasslands in the mountains are managed by the villages with traditional use rights over them, large areas being put aside as hay meadows to provide winter feed as under traditional grassland management systems.

15. However, since the wholesale transfer of ruminant livestock to smallholder farmers, unmanaged overgrazing in the valleys and lower and mid hills areas has increased several fold, and evidence of a serious soil erosion cycle is beginning to emerge. Gully and sheet erosion is becoming serious, and general degradation of protective forest areas near villages is increasing at an alarming rate.

Agricultural Support Services

16. Agricultural Extension. Although private agriculture, composed mainly of smallholder farmers, contributed substantially to the large informal economy of Soviet Georgia, the state provided limited extension services to these farmers through about 1,000 specialist advisors located in 62 district offices countrywide. Specialist advisors employed by processing factories such as wineries and fruit canneries provided some advice to private producers, although this was very limited. However, by being specialist technologists with little concept of the farm as a system, these advisors had little impact on private farm productivity. Farmer and worker training courses provided by state controlled farming enterprises and research institutes for state employees may have contributed in a small way to the dissemination of technical information to the private sector. Voluntary farmer organizations, an important vehicle for the delivery of extension services to smallholder farmers, have not been developed, and will need to become a major focus in the development of a national government extension service.

17. Veterinary Services. An enormous veterinary staff of about 7,000 veterinarians and veterinary technicians are employed in Georgia, of which 4,600 provide on-farm clinical and disease control services to livestock producers through a network of veterinary offices at local, district, regional and national levels. There is a high degree of specialization among these staff which leads to considerable inefficiencies in the delivery of services. With the collapse of the economy, skilled farm service veterinarians are continuing to provide services for fees, in spite of the collapse of the veterinary drug

delivery system, and transportation shortage. Demand among farmers for these quasi-private veterinary services is said to be high in spite of the difficulties. A government monopoly, the Veterinary Drug Corporation presently imports all veterinary products, with serious supply shortages being common even prior to the present economic collapse.

18. Agricultural Research. The number of research staff and facilities in the 25 research institutes for agriculture vastly exceed the country's present requirements. The research activities of the past have been too focused on specialised scientific and technical issues to be of much relevance to the present needs of private agriculture, processing and marketing.

19. Training and Education. University level education in livestock is conducted at the Zootechnical or Veterinary Institute, which provides university courses in both veterinary medicine and animal science. Despite the serious shortage of resources, the quality of education has not deteriorated drastically as would be expected, and students are graduating with a fair range of skills. However, training is too specialized for the needs of a livestock industry operating in a market economy. Farmer level training which ceased in the 1990-92 period was provided by state farms and collectives, as well as various research institutes, primarily for informing state farm employees and collective farm participants. Much of the information in the farmer level training did reach the private smallholder farmers.

II. RECOMMENDATIONS

Agricultural Research and Extension, and Veterinary Services

20. Research. The large research infrastructure and large staffing of highly specialized scientists and technologists should be rationalized and approaches reoriented to the realities of a market economy. Research should not be done in isolation, the common practice in the past, but should be coordinated closely with industry participants. Reduction of facilities and a mechanism for livestock industry financing should be introduced. Emphasis must now be given to the commercial significance of research findings and recommendations, requiring a broadening of the research base to include adaptive and systems research as an integral part of technology development.

21. Agricultural Extension and Veterinary Services. With the majority of agricultural development being dependent on improvement and upgrades in the private smallholder production system and support of processing and marketing activities, the establishment of effective extension and veterinary services will be a major element in strongly establishing the market economy process. Both should be privatized, except those areas such as plant, veterinary and human health protection should be financed by the users, whether producers or the consumers. Various mechanisms for delivering information and services to farmers should be adopted in the development of extension and veterinary services, although the development of farmer organizations and linking extension to marketing and veterinary services should be considered as important approaches.

The Provision of Machinery Hire, Transport, Marketing, Credit, Input Supply and Other Essential Services

22. Government policies should support the development of all these services by the private sector.

Land Use Planning and the Development of a Public Land Use Policy

23. The lack of suitable natural resources management policies are highlighted with the overgrazing problem, and the minor disputes that are beginning to appear over the use of meadowlands for hay production. Land use management policies should be immediately formulated and a legal framework in which the policies would be applied should be established. The establishment of a land use rights entitlement instrument, which provides for security of tenure in environmentally fragile areas, should be introduced in the earliest possible time before irreversible environmental damage is done.

LIVESTOCK DEVELOPMENT

Issues	Recommended Measures		Ultimate Objective
	Short-Term	Medium Term	
Large scale high input poultry, pig and dairy operations are unprofitable.	Cease operations	Encourage private investment in commercial intensive livestock production preferably involving abandoned facilities.	Establish commercial intensive livestock industry.
Severe shortage of inputs.	Change to low input livestock production regimes.	Encourage private investment in the provision of vital inputs.	Increased commercial viability of livestock industries based on the adoption of modern technologies.
Undeveloped technologies suitable for commercially viable livestock production operations.	Adopt low technology traditional livestock production methods.	Conduct systems research on livestock production methods under local farming conditions.	Establishment of commercially viable livestock industries suitable for local conditions.
Little or no dissemination of information to individual livestock producers on improved production methods, available services and markets.	Raise livestock for subsistence and the supply of known local markets, and adopt low technology, low input traditional livestock raising methods.	Establish agricultural extension and veterinary services.	Increased commercial viability of smallholder livestock production.
Lack of small scale dairy processing equipment.	Process milk in the home.	Support the private sector in making small scale food processing equipment available.	Establish highly specialized dairy product producers for supplying local and export niche markets.
Undeveloped fodder production technologies relevant to local smallholder farming systems.	Adopt low input livestock production technologies, and apply traditional fodder production methods.	Include fodder crops in farming systems research.	Increased commercial viability of smallholder livestock production.
Overgrazing	Inform livestock raisers of the untoward effects of overgrazing.	Introduce certificates of stewardship contract with environmental protection provisions, as the land tenure instrument in environmentally fragile areas.	Maintain the productivity of the country's natural resources.
No livestock credit.	Limit livestock development to within the financial resources of farmers.	Modernize banking system and provide credit for livestock in accordance with commercial banking practices.	Enable large numbers of farmers to start or expand livestock production enterprises.

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GEORGIA

Aide Memoire Summary

ANNUAL CROP PRODUCTION AND INPUT SUPPLY - OVERVIEW

Crop Production

1. The potential of annual crop production in Georgia is seriously underutilized. Under the prevailing generally favorable agroecological conditions, most crops could produce at least double their present yields and in some economically important crops such as wheat, maize, beans, potatoes and sugarbeet, it is estimated that current yields could be tripled and even quadrupled. Main reasons for the low yields are on the one hand disrespect of the agricultural calendar (i.e. maintaining optimum times for field operations), and on the other hand a very serious lack of practically all essential production inputs.

2. Although estimates for the 1994 crop are very preliminary, the outlook is that the combined grain crop will be about 15% higher than in 1993, mainly due to a roughly 40% (over 50,000 tons) increase in maize production. Winter wheat output is expected to be by about 20,000 tons lower than last year. Changes in other crops are believed to be less pronounced, except for a sharp drop in beans (only about 500 t, or somewhat over 8% of the 1993 crop is expected) and an approximate 3.5 times increase in sunflower production is anticipated, about 16,000 tons.

Input Supply

Seeds

3. The original structure of the seed production system, research institute -> elite seed production farms (elitkhozy) -> district seed production farms (raysemkhozy), has been largely preserved in Georgia. Thanks to a Government decree most of the seed farms retained their function and in only about 20-25% of them seed production was interrupted due to restructuring. The seed supply is generally considered to be adequate, though much of the seed is farmer produced and saved. However, there is considerable room for variety improvement, particularly in the area of maize, sunflower and sugarbeet hybrids.

Fertilizer

4. Crop production over the last 4-5 years has been consistently mining natural soil nutrient reserves. More than 60% of Georgian soils have low to very low organic matter and nutrient contents. To maintain sustainable annual and perennial crop production, an annual application of about 300,000 tons of well balanced NPK would be required. However, since 1989 fertilizer supply has been decreasing dramatically, and in 1994 only about 12,000 t of Nitrogen (representing only about 4% of total requirement) was made available. To arrest the rapidly decreasing soil fertility an improvement in fertilizer supply is urgently required.

Pesticides

5. The situation in pesticide supply is equally alarming as in fertilizers. Crop losses in the fields due to inadequate pest control are substantial and might be approaching 30%. According to the present situation in pest management, agriculture would optimally require about 41,000 tons, physical weight, of pesticides (of which about 45% should be fungicides). The availability in 1994 was 1000 tons (less than 3% of estimated need).

Integrated Pest Management (IPM) systems expected to reduce chemical pesticide needs have been worked out for all crops and are being gradually introduced. In the interim pesticide supply has to increase substantially if crop losses are to be prevented.

Mechanization

6. After 1990 practically no new machines were procured for Georgian agriculture. The age structure of tractors and equipment is very unfavorable; 60% of machines are reported to be older than 10 years, 30% are between 5-10 years old and only some 10% have less than 5 years of age. The work quality performance of a number of machines is very unsatisfactory (seeders, fertilizer spreaders, pesticide sprayers, harvesters). Very serious shortages exist in the fuel, lubricant and spare part supply, causing around 50% of the machines to be inoperable. Apart from that, only a small portion of the machines are suitable for use in the small fields of the several hundreds of thousands of new private farmers. Priorities in mechanization are, therefore: (i) an urgent improvement in fuel and spare part supply; (ii) a reasonable renewal of the rapidly aging machinery fleet; (iii) provision of smaller scale tractors and equipment; and (iv) modernization of some machines with low work quality parameters.

CROP PRODUCTION AND INPUT USE ACTION MATRIX

Area/Issues	Recommended Measures		Ultimate Objectives
	Short Term	Medium Term	
Crop Production: production potential seriously underutilized; yields low, often declining, causing variations and unpredictability of production.	Introduce better management of field operations and respect to agricultural calendar; improve essential input supply including timely and reliable irrigation scheduling where applicable; strengthen soil conservation measures including erosion control; introduce sound input/output price relationship; establish advisory system geared to small farmers, concentrating on whole farm management, simple accounting and marketing information.	Improve genetic potential of annual and perennial crops through importation and own breeding; in preparation of improved input supply situation introduce hybrid seed production of maize, sunflower and possibly sugarbeet seed; under grant funds test on small areas potential of economically most important vegetable hybrids (e.g. in cooperation with Dutch of former Yugoslav companies). Establish genetic bank to preserve Georgian biofund.	Sustainable and predictable high production of grains, oilseeds, industrial and forage crops, as well as high value potential export crops through introduction of modern complex technologies. Depending on results and recommendations of study, modernization or winding down of sugarbeet production and processing.
Issue of sugarbeet production/processing: beet production low, factory obsolete allowing only 3-10% sugar recovery.	Carry out study of the sugarbeet production and processing subsector with view to either modernize if economically justified, or close it down if it is money losing operation.		
Seed Production: the earlier, well established system of seed production was partially eroded after land privatization, and there is need for higher yielding genetic material.	Reestablish sound seed multiplication network with recommended varieties and seed exchange periods, continue screening of imported materials for higher yielding, well adapted varieties. Offer royalties to seed breeders, as well as attractive prices to producers to ensure highest seed quality. Introduce Seed Law.		

CROP PRODUCTION AND INPUT USE ACTION MATRIX

Area/Issues	Recommended Measures		Ultimate Objectives
	Short Term	Medium Term	
Inputs: Inadequate quantity and quality of all inputs, making wider spread of improved technologies impossible	(i) Fertilizer: increase mineral fertilizer supply to at least 1990 levels ensuring about 100 kg/ha of NPK nutrients; improve organic fertilizer management; resume rehabilitation of saline, acidic and waterlogged soils if economically justified.	(i) Fertilizer: supply optimal level of scientifically recommended pure nutrients in appropriate combinations of chemical and organic fertilizers; resume turf mining to increase availability of organic materials, if economically justified.	Introduce an economically justified optimal mix of modern inputs leading to complex technological lines in support of sustainable crop production and maintenance of soil fertility, as well as maximizing returns to the farmers' community and national economy.
	(ii) Pest Control: give full support to introduction of Integrated Pest Management (IPM) system which has been worked out for all crops; improve supply of absolutely necessary pesticides with modern, safe, low application and fast biodegradability rate materials; improve spraying techniques; introduce into practice and monitor recently approved Law on Crop Protection	(ii) Pest Control: continue strong support to IPM until it becomes an integral part of farming practices; make available to farmers optimal levels of necessary, environmentally and economically justified, safe, modern pesticides;	
	(iii) Mechanization: improve in shortest possible time fuel, lubricant, electric energy and spare part supply.	(iii) Mechanization: provide through free market channels optimal numbers of most suitable mix of large, medium and small scale tractors and machines to enable timeliness and best economy of all field operations.	

GEORGIA

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C. HORTICULTURE AND IRRIGATION SUB-SECTORS

Horticultural Sub-Sector

1. Tea. Green leaf production is declining rapidly due to the wholly state-owned tea factories' inability to adequately reward manual tea pickers for a day's labor. Mechanized tea plucking (formerly 30% of the national crop) is also in decline due to lack of fuel and spares for the state tea farms' field machinery. Few crop inputs are presently used by the state and collective tea farms, due to lack of purchasing power, as state trading is in coupons. There is very little privately owned land out of the reported 55,000 ha of tea, the Government expressing concern that privatization could lead to uprooting of tea bushes by smallholders who see little income from tea growing vis-a-vis more rewarding or (for them) more vital land uses. These issues prompt concern about the medium to long-term viability of tea growing in Georgia compared to tea producing countries having longer growing seasons and abundant cheap labor. It is proposed that a study be organized to assess the long-term prospects for the tea industry, including the place of mechanized tea harvesting systems (on suitable land) producing lower grades of tea. Meanwhile prompt payment of Rbl 200 (or equivalent in kind) would restore green leaf deliveries to the factories.
2. Citrus. Yields from state farms and collectives are half those from the considerable areas of private citrus, again state farms and former collectives unable to apply crop inputs, whilst trees on small private holdings are receiving some inputs, purchased in rubles, even during the present difficult times. Observation of large state farm citrus groves indicates no advantages of scale for a crop such as citrus. Production of citrus (subject to marketing and transporting considerations) would double following early and complete privatization of all citrus areas into small-holdings and larger units. Meanwhile the coming citrus harvest needs urgent emergency measures to resolve present logistical difficulties imposed by the blockade in Abkhazia.
3. Grapes. Presently half the national crop is processed into wine at home by private growers themselves. This trend will increase unless the state-owned wineries offer realistic and prompt payment for wine grapes. This, along with manufacturing difficulties, is drastically reducing wine exports. Growers are keen to keep their vineyards, but yields will only be restored to former levels if the "new" small-scale growers are paid adequate prices for their grapes and can afford to buy needed inputs and hire machinery/transporting services at reasonable hire rates. Wine grape producers should receive the benefit of production credit in kind, extended by the local (privatized or cooperatively owned) wineries. This should be an essential component of donor assistance to the wineries. Family winemaking and table grape production would be facilitated by the extension of credit through an agricultural bank, but this will take longer to evolve.
4. Deciduous Fruit. Present felling of old orchard areas will continue until demand for (luxury) fruit and processed fruit products improves in neighboring countries, and more convenient small scale vehicles can be provided for transport to newly emerging local markets. Meanwhile, the Fruit and Wine Institute should prepare for a market upturn by having available adequate quantities of improved planting material for select fruit varieties and semi-dwarfing rootstocks, which should be multiplied by private sector certified nurserymen for sale to growers as the market recovers. The same constraints of

lack of adequate inputs could be partially resolved through making international loan funds available for supply of crop inputs in kind through local agroprocessing industries purchasing raw fruits, but the likely sizeable fresh market will need to await the provision of formalized credit channels through a fully functional agricultural bank.

Irrigation Sub-Sector

5. Irrigation in Georgia may be considered supplemental to rainfall. However, areas to the East of the central divide, receiving less than 800 mm of annual rainfall, normally need irrigation to guarantee reliable summer arable cropping and perennial fruit and grape production over a run of years. However, under the FSU, irrigation (and drainage) was often provided irrespective of cost. Now that water should be paid for by users, in order to provide an income to the state-owned Water Enterprises for sustainable operation and maintenance (O&M), irrigation will need to become more selective. Consequently high lift pump irrigation may no longer prove financially sustainable, even when energy becomes more abundant, and large irrigation machines will no longer be appropriate to smallholder irrigation needs. The following measures are recommended:

- i) The early passing of a law by Parliament, or decree by the Head of State, that all water should be paid for by users at prices that would allow streamlined state sector water enterprises to provide sustainable, reliable, water supplies.
- ii) A survey to estimate parts of the former irrigation network that would be economically and financially viable to operate assuming no subsidization of energy or services.
- iii) An inventory of the physical installations in those economically viable areas with estimates of any rehabilitation needs, which might form part of any future donor loan.
- iv) The handing over of all parts of the rehabilitated network lying on privatized land to private water users associations for operation and maintenance, which WUAs would collect water charges from their membership based on volume of water supplied, for immediate payment to streamlined Water Enterprises.

HORTICULTURAL CROP PRODUCTION ACTION MATRIX

Issues		Recommended Measures		Ultimate Objective
		Short-Term	Medium-Term	
1	Rapidly declining production of tea.	Offer Rbl 200/kg to tea pluckers to restore manual plucking, thus restoring green leaf supplies to tea factories.	Mount a mission to investigate the present state and future prospects for the Georgian tea industry, <i>vis-a-vis</i> foreign suppliers, especially India, Sri Lanka and East Africa.	The identification of a streamlined competitive, (possibly fully mechanized) Georgian tea industry.
2	Privatization of tea growing.	Carry out a survey to determine optimum size ranges for tea production units.	Promote privatization of tea growing for a range of different enterprise sizes.	The establishment of a sustainable tea industry where Georgia can demonstrate a competitive position in supply of tea to world markets, and the conversion of non-viable tea into more useful purpose.
3	Future possibility that productivity of manual tea plucking may fall below that acceptable for an expanding Georgian economy.	Mount a survey on tea picking productivity, for both manual and mechanical plucking.	Investigate world sources of small-scale mechanized tea plucking machinery and evaluate these in Georgia.	To ensure the longer-term viability of the Georgian tea industry.
4	High ratios of fuel oil consumption per tonne of made tea produced.	Carry out a survey of all existing tea factory machinery.	Where viable use loan money to replace inefficient green leaf dryers.	Improved fuel efficiency.
5	Impending crisis in marketing the 1994/95 crop of citrus.	Immediately initiate a study by specialists to find markets and investigate transport alternatives for the reported 100 thousand tonne crop.		
6	Declining state sector production of citrus (state farm yields being 50% those of the private sector due to total lack of inputs).	Immediately fully privatize all state citrus farms. Promote the individual responsibility system on all former Kolhoz citrus areas, with an adequate incentive system related directly to individual effort.	Privatize all Kolhoz citrus areas into privately owned and operated smallholdings. Support the citrus smallholder sector by technical and farm management extension services.	The establishment of a sustainable citrus industry offering adequate rewards to individual effort and entrepreneurial skills.

HORTICULTURAL CROP PRODUCTION ACTION MATRIX

Issues	Recommended Measures		Ultimate Objective
	Short-Term	Medium-Term	
7 Rapidly declining production of deciduous fruits and felling of older orchards.	In the short-term fruit orchard felling is a natural response to declining markets and increasing transport costs (made worse in Gori district by restricted irrigation water supplies due to disturbances in Ossetia).	Ensure that the fruit and Viticultural Institute has sufficient high quality dwarfing rootstock and modern cultivators to await the reawakening of demand for deciduous fruit products within Georgia's former trading partners. New planting material should be <u>sold</u> to certified private nurserymen for multiplication prior to <u>sale</u> to growers wishing to replant their former orchard areas with low labor demanding, earlier maturing, higher yielding material.	To ensure that Georgia resumes its former important place as a supplier of quality produce to its near neighbors.
8 Increasing tendency towards home production of wine resulting in lack of fresh grape supplies to wineries, and resulting declining exports of wine.	Extend credit (through donor financing) to (privatized) wineries, not only to improve their wine processing facilities to match increasing international standards, but also to enable wineries to offer an attractive price to growers for their grapes and to supply inputs (initially fertilizers and crop protection chemicals in kind) to improve vineyard performance.	Investigate the formation of grape grower cooperatives, owning a winery in order to offer some advantages of scale, whilst retaining rewards for individual effort.	The establishment of a viable wine industry capable of offering world class wines at competitive prices.
9 Shortage of quality seed potatoes at affordable prices (due to FSU policies of zonal specialization resulting in the necessity to import potato seed from Belarus).	The utilization of existing tissue culture facilities to produce a first generation of virus-free potato seed by the Bio-Technical Institute, for multiplication by private sector certified seed growers prior to sale to commercial potato growers.	The sustainable continuation of this program.	Self-sufficiency in potato and potato seed production.

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IRRIGATION AND WATER RESOURCES ACTION MATRIX

Issues	Recommended Measures		Ultimate Objective
	Short-Term	Medium-Term	
Decline in O&M of existing systems due to lack of money for salaries, materials, fuel, machinery spares and repairs.	Proclamation by Parliament, (or Decree by Head of State), that all water should be paid for by all agricultural, industrial and domestic users according to amount supplied.	Draw up estimates of water delivery costs, and put in place effective payment collection mechanisms from users which are swiftly made available for O&M by state retained Water Enterprises.	Achievement of self-financing State-owned Water Enterprises selling reliable irrigation water to private WUAs.
Breakdown of effective and equitable water management on recently privatized irrigated lands.	Proclaim need to form Water Users Associations (WUAs) fairly representing all user interests.	Provide technical assistance for formation of water users associations by cooperating groups of 15 to 20 irrigators sharing a common supply channel. Individual WUAs should be grouped under umbrella association, remitting water charges to Water Enterprises.	Full responsibility for O&M of networks lying within private sector farms to be handed over to WUAs.
High energy demands of much of the former irrigation network.	Carry out detailed estimates on cost of providing pumped irrigation water (and pumped drainage) for agricultural purposes, with a view to retaining in use only those parts of the network that are financially viable to operate.	Rehabilitate only those parts of the network that are likely to prove financially viable.	To streamline the national irrigation network and eliminate all financially and economically inviable irrigation.
Poor condition of much of the national irrigation network, due to lack of maintenance over the last five years, and to damage following privatization and system disuse.	Carry out inventory on condition of <u>useful</u> network in order to estimate rehabilitation needs and costs.	Provide WB loan to rehabilitate useful parts of the existing network before handing over ownership and full responsibility for O&M within WUA areas to users.	Acceptance by WUAs of full responsibility for O&M of all parts of the network lying within land under private ownership.
Variable irrigation skills amongst many new irrigating farmers.	Water Enterprises to provide training to WUA members in crop irrigation needs and timing.	Introduce variable charge rates for water, according to value of crop and peak needs.	Establishment of a fair and equitable water charging system based on efficient irrigation practices.
Lack of water measuring devices at farm level.	Use proxies to estimate amount of water supplied to individual WUAs.	Install irrigation water measuring devices serving each WUA.	To facilitate accurate charging for water supplied.
Need to streamline the Water Enterprises, to make them more affordable by water users.	Review current staffing levels and operations with view of shedding spare capacity, including a critical survey of factories, plant and equipment held.	The Water Enterprises should contract out all operations that could be more efficiently carried out by private sector civil engineering and building contractors.	To obtain a lean, efficient public service, offering reliable affordable irrigation water (and domestic & industrial supplies) to users at affordable prices.

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FOOD PROCESSING SUB-SECTOR

Assessment

1. The Georgian economy is in the middle of a major transformation from a state owned, centrally planned economy to a market driven economy with widespread private ownership. This transformation affects all economic sectors, but particularly the agriculture and the food processing industry which has an important role in the Georgian economy.
2. The Georgian food processing industry is facing unprecedented challenges. Firstly, due to the disintegration of the Soviet Union, the sector lost a large part of its guaranteed export markets. Secondly, the state, which owned a significant part of processing capacity is privatising these enterprises.

Decreasing Output

3. The disruption of normal trade flows within the CIS and other Central-European countries (irregular supply of raw materials, energy and spareparts), decreasing domestic demand and civil war (road and railway blockades) combined to cause the decline of food production in Georgia.
4. According to the Ministry of Agriculture and Food, the average utilisation in 1994 for the food processing enterprises is only 7-10 % of installed capacity. Beef and pigmeat processing, vegetable oil and margarine, and sugar manufacturing have practically ceased. Even worse for the national economy is that the most important export-oriented enterprises of the food processing sector - wine, tea, non-alcoholic drinks and canning - are operating at only 10-15 % of their producing capacities.
5. In short, present output of the food processing industry (1994) is estimated to be only one-tenth that of the late Eighties.

Ownership and Direction of Food Processing

6. Georgia has more than 300 food processing factories in state ownership. The Ministry of Agriculture and Food supervises meat, dairy products, wine, tea, sugar, beer and non-alcoholic drinks and the major part of the canning enterprises. The State Corporation of Poultry Industry and Breadmaking controls the poultry farms and the poultry processing factories, the mills, compound feed factories and bakeries.
7. Only a few food processing plants belong to the cooperative sector. Farmer cooperatives own and operate 5-7 % of the total food processing capacity.

Privatization

8. The Georgian Government is vigorously committed to supporting the privatization program of the food processing industry, but so far this has been proceeding relatively slowly. State enterprises in the food sector have been privatised in compliance with the Law On Entrepreneurial Companies passed by the Parliament in 1992. Privatization is under the jurisdiction of the Ministry of

State Property Management and Privatization.

9. Privatization has been accomplished using three techniques, namely: i) Leasing; ii) Auction or competitive bidding; and iii) Transformation into (mainly closed type) joint-stock companies.

a) Privatization by Leasing

10. From the beginning of 1991 some unprofitable, loss-making state owned food processing enterprises were leased to workers and management, with an option to buy. The leasing period is usually 5 years. Presently, more than 30 processing enterprises (mainly meat, wine and canning factories) have been leased. Privatization by leasing has recently been discontinued, however. Out of the 30 leased enterprises 9 have already managed to fully pay the established leasing fee and are entirely privately owned.

b) Privatization by Auction or Competitive Bidding

11. Small-scale and medium sized enterprises are sold off via auction or competitive tender (first price sealed-bid method). The decision on whether to use an auction or a competitive tender is made by the regional departments of the Ministry of State Property Management. The valuation of assets of enterprises to be privatised were fixed as of January 1, 1993. These valuations were then used as the basis for reserve prices.

12. To date 24 food processing enterprises have been privatised by auctions or competitive bidding. It is very important to note, that the sales revenue through auction and tender was on average two and a half times more than the established asset value of the enterprises.

c) Privatization by transformation of enterprises into joint-stock companies

13. About 170 food processing enterprises are classified as large, with assets in excess of Rubles 30 million (on 1st of January 1993.) For these enterprises the preferred privatization technique is transformation into joint-stock companies. More than 30 larger food processing enterprises have already been transformed by this technique.

14. In some strategic subsectors like tea and wine making, the State intends to hold the majority stake in the transformed companies for the foreseeable future. Private investors having a maximum of 49 % of the shares cannot have the controlling interest.

15. In the other food processing enterprises 51 % of shares are to be offered to workers and management. The remaining 49 % will be privatised through vouchers. (The Georgian authorities intend to distribute vouchers to the entire population, the rules and value of vouchers per citizen have not yet been clarified).

16. Foreign investors have not participated in the privatization of food processing companies. So far only a few small joint-ventures have been established. All of them are dealing with marketing of processed food (wine and juices). The total amount invested by foreign companies is estimated at less than 100,000 USD in the whole sector.

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Recommendations:

17. The following recommendations are proposed:
- i) Seek agreement on what enterprises are to be sold first.
 - ii) Start with privatization of the most export-oriented companies, such as wineries, tea and citrus processing and canning enterprises. Those which have relatively modern technology should be sold first.
 - iii) Use the competitive bidding privatization technique in order to generate higher sales revenue in cash for the Treasury.
 - iv) Discontinue immediately the transformation of enterprises into closed type joint-stock companies in the competitive sector. (Wine, citrus processing, canning factories and tea processing companies should be put into this group.)
 - v) Instead of simple, mechanical transformation of an enterprise into a company, a more appropriate commercial approach to transfer them to private ownership should be taken.
 - vi) Re-examine any government plans to retain food processing enterprises under state ownership merely because such enterprises are considered to be of "strategic" importance.
 - vii) It is highly recommended to revise the government's ownership strategy on the State Corporation of Poultry Industry and Breadmaking. The Corporation should be dismantled and reorganised into viable operational units or independent profit centers. The poultry farms and processing units should be separated from the flour and bread making factories.
 - viii) Sell first the most efficient poultry farms and poultry meat processing factories. Close the inefficient immediately.
 - ix) Sell the bakeries through auctions or competitive bidding according to their size.
 - x) The mills and compound feed factories should be sold last. However, they also have to be managed as independent public companies. It is advisable to transform them into limited liability companies instead of joint-stock companies and in the second stage they should be privatised through competitive bidding. These companies will certainly be very attractive for investors.
 - xi) Eliminate the centrally organised and directed grain distribution system by commercialising imported or donated wheat and grain for fodder through open tenders or regional auctions. Donated milk powder should also be sold by auctions and not distributed through government channels. These auctions could be organised by state owned companies first, under supervision of government authorities in order to avoid unfair market practices.

- xii) It is recommended to develop a new accounting system for the transformed and privatised companies that provides valuable information and data on costs and benefits.
- xiii) It is also important for Parliament to pass a Law On Foreign Investment Protection as soon as possible. Without comprehensive legislation, reliable foreign companies will never invest in the Georgian food processing industry. Due to the typical lack of working capital in the Georgian food industry, the sector badly needs additional capital inflow in order to be able to improve its export performance.

AGRO-PROCESSING ACTION MATRIX

Issues	Recommended Measures		Ultimate Objective
	Short-Term	Medium-Term	
Demonopolisation and restructuring of food processing and input supply	<p>Elaborate program of demonopolization and restructuring of centrally directed input supply.</p> <p>Determine how to restructure state enterprises before corporatization and transformation</p>	<p>Implementation a market oriented input supply and output marketing system.</p> <p>Dismantle the State Corp.of Poultry Industry and Breadmaking into viable operational units or independent profit centers</p>	<p>Establish clear rules and a legal framework for market competition.</p> <p>Create institution to control unfair market practices</p>
Privatization process and techniques	<p>Develop market oriented privatization techniques.</p> <p>Extend the competitive bidding privatization technique to large-scale food processing companies.</p> <p>Elaborate a comprehensive reorganization program for non-attractive companies.</p>	<p>Privatise the most export-oriented companies such as wineries, tea and citrus processing enterprises.</p> <p>Restructure loss-making companies or sell off their assets in open auctions.</p> <p>Close non-viable and outdated factories remaining in state ownership</p>	<p>Completion of privatization of food processing state enterprises and input distribution chain.</p>
Foreign investment	<p>Establish a comprehensive legal framework to attract foreign capital. Accelerate legislative procedures on Law On Foreign Investment</p>	<p>Privatise some important large food companies through capital increase, particularly where new technology is needed.</p>	<p>Establish transparent and fair conditions and legislation for foreign investments.</p>
Inadequate accounting system	<p>Determine inadequacies of applied accounting systems, develop alternatives for internal accounting systems</p>	<p>Educate financial managers in new accounting practices.</p> <p>Facilitate installation of new accounting system by government incentives.</p>	<p>Put in place a meaningful system of internal accounting that is understood and help provide appropriate economic analysis for the management.</p>
Low capacity use, high unit-costs	<p>Reallocate products processed in small quantities or cease processing small volumes.</p>	<p>Provide for feasibility studies on how to reach optimal capacity.</p> <p>Rationalise factory output and operational costs</p>	<p>Increase capacity utilisation of factories to reduce unit-costs and to increase profitability of production.</p>

GEORGIA

Aide Memoire Summary

ENVIRONMENTAL ISSUES

1. The main environmental concerns of Georgian agriculture include: a) protection of topsoil from practices associated with privatization and from overgrazing; b) prevention of ecosystem contamination; and, c) rational design of support systems and development plans. It is crucial during the transition period to establish correct systems of environmental protection in order to avoid potentially negative impacts of planning and *ad hoc* implementation.
2. A number of serious environmental problems, including degradation of cultivated land, soil erosion and deforestation are associated with agricultural activities and logging.
3. Degradation of Cultivated Lands. The principal environmental problems of cultivated land involve soil loss and degradation. Reportedly, nearly 35% of agriculture lands are susceptible to water and air erosion. The primary causes are non-contour plowing of steep hill lands, and agriculture practices which do not protect the soil surface, (and poor irrigation in some regions as well).
4. Pollution from Cultivation. Excess and/or ill-advised use of pesticides and fertilizers has been a problem in past decades, polluting water and affecting wildlife. The use of agricultural chemicals has declined due to the general crisis in the economy, but could re-emerge.
5. Overgrazing and Upland Farming. The sharp increase in livestock ownership, by smallholder farmers adopting low input production methods, in the past five years has led to a two to a three fold increase in utilization of the country's grasslands, causing serious overgrazing in some areas. Particularly in drier areas on environmentally fragile slopes in hill and mountain districts there has been an alarming acceleration of gully and sheet erosion and general environmental degradation. Problems are further accelerated by the substantial increase in upland farming activities being conducted on marginal arable lands of the lower and mid hills, where clearing of trees and failure to adopt contour farming methods is causing rapid destruction of the country's natural resources and a decline in their productivity. While such destruction has not yet become widespread, growing land pressures in rural areas will lead to a process of degradation that will become irreversible if environmental protection measures are not adopted early.
6. Deforestation. Forests cover 2,750,000 ha, which remains as State property. The Ministry of Agriculture and Food Industry manages 580,740 ha. While industrial logging is relatively small, "sanitary logging" is widespread and reportedly accomplishes the same objective, although such logging is intended to remove only sick or damaged trees. During the last three years and especially during last winter, the main cause of localized deforestation was for fuel and construction timbers, much taken from along the roadside. Large scale uncontrolled tree cutting is expected in winter 1994 in different regions of Georgia, due to lack of other fuels.
7. Landslides. Landslides have become more numerous and destructive in recent years. Many deaths have been reported from landslides. Here, as elsewhere in the world, steep, slip prone slopes are stabilized by vegetative cover, especially tree roots. Removal of the vegetation layer promotes slides during heavy rainfall or snow melt.

Food Processing Privatization and the Environment

8. Privatization is an important structural change associated with market reforms, which may also make substantial improvements in the environmental performance of agricultural enterprises. Privatization plans should require new owners to reduce pollution to acceptable specified levels within a statutory period of time.

9. In order to make investment in privatized property attractive, government officials need to accept past liability and to determine what level of liability should be imposed upon the new owners. Therefore legislation should establish:

- a) an acceptable level of liability for damage caused to the environment;
- b) an acceptable level of required environmental protection.

10. The extent of liability for past damage will influence valuation of assets. Environmental uncertainties play a significant role in asset value determination. Environmental uncertainties result from:

- a) past contamination which has already caused physical harm to private or public property, and the environment (water, flora and fauna, etc.); or which will have harmful impacts in the future;
- b) future compliance problems.

Proposed Actions and Recommendations:

11. Over the short to medium term, priority should be given to the following tasks:

- a) Stop and Reverse Land Degradation Due to Cultivation: Agricultural practices should be tailored to environmental conditions. There should be surveys and research to determine best crops and practices to arrest land degradation and improve farm productivity. Results should be provided to farmers through development of an effective agricultural extension system. Special attention should be given to erosion control including avoiding cultivation on ecologically fragile lands such as steep slopes.
- b) Reduce the Use of Agricultural Chemicals: While fertilizers and pest control measures are needed; the use of chemicals which damage the environment should be reduced as much as possible. Biological control should be developed and applied to Georgian conditions. An agricultural research program is needed in conjunction with an effective extension system to convey meaningful results to farmers.
- c) Reduce Overgrazing: A comprehensive pasture survey and research program is needed to evaluate the actual condition of the grazing lands, to determine stock carrying capacities, and to identify areas which should receive urgent protection to halt serious degradation. The introduction of "certificates of stewardship contracts" under which farmers lease environmentally fragile areas under clearly specified conditions, should provide the appropriate land use rights instrument for protection of environmentally

- (12)

fragile lands from exploitative farming practices. Under the contract, if the land management conditions are not met, the farmer will be required to sell the land to another farmer, or return it to government after full compensation has been paid for improvements made. The compensation provisions ensure security of tenure of land covered by stewardship contracts.

- d) Stop and Reverse Deforestation: A major nationwide program is needed to stop the various causes of deforestation. Sanitary logging should be carefully controlled. Sources of alternative and economically viable fuels need to be found as soon as possible. New construction projects should be sited with much more care than in the past, taking environmental factors including trees into account. Livestock grazing in forest areas needs to be carefully controlled to allow successful tree reproduction.
- e) Control Landslides: Landslide-prone areas should be carefully surveyed to rank danger and to develop control or avoidance measures. A program should be mounted to plant suitable trees on critical areas to replace those which have been removed, and to encourage good vegetative cover through protection from overgrazing. Where the danger is considered especially great, human habitations should be removed.
- f) Raise Fines for environmental damage and index these to the rate of inflation.
- g) Expand the Size of Protected Areas for Nature Conservation, by balancing the needs of conservation (protection of threatened species and ecosystems), recreation and economic activities (grazing, etc).

GEORGIA

Aide-Memoire

GEORGIA AGRICULTURE AND FOOD SECTOR REVIEW
LIST OF MISSION MEMBERS

- C. Csaki, Mission leader.
- E. Brook, land reform, agro financing and project identification.
- A. Valdes, macroeconomic framework and trade policies.
- O. Honisch, crop production, input supply and mechanization.
- J. Beeny, horticulture, irrigation and agriculture resource base.
- E. Pitt, livestock, research and extension.
- G. Rasko, agroprocessing and privatization.
- D. Onoprishvili, environment and statistical data base.



**TECHNICAL ASSISTANCE TO THE ECONOMIC REFORM IN
GEORGIA
AGRICULTURE AND FOOD DISTRIBUTION SECTOR**

TERMS OF REFERENCE

Title of the project: Integrated Technical Assistance to Georgian Agriculture

**Georgian Operator: Ministry of Agriculture and Food Industry
Tsekavshiri (Georgian Alliance of Consumer Cooperatives)**

Content:

- 1. Background**
- 2. Project objectives**
- 3. Profile and tasks of the experts**
- 4. Reporting**
- 5. Management of the project**
- 6. Equipment**
- 7. Procurement arrangements**
- 8. Infrastructure and local support**
- 9. Financial arrangement**
- 10. Various**

1. Background

Georgia, one of the republics of the former Soviet Union (FSU), has a population of 5.4 million people. The country has a total of about 1.2 million ha of arable land used for perennial and annual crops and 1.9 million ha of pasture land. It offers a wide variety of climates and soils, and as a result many crops can be grown. Georgia is an exporter of wines, citrus and tea to the other republics of the FSU and an importer of cereals, dairy products, meat, poultry, agricultural inputs and fuel. It was one of the wealthier republics of the Soviet Union.

Today Georgia ranks among the countries of the FSU with the lowest per-capita income. This is a result of the disruptions in the former Soviet monetary, trade and transport systems and the of the civil conflicts, because of which the formal food production, processing and distribution system has nearly collapsed. Old structures and rules are being removed or changed but new ones are not yet in place or functioning. The informal sector of the economy has expanded tremendously. As a result the food situation in the urban areas may be critical during the winter of 1994-95, although harvests are forecast to be good. Price policy is a key issue. The Government is under pressure from the IMF and the World Bank to reduce its budget deficit. This deficit is partly due to food subsidies.

In a recent speech addressed to the international donor community¹ the Minister of Agriculture, Mr. George Kvesitadze, admitted that only about half of arable and perennial crop land has been privatised and that this "privatisation" still awaits the issuance of proper titles and the application of cadastral surveys. Without effective land legislation agricultural development will be held back - he said. An effective cadastral programme will require a significant investment in land surveys.

Many businesses formerly belonging to the Ministry have been sold off. The Ministry itself is defining a new role for itself - supporting the 300 - 400 000 farmers that have been created in recent years and is seeking a new internal structure with the help of one adviser being provided by the British Know How Fund.

Georgia is committed to market oriented policies - said the Minister.

Cereal production may expand in the near future in response to free prices

The role of the Grain Corporation (the main buying agency for domestic grain) must be re-examined.

Attention must be paid to employment generation, to foreign exchange earnings and to the environment.

Government barter trade must be reformed and reduced

Farmers Associations must be fostered at grass roots levels

A strategy for the development of extension services must be elaborated

¹ On July 12, 1991 the World Bank organised an informal donors meeting in Paris

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The Ministry will maintain a role in export marketing whilst private marketing must be supported.

The creation of a National Agricultural Policy Council is proposed.

There is no mechanism to provide credit to the 400 000 farmers of the country.

The supply of crop inputs and machinery spares has been disrupted and in the short term the former supply lines should be assisted whilst they are being transformed into independent private businesses.

Originally some 500 000 ha used to be irrigated. It is likely that this figure has fallen to less than 100 000 ha now.

There is a large need for small equipment in the area of agricultural mechanisation and the possibility of joint ventures must be examined.

Agricultural research and agricultural education must be rationalised and the veterinary service must be rehabilitated.

Some non-private activities are not under the Ministry of Agriculture and Food Industry (MAFI). The consumer cooperative TSEKAVSHIRI - a secondary recipient of the present TA - is independent. So is the Committee for the Land Cadaster - an indirect recipient of the present TA. The provision of inputs - a crucial element in the equation of agricultural development - is not managed by MAFI.

The GEORGIAN NATIONAL ALLIANCE OF CONSUMER COOPERATIVES "TSEKAVSHIRI" is a food distribution network in the first place. However the cooperative also includes production and processing units. The cooperative exists since 1850. During the Soviet period their role was limited to trade and they belonged to the state. They have a staff of 55.000 people. They claim a membership of 1 000.000 and are considering opening regional branches of their bank for which they would like expert advice.

Tsekavshiri is in the process of being privatised. Contacts with international cooperative organisations have been re-established. Whether it can become an effective organisation for farmers is to be seen, since its main obligation is to consumers and its emerging shareholders. To become viable under the free market it will require institutional restructuring and strengthening, training and the introduction of modern accounting and management systems. Its Chairman and its top management hope the present project will provide assistance in these areas and will increase their capability to attract foreign investment. They also wish to receive TA narrowly focused in specific areas of the food production and distribution system.

The 1991 TACIS programme established a series of reviews and planning studies of agricultural production, processing and distribution, with particular emphasis on milk, meat, fruits and vegetables and animal feed. This project started in march 1993 and was

effectively completed in July 1994 with the elaboration of an agricultural MASTERPLAN up to the year 2005.

The potential of Georgian agriculture - according to the Masterplan - is great. The supply of inputs such as fertilisers, seeds, pesticides and fuel will be gradually improved. A readjustment of the cropping pattern can place more emphasis on self sufficiency. At the same time the improvement of yields will allow a parallel increase in exports which will bring valuable foreign exchange. Yields are indeed low and this is a source of optimism for the future. Privatisation of land and assets must be accelerated. The privatisation of management may be even more important than the privatisation of land and assets thought the team leader of the project. Excessive subdivision or fragmentation of the land must be avoided during the privatisation process to guarantee the technical viability of the farm and a minimum revenue for the rural family.

Another 1991 programme was completed in June 1993 and resulted in recommendations that were used to formulate the legal basis for setting up intervening offices and marketing boards and recommendations on production.

2. Project Objectives

The project will support the MAFI and its peripheral bodies in their transformation from command to support institutions and in their efforts to rehabilitate and develop Georgian agriculture. It will have a second office at TSEKAVSHIRI which will be the second recipient of its technical assistance.

With twelve long term European and Georgian experts and numerous short term ones the project hopes to be able to respond fast and in an integrated coherent manner to any reasonable request of the recipients, for technical assistance and to provide useful studies, effective advice and needed training.

It will follow up where the 1991 projects have left. It will produce an improved and updated annual agricultural MASTERPLAN. Whilst covering in this Masterplan in an aggregate, summary, large scale, long term way, all aspects of Georgia's agricultural development, the project will focus specifically in five areas where a long term European expert will be assigned and special reports will be produced:

- Management
- Privatisation
- Marketing
- Farmers Associations
- Training

Thus in more detail the present project will seek mainly to address the following

1. MASTERPLAN

The continuing formulation, monitoring and adjustment of an overall policy for the agricultural sector, along the lines first suggested by the Masterplan elaborated by the 1991 TACIS study,

is required. It must systematically prioritise proposed actions, projects and investments and strive for an optimum use of the sector's export potential. This strategic document will be reviewed and revised twice during the 24 months of the project's life and would be submitted for discussion, correction and approval to the Minister of Agriculture and a National Agricultural Policy Council to be created.

2. MANAGEMENT

Both the MAFI and Tsekavshviri have requested assistance with reorganisation. A reorientation of the functions of the Ministry and a reorganisation of the institutional structure to suit a free market economy and a private agriculture is under way and a plan has been agreed; TACIS advice and assistance is welcome. Tsekavshviri wishes to examine critically its present communication, decision making and management procedures and to develop new more efficient structures better suited to the free market ; a monitoring and evaluation system has to be elaborated and implemented for both recipients and for the project itself.

3. PRIVATISATION

Assistance and advice is required in the establishment of the required complete and full legal basis and land cadaster for effective privatisation and private management of all agricultural land, property and equipment. Following the recommendations of the 1991 project (M.Sigaud) the Georgian Land Resources and Land Cadaster Committee is hoping to improve its land information system and should be helped to prepare all necessary documentation needed to obtain international financial and technological assistance for a full modern land cadaster.

4. MARKETING

The study of food production and distribution, of the food chain from the farm gate to the consumer, is required. Poor marketing is perceived by the recipients as a major weakness of the country and of their own institutions. The elaboration of practical recommendations is desired and assistance in implementing them is expected during the second and third phases of the project. Wine, brandy, tea, essential oils, mineral water are mentioned as first candidates for practical technical assistance.

5. FARMERS ASSOCIATIONS

The reorganisation or establishment of professional and farmers' organisations, input supply and service centres and/or effective distribution and marketing structures are essential in developing (small scale) private farming. Farmers should be assisted to organise themselves into "associations", to strengthen these associations and link them with other established associations. The role of the Ministry of Agriculture and Food Industry is to be defined. The word "cooperative" has negative connotations in the former USSR. It is vital not to impose a "model" however successful it was in other countries. The specific historical background and present economic and legal context of Georgia is to be considered.

6. TRAINING

Training and education are to be studied as a national issue of agricultural development and are to be provided to the recipients on a practical and ad hoc basis during the project. The

study of training and education should arrive soon to an agreed set of recommendations for its reform and reorganisation and their implementation should be pursued during the second and third phases of the project.

Training is desired by both recipients in many areas and at all levels: High level short seminars (1-2 weeks) in which the top management of the Ministry, of Tsekashviri and of other interested private and public bodies would participate are to be organised in Georgia and Europe, by European Universities specialised in agriculture and in the areas of management and administration, of marketing, of project analysis and evaluation. A workshop on how to do business with Europe has been requested. Similar topics are to be covered in greater depth and at greater length during short courses of 6-8 weeks to be organised in Georgia. Some two hundred students would be expected to participate in these. A few dozen students would be invited to attend special courses and a study tour in western Europe. Some of the courses and tours will be organised in collaboration with European cooperative unions. The project would also cover all expenses for eight distinguished students to study for an agricultural postgraduate degree such as Agricultural Economics or Agricultural Marketing, or Agricultural Management for a period of 12 months in a European University.

7. OTHER

Assistance in setting up an information dissemination centre at the Ministry of Agriculture has been requested and will be provided. Follow up assistance with the intervening offices recommended and established by previous TACIS projects is desired. Two pilot operations are foreseen, one for each recipient, their exact content to be defined during the first phase of the project. Short term specialists will be invited to answer different specific needs and requests.

The project will make a contribution to the economic development of Georgia, resulting in more food for the population and a reasonable income for farmers and personnel working in the food sector. There should also be a beneficial impact on joint venture investment in commercially viable units of production, processing and marketing. Favourable impact on the balance of payments is expected, as exports are stimulated, bringing in foreign currency. The present project and its team of experts will act as a facilitators to attract other donor financed investment and economic cooperation projects.

These objectives are consistent with the Indicative Programme for the years 1993-1995, the Georgian agricultural reform programme and the requests formulated by the Georgian Ministry of Agriculture and Food Industry to the EC and the recent statements of the Minister of Agriculture to the Paris Donors Meeting organised by the World Bank on July 12, 1994.

A participative approach at all levels and at all stages is essential. The particular economic, cultural and political background of the country, and its regions, has to be taken into account. The technical assistance team can only suggest solutions or actions, but the competent local authorities will have to take the necessary decisions and implement the required activities and actions.

3. Tasks and profile of the experts

The project duration will be 24 months utilising 115 man months of European experts and 131 man months of Georgian experts. Their use over a 24 month period is shown in the diagram on the following page along with an indicative overall budget for the project.

Experience of the former USSR, experience of training counterpart professionals, a participative approach and a proven ability to undertake written and verbal advisory work at senior Government level are considered a major asset for all experts. Previous collaboration and common work experience by some members of the team and by the team leader and the assistant team leader in particular would be an advantage.

All experts must be persons of wide experience and must have the ability to provide formal and informal training. The experts are assigned by the present terms of reference a main task but must also be able to substitute and complement each other according to the team leader's instructions. The team will have two offices. A main one at the MAFI where the team leader and his Georgian counterparts will be permanently resident and a second office at Tsekashviri where the assistant team leader and his counterparts will reside. The other members of the team will be assigned to one or the other office or any third related office by the team leader according to the projects needs.

This is integrated technical assistance in the sense that the team as a whole must by the end of the first phase (month 8) have developed a thorough knowledge of all aspects of Georgian agriculture and must be able to respond fast and effectively to requests for advice and assistance from the recipients. It will assist in the implementation of the policies and recommendations that it will have helped to formulate and get accepted. This integrated TA also in the sense that it brings together European and Georgian experts in an attempt to marry the latest theoretical and technological knowledge with a direct understanding of local conditions and particularities. Expert opinion offered but not understood and sincerely accepted by the Georgian recipients will not serve the purposes of this project.

A provision has been made for two pilot operations, one for each recipient. Their character will be experimental, demonstrative and educational and their exact content, purpose, location and management will be decided by the team leader in collaboration with the recipients.

Resident expatriate experts.

1. *Team Leader (macro-agricultural economist)*

The team leader will have overall responsibility for the successful implementation of all aspects of the project and special responsibility for liaison with the Ministry of Agriculture and the Government of Georgia. He should have a higher degree in AGRICULTURAL ECONOMICS and at least ten years experience in macro planning and/or large scale policy advice. Experience of the consequences of a transition from a command to a market economy and some knowledge of the Georgian or Russian language will be an asset. He should have a proven track record in project management and exceptional interpersonal skills in managing a multicultural team of international and national experts. He will participate in the teaching of seminars and courses. Main direct task : preparation of revised agricultural Masterplan on the 12th and 24th months of the project.

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2. *Assistant Team Leader (agricultural marketing economist)*

The assistant team leader will help the team leader in all his tasks and be able to replace him during his absence. He will have special responsibility for TSEKAVSHVIRI. He should have a university degree in AGRICULTURAL MARKETING, and at least ten years relevant experience. He must have a thorough understanding of the institutional framework in the agricultural and food sector, preferably with experience of the consequences of a transition from command to market economy system. He will participate in the teaching of marketing seminars and courses. Main direct tasks : study of the food chain, study of Tsekashviri.

3. *Administrative-management specialist*

The specialist should have a higher degree in management and/or law and at least ten years experience related to the organisation and reorganisation of government departments and or Ministries or other large scale organisations. Experience of the former communist countries and of administrative reforms relating to agriculture will be a major asset. He will carry out a detailed management study of MAFI and its related institutions, formulate in collaboration with the recipients and the counterparts detailed recommendations on the new management structures to be set up and assist towards their implementation. He will assist and advise the Minister of Agriculture in implementing managerial and administrative reforms and will assist in setting up a monitoring system for the project and the Ministry. He will assist in setting up an Agricultural Information Centre at the Ministry. He will participate in the teaching of management seminars and courses. Main direct tasks : Management study of Tsekashviri, assistance to the institutional reform of the Ministry

4. *Cooperative Specialist*

The specialist should have a higher degree in agriculture or a related subject, and have at least seven years of experience. He should have a background in farmers' associations or professional organisations, promoting the interests of the small-scale farmers. This experience should preferably include more than one country in the European Union (EU), in order to avoid the promotion of only one "model". He should be able to work under difficult conditions and also understand the real situation of farmers and economic operators in countries such as Georgia. A proven track record in promoting such organisations is considered an asset. He will participate in the teaching of seminars and courses. Main direct task : study on Farmers Associations.

5. *Land Privatisation and Cadaster Specialist*

This expert should have at least seven years of practical experience in land cadaster issues and land privatisation or land reform. A university degree is required. He should be able to study the legal, technical and institutional aspects of land privatisation in collaboration with the MAFI, Tsekashviri and the specialised Ministry of State Property Management and should provide practical guidance in privatisation issues and in the preparation of the land cadaster. Main direct task : study of land privatisation.

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6. *Agricultural Training Specialist*

This expert will have the highest academic qualifications in the area of agricultural economics (Ph.D.) and at least seven years experience in setting up, managing, monitoring and teaching training courses in the field of agriculture. Previous experience of training courses addressed to students from the former communist countries is required. Main direct tasks : study of agricultural training and education in Georgia, preparation and management of seminars, short courses and study tours.

National experts

National (Georgian) experts will shadow, assist and complement every long term European expert. Their qualifications experience and profiles should mirror as closely as possible those of the main European expert under whose guidance they are expected to work. They will be involved in all aspects of the work and are expected to be able to replace the European experts when absent. Their on the job training is in itself an important output of the project. The support that will be indirectly provided to the local consulting firm that will manage the local experts also constitutes a contribution towards the establishment of a free market network. The recruitment of local experts will be carried out during the inception phase of the project in close cooperation with the EC Coordinating Unit in Tbilisi and the beneficiaries of the project.

Short term specialists

The exact list of short term experts and their timing is to be proposed by the tenderer and will be an essential element in the evaluation of the offers. During or before project implementation, this planning can be adapted on the request of the team leader and his counterpart, if agreed by TACIS. The following is a first indicative list of short term specialists that may be required.

Legal specialist (with knowledge of the former Soviet legal system)

Specialist in land cadaster.

Specialist in information centres

Specialist in food processing (Specialisation as needed)

Specialist in accounting and/or business administration

Credit and/or banking specialist

Extension specialist

Irrigation specialist

Information specialist

In the course of the project, the team leader has to prepare the specific terms of reference, bearing in mind the tasks to be undertaken and the need to make the best combination and use of the experience and expertise of the individuals whom he proposes. He should relate these

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terms of reference to the detailed work plan of specialist input that he has proposed, bearing in mind the need for coordination and phasing.

All short term specialists should have a university degree or the equivalent professional qualification and preferably seven years relevant professional experience. Experience in Eastern Europe, and in particular the FSU, is considered an important asset. All members of the team should have an excellent command of English. A working knowledge of Russian on the part of at least one member of the team would be an advantage.

4. Reporting.

Reports will be provided regularly by the consultant to the Commission through the Coordination Unit and the Delegation of the Commission when one is established in the Republic of Georgia, and should follow the guidelines of the Commission.

Standard reporting, contractually required under the TACIS programme, are an Inception Report, to be provided 6 weeks after the project start, and brief monthly financial and administrative reports to be provided about the 15th of each month to the Coordinating Unit and the Delegation for forwarding to the Commission, following the check list provided by the Commission. These reports should also be accompanied by any documentation relative to contractual performance, especially in the light of payments to the consultant.

Reports to be provided to the Commission and the Beneficiary during the project include:

- Inception Report (Team leader month 2)
- Findings and proposals on training. Progress and final reports. (Training specialist - months 8, 16, 24)
- Findings and proposals on management reform. Progress and final reports. (MAFI & Tsekavshiri) (Management specialist - months 8, 16, 24)
- Findings and proposals on privatisation and the land cadaster. Progress and final reports. (Land reform specialist - months 8, 16, 24)
- Findings and proposals on farmers' associations, progress and final reports. (Cooperative specialist - months 8, 16, 24)
- Findings and proposals on agricultural marketing and on Tsekavshiri, Progress and final reports. (Assistant team leader months 8, 16, 24)
- Updated agricultural MASTERPLAN (Team leader - months 12, 24, drafts 30 days earlier)
- AIDE-MEMOIRE (All short term experts upon completion of visits)
- Brief monthly report of 800 words on overall project progress and plans (team leader)

- Project Completion Report, 3 months before full project completion, including recommendations for further action and follow-up
- A Final Report on the Technical Assistance Programme.

Major reports should be written in English and include an executive summary (10-20% of the full length) in English and in Georgian. The Monthly progress report should be available in both English and Georgian. Normally 10 copies should be printed by the consultant for distribution, in consultation with the Coordination Unit, to the Government of Georgia, to the Commission and to other counterpart organisations designated by the Ministry of Agriculture and Food Industry.

The team leader will travel four times a year to Brussels to liaise with the appropriate TACIS officers. All other experts including the national (Georgian) experts will visit TACIS at least once a year.

5. Management of the project

The project will be managed under the technical assistance contract with the consultant, who will be responsible in every respect for the satisfactory implementation of the project and for ensuring good liaison with and reporting to the Coordination Unit, the Delegation to be set up in Tbilisi and to the Government of Georgia, for all aspects of the execution of the project. The main European consultant is expected to go into partnership with a local Georgian consultant in order to obtain the required national (Georgian) experts. Assisting young Georgian consulting firms to play this role and enter into partnership with European consultants is in itself a significant objective of the present project.

The final recipient is the Ministry of Agriculture and Food Industry (MAFI) and a secondary beneficiary is the consumers cooperative Tsekavshiri. Any uncertainty concerning the area of responsibility will be resolved by the team leader. The two recipients will ensure liaison with and support by their subsidiaries, relevant State Committees, research and training institutions, local and district organisations and any public institution involved. The MAFI and Tsekavshiri will ensure that the infrastructure and counterpart personnel will be available in the respective offices to the consultant on a full-time basis.

6. Equipment.

Equipment which will be passed to the recipients and the local contractor at the end of the project will be required for the consultants office and an indicative list is as follows:

- Personal computers; desktop and laptop or notebook, modems, scanners and network hardware and software
- Computer software (licensed for required number of computers)
- Printers; desktop and portable

- Fax machine
- Photocopiers
- Consumable office supplies

Training costs include teaching equipment, costs of organising training sessions, seminars, visits within Georgia and to Western Europe. Separate indicative provisions have been made for equipment required by TSEKAVSHIRI and by the two pilot operations to be set up.

In order to guarantee a minimum of operational independence, additional equipment is required, such as two 4X4 vehicles for the two team leaders and regular cars for each of the long term experts, and small power generators with all necessary spares for their offices and homes. The consultant may give an indicative list of other equipment required at the tendering stage. The equipment for personal use of the experts is to be included in the price for experts. The tenderer will prepare a final list for inclusion in the Inception Report in consultation with the European Commission (EC) and the beneficiary.

7. Procurement arrangements

The consultant will purchase all equipment once the technical performances specifications have been agreed with EC and approved by CU. The consultant will follow standard CU procedures:

- up to ECU 5,000 - direct purchase allowed.
- ECU 5,000 to ECU 50,000 - direct purchase with restricted consultation of at least 3 suppliers in EC member states and with prior approval of the Commission. Proof of consultation will be required with Financial Reports in the form of pro-forma invoices.
- above ECU 50,000 - open call for tender, advertised in the EC Official Journal with prior approval of the Commission. Contract to be placed in line with 'General Conditions for Supply Contracts' and financed from TACIS funds.

8. Infrastructure and local support

In general terms the consultant is responsible for providing the equipment whereas the Counterpart Organisation is responsible for providing local facilities and services which shall be free of charge to the consultant. Sometimes the consultant may have to provide appropriate incentives but normally the counterpart organisation will provide the following:

- Local specialists to assist the Consultant in his work.
- Adequately serviced offices, including a meeting room.
- Telephone lines for national and international communication.

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- Translation and interpretation services.
- Secretarial staff, with the appropriate skills.
- Local transport as required.
- Drivers and other staff as necessary.

The Counterpart Organisation will also provide such assistance as is necessary with arranging visas and customs clearance and inland transport for imported equipment.

9. Budget

The budget available for this project is 3.300.000 ECU drawn from the TACIS national Programme as follows:

1992 Action Programme	1.500.000 ECU
1993 Action Programme	1.800.000 ECU

with the following *indicative breakdown*:

Expatriate staff:	2.000.000 ECU
Local staff	500.000 ECU
Equipment for demonstration	300.000 ECU
Reimbursable	500.000 ECU

10. Various

A. BRIEFING OF FIELD STAFF

In the implementation of TACIS Projects, it is essential that the field staff of the Consultant (i) be adapted to the local environment (in particular, in their relationship with their local counterpart); (ii) show creativity in the project implementation; (iii) bear in mind a number of key elements for successful Technical Assistance projects (sustain ability, multiplier effect and financial viability).

A.1. The Consultant is expected to brief thoroughly the proposed team of experts (especially the Team Leader) who will implement the project in the beneficiary region.

The objective of this briefing will be to implement as successfully as possible TACIS projects by preparing the field staff with general information on the beneficiary country (political situation, description of the Agriculture and Food Sector, etc.) as well as "practical" information (customs, visas, local currency, etc.).

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A.2. In addition, the Team Leader is requested to attend a one day briefing session held by the Agriculture and Food Sector of the TACIS Programme, covering the following issues: the TACIS Programme in general, the experience gained during the previous TACIS Programme in the Agriculture and Food Sector and specific technical information linked to the Project.

B. PROMOTION OF TACIS PROJECTS

During the implementation of the Project, the Consultant will promote the TACIS Programme, and the actions undertaken in the Agriculture and Food Distribution Sector.

The objective of promotion will be to improve the local awareness on the integrated TA Programme in food production, processing and distribution, by showing the positive and visible results of the project.

B.1. Promotional actions will be targeted primarily towards audience of the beneficiary country: local authorities, personnel concerned at all levels of the agricultural & agri-industry sector and the public at large. In addition, the Consultant is free to target promotional actions towards EC Countries.

B.2. The consultant will undertake the necessary actions to attain the objective mentioned above. In particular, he will establish links with the national, regional and local TV, radios and newspapers, in order to obtain regular press coverage of the project and the TACIS Programme in general. When applicable, the Consultant will co-ordinate with the EC Delegations and the TACIS Co-ordinating Units in the NIS.

In all his reports, the Consultant will provide the EC Project Manager with a specific document compiling copies of all newspapers' articles and videotapes of TV Broadcast related to his project, published in the NIS or in the EC.

B.3. The Consultant will widely and prominently display the EC logo (and, when existing, the TACIS logo) in order to give a clear visual identity to the project. The consultant will consequently budget appropriate promotion material (stickers, flags, badges, pens, lighters, etc.) in the financial proposal and supply it in sufficient quantity. This material will be attached to all equipment provided in the framework of the project (vehicles, computers, demonstration or training equipment, etc.), displayed in relevant offices and premises, and distributed to the local personnel involved in the project.

B.4. The Consultant will also prepare for the TACIS project manager, as frequently as requested, short synopsis of the project progress to be included in all TACIS information documents.

B.5. On the issue of Public Relations, the Consultant is reminded to his obligations specified in the Special Conditions of the TACIS Service Contract (Article 65 bis). The Consultant will also follow the General Conditions for EC Public Service Contracts, in terms of responsibility and, in particular, Articles 62 to 69.

C. DISSEMINATION OF TACIS CORPORATE MEMORY

1. The Issue of Technical Information in the CIS

Technical information is necessary to support the transition to market economy in the CIS. In addition to specific actions foreseen in the framework of TACIS projects, Technical Assistance should also be provided through dissemination of technical information in the CIS. This dissemination is playing an essential role in the creation and/or support to the multiplier effect in the field of technical know-how.

Technical information is widely being produced during project implementation under various forms: training programmes, training modules, technical working papers, technical glossaries, software programmes, audio-visual material and any other type of material produced for training and replication purposes.

This production constitutes the TACIS Corporate Memory (TCM) and is a visible output of the TACIS Programme. TCM is of high added value, due to the scarceness of adequate and reliable information, reports, programmes and manuals necessary for the economic restructuring in the CIS. Furthermore, this production has been "field tested" in the framework of TACIS projects and is adapted to the local environment. Its dissemination should consequently be the adequate initiative to increase the multiplier effect of field projects' results and to fill in the lack of locally available technical information.

2. Tasks of the Consultant

The Consultant will submit to the EC budgeted proposals of contribution to the dissemination of TCM.

During the inception phase of the project, the Consultant will be required to identify contributions to the production and effective dissemination of technical information related to the project. These contributions should be identified with other TACIS projects, with which co-ordination is relevant. These other projects may be of other TACIS sectors and concern other local areas.

These contributions will be implemented at the most adequate stage of the project, after approval of the EC on the planned activities and related budget.

In addition to any other task which the Consultant might consider as relevant or which is being requested by TACIS services, these contributions to information dissemination will include at least the following tasks:

- Choice of preferably one technical subject matter per produced material or at least focusing on a single main topic;
- Establishment of a communication strategy (identification of the target audiences, knowledge of local needs in technical information, etc.);
- When relevant, before the drafting phase, the Consultant will co-ordinate with other TACIS projects dealing with the same technical issue in order to produce a commonly

drafted document. The EC will designate the leading firm for the implementation of the proposal.

- Drafting of the contents of the material;

In doing so, the following elements will be taken into account:

1. technical quality of contents
2. country relevance: specify the geographical coverage and take into account local tastes and interest;
3. didactic value: understandable for the local audience;
4. replicability of field experience in terms of technical information and country relevance;
5. user friendly presentation (clear presentation, appropriate wordings, didactic illustrations, etc.).

The final version will be drafted in correct English.

- Translation of the produced material into Russian language and any additional appropriate CIS language; this translation will be cross-checked in order to ensure the best local understanding of contents.
- Production (preferably by a CIS publisher/editor) in quantities in accordance to the defined communication strategy;
- Dissemination of material, so that effective dissemination of technical information in the area of the project or other relevant areas in the CIS is ensured, particularly in the light of multiplier-effect;

On basis of the defined communication strategy and the project experience, the Consultant will use the most effective dissemination channels and networks (including the ones used in similar operations by other TACIS or Western projects).

The Consultant will also train adequate local manpower, who preferably participated to the project. This staff will have the adequate technical knowledge as well as communication skills and will transfer technical information on local level and for a limited period of time to be defined during the project.

- At the end of the project (or at an earlier stage of implementation, when relevant), for each document or material, the Consultant will provide the EC with the following:
 1. three copies of each existing version of produced material;
 2. a copy of the document on diskette, in case of written material;
 3. a completed "TACIS Corporate Memory Summary Sheet" (the guidelines for this document will be provided by the EC).
 4. a complete final report on the implementation of TCM dissemination, including all relevant information such as production and distribution networks.

CONSULTATIVE GROUP MEETING FOR GEORGIA

Paris, November 21, 1994

Pledging Statement of the German Delegation

Germany intends to support the stabilization and reform program of the Government of Georgia (GOG) in three ways:

- First by the immediate implementation of the agricultural sector program, agreed upon in 1993 amounting to 7.5 million DM. This loan on IDA terms will be used for the purchase of urgently needed spare parts and equipment. According to KfW, which is prepared to sign the loan agreement in November, 0.5 million DM can be disbursed in 1994 and 6.5 million DM in 1995.

We strongly support the intention of the GOG to liberalize prices, to privatise agriculture production as well as the processing of agricultural products as this is a basis for the development of private agriculture.

- Second, we are prepared to provide another 20 million DM earmarked in 1993 for the food processing industry in fast disbursing commodity aid (we have not the possibility to give balance of payment aid). We therefore welcome the commitment of the GOG to break up the quasi-monopoly of the Bread Corporation and the monopoly for the procurement of wheat, as this would help the German Government to make the funds available.
- Third, we intend to use funds from the Federal Budget of 1995. Due to recent elections in Germany, I guess the Budget law will not pass parliament before February/March next. I therefore cannot commit my Government concerning funds from the 1995 Budget. If funds become available we assume that they will be disbursed rapidly.

Let me briefly pass to other fields of assistance and cooperation. Since 1992, Germany has been providing Technical Assistance (TA) in a number of areas, totalling 9.9 million DM as a grant. We intend to continue our strong commitment. As the agricultural sector has become a sector of priority, though not the exclusive sector for our cooperation, I could imagine that the major part of future TA funds will be used for the support of measures in the agricultural sector.

Part of the TA funds will be needed to continue important projects:

- There is agreement with the Georgian side to continue and enlarge the advisory services for economic legislation. I think this is a good example not just for a successful project but also for an effective coordination between the GOG, Germany, the EU and the Bank. Early 1995 there will be a planning workshop in Tbilisi and I would like to invite interested donors to participate.

- Germany is also ready to support the Ministry of Finance in the field of tax administration. As in the past, this project will be closely coordinated with the IMF and the Bank.

- Another field where TA is needed is privatization. We are ready to support the GOG in this field, and in the case of a positive outcome of a study that has just been completed, we are ready to provide TA to the ports of Batumi and Poti.

In closing, I would like to wish us all success in our endeavor to support Georgia on her way to economic growth and the improvement of living conditions for the population.

**Financial and Technical Cooperation
Federal Republic of Germany - Republic of Georgia
1992 - 1994**

**Federal Ministry for
Economic Cooperation and Development**

Bonn, november 1994

Georgia

as of 1 November 1994

Project/Executing Organisation	Description of project	Commitment in DM million	stage of Implementation
Financial Cooperation of which commitment 1993 of which commitment 1994		total 30.0 30.0 no new funds available in 1994	Government agreement on DM 30.0 million concluded
1. Study and Expert Fund	Financing of studies, secondment of experts to prepare financial cooperation projects	2.5 grant	Under implementation Financing agreement concluded
2. Sector Programme I in support of private agriculture	The funds are provided for the transmission of investment loans to small family enterprises, smaller downstream processing plants and also larger agro-enterprises involved in processing. The loans are provided via a Georgian Bank.	7.0 (loan for investments) on IDA conditions 0.5 grant	KfW charged with implementation. Loan and financing agreements to be concluded soon. Expected disbursement: 94 DM 0.5 million 95 DM 6.5 million
3. Sector Programme Agriculture II		20.0 (loan for investments) on IDA conditions	still to be prepared

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Project/Executing Organisation	Description of project	Commitment in DM million	stage of implementation
<p>Technical Cooperation of which commitment 1992 of which commitment 1993 of which commitment 1994</p>		<p>total 9.9 4.5 3.0 <u>2.4</u> 9.9</p>	
<p>Study and Expert Fund</p>	<p>Fund gives possibility of implementing, at short notice and with little input, TC-projects of a smaller scope, studies and basic and advanced training of counterparts.</p> <ul style="list-style-type: none"> - Advisory services to Ministry of Justice and Parliament regarding economic legislation (deployment of short-term experts, provisions in kind) - Support in privatisation of economy (holding of seminars, assignment of short-term experts, supplies in kind, basic and further training together with Tiflis Business School, management advice to selected enterprises) - Promotion of health system (supply of medicaments and medical equipment) - Promotion of horticulture farming (extension services to farmers' associations and supply of vegetable seeds) 		<p>under implementation project extension envisaged initially until end-95.</p> <p>under implementation extension envisaged, planning workshops to take place beginning of 1995.</p> <p>under implementation follow-up measures envisaged.</p> <p>under implementation following-up project under preparation</p>

Project/Executing Organisation	Description of project	Commitment in DM million	stage of implementation
	- Support of banking system (deployment of short-term experts, holding of seminars)		finalized
	- Advisory services to Ministry of Finance on budgeting and finance (deployment of short-term experts, further training)		under implementation (from 19 November 1994 intensive continuation for 2-3 years prepared in a planning workshop).
	- Advisory services to Ministry of Environment on nature protection and environment legislation (assignment of short-term experts, supplies in kind)		under implementation; possible follow-up measures to be agreed upon at next consultations.
	- Study on Optimization of Poti and Batumi Harbours		GTZ will submit results of study shortly.
	- Support of business management training at Tiflis Business School		project offer under preparation, commitment of funds still envisaged for 1994.
	- Coordination of STEP and advisory services to Georgian government as to its use		under implementation

Donor Community Meeting

1. On Friday, 1st of July 1994 a meeting of donor agencies to Georgia took place in the German Embassy. It was a joint initiative of the German Embassy and the European Union's TACIS Coordinating Unit in Georgia.
2. Invitations were extended to the Embassy of the People's Republic of China, the Embassy of the Islamic Republic of Iran, the Embassy of Israel, the Embassy of the Russian Federation, the Embassy of the Republic of Turkey, the Embassy of the United States of America as well as to the European Union's TACIS Coordinating Unit, the United Nations Development Programme (UNDP) and the World Bank.
3. The purpose of the meeting was an exchange of economic assistance programmes to Georgia and to initiate a follow-up of the first meeting in order to improve coordination between donor agencies in Georgia.
4. The People's Republic of China has delivered 30 metric tons of products (mainly, medications) to Georgia. It has signed a treaty, with Georgia granting a 3.3 million \$ low-interest loan for the purchase of small tractors.
5. Germany's economic assistance to Georgia includes both technical and financial assistance projects. The Technical Assistance consists of advice in the field of economic legislation to the Georgian Ministry of Justice, support of privatisation, support in the health field, support of private farmers, support in the field of banking, advice in the field of budgets and finances to the Ministry of Finances and of advice in the field of ecological legislation to the Ministry of Environment. The Technical Assistance budget amounts to DM 4,5 million in 1993 and DM 3 million in 1994.
The Financial Assistance consists of a DM 27 million loan and a DM 3 million grant in order to strengthen private agricultural businesses. A first tranche of this loan (DM 7 million) will be issued in 1994.
6. On the occasion of President Yelzin's visit to Georgia 20 treaties have been signed between Russia and Georgia covering most sectors of cooperation between the two countries. Russia is focusing on the rehabilitation of the traditional relations. A interest-free loan worth 20 billion roubles has been given to Georgia. Georgia is free to choose the use of this loan. A grant worth 5 billion roubles was given in order to rebuild Tskhinvali (capital of Southern Ossetia). Humanitarian assistance is furnished

to the Russian minority in Southern and Western Georgia and in Abkhazia. The Avarian minority in Georgia receives support by the Russian government.

The delivery of energy to Georgia is under discussion.

It was underlined that a lot of Russians have left Georgia. Their expertise is lacking in Georgia while there are not enough Georgian experts.

7. USAID tentatively presented its programme for the budget year 1995 (through September 1995), which consists of approximately \$ 26 million. \$ 14 million will be spent for Humanitarian Assistance and \$ 12 million for Technical Assistance. The Technical Assistance programme includes projects in the energy sector in order to improve the infrastructure (\$ 6 million or more) in the field of democratic reforms focusing on the rule of law and the development of independent media (\$ 1.5 million), in the health field (\$ 1 million), in the field of privatisation (\$ 500,000) and in the environmental sector. USAID promised a general survey of all economic assistance projects that have been given to Georgia so far.

8. The European Union Technical Assistance to Georgia focuses on the support to Enterprises (7.3 million ECU), advice in the agriculture and food sector (7.2 million ECU) and the Human Resource Development (Government and legal advice) (6.1 million ECU). Furthermore Georgia was entitled to 132 million ECU of loans from the European Union.

9. The UNDP has identified some projects within its \$ 1.5 million, budget whereof one project is going to be implemented soon. It consists of advising the newly created aid coordination unit within the Georgian government (\$300,000). Another project to strengthen the social safety net has been identified.

It was underlined that the UNDP does not include World Bank projects.

10. The World Bank intends to grant two loans to Georgia. The first loan worth \$ 10.5 million on IDA conditions is an institution building loan.

Tentatively it was mentioned that another \$ 60 - 100 million loan (IDA conditions) for the next three years could be granted.

That includes a rehabilitation loan that could be granted if Georgia signs the stand-by treaty with the IMF. Its conditions are not underlined.

Another \$ 20 - 30 million loan could be issued in order to improve the municipal infrastructure. Furthermore, the World Bank is planning a joint project with the European Bank for Reconstruction and Development in order to rehabilitate three hydropowerstations in Georgia.

11. It was suggested to the Russian Embassy to host the next donor's meeting in about two months.

List of Participants

- 1) Geo Abbink, EU/TACIS Coordinating Unit
- 2) Achilles G. Adamantiades, World Bank
- 3) Marta Ruedas, UNDP
- 4) Hari Politopoulos EU/TACIS Coordinating Unit Team Leader
- 5) John Scott, Policy Advisor to the Head of State TACIS
- 6) Christine M Sheckler USAID
- 7) Feodor Starcevic UN Permanent Representative
- 8) Alexander N. Yakovenko Russian Embassy
- 9) Vladislav Vucetic, World Bank
- 10) Wang Jin Guo Chinese Embassy
- 11) Jakob von Wagner German Embassy

SURVEY OF WHEAT AVAILABILITY FROM THE 1995 HARVEST IN GEORGIA

Background:

This survey was carried out February 10-15, 1995 by William R. Furtick of Agricultural Cooperative Development International (ACDI) with the help of Save the Children Foundation (SCF) staff. This was requested and financed by USAID through a block grant with SCF. The results of this survey are based on official estimates of the Ministry of Agriculture and Food Industry (MOAFI) summarized in Table 1, a visit to the Mtsketa Seed Farm, discussions with TriValley Growers (TVG) and with the staff of the Private Farmers Union, a visit with the Vice-president of the Academy of Agricultural Sciences in Georgia and two field trips into some wheat growing areas for first hand observation.

Sources of Information:

The TVG is an American agricultural cooperative working under an AID funded Farmer to Farmer NIS regional project contracted with ACDI. TVF has been helping the Private Farmers Union (PFU) improve their seed and input distribution system. The PFU is the largest and perhaps most vocal organization of farmers resulting from privatization. They have about 25,000 members of which about one hundred have more than fifty hectares and the rest are smaller farms with a minimum size of one hectare. They cover all of Georgia with regional offices. They are operating like a supply and marketing cooperative in the U.S.

The Mtsketa Seed Farm is the main cereal crop research and seed multiplication institution in Georgia. It is responsible for breeding, selection and basic seed multiplication for wheat, barley, oats, hybrid seed corn, beans, soybeans and alfalfa. The visit confirmed it was fully operative with all programs functioning. They indicated that the process of multiplying the basic seed they distributed to a network of Government Seed Multiplication Farms for producing the seed needs of farmers had largely broken down. This is due to the inability of many of these farms to fully function because they lack fuel, machinery spare parts, money to buy fertilizer and herbicides and pay other operating costs. The basic seed from Mtsketa was distributed to the multiplication farms without problems and in adequate quantity. Apparently the multiplication farms sold part of this basic seed directly to farmers rather than plant it for multiplication. They also sold it on the open market for food or livestock feed to get operating money. This resulted in a severe shortage of winter wheat seed last fall. Although farmers also suffered the same constraint as the multiplication farms, they still appeared to have plowed much more land for planting winter wheat than the available seed permitted them to plant. This was observed on the field trips. These farmers are now looking for spring wheat seed. If it were available, they would probably plant more than 20,000 hectares. There appears to be only two ton of spring wheat seed available which would plant a maximum of about forty hectares.

The New Georgia Cereals Policy:

Dr. Robert V. Andguladze, Vice-president of the Academy of Agricultural Sciences of Georgia was visited. He led the effort to develop the Government of Georgia Policy on Cereals which passed the Council of Ministers on January 18, 1995. It is to form the basis of a new national cereal grain policy and requests for donor assistance. This details production targets, pricing policy and specific targets for donor assistance. Full implementation is scheduled in 1997. The figures in Table 1 are targets under this policy. The document for this program is not yet available in English, but was discussed in detail and SCF has a copy in Georgian. It deals with all cereals including wheat. It indicates a preference for shifting production increasingly to favor corn both for food and feed uses. The major target for donor assistance is for small scale machinery, fertilizer, pesticides and credit. This package calls for about \$455,000,000 of donor assistance over the next five years of which \$280,000,000 would be in the first year. It appears that part of this, in the form of agricultural machinery, has been committed by the Federal Republic of Germany, the Peoples Republic of China, and the rest may come from the pending World Bank Loan. This exercise may have resulted in the emergency request for seed wheat by the Georgian Government to USAID. Much of this plan seemed to hark back to the era of central planning..

Estimates of 1995 Production:

Based on these discussions and field observations, it is felt that the estimates provided in Table 1 are unrealistically high. The Director of the Mtsketa Seed farm indicated he expected a maximum production of 70-80,000 metric tons. This was based on the assumption that no more than 50,000 hectares, at most, of winter wheat was planted, and seed for spring planting is negligible. The Ministry estimates includes the production of a much higher than unusually planted spring wheat crop. The desire of farmers to plant a large area to spring wheat is confirmed by the PFU data. He also estimated lower yields due to the lack of fertilizer, herbicides and that lack of operative equipment and fuel would hamper harvest. In addition, lack of functional irrigation would further reduce yields, unless weather was unusually favorable. The basic seed crop on the seed farm is fully planted and in good condition, but the state of the multiplication farms is not improving. This would indicate a very large probable shortage of wheat seed this fall, and again in 1996. The need is also probably underestimated as small farmers that plant an increasing portion of the wheat crop are planting by hand rather than with grain drills. This increases the amount of seed required by almost three times.

Consumption:

The Government price policy on the purchase of wheat for coupons at lower than market price and unavailability of funds for payment on delivery is resulting in both the farmers and State Farms selling on the informal market. This makes it very difficult to determine

actual availability, production or consumption. A higher use as animal feed by the numerous new privatized small farmers who are increasing their livestock and poultry numbers very rapidly and sales across the borders also complicates gathering accurate data. There is clearly a rapid increase in the planting of small amounts of wheat for subsistence needs by a very large number of the new small private farmers. This may be adding considerably to the total production and reducing consumption requirements of officially traded wheat. Much of this production is thought to be from farmer saved wheat seed. There is also clearly a shift to greater production and consumption of corn both for food and feed. Since the official figures on need reflect past consumption patterns based on the Soviet era., this may cause the need estimates to be overstated both for human consumption and due to the collapse of the large scale State Livestock Farms, feed needs. Taking these factors into consideration, the total wheat needed and consumer demand indicated in Table 1 are both probably considerably higher than the actual situation. Demand for human consumption might well be 700,000 metric tons or less.

Issues Regarding Import of Seed:

Discussions on import of wheat seed indicated that some U.S. varieties have been tested, but their yields were much less than local varieties or those from the Ukraine or Russia. The highest yielding variety was examined and it appeared very similar in characteristics and appearance to the very high yielding Pacific Northwest varieties from the U.S. which are grown in a climate similar to Georgia. Even if adequate seed were imported for fall 1995 planting, there is not a satisfactorily functioning distribution system except the limited but rapidly growing private sector network of the PFU. The interest of their members in growing wheat is shown in Table I by the intent to plant 20-25,000 hectares this spring. This will happen only if spring wheat seed could be made available in the next 30-45 days. There is a large spring wheat production area in the lower elevations of Western Turkey using high yielding varieties developed with the help of the International Wheat and Maize Research Center (CIMMYT) in Mexico. This might offer the best hope of getting spring wheat seed in time for planting. There is some supply of locally produced nitrogen fertilizer, but shortage of money to purchase it. Herbicides are not available. Expansion of the TVG seed distribution effort with PFU, now involving hybrid corn, to include wheat seed would appear to be a vehicle USAID could use for any assistance through wheat seed import. PFU proved a satisfactory vegetable seed distribution mechanism for German technical assistance through GTZ and is rapidly gaining strength as a private sector alternative to the collapsing Government distribution system. Since TVG activities are already AID funded, they offer a rapid vehicle through contract amendment.

Special recognition is given to David Bedoshvili and Temo Jorbenadze of SCF for their collaboration.

Table 1

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Information obtained	Source of Information		
	Ministry of Agriculture, Ednar Mikanadze	Agricultural Academy (Estimates)	Planting/Intensions PFU Members
Hectares planted to winter wheat in fall 1994	73,000	"	3,000 ha
Added hectares to be planted to spring wheat 1995	22,000	"	20-25,000 ha
Anticipated productivity in 1995	2,1 MT/ha	"	3 MT/ha
Hectares planted to winter wheat in fall 1993	75,000 ha	"	"
Added hectares planted to spring wheat 1994	2,000 ha	"	30%
Total production in 1994	104,000 MT	"	2-3 MT/ha
Seed required for planting fall 1995	51,000 MT	46,000 MT	20-30,000 MT
Seed available for fall 1995	30,000 MT	"	2,000 MT
Tons of wheat needed for 1995-1996	2 million MT*	2.2 million MT	150,000 MT
Total consumer demand for wheat	990,000 MT**	1.1 million MT	50,000 MT
Expected production from 1995 harvest	135,000 MT	"	"

*Including livestock feed

**Calculated as 180kg/person for the population of 5.5 million.

" No data is available