LAND O'LAKES, INC.

COOPERATIVE SUPPORT GRANT
COOPERATIVE AGREEMENT NUMBER: PDC-0192-A-00-1045-00

QUARTERLY REPORT
OCTOBER 1 - DECEMBER 31, 1992
I. Activities this quarter:

Core Cooperative Support Grant

1) "Dairy Production and Management Techniques" training course and dairy production technical assistance to small dairy farmers and cooperatives in Northern Mindanao region, the Philippines. Trainer/technical specialist: Michael Sohl. September 30-October 17, 1992.

See Appendix A for a picture of his class. Refer to Appendix B for course rosters and profile graphs of gender percentages and professional mix.

2) Russia trip by Kristin Rens, Project Development Manager. October 10-14 and October 18-26.

The purpose of her trip was to evaluate and reconfirm contacts and focuses of grants received for implementation in Russia and to develop additional in-country collaborators and concepts for Land O'Lakes in new areas of the emerging private agricultural sector.

The trip report for this and the other trips funded under the core cooperative support grant are attached in Appendix D.

3) Russia trip by Martha Cashman, Vice President, International Development; Bob Tenner, Director of International Ventures, Dairy/Foods Division; Dave Gray, Vice President, Foodservice Marketing--all of Land O'Lakes. Early October, 1992.

This team met with the farmers and management of the Venëv cooperative, explaining how a cooperative and its board is formed and how they operated. The team emphasized that Land O'Lakes can offer much in increasing dairy production through improved nutrition, sanitation, forage, herd health, and management practices.

Appendix A has two pictures taken with the plant manager at the Venëv dairy plant.

The team also met with AKKOR, a large farmer cooperative, regarding future technical assistance programs and the placement of Land O'Lakes trainers in Russia.
The cooperative support grant paid for the airfare of Tenner and Gray; as match, Land O'Lakes paid for their time.


Kristin became familiar with the dairy sector and agricultural cooperative movements in Kazakhstan and established relationships with counterpart organizations for collaborative development activities. In-country training for all levels of dairy producers and assistance in forming a women’s dairy association is recommended, as a mission buy-in.


The purpose of this trip was to evaluate and reconfirm contacts and focuses of grant received for implementation in Ukraine and to develop additional in-country collaborators and concepts for Land O’Lakes in new areas of the emerging private agricultural sector. As a result of this trip, Kristin recommended developing a rural development commission to generate a stronger voice of support for and information to the farmers and agricultural entrepreneurs in the rural, private, agricultural sectors of the L’viv Oblast.

6) Trip to Poland and Hungary by Patty Miller, Land O'Lakes writer. November 7-14, 1992.

Patty Miller wrote an article intended for publication in the February 1993 issue of Frontlines regarding Land O'Lakes development efforts worldwide (see attached as Appendix C).


Bohdan Chomiak’s visit served two purposes: 1) to familiarize himself with the cooperative system and Midwest agriculture, and 2) to discuss collaboration between Land O’Lakes and the Ukrainian Resource and Development Centre, located in Kiev, for implementation of Land O’Lakes’ Farmer-to-Farmer program for L’viv, Ukraine.

8) Colleen Bryn began as the program specialist for the cooperative support grant in November, 1992.

Colleen’s job consists primarily of writing and monitoring consulting agreements, travel authorizations, and reports for USAID, and acting as a liaison within the division for USAID.
New Initiatives for the Baltics

Note: The trip reports for Gary Seiler, Joel Stangeland, and Ken Wahlin are attached as Appendix E.


The purpose of Gary's trip to Latvia was twofold: to conduct a 5-day training course and to provide technical assistance. From November 23-27, Gary taught 28 people from the Valmiera milk district the principles of milk procurement and assembly, including such topics as establishing cooperatives, milk pricing, maintaining milk quality, managing mastitis, and staffing a field force. Upon the request of a Gundars Kleinbergs of the Latvian government, he conducted an impromptu half-day seminar with dairy officials of the Riga district. He provided technical assistance November 30 to December 4 to several large collective farms and some of the new private farms. Refer to Appendix B for course rosters and for graphs that depict the gender percentages and professional mix.


Joel provided technical assistance to six dairy plants in Estonia, providing training in cooperative organization, raw milk and product quality, pasteurizer functionality, and energy conservation. Joel recommends follow-up training in marketing of dairy products, management skills, raw milk quality assurance, product standardization, energy conservation, and basic dairy processing sanitation practices.

The photos in Appendix A show a lab in an Estonian dairy plant that Joel visited and a group of dairy professionals who received technical assistance, including Jaan Madis.

Joel identified Jaan Madis, head of the mechanical department of the Paide Dairy Plant, as an excellent candidate for a U.S. internship. Jaan traveled to Minnesota for a one-month participant training program January 3-29, 1993, that features training in dairy plant engineering and quality assurance. This will be more fully described in the annual report.


In Vilnius, Lithuania, Ken Wahlin conducted one week of technical assistance in the food plant operations. Ken also conducted two 5-day courses in food plant operations, which were funded under USAID grant number: EUR-0024-G-00-1072-00.
II. There were no problems/delays/adverse conditions that substantially affected program objectives, time schedules or project work activities.

III. Consequently, there were no actions taken or contemplated and any assistance needed to resolve any situations.

IV. There were no favorable development or events that enabled time schedules to be met sooner than anticipated or more work activities to be performed than originally projected.

No new USAID funding was received this quarter.

V. Financial Report (see next two pages)

1) Cooperative Support Grant

2) New Initiatives for the Baltics
## Expenditures

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** The estimated final overhead rate for 1992 was 39%. The indirect cost for 1992 was reduced by $32,318 for the lower overhead rate. The 1993 overhead rate is estimated at 31%. **
NEW INITIATIVES (CSG BUY-IN)
FINANCIAL REPORT
Thru 12/31/92

### Expenditures

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** The estimated final overhead rate for 1992 was 39%. The indirect cost for 1992 was reduced by $3,090 for the lower overhead rate. The 1993 overhead rate is estimated at 31%.**
APPENDICES

A. PICTURES

B. PROFILE GRAPHS AND COURSE ROSTERS OF IN-COUNTRY TRAINING

C. FRONTLINES ARTICLE

D. TRIP REPORTS FROM CORE COOPERATIVE SUPPORT GRANT
   -- Russia
      Martha Cashman
      Bob Tenner
      Dave Gray
      Kristin Rens
   -- Alma Ata
   -- Ukraine

E. TRIP REPORTS FROM BALTICS NEW INITIATIVES FOR THE BALTICS
   -- Latvia
   -- Estonia
   -- Lithuania

Land O'Lakes
Participants of the Dairy Production and Management course with their certificates upon completion of the course. Instructor Mike Sohl is standing in the first row holding the plaque, and next to him on the right are coordinators Bong and Bing Pelaez.

The course was held in Northern Mindanao, Philippines, October 5-9, 1992.
Bob Tenner (left), Dick Fogg (second from right), and Dave Gray (far right) of Land O'Lakes meet Alexander Petrakov, plant manager of the Veněv dairy cooperative in Russia.

Inside the Veněv dairy plant, Alexander Petrakov (center) continues discussion with Dick Fogg and Dave Gray (right), members of the Land O'Lakes technical assistance team, with translation assistance by interpreter Nathaniel Carin of Land O'Lakes International Development Division.
Antone Gregory (at left) and Joel Stangeland provided assistance to technical professionals of the dairy industry in Estonia. At the Tartu Dairy plant, Gregory spoke on the topic of energy processes in dairies. Jaan Madis, to Gregory’s left, travelled to the U.S. for a one-month internship in dairy plant engineering and quality assurance.

Featured below is the central lab at the Estonian Dairy Association in Tallinn, Estonia, also a recipient of technical assistance by Joel Stangeland.
APPENDIX B

PROFILE GRAPHS AND COURSE ROSTERS
OF COURSES IN-COUNTRY TRAINING

Land O'Lakes
Philippines

Gender

- Women (5) 21%
- Men (19) 79%

Number of course(s) = 1
Philippines

Professional Affiliation

Farmers (17) 74%
Agribus. (2) 9%
Housewives (2) 9%
Dairy Coop. (1) 4%
Govt. (1) 4%

Number of course(s) = 1
# LAND O' LAKES, INC.
# COURSE ROSTER

## Course Title:
DAIRY PRODUCTION AND MANAGEMENT TECHNIQUE WORKSHOP

## Course Location and Dates:
TRAINING CENTER, CAMP 17, PHILIPS, BULTIQUON, PHILIPPINES

## Name of Instructor(s)
MR. MIKE SOEL

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LATVIA
Gender Profile

Number of Courses = 1
LATVIA
Professional Affiliation

Cooperatives
Marketing Specialist
Production
Procurement Manager
Academia
Dairy Bacteriologist
Cattle Nutritionists

Number of Participants

Number of Courses = 1
## LAND O'LAKES, INC.
### COURSE ROSTER

**Course Title:** Milk Procurement + Assembly  
**Course Location and Dates:** 11/23 - 11/27, 1992, Ventspils, Latvia  
**Name of Instructor(s):** Gary Seiler

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- High school ............... 2
- Vocational school .......... 3
- Some college .............. 4
- College graduate or more 5
- 4.89

17. What is your occupation?

Land O'Lakes appreciates any comments or suggestions you have regarding this course. Please write on the space below or on the back of this page to share your comments with us. Thank You.

Prof. Affiliation

- Bacteriology in dairy
- Procurement manager
- Lab supervisor
- Trade school instructor
- Professor of livestock
- Cattle nutrition & genetics
- Engineers of production
- Chairman of co-op
- Bacteriology & engineers
- Consultant & nutritionist
- Production manager
- Marketing specialist

26 Females
2 Males
Land O'Lakes: Meeting agriculture's needs worldwide
for February issue of AID's Frontline

Writer: Patricia Miller, 612-822-5967
December 9, 1992
Final
Land O’Lakes: Meeting agriculture’s needs worldwide

A misty November night already cloaked the eastern Hungarian town of Heves, but Janos Orcsik was still at work, making a final inspection of the stainless steel vats and pipelines that are the heart of his backyard dairy processing plant. Begun just over a year ago, Orcsik’s small-scale plant is the only privately owned dairy in Hungary.

He launched the venture because he saw a need in the region for high-quality dairy products, as well as a stable market for dairy farmers’ milk. Although his business is thriving — Orcsik says he could sell 1,000% of his production — he’s a newcomer to dairy processing and marketing. So he jumped at the opportunity to attend a U.S. AID-funded marketing seminar presented by Land O’Lakes, Inc., the Minneapolis, Minn.-based dairy processing, food marketing and farm supply cooperative.

“I’ll say to anyone that my current success — and why I’m expanding the plant — is the result of that course,” Orcsik says. “Much of what I’m doing in marketing began as concepts from the course. I’ve used it as a launching pad for new activities and new ideas.”

A successful partnership for development

Janos Orcsik is just one of the thousands of entrepreneurs, managers, farmers and agricultural officials to whom Land O’Lakes International Development is providing training and technical assistance worldwide. These programs are the result of a successful partnership between U.S. AID, which supplies funding, and Land O’Lakes, which furnishes the expertise.
Courses taught by Land O' Lakes specialists are offered in-country from Hungary to the Philippines, Cameroon to Pakistan, as well as in the U.S. Topics cover a broad spectrum, including food processing, human and animal nutrition, agricultural practices, cooperative and agribusiness management, transportation and distribution, marketing, privatization and much more.

Helping the privatization process

Krystyna Celemencka, Warsaw, Poland, attended a Land O' Lakes courses on privatization. Celemencka, a senior specialist in the food processing department of the Ministry of Agriculture, helps transfer state-owned food processing plants to private ownership.

"In the course I learned to establish a net present value for a company, determine how much it's worth, whether a project can be profitable and if it will be able to survive without support from the Ministry of Agriculture," Celemencka says. "The course helped me look at the market in a different way and decide how the proposals that come across my desk will fit into it."

Strengthening fledgling dairy industries

Half a world away, Mike Sohl, Land O' Lakes milk production specialist, worked in the Philippines for two weeks with current and prospective dairy farmers wanting to improve their milk production and income. "The people in my class were determined to give dairy farming their best shot," Sohl says. "So I tried to provide them with information on feeding, herd health and management practices that will help them right now or that will help them get off to a good start."
The African nation of Cameroon is developing its dairy industry by building on the cattle farming traditions of the Fulanis, a highland tribe. Since women handle the milking chores, a group of Fulani women spent nearly a month in the U.S. at Land O'Lakes farms and facilities as part of a non-formal education program for illiterate adults. The program was designed to help them improve their milk handling, storage practices and milk quality and learn processing techniques for making wholesome and marketable products.

Providing a mini-plant model
Like Janos Orcsik, Mary and Joe Eichten and their daughter Eileen Eichten Carlson operate a micro dairy processing plant virtually in their backyard. But unlike Orcsik, the Eichten's have 17 years of experience behind them. Their Hidden Acres Cheese Farm provides a model for Land O'Lakes course participants wanting to learn the art, versus the technology of cheesemaking, and operate similar plants in their home countries.

"We have anywhere from five to 35 Land O'Lakes visitors a year to observe or participate in all aspects of the business," Carlson says. "Here they can see the whole process from milk production to cheesemaking to labeling, packaging, marketing and sales all in one place."

American farming firsthand
For a longer-term training experience, Land O'Lakes also places interns on the farms of its members. Through a Land O'Lakes-funded internship, Jacek Klos (pronounced kwose) of Poland spent a season on a Minnesota hog farm, then rounded out the year with classes at the University of Minnesota and training at an agribusiness firm.
“Besides the language, management and computer skills I gained, I also grew up in the United States,” Klos says. “I acquired a more positive way of thinking, and learned that my future belongs to me, that I must take responsibility for it and plan for more than tomorrow.”

Dairy farmers Dan and Terry Pearson have hosted interns from Jamaica and Poland since 1989. “It’s a real learning experience -- and culture shock -- on both sides,” Terry says. “There’s always a honeymoon period while we settle into a routine. I know it’s over when I don’t make breakfast for the intern anymore!

“It’s somewhat of a bittersweet experience sharing our lives with others. We don’t want them to think they have to do it our way and only our way. We want them to learn how to better their lives at home, to make what they learn fit their country, their situations. We try to provide them with those tools.”
Cutlines for Land O'Lakes story

(guy with milk cans)
Janos Orcsik, Hungary, shows off some of his milk processing equipment.

(woman feeding calf)
A Fulani woman practices feeding a calf on a Land O'Lakes member's farm.

(women in classroom)
Fulani women discuss how they will share their newly acquired information at home in Cameroon.
APPENDIX D

TRIP REPORTS FROM CORE COOPERATIVE SUPPORT GRANT
Russia Trip Report
Martha Cashman, Vice President, International Development
October 7 - 15, 1992

Trip Objectives:

- Meet with USAID/Moscow to introduce Land O'Lakes Farmer-to-Farmer Program and receive briefing on operational issues from the mission perspective.

- Meet with AKKOR to discuss the coordination and implementation of the Farmer-to-Farmer program, future training and technical assistance programs and the placement of two or more long-term Land O'Lakes staff in Moscow, Tula and Venev.

- Provide final presentation and briefing to the Minister of Agriculture on the joint Land O'Lakes/AKKOR Tula/Venev feasibility study and project.

- Accompany, and provide orientation to, Land O'Lakes Group Vice President Dairy Foods, Vice President Foodservice Marketing, and Director of International Ventures to Venev project.

Itinerary:

10/5 Leave Minneapolis for Moscow
10/7 Meet AKKOR for planning session
10/8 Meet AKKOR, McDonalds and Lux (SuperValu) retail management
10/9 Travel to Venev to meet with farmers, mayor and local AKKOR
10/10 Retail store surveys
10/11 Sunday, day off, tour of Kremlin
10/12 Presentation to Minister of Agriculture Klyhstun and planning meeting with AKKOR
10/13 Planning meeting with Land O'Lakes Moscow staff and Summit Limited
10/14 Return to Minneapolis
I am writing you to provide a travel report of my Moscow/Venev trip October 7-9, 1992.

Overview

There were several objectives for the trip.

1. Initial exposure, analysis and evaluation of commercial business opportunities with hard currency and state stores.
2. Meet with AKKOR, a private farmers organization regarding future technical assistance programs and the placement of Land O'Lakes trainers in Russia.
3. Meet with McDonalds regarding supplying cheese from the Venev Coop plant.
4. Meet with farmers and management of the Venev facility regarding their commitment to implementing the feasibility study.

Itinerary

October 7  Arrived from Poland.
October 8  Meeting with AKKOR, toured and met with McDonalds facility management. Met with the Lux retailer management.
October 9  Traveled to Venev. Met with local farmers, AKKOR representatives and local authorities.
October 10 Return to Minneapolis.

Conclusions

The trip met the predetermined objectives. I was successful in both gathering and communicating appropriate information. Although the two day visit was too brief, I gained a good understanding of what will be required to accomplish our international development goals.
RUSSIA
DAVE GRAY
OCTOBER 1992

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Association of Peasant Farms and Cooperatives of Russia
Research Centre "Selo"

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Nikolay Stepanovich
Director

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tel: 204-44-39
Moscow University, faculty of Economics
Research Centre "Selo"

Dr. YURI KLIMENKO
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(Box 2247)
This provides a travel report of my trip to Russia from October 3, 1992 through October 13, 1992.

OVERVIEW

This was a multi-purpose visit to Russia. Key objectives included:

1. Technical research methodology/organizational discussion with CESSI Research Company.

2. Trade show planning discussions and backgrounding with Crocus International, the primary World Food '92 exhibit organizer.

3. Retail grocery and food distribution surveys in Moscow among both hard currency and state stores.

4. Planning discussions with AKKOR, a private farmers organization, regarding the presentation of the feasibility study final results to Minister Klystun and subsequent planning discussions regarding technical assistance programs and placement of LOL trainers/coordinators in Russia.

5. Presentation of the final results of the feasibility study to Minister Klystun.

6. A field visit to the Venev area to discuss the status of the agricultural environment and their continued interest and commitment to implementing the feasibility study.

REPORT

Each of the objectives detailed above was accomplished according to the following schedule:

1992
10/3 Leave Minneapolis for Moscow.
10/4 Arrive Moscow 5:00 pm. Discuss week's itinerary with interpreter, Mr. Dukhnov.
10/5 10:00 am. meeting with CESSI. 1:00 pm. meeting with Crocus International.
10/6 Retail store surveys - Irish House, M. Leader, Colognia, Swiss.
10/7 Meeting with AKKOR management - planning session, retail store checks.
Meeting with AKKOR, McDonalds, Lux retailer management.
Travel to Venev. Meeting with farmers, mayor, local AKKOR.
Retail store surveys.
Sunday - Day off. Tour of Moscow, Kremlin.
Presentation to Minister Klystun. Planning meeting with AKKOR.
Return to Minneapolis.

SUMMARY

This visit was considered very productive in terms of the information we relayed to our Russian counterparts, the information we received, and the detailed planning of next steps to accomplish our international development goals.

Please advise if you have questions.

RJT:tm
Trip Report
October 10 - 14, and 18 - 26, 1992
Russia
Kristin Rens, Project Development Manager
International Development Division
Land O'Lakes, Inc.

Scope of Work:
To evaluate and reconfirm contacts and focuses of grants received for implementation in Russia and to develop additional in-country collaborators and concepts for Land O'Lakes in new areas of the emerging private agricultural sector.

Contacts:
See attached list.

Areas of Interest:

Private Farmer Situation

Several political, social and economic factors have held and continue to hold back privatization of farming in Russia. The factors affecting this process are constantly changing. Top of the list is the great instability within the central government and the scrabbling for position and funding by branches of the government (i.e. AKKOR, Rural Youth Federation, etc.), which subsequently impedes agricultural support and policy reform. There is an "aire" of uneasiness among current and potential private farmers because of this. Farmers are not engaging in "risk-taking" activities such as expansion of present farm operations, creating new agribusinesses, seeking out niche markets, securing short-term loans, breaking out of the state/collective agricultural system, etc. This is all due to the uncertain and unclear political and economic future.

Within the Russian agricultural sector, private farmers have a myriad of issues to confront (and dodge), in their efforts to remain operational. The biggest, single issue for the private farmer continues to be private ownership of land. It was stated by AKKOR that 75% of land farmed by individuals is held either by long run leases, or proprietorship with user-rights. Until private ownership is a clear option, the fear of the private farmer will remain
that the land farmed under these agreements will be "whisked" away at any moment as has happened in the past. Farmers hesitate to make long-term plans, financial investments for continued growth while trapped in this situation.

Chaos generated by the transitions to a market economy have severely inhibited the agricultural input and marketing systems to and from the state/collective enterprises. This has resulted in a decreased flow of inputs to these enterprises and an increased amount of produce/product that is not marketed. The impact of this situation on the private farmers is great: the availability of agricultural inputs and the willingness of state/collective enterprises to provide access of inputs to farmers is stifled; state/collective enterprises, with an existing back-up of products, can only offer to purchase private farmer produce for prices way below their cost.

The private farmer is experiencing the sensations of breaking-out of a seventy year old paradigm of socialized agriculture. It is not a comfortable position to be in the minority nor play the "change agent". Presently in rural Russia, if you are not working on a state/collective farm, or if you do not have good connections with the state/collective managers as a private farmer, you are on your own. The private farmer must develop their own input connections, consider on-farm, value-adding to their produce, and create a system to market their products. All these efforts and hard work are necessary to reduce the risk of loss and increase the possibility of profit.

Basic as it may be, the state/collective farms offer their employees and families access to healthcare, education, housing, and social activities besides other subsidized benefits. Individuals, who choose to break out of the state/collective farms to become private farmers and agribusiness entrepreneurs, sever ties to the only operational social support system currently in existence in Russia. These courageous and determined individuals are left to fend for themselves in a societal system that regards them as "outsiders". Presently in Russia, rural, private living means life without the basic infrastructures, therefore, adding even more hardship to the efforts of the private farmer.

Youth in Agriculture

The development of youth in agriculture has become an area of interest by the Russian youth themselves and by the government of Russia in their efforts to encourage rural development and lessen urban migration. At present, there is an organization called "Rural Youth Union" which, as it’s main objective, promotes higher agricultural production through formal agricultural education at Russian Institutions and overseas internships in agriculture for their members. Registered in 1990, the Union now has a stable network in 14 regions of Russia with members (rural youth) between
the ages of 17 - 34. Funds have been acquired from various donors to provide tuition to youth interested in being trained in agriculture and who then returns to the country-side to begin a career in agriculture. The Rural Youth Union then continues to support these individuals in their new endeavors with possible internships to Western Europe and North America. The president, Yuri Tsypskin, has been the "generator" of the collaboration for the 250 internships for Russian youth thus far (mainly with Germany and Australia).

Environment

Agriculture and its impact on the environment is not an issue of top priority for anyone, at any level in Russia. Environmental issues regarding nuclear power and industrial pollution are receiving attention. The Russian government is in collaboration with western donors for assistance in reducing air/water pollution generated by Russia's massive industrial/energy sector. There were several cases cited in regards to agricultural productions(mainly large scale) impact on the environment. One case dealt with chemical run-off of state-farm acreage under production which severely disturbed a river ecosystem and contaminated water tables in the area. Another case, also on a state-farm, was described in which "mountains" of fertilizer have been left on bare ground, uncovered, exposed to climatic conditions, causing severe leaching and accumulation of lethal levels of poisonous chemicals in the surrounding environment. **State/collective farms must improve their chemical storage and application practices.**

The response from the private farmers when asked their concern of the environmental impact of their agricultural activities was usually a chuckle. Private farmers explained that their agricultural production is "clean" or "organic" and not by choice but by default. Presently, the private farmer is not capable of harming the environment through the use of chemicals because they do not access nor the money to purchase the inputs. Until the agricultural system is developed, the private farmers will not be the culprits of harming the environment through their agricultural production practices. Private farmers need to be more aware today of sustainable agricultural practices i.e. low impact farming, crop rotation, etc. They are not using chemicals to a large extent to enhance production yet, but, in the near future there will be a great need to inform them of appropriate applications.¹

¹ Most bags of fertilizers, herbicides and pesticides observed in Russia did not include appropriate labeling that described bag content and application recommendations.
Recommendations:

1. On-going Activities

For activities currently funded, Land O’Lakes should continue to focus geographically at the district level and focus programmatically the scope of activities. It is vitally important that the programs "get rolling" and Land O’Lakes becomes more than just a concept but an active development project in the Tula Region. The Private Farmers Association in Venev remains highly supportive along with the Venev district government of Land O’Lakes’ development activities. It will be important to keep AKKOR fully informed of our movements at the Regional and National level but to implement the Land O’Lakes activities directly with the contacts within the District of Venev.

Due to Land O’Lakes’ development history in Tula, the subsequent relations with private farmers and regional/district contacts and success with working in the Tula Region, many other organizations have chosen to work focus their programs in this region. It is in the best interests of Land O’Lakes to coordinate and collaborate with, for example, 1) ACDI, as they assist in the development of a farm credit system in Tula, and 2) VOCA, with their numerous volunteers with technical expertise of interest to the private farmers/agribusinesses of Venev. The collaboration is a two-way street. Land O’Lakes has and should continue to inform cooperative colleagues of on-going programs in Tula and the opportunities for their projects to benefit from Land O’Lakes’ activities.

2. Possibilities for Additional Activities

There is a need for a structure to be created that will expand the supportive role of AKKOR and their branches at the regional and district level. It is recommended that Land O’Lakes investigates the possibility of forming a "private farmer foundation" in Tula to respond to issues that deserve attention but lack the enormity of privatization obstacles generated by the transition. The essential activities of this foundation for private farmers should encompass:

1). the present social constraints of rural living outside of the state/collective system,

2). the promotion of "clean" and sustainable agricultural production practices (large- and small-scale),

3). the youth/new young farmers involved in private agriculture, and
4). the advancement of key leaders in agriculture to seek support and action from government/public/private sectors related to the needs of Russia’s farmer and families.

The foundation should begin in the Tula Region, funded, initially with 416(b) monetization activities and private donations (several organizations have indicated strong interest). The formation of the board would consist of both Russian and Western private farmer advocates. The board will be charged with the responsibility of focusing activities, creating additional funding sources and securing the sustainability of the foundation. The foundation concept could be transferred to other regions when and where appropriate.
List of Moscow Contacts

USAID

Elisabeth Kvitashvili, Special Projects Officer
Thomas L. Rishoi, Project Development Officer

AKKOR

Vladimir Bachmachnikov, President
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Yuri Linin, Vice President
Yuri Klimenko, Director, Department of Organizing Agro-service of Farms
Nikolay Charitonov, Director, AKKOR Research Center
Mr. A. Shlayhov, Deputy Head of Venev District Administrative Unit
Alexander Kondratenko, President, Venev Private Farmers Association

Rural Youth Union of Russian Federation

Yuri Tsypkin, President
Stephan Durr

All-Union Research Institute of Information and Technical-economic Studies of agroindustrial Complex

Dr. V.I. Nazarenko, Doctor of Economics, Special Economic Reform Advisor to the Vice President of Russia

Office of the President of Russia

Alexy V. Yablokov, Counsellor for Ecology and Health

World Bank

Wayne Ringlien, Agricultural Officer-Russia
Ed Cook, Agricultural Analyst

Center on East-West Trade, Investment, and Communications

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Leningrad Region Administration

Yuriy Pavlov, First Deputy

U.S. Embassy

Jack Gosnell, Consul General
Trip Report  
Alma-Ata, Kazakhstan  
October 14 - 18, 1992

Kristin Rens, Project Development Manager  
Land O'Lakes, Inc

Scope of Work:

To familiarize Land O'Lakes with the dairy sector and agricultural cooperative Movements in Kazakhstan and establish relationships with counterpart organizations for collaborative development activities.

Contacts:

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Krempin Emiliay, Chief, Product Technologist, Alma-Ata Region Dairy Plant, Alma-Ata  
Beysekova Gaziza, Chief, Plant Operations, Alma-Ata Region Dairy Plant, Alma-Ata  
Mark Levenson, Country Director, VOCA, Alma-Ata  
Bert, Expatriate(Dutch) Farmer/Entrepreneur

Areas of Interest:

State/Market Food Product Availability and Prices:

The following is a survey of products and prices of agricultural produce and dairy products in Alma-Ata state stores and central market:

<table>
<thead>
<tr>
<th>Products</th>
<th>State Stores</th>
<th>Market</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fresh Milk</td>
<td>27 R/1l</td>
<td>100 R/1l</td>
</tr>
<tr>
<td>Sour Cream</td>
<td>78 R/1l</td>
<td>250 R/1l</td>
</tr>
<tr>
<td>Kefyr</td>
<td>30 R/1l</td>
<td>100 R/1l</td>
</tr>
<tr>
<td>Butter</td>
<td>228 R/1l</td>
<td>350 R/1l</td>
</tr>
<tr>
<td>Cottage Cheese</td>
<td>50 R/kg</td>
<td>60 R/kg</td>
</tr>
<tr>
<td>Soft Cheese</td>
<td>120 R/kg</td>
<td>200 R/kg</td>
</tr>
<tr>
<td>Condensed milk</td>
<td>36 R/320 g</td>
<td>-n/a-</td>
</tr>
</tbody>
</table>
There are several dollar stores in the city of Alma-Ata but at present they are not in the business of selling many imported food products. The state stores are well stocked with a variety of food stuffs, both fresh and processed. There were no long lines or shortages/hoarding noticed. The market has a tremendous array of vegetables, fruits, meats and dairy products. Prices have been liberated for all agricultural commodities sold in the market place. Vendors must pay a fee of 90 Rubles/day to secure their place in the market area.

** As a reference, petrol sells for 21-26 R/1l

Milk Production

There are approximately 2 million head of dairy animals in Kazakhstan with the major dairy area being in the north-northeast areas of the country.

Currently, there seem to be four levels of milk producers in the Alma-Ata Region. The first level of producers are the individuals who have 1-2 dairy cows to provide dairy products mainly for family consumption. These individuals generally are workers from state/collective farms who have purchased the animals on credit and receive feed stuffs at a subsidized price from the state/collective farms. They keep their animals within their parcel (less than 1 hectare of land) and graze them during the day on state/collective fields. If milk is in surplus, these producers may process it into products such as sour cream, kefyr, butter, etc. and sell to local clients and/or "middle-men".

The second level of milk producers are the individual farmers who have 3-7 cows as a part of their diversified farm. These private farmers usually have in addition to these dairy animals, 1-2 beef animals, several pigs, chickens, horses (for transport and production of "cumays") and a variety of fruits and vegetables. They support the livestock/crops on land totaling, on average, 2-3 hectares or they may combine their land with friends/relatives so as to more effectively support the larger number of livestock. The dairy products produced by these individuals are usually sold on the local market, depending on distance, either daily or several times per week. Women are the animal caretakers, milkers, processors, and marketers of the dairy products.
In the case of long distances to the markets, the women have purchased refrigerators to keep the milk products over a longer period of time. The following are examples of the array of milk products processed by the women who have acquired these skills through generations of technology perfection:

1. Cumays Mare's Milk
2. Moloko Fresh Milk
3. Smetana Sour Cream
4. Keyyr Butter Milk
5. Sleevky Cream
6. Tvorog Cottage Cheese
7. Syir Hard/Soft Cheese
8. Maslo Butter
9. Toplyonaye Maslo Ghee
10. Iremshek Dried Milk Cakes

The dairy breed is a local breed and, in some cases, crossed with Holstein or Jersey. The average daily production is about 10-15 liters and during the summer months, up to 20 liters.

There have been several attempts by dairy producers to form dairy cooperatives. At present, the women have strong desires to remain independent and lack experience in forming cooperative structures. Development in this area will remain minimal until the women realize the benefits of working together to produce and market their milk.

The third level are groups of women who obtain dairy cattle from state farms under contractual agreements for "user rights" of the farm's cattle. An example, there is a group of ten women in a village near Alma-Ata who milk 20 head under a special agreement with the nearby state farm. The women pay the farm for the animals with 70% of the milk produced and are able to market the remaining milk for themselves. The state farm provides feed to the women at a subsidized price and a fixed amount per month (additional feed will be sold to them at market prices) and building space if necessary. The farm also provides veterinary and AI services for a fee.

The 81 state/collective farms represent the fourth level of dairy production. The number of dairy animals on these farms varies from 200-800. The collective farm visited outside Alma-Ata has recently been "privatized" and is now owned by 65 families. The profits are shared among the members based on size of share and contributed labor to the dairy operation. Presently the farm is milking 270 head (local breed), milked by seven milk maids using an Alfa Laval system. The herd averages about 5-6 liters per day. The city processing plant collects 70% of the milk twice daily; the remaining is consumed by the member families and/or sold in the local market.
During the summer months, the cows are on pasture plus are fed corn when available. During the winter months, production drops to 3-4 liters per day and are fed mainly course cut silage. Basically, there is a protein-void in the feed ration. The cows are underweight but not in noticeably poor health - the barn manager stated that mastitis does occur and is treated immediately by the farm veterinarian. Heifers are held in a muddy holding area and are grazed along with the producers when pasture is available. Calves are kept in wooded pens off the ground and bedded in straw. The calves are fed colostrum for first 10 days, milk the following 15 days, then introduced to forages thereafter. Bull calves are fed out and sold to the state meat processing plant in Alma-Ata.

Dairy Processing

The Alma-Ata City Dairy Processing Plant is the largest processing plant in Kazakhstan; there are ten dairy processing plants in the Alma-Ata Region (see attached tables for capacity/processing specifics). The City Plant collects milk from 81 state/collective farms. Currently, they do not collect any substantial amount of milk from private farmers; it was stated that less than one percent of the total milk collected is from private farmers (collected at the state/collective farm).

The milk is tested once it arrives at the plant for butter fat (3.7% is standard for payment), protein solids, and microbial counts. Presently the plant is, on average, collecting 700 tons of milk per day. Depending on the season, the plant is using about 4% - 14% of its total capacity. It was stated that the plant has equipment capable of processing over 113 different products. Due to the current situation of the breakup of collective farms, lack of quality feeds/forage, the availability of raw product has decreased drastically. The plant is now processing six different products: fresh milk, kefyr, cream, butter, soft cheese, ice cream. The sour milk product, kefyr is processed in highest quantity because it is the lowest cost item and it moves quickly in the state stores. Besides the serious constraint of lack of raw product, another major problem for the processing plant is packaging technology, and materials.
Recommendations:

Production

There is great potential for improved milk production and processing in the Alma Ata Region based on the visits and conversations with both private farmers and government officials/employees in the domestic dairy sector. The genetic potential of the local dairy breed is definitely being underutilized. According to the Ministry of Agricultural's dairy expert, if fed a balanced ration, the local breed could perform on the average about 20-25 liters/day. In the case of cross breeding with imported stock (Holstein/Jersey), the daily production could easily average 25-30 liters/day.

A recommended focus of technical assistance and training could be with the women who have the 4-7 head of milk producing animals who are interested in "combining forces" in order to more effectively purchase feeds and market their product. An association of women dairy producers, not a cooperative - yet, would provide these women an opportunity to be more cost effective and reduce the labor requirements involved with acquiring feeds and marketing their product.

Processing

It was stated that the government of Kazakhstan is pursuing privatization in the food processing sector. As this reform is implemented, there will be a great need for key staff in the processing sector to be re-trained in milk collection, plant management, cost-effective operations, product diversity, product packaging, and marketing. The level of education and basic knowledge in these areas (except marketing) is quite good but "fine-tuning" of skills is necessary in order to compete effectively in the emerging free market.

Conclusions:

Land O'Lakes has a solid understanding of the needs of developing dairy sectors and the appropriate approach to assisting in the improvement of domestic dairy production. Land O'Lakes has successfully implemented training and technical assistance in dairy production, processing and marketing in Central/Eastern Europe, the Baltic States and Russia during the past three years. In-country training and technical assistant to all four levels of dairy producers in improved feeding and husbandry practices can be provided by Land O'Lakes experts through a buy-in to Land O'Lakes' Cooperative Support Grant. In-country training and technical assistance to the women dairy producers of the Alma Ata Region to assist in the formation of a dairy association can be provided by Land O'Lakes staff and producer-members via a buy-in to Land O'Lakes' Cooperative Support Grant.
In the case of the re-training of key processing people, Land O'Lakes can provide U.S. customized, short-course training. To meet the specific needs of each individual, Land O'Lakes can develop hands-on training for each participant within the Land O'Lakes cooperative system. The short-course would include the necessary technical training (formal and informal), exposure to U.S. agriculture and private cooperative systems, training-of trainers and transfer-of-skill components to ensure appropriate learning and effective dissemination of information to others. Mission buy-in to the Land O'Lakes cooperative agreement can facilitate the necessary funding to implement this training.

VOCA and Winrock both have Farmer-to-Farmer grants in Kazakhstan for agricultural development over the next three years. Land O'Lakes will communicate the described needs for the development of domestic dairy production to these organizations and dialogue about possible collaboration in this area.
<table>
<thead>
<tr>
<th>Plant</th>
<th>Initial Yr of Operation</th>
<th>Butter</th>
<th>Hard Cheese</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. ALMA-ATA PLANT #1</td>
<td>1960</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>(recon.1989)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. ALMA-ATA PLANT #2</td>
<td>1977</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>3. KASKELEN PLANT</td>
<td>1966</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>4. TALGAR PLANT</td>
<td>1947</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>(recon.1990)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. KEGENSKY PLANT</td>
<td>1954</td>
<td>1,28</td>
<td>-</td>
</tr>
<tr>
<td>6. UZUN-AGACH PLANT</td>
<td>1985</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>7. CHALKUDIN DEPARTMENT</td>
<td>1967</td>
<td>0,32</td>
<td>-</td>
</tr>
<tr>
<td>8. ORNEKSKIY DEPARTMENT</td>
<td>1966</td>
<td>0,32</td>
<td>-</td>
</tr>
<tr>
<td>(recon.1990)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. CHILIKSKIY PLANT</td>
<td>1987</td>
<td>1,4</td>
<td>1,0</td>
</tr>
<tr>
<td>10. BAKANAS PLANT</td>
<td>1988</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>11. DMITRYEVSKY PLANT</td>
<td>1990</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**TOTAL:**

<table>
<thead>
<tr>
<th>BUTTER</th>
<th>HARD CHEESE</th>
</tr>
</thead>
<tbody>
<tr>
<td>3,3</td>
<td>1,0</td>
</tr>
</tbody>
</table>

1. JOINT STOK COMPANY "ISSAYK" 1990 - -

2. ELTAISKY PLANT N.A. - -

Land O' Lakes, Inc.
**TABLE ONE cont.**

<table>
<thead>
<tr>
<th>MILK</th>
<th>DRY MILK</th>
<th>PROCESSED CHEESE</th>
<th>DRY WHEY</th>
<th>CASEIN</th>
<th>ICE-CREAM</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 80,0</td>
<td>-</td>
<td>4,9</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>2. 237,0</td>
<td>-</td>
<td>-</td>
<td>1,9</td>
<td>-</td>
<td>15,0</td>
</tr>
<tr>
<td>3. 30,4</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>4. 41,4</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>5. -</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>6. 10,0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>7. -</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>8. 5,0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>9. 12,0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>10. 5,0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>11. 30,0</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>TOTAL:</td>
<td>450,8</td>
<td>4,9</td>
<td>1,9</td>
<td>-</td>
<td>15,0</td>
</tr>
</tbody>
</table>

**NOTE:** All above mentioned enterprises are under privatization.
TABLE TWO
Land Availability, Former USSR Republics, 1990

<table>
<thead>
<tr>
<th>Republic</th>
<th>Arable Land (Million hectares)</th>
<th>Sown area</th>
<th>Irrigated land</th>
<th>Drained Land</th>
</tr>
</thead>
<tbody>
<tr>
<td>Russia</td>
<td>131.8</td>
<td>117.8</td>
<td>6.3</td>
<td>7.4</td>
</tr>
<tr>
<td>Ukraine</td>
<td>33.4</td>
<td>32.4</td>
<td>2.6</td>
<td>3.2</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>35.5</td>
<td>35.2</td>
<td>2.3</td>
<td>--</td>
</tr>
<tr>
<td>Lithuania</td>
<td>2.3</td>
<td>2.2</td>
<td>--</td>
<td>3.0</td>
</tr>
<tr>
<td>Latvia</td>
<td>1.7</td>
<td>1.6</td>
<td>--</td>
<td>2.0</td>
</tr>
<tr>
<td>Estonia</td>
<td>1.1</td>
<td>.9</td>
<td>--</td>
<td>1.2</td>
</tr>
</tbody>
</table>

Source: Narodnoe khozyaustvo, USSR, 1991 (agricultural magazine)

TABLE THREE
Production of Meat (slaughterweight), Former USSR Republics

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Russia</td>
<td>7,427</td>
<td>8,487</td>
<td>10,082</td>
<td>10,112</td>
<td>9,251</td>
</tr>
<tr>
<td>Ukraine</td>
<td>3,500</td>
<td>3,918</td>
<td>4,430</td>
<td>4,358</td>
<td>4,082</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>1,069</td>
<td>1,113</td>
<td>1,573</td>
<td>1,548</td>
<td>1,550</td>
</tr>
<tr>
<td>Lithuania</td>
<td>422</td>
<td>504</td>
<td>534</td>
<td>530</td>
<td>n/a</td>
</tr>
<tr>
<td>Latvia</td>
<td>284</td>
<td>324</td>
<td>331</td>
<td>308</td>
<td>n/a</td>
</tr>
<tr>
<td>Estonia</td>
<td>196</td>
<td>216</td>
<td>229</td>
<td>219</td>
<td>n/a</td>
</tr>
</tbody>
</table>
### TABLE FOUR
Production of Milk, Former USSR Republics

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1,000 tonnes)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Russia</td>
<td>46,823</td>
<td>50,169</td>
<td>55,742</td>
<td>55,715</td>
<td>52,100</td>
</tr>
<tr>
<td>Ukraine</td>
<td>21,112</td>
<td>23,039</td>
<td>24,377</td>
<td>24,508</td>
<td>22,700</td>
</tr>
<tr>
<td>Byelarus</td>
<td>6,105</td>
<td>6,759</td>
<td>7,419</td>
<td>7,457</td>
<td>6,900</td>
</tr>
<tr>
<td>Moldova</td>
<td>1,194</td>
<td>1,402</td>
<td>1,548</td>
<td>1,512</td>
<td>1,300</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>4,597</td>
<td>4,763</td>
<td>5,563</td>
<td>5,642</td>
<td>5,500</td>
</tr>
<tr>
<td>Uzbekistan</td>
<td>2,266</td>
<td>2,439</td>
<td>2,929</td>
<td>3,034</td>
<td>3,300</td>
</tr>
<tr>
<td>Kyrgyzstan</td>
<td>682</td>
<td>771</td>
<td>1,202</td>
<td>1,185</td>
<td>1,100</td>
</tr>
<tr>
<td>Tajikistan</td>
<td>499</td>
<td>547</td>
<td>580</td>
<td>575</td>
<td>600</td>
</tr>
<tr>
<td>Turkmenistan</td>
<td>306</td>
<td>348</td>
<td>423</td>
<td>436</td>
<td>400</td>
</tr>
<tr>
<td>Armenia</td>
<td>488</td>
<td>546</td>
<td>491</td>
<td>432</td>
<td>400</td>
</tr>
<tr>
<td>Azerbaijan</td>
<td>796</td>
<td>951</td>
<td>1,054</td>
<td>970</td>
<td>900</td>
</tr>
<tr>
<td>Georgia</td>
<td>642</td>
<td>684</td>
<td>712</td>
<td>660</td>
<td>n/a</td>
</tr>
<tr>
<td>Lithuania</td>
<td>2,524</td>
<td>2,2973</td>
<td>3,235</td>
<td>3,157</td>
<td>n/a</td>
</tr>
<tr>
<td>Latvia</td>
<td>1,696</td>
<td>1,957</td>
<td>1,977</td>
<td>1,893</td>
<td>n/a</td>
</tr>
<tr>
<td>Estonia</td>
<td>1,169</td>
<td>1,260</td>
<td>1,277</td>
<td>1,208</td>
<td>n/a</td>
</tr>
</tbody>
</table>

Source: Narodnoe Khozyaistvo, USSR, 1991; Ekonomika i zhizn', No. 6 (1992)

### TABLE FIVE
Milk Product Trade by Republic, Former USSR, 1991

<table>
<thead>
<tr>
<th>Republic</th>
<th>Imports</th>
<th>Exports</th>
<th>Net Exports</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1,000 metric Tonnes)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Russia</td>
<td>7,471.5</td>
<td>330.3</td>
<td>-7,141.1</td>
</tr>
<tr>
<td>Ukraine</td>
<td>81.9</td>
<td>1,664.0</td>
<td>1,582.1</td>
</tr>
<tr>
<td>Byelarus</td>
<td>7.7</td>
<td>1,547.5</td>
<td>1,540.0</td>
</tr>
<tr>
<td>Moldova</td>
<td>18.0</td>
<td>107.8</td>
<td>89.8</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>180.4</td>
<td>32.7</td>
<td>-147.7</td>
</tr>
<tr>
<td>Uzbekistan</td>
<td>1,117.5</td>
<td>--</td>
<td>1,177.5</td>
</tr>
<tr>
<td>Kyrgyzstan</td>
<td>61.5</td>
<td>0.3</td>
<td>-61.2</td>
</tr>
<tr>
<td>Tajikistan</td>
<td>224.2</td>
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<td>-61.2</td>
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<td>341.6</td>
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</tr>
<tr>
<td>Armenia</td>
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<td>Azerbaijan</td>
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<td>--</td>
<td>-1,038.2</td>
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<td>Georgia</td>
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<td>Total</td>
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<td>-6,851.1</td>
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Source: Zavoz i vyvoz tovarov narodnogo potrebleniya v 1990 g., Goskomotat USSR, 1991
TABLE SIX
Private Farms in Former Soviet Union, Jan.1, 1992

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<thead>
<tr>
<th>Republic</th>
<th>Number</th>
<th>Area</th>
<th>Average size</th>
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<tr>
<td>Units</td>
<td>hectares</td>
<td></td>
<td></td>
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<tr>
<td>Azerbaijan</td>
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<td>164,542</td>
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<td>Byelarus</td>
<td>739</td>
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<td>Kazakhstan</td>
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<td>793,500</td>
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<td>Kyrgyzstan</td>
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<td>103,084</td>
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<tr>
<td>Moldova</td>
<td>5</td>
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<tr>
<td>Russia</td>
<td>49,770</td>
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<td>Uzbekistan</td>
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<tr>
<td>Ukraine</td>
<td>2,098</td>
<td>39,737</td>
<td>19</td>
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</tbody>
</table>

Source: Interfax for other than Russia; Russia data from State Land Reform Committee
Trip Report
October 26 - November 2, 1992
Ukraine
Kristin Rens, Project Development Manager
International Development Division
Land O’Lakes, Inc.

Scope of Work:

To evaluate and reconfirm contacts and focuses of grant received for implementation in Ukraine and to develop additional in-country collaborators and concepts for Land O’lakes in new areas of the emerging private agricultural sector.

Contacts:

See attached list.

Areas of Interest:

Private Farmer Situation

Ukraine legalized private farming in 1991. As of July, 1992, there have been 11,500 private farmers registered in Ukraine. The highest number of private farmers are found in the southern band of Ukraine (the Odessa Region) and in Western Ukraine (L’viv/Ternopil Regions). Ukrainian statistics show that the growth of private farm numbers has slowed since 1991 mainly due to potential farmers failing to obtain land. The resistance to reform by local officials is great and distribution of land is hindered by this mind-set. It seems as though it is politics, rather than the lack of good will, that remains the obstacle to change.

The central government decreed that 3.2 million hectares (7% of Ukraine’s arable land) should set aside, by state/collective farm managers, for distribution to private farmers. Currently, there is approximately only 218,000 hectares of land under production by private farmers. The size of private farms range between five and twenty-five hectares; the type of production varies

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1 From 1988 to 1991 villagers could lease land for up to fifty years. The number of land leases grew to 9,000 during this time.

2 This represents only .5% of the arable land in Ukraine.
throughout the country. Private farmers in the southern band of Ukraine produce a high percentage of the country's fruits and vegetables. The central band has climatic and soil conditions suitable for grain production (rapeseed, flax, wheat, and soybeans). Private farmers in the north/northwest band of Ukraine produce mainly corn, sugarbeets, and potatoes and raise much of the livestock (dairy is concentrated in this area) sold on the Ukrainian market.

The constraints to private farmers are many. Individual farmers, members of farmer associations, and ministerial staff interviewed during the visit voiced similar major difficulties faced by private farmers in their efforts to operate at a profitable level. They are:

1. Allocation of Land

As mentioned above, it is the managers of state/collective farms that are usually the blockades to distribution of land to potential and private farmers – the second obstacle being the village council. Without concurrence and cooperation by these groups, the private farmer has limited opportunity to obtain land elsewhere.

2. Financial Credit

The private farmer lacks collateral. Even if collateral/co-signer is identified, the farmer can hardly afford the high interest rates for short-term loans\(^3\). Banks view agriculture as high risk and claim shortages of credit resources as reasons to deny loans to private farmers.

3. Appropriate Machinery

Farming equipment manufactured in Ukraine was/is for large-scale production on state/collective farms of Ukraine and for other former republics. It is extremely difficult to find, order, and import machinery of appropriate size for smaller farms\(^4\).

\(\begin{align*}
^3\text{Banks are only interested in giving loans out for a 3-5 year re-payment period - it is almost impossible for a private farmer to accomplish this.}

^4\text{Some private farmers have acquired pieces of machinery from state/collective farms. Due to the size and cost of operation, the equipment is used as collateral for loans or as an investment verses production.}
\end{align*}\)
4. Lack of Agricultural Inputs

Chaos generated by the transitions to a market economy has restricted the flow and availability of agricultural inputs for state/collective farms and private farmers to a trickle. Feed, seed, fertilizers, and herbicide supplies are low country-wide, and the demand by the state/collective farms can not be met. This creates hoarding of agricultural supplies by the state/collectives and terribly high prices for private farmers.

When asked to prioritize needs for technical assistance and training, most private farmers responded with requests for skills and knowledge in small farm and agri-business management and marketing of their product and value-added products. Another area that most private farmers felt should be a priority is information support (the need to improve the system of passing useful agricultural production information to private farmers and agribusinesses). The state agricultural experts are trained in large-scale crop and livestock production - information not suitable for the small-scale producer/processor. The third area that was repeated during interviews with private farmers was the lack of knowledge in private cooperative structural development. Private farmers are quickly realizing that, in order to operate successfully under the myriad of constraints, they would benefit by working together. For example: to obtain agricultural inputs, purchase machinery, market products, etc. The final area that should be mentioned is the request for training and technical assistance for improved small-scale storage and on-farm processing. Up to 40% of the private farmers' produce spoils or loses value due to poor storage practices. Private farmers are interested in on-farm processing for a two-fold purpose: to increase the value of the product; and to increase the "shelf-life" of a product especially where marketing is a problem.

Living Outside the State System

Presently in Ukraine and in other former soviet republics, rural, private living means life without the basic infrastructures. In Ukraine, life outside of the state and collective farms means that it is necessary, as a private farmer, to identify and/or create ways to meet the needs of the farm operation or agribusiness and family. The prevalent areas of concern, lack of support and information include:

1. Housing

It will be necessary for the farmer/entrepreneur to improve upon or build a house and other buildings. There is a lack
of building supplies, electrical lines, telephone lines, roads, etc. to any homestead outside the state/collective residential area.

2. Health Care

Health care is provided and subsidized to state/collective farm employees. The private farmer/entrepreneur must find access to a reliable source of medicine and health professionals. Presently, the choices are extremely limited; bribe to get into the state clinics or pay exorbitant prices for private care and medicines.

3. Education/child care

Primary and secondary schools remain accessible to the children of private farmers. There is less access to transportation for the students outside of the state/collective farms. Day care, nursery school and kindergarten are offered only to the employees of the state enterprises. Services such as these are yet to be developed in the private sector.

4. Access to farm supplies and production/management/marketing information

If the farmer is on agreeable terms with the state/collective farm manager, he may have the good fortune of obtaining indefinite quantities of agricultural inputs. If not, the farmer must seek out new avenues of supplies on the free market or go without. There is not adequate information for private farmers in production/management/marketing practices for small-scale farming and processing operations.

5. Government Support

Rayon, oblast and national governing bodies currently do not recognize the basic infrastructural needs of individuals and families living "outside" of the state system. There does not exist a lobbying support group to voice the issues and concerns of the private, rural agriculturalist and their families to the government at any level.

Food Processing and Distribution

Ukraine is attempting to reform its current food processing and distribution system. The reason for undertaking this massive task is that the current food processing and distribution system is not operating economically nor meeting the demands of the
Ukrainian consumer. Unfortunately, there is great resistance to change. Resistance is increasing because the current technical assistance implemented by the Ukrainian government and/or Western organizations have continued to focus on "fixing" the existing structure and not confront the challenge of true reform. These activities only assist in solidifying the "old guard" in what they feel are their proper places - in control of the Ukraine's food production, processing and distribution sectors.

Ukraine has a vast and complex processing and distribution sector which, with certain sum of funds, could be bandaged and operating in the short-term. In the case of dairy processing, the major constraint to operating at full capacity is obtaining raw product and improving the operational efficiency of the plant (both non-cost and cost improvements). Raw product availability is low due to lack of feed and poor management of state/collective dairy farms. The dairy processing plant could improve its milk collection system to include milk produced by private farmers but farmers refuse to sell their milk at the state subsidized price. Non-cost improvements of the plant include improved sanitation and quality control practices. There is no incentive to improve product performance because consumers will purchase anything the plant produces, no matter what the quality, as long as the price remains subsidized.

The problem is that technical solutions do not change the structural reform problems. Without food policy, reforms that support free prices, privatization of land, enterprises, and retail outlets, change is only on the surface. When new policy is confirmed, then technical assistance for the improvement of the food processing and distribution sector should follow to provide incentive and reinforce real structural reform.

Recommendations:

**Farmer-to-Farmer Grant**

It is recommended that Land O'Lakes work with the Ukrainian Resource and Development Centre, headquartered in Kiev, to implement the Farmer-to-Farmer technical assistance interventions. The Centre has been operating programs in Ukraine for two years focusing mainly on the transition from a totalitarian economic system to a socially responsible, free market economy. A majority of their activities have been working with agricultural technical schools in efforts to create agricultural production, management and marketing curriculum to be delivered to private farmers. The Centre has also worked with private farmer associations in their structure and formation of small credit institutions.
Bohdan Chomiak, Program Manager, has indicated strong interest in collaborating with Land O' Lakes by assisting in the identification of requests for post-harvest technical assistance by private farmers, their associations, privatized processing plants, and agricultural technical schools (Crimea and L'viv Regions). Mr. Chomiak has also offered in-country program management, monitoring, and follow-up evaluation for each intervention.

**New Concept - Rural Development Commission**

Land O' Lakes has a mandate to support private agricultural activities in developing countries and emerging democracies. By collaborating efforts and skills of Land O' Lakes with the Ukrainian Resource and Development Centre and possibly with a Minnesota Development Commission in rural Ukraine, a support mechanism can be created to voice and meet the needs of the new rural private farmers and agribusinesses.

Land O' Lakes proposes to develop a rural development commission to generate a stronger voice of support for and information to the farmers and agricultural entrepreneurs in the rural, private, agricultural sector of the L'viv Oblast. Initial technical assistance in the development and refining of a structure and mandate could be offered through Land O' Lakes Farmer-to-Farmer grant. Subsequent development activities will need to be funded through the solicitation of funds from various governmental, private and multinational donors. See attached concept paper for more details.
Ukraine Contacts

Grant MacEwan Community College

Bohdan Chomiak, Manager, Canada-Ukraine Programs, Ukrainian Resource and Development Center
Tanya Vorovyeva, Administrative Assistant
Vitali Ruvich, Translator

Kiev Private Farmers Association - Smaller Association

Vasyl Vasilovych Hordienko, President
Victor Ceasar, Commercial Director

Ministry of Agriculture - Kiev

Galina Checmistzona, Education
Stanislaw Rychenko, Deputy Chief, Department of Farms
Grigori T. Shkurin, Chief, Department of Meat Production

Kiev Private Farmers Association - Larger Association

Mykola Ivohnovuch Shkarban, President

Ukraine Agricultural University - Kiev

Dr. Melnichuk D.A., Rector

Centre for Ukrainian Agriculture

Alex and Helen Woskop, Founders

Financial Times

Chrystia Freeland, Kiev Correspondent

Ukrainian Legal Foundation

Halyna Freeland, Executive Director

International Renaissance Foundation

Valery Hruzyn, Executive Director
Volodymyr Melnik, Deputy Director

The Western Department of the International Renaissance Foundation

Alexander Sofiy, Executive Director, L'viv, Ukraine

Land O'Lakes
National Centre for the Implementation of International Technical Assistance

Dr. Oleh E. Semenets, Vice-Chairman
Dr. Anatoliy Bobrovitsky, Chief Specialist of Inter-regional Projects Department

VOCA

Martin C. Robinson, Country Representative-Ukraine
Stanely Parris, Volunteer, Agricultural Banking
Larry Wisniewski, Volunteer, Agricultural Banking

Olds College

Reg Radke, P. Ag., Manager, International Education, Olds, Alberta, Canada

Prairie Land Consultants LTD.

Orest T. Curniski, Consultant, Olds, Alberta, Canada

Kilmurry Training Associates

Don Bushe, M. Ed., Interactive Learning Systems, Edmonton, Alberta, Canada
Ukraine Contacts-Simferopol

Crimea State Farm Technical School

Ephriam Abramavitch Vernovsky, Director

Crimea Experimental Horticulture Station

Nikolayevich Victor Sochenko, Manager

Rodyna Collective Farm

Victor Petrovich Bely, Chief Manager

Transcarpathian Joint Stock Commercial Bank

Michael S. Vitkov, General Director

Private Farmer Association - Crimea

Nikolai Yevg Gavriliux, Chairman, Simpheropol
Yuri N. Govenkov, Executive Director, Special Fund for the Support of Farmers, Simpheropol
ECONOMIC FACT SHEET: UKRAINE

1. Profile
Population: 52 million: 74% Ukrainian, 21% Russian; 67% urban; Western areas more heavily Ukrainian; Eastern areas and Crimea more heavily Russian
Religions: Atheist, Ukrainian Orthodox, Uniate, Jewish, Islamic
Languages: Ukrainian (principal), Russian
Leadership: President: Leonid Kravchuk; elected 12-1-91
Prime Minister: Vitold Fokin
Deputy Prime Minister: Oleg Slepichev
Minister of Economy: Anatoly Minchenko
Minister of Finance: Grigory Pyatachenko
Minister of Foreign Economic Relations: Valery Kravchenko
Ambassador to U.S.: Oleh Bilorus

2. Economy
Percentage of former USSR GNP: approximately 16-17%
Currency: Russian ruble plus coupon system; plans to introduce new currency, "hrivna."
Production in key sectors as % of former USSR total:
1% Oil 22% Agriculture 24% Coal
34% Steel 4% Natural Gas
Key Resources: Iron ore, coal, titanium
Key Industries: Coal, steel, chemical equipment, petrochemicals, low-tech machine tools, electrical transformers, agricultural machinery, computers, televisions, tape recorders; grains, potatoes, sugar beets

3. Foreign Trade
U.S. Exports to Ukraine, Jan.-Feb. 1992: $12.5 million
U.S. Imports from Ukraine, Jan.-Feb. 1992: $0.1 million
Ukraine Total Foreign Trade (figures based on Soviet statistics in Rubles converted to USD at official Soviet 1989 rate of 0.6 Rubles = $1):
Total Exports, 1989: $90 billion
Total Imports, 1989: $80 billion
Exports outside USSR, 1989: $24 billion
Imports from outside USSR, 1989: $12 billion

4. U.S. Representation in Ukraine
United States Embassy Kiev
Charge D'Affairs Jon Gundersen
Political/Econ. Officer John Stepanchuk
10 vul. Kotsynbinskovo
252053 Kiev 53
Tel: 7-044-244-7349; Fax: 7-044-244-7350
US&FCS office to open September 1992

Sources: U.S. Department of Commerce data, Soviet statistics
May 5, 1992
Concept Paper
Integrated Rural Support to the Private Agricultural Sector
Model Formation
The L'viv Region of Ukraine

Purpose Statement
To assist in the development of dynamic and sustainable relations for private farmers/agribusinesses and their families with providers of healthcare, education, commerce, and the government sector to create an infrastructure that supports the basic needs of individuals living outside of the state system.

Background
Basic as it may be, the state and collective farms offer their employees and families access to healthcare, education, housing, and social activities besides other subsidized benefits. Individuals who choose to break out of the state and collective farms to become private farmers and agribusiness entrepreneurs in the rural area sever ties to the state's support system. These courageous and determined individuals are left to fend for themselves in a societal system that regards them as "outsiders".

Presently in Ukraine and in other former soviet republics, rural, private living means life without the basic infrastructures. In Ukraine, life outside of the state and collective farms means that it is necessary, as a private farmer, to identify and/or create ways to meet the needs of the farm operation or agribusiness and family. The prevalent areas of concern include:

1. Housing
   It will be necessary for the farmer/entrepreneur to improve upon or build a house and other buildings. There is a lack of building supplies, electrical lines, telephone lines, roads, etc. to any homestead outside the state/collective residential area.

2. Health Care
   Health care is provided and subsidized to state/collective farm employees. The private farmer/entrepreneur must find access to a reliable source of medicine and health professionals. Presently, the choices are extremely limited; bribe to get into the state clinics or pay exorbitant prices for private care and medicines.

3. Education/child care
   Primary and secondary schools remain accessible to the children of private farmers. There is less access to transportation for the students outside of the
state/collective farms. Day care, nursery school and kindergarten are offered only to the employees of the state enterprises. Services as these are yet to be developed in the private sector.

4. Access to farm supplies

If the farmer is on agreeable terms with the state/collective farm manager, he may have the good fortune of obtaining indefinite quantities of agricultural inputs. If not, the farmer must seek out new avenues of supplies on the free market or go without.

5. Government Support

Rayon, oblast and national governing bodies currently do not recognize the basic infrastructural needs of individuals and families living "outside" of the state system. There does not exist a lobbying support group to voice the issues and concerns of the private, rural agriculturalist and their families to the government at any level.

Land O' lakes has a strong relationship with an in-country organization, the Ukrainian Resource and Development Centre, which has a mandate to assist in the improvement of rural private life. It is a Canadian funded program and has been collaborating with educational institutions, private farmers/agribusinesses and government officials for two years in the L' viv Oblast of western Ukraine. Bohdan Chomiak, Manager of the Centre is very eager to work with Land O' Lakes in contributing to the improved well-being of private farmers and their families.

The Region Nine Development Commission of south central Minnesota offers support to the rural population, including many Land O' lakes members, through it's "issues programming" activities. The commission's philosophy is that counties, cities and other local governments need to work together to solve the problems facing rural Minnesota. Kristin Juliar, Deputy Director, is interested in applying her knowledge and the skills of her staff to the development of a "development commission" prototype for the L' viv Region in Ukraine.

Project Description

Land O' Lakes has a mandate to support private agricultural activities in developing countries and emerging democracies. By collaborating efforts and skills of Land O' Lakes with the Ukrainian Resource and Development Centre and the Region Nine Development Commission in the L' viv Oblast of Ukraine, a means can be created to voice and meet the needs of the new rural private farmers and agribusinesses.
Land O'Lakes proposes to develop a **rural development commission** to support the farmers and agricultural entrepreneurs in the rural, private, agricultural sector of the L'viv Oblast.

To begin the establishment of the commission's structure and mandate, Land O'Lakes will provide two experts for a three-week period, under Land O'Lakes' Farmer-to-Farmer Grant, to visit the L'viv region and work with Bohdan Chomiak, from the Ukrainian Resource and Development Centre and key individuals from the L'viv Region to develop a structure and strategy for attacking the issues faced by private rural agriculturalists. The U.S. experts will work closely with individuals who want an active role in managing the commission and representing the issues/concerns faced by the rural, private population to private/public organizations and the government.

Four key leaders will be chosen during the visit of the U.S. experts. The key leaders will participate in an intensive, four-week, U.S. key leader short course training and orientation to midwest cooperative and rural systems. The participants will receive real life exposure to and participate in business, government and civic activities that support the issues and deal with the concerns of the rural agricultural family.

Upon return to Ukraine, the four key leaders will hold a three-day conference in L'viv, in collaboration with the Ukrainian Resource and Development Centre, for all rural private farmers and agribusinesses and their families. The conference's objective is to discuss and prioritize current problems and strategize how to make changes in the situation being faced by the private individuals and families in rural areas. One U.S. expert will be present to assist in the planning and organizing of the commission's activities. The commission will appoint two lobbyists that will, on a full-time basis, voice the prioritized issues to the all levels of government, public and private organizations and to the general public.

The commission will begin to publish a monthly bulletin to provide news of current activities, progress made in support of the private rural population, and informative articles on healthcare, education, housing and agriculture to the rural population.

These activities will all be accomplished and/or initiated in year one of the project. In years two and three, the rural development commission model will be replicated in other regions of Ukraine.

**Project Inputs**

Project Inputs include the following:

* properly designed assignments for two U.S. experts to work with the rural agricultural population of L'viv and the Ukrainian Resource and Development Centre for a three-week
period.

* properly designed one-month U.S. short course for four key leaders from the L'viv Oblast in leadership training and midwest agricultural and rural systems orientation.

* organized in-country rural development conference delivered by the returned key leaders and attended by L'viv's rural private farmers and agribusinesses and families.

* financial support for two full-time lobbyists from the L'viv Oblast.

* financial support for U.S. and in-country management.

* financial support for the production and dissemination of a Rural Development Bulletin for the L'viv Region.

Project Outputs

The project outputs include the following:

* existence of a functioning rural development commission in the L'viv region of Ukraine.

* full awareness and representation of the issues and concerns of the rural agricultural population to government, public and private sectors.

* improved standard of living for the private, rural population in the L'viv Region of Ukraine.
Budget
Yr 1 (duplicate for yrs 2 & 3)

1. Technical Assistance (covered by ftf)

2. U.S. one month short-course for four people

   - Airfare 4 x $2,700
   - Per diem 4 x 28 days x $65
   - Car/driver 28 days x $100
   - Trainers 20 days x $265

3. In-country Conference

   - Airfare for one U.S. expert 1 x $3,200
   - Per diem for one week 6 x
   - Local transportation 1 week x $200

   - Facilities for 3 days
     - Conference hall 3 x $100
     - Participant per diem 3 days x 200 people x $25
     - Document duplication $500

4. Bulletin Production

   - $6,000 yr 1
   - $12,000 yr 2
   - $18,000 yr 3

5. Management

   - Land O'Lakes
     - U.S. project officer 30%
     - O.S. " manager 50%
APPENDIX E

TRIP REPORTS

NEW INITIATIVES FOR THE BALTICS
Milk Procurement and Assembly of Milk in Latvia

Technical Advisor: Gary Seiler

November 18-December 6, 1992
Executive Summary

My presentation on establishing cooperatives, milk pricing, maintaining milk quality, mastitis management, milk pricing alternatives, and staffing a field force proved to be a successful venture. Twenty eight people of the Valmiera milk district participated in the seminar. This milk district is the largest of 26 milk districts in Latvia. The participants were the best professionals Latvia had in the region. They were knowledgeable people in dairying searching for ideas from America that could help them.

This opening seminar displayed that I was there to help them and offer suggestions. Trust and confidence in each other grew as the days progressed on the seminar. With the trust factor resolved, they arranged for some fine tours of their dairy operations. I was able to tour some farms. They showed me a few of the large collective farms and a few of their new farms that are getting established.

They provided me with a tour of a few of their processing plants. This enabled me to visit with a few plant managers. From them I could capture the financial and quality difficulties their dairy industry is encompassing.

I was impressed with the leaders they have in the dairy industry. They are knowledgeable and want to learn more about how they can improve the conditions of their industry. They have almost insurmountable challenges in front of them.

The Latvian government is totally committed to offering their people free enterprise. If any person can prove that they are a direct ancestor of a land owner prior to communist rule, they are awarded that parcel of land. This means there are many new farms being established at the sacrifice of the state owned collective farms. Most new farm owners assume that anyone can be a farmer and proceed without any training. This also make for inefficiencies of the collective farms.

The milk plants are burdened with servicing the numerous small farms. For example, one plant processes about 60,000 pounds per day and has 2,000 farms to service. Milk pickup is a major expense.

The challenge of establishing private ownership of the milk plants is facing them. If cooperatives are established what size should they be and how should they be structured?

The opportunity to have good quality milk for a processing plant is difficult. Detergents, sanitizers, and brushes are not to be found. The vast majority of milk contact surfaces of milking equipment are aluminum. Stainless steel is extremely expensive and is hard to find. The refrigeration facilities on the farms are not good. Very few farms have bulk coolers. The canned milk on the farms are not receiving cold water circulation to rapidly cool the milk.

The mastitis situation is not good. All the dairy cows I saw have peat as bedding. Being moist and high in organic material, this is a host for mastitis causing bacterium. Without having good sanitizers and teat dips available I’m sure the cows are infected
with mastitis. The milking equipment installation I saw need improvement. Some were
fine for present cow productivity. But with the prospect of heavier milking cows, the
equipment could not handle it.

The milk price of 18 rubbles per liter paid to the farmer and the cost of 60 rubbles per
liter for gasoline makes dairying unprofitable. The export market Latvia had was mainly
with Russia. But because of the heavy inflation rate of the Russian rubbles they dropped
Russia. The economy is such that the people don’t have money to purchase dairy
products. The average worker makes $40.00 American money equivalent per month.
At present they aren’t able to enter the western world market.

A supply cooperative structure needs to be established that can provide the basic
detergents, sanitizers, and brushes for cleaning equipment. They also need a basic
supply structure for other farm needs.

The basic needs for quality milk need to be presented to the farmers. Personnel trained
on how to work with farmers with milk quality need to be available. A reward structure
to farmers producing superior quality milk is needed.

More basic laws established by the government are needed. Aluminum for milk surfaces
must go. Basic refrigeration requirements are also needed.

General cooperative principles need to be presented to the dairy plant leaders and then
to the farmers. The farmers won’t believe in cooperative needs if employees don’t speak
well of them. Then basic cooperative meetings could be presented to the farmer.

Revenue is needed for the industry. At present there isn’t any incentive for any farmer
to improve themself. Although marketing isn’t my expertise, I can plainly see it is
desperately needed. There is immediate opportunity to capture tourist sales around the
Baltic Sea. An attractive package with a quality trade mark on their cheeses would be
a positive first step.

My number one recommendation in meeting the challenge of milk assembly in Latvia
is basic sanitation practices. The rank and file must be made aware of the rewards of
good quality milk. Of course along with this a basic source of farm supplies at a
reasonable price is needed.
Purpose of Trip

My main purposes of the assignment were:

1. Present a seminar to their dairy industry leaders on milk procurement and assembly of milk.
2. Offer technical assistance to areas identified by participants of the course.
3. Determine what future technical assistance their dairy industry may need.

Accomplishments

Through the various activities I was able to grasp the many challenges their industry is facing. Latvia is committed to the privatization of the dairy industry. The transition phase is going to be difficult. Being able to see where they are and where they want to go is important.

In attempting to offer some basic technical advice, the void of basic farm supplies was a road block. A farm supply cooperative system is needed. We can offer sanitation and mastitis management advice but detergents, brushes, and dips are needed along with some refrigeration systems to cool the milk.

The integrity of Land O'Lakes and their trust in that we are sincere in wanting to help them were all accomplished. They grasped that we have the trained personnel in milk assembly that could help them. Myself, along with other pertinent Land O'Lakes personnel were given a warm invitation.

Mastitis Management - They had basic ideas of mastitis but were intrigued with the contagious aspect of some mastitis causing bacterium.

Milk Pricing - Offering quality and volume premiums intrigued them. The concept of federal order pooling proved interesting.

This seminar was a success. We had many good questions and discussion was good. Even though we had to always go through an interpreter the discussion flowed well. The participants could sense that we truly wanted to help them.

Through the evening gatherings and breaks I realized the concern their people have with establishing cooperatives. Their present processing plants are unprofitable and are operating at 60% of capacity. If satellite plants break away and form a cooperative that will make the main processing plant even more inefficient. Economics of scale also enter the picture. New processing equipment is desperately needed. Milk volumes are needed to spread out those costs.

Maifa Brunovska, the executive secretary for Mr. Kleinbergs arranged for tours of various farms, milk plants, and government officials. She did an excellent job.
We toured some of their large collective farms and some of their new farms. We visited a few of their milk processing plants and I had the opportunity to have in-depth discussions with their plant managers on their costs of gathering milk.

I had the opportunity to have a follow-up visit with Mr. Kleinbergs. He was thrilled with the reports from the seminar. As the result he had Maifa arrange to have a 1/2 day seminar with the dairy officials of the Riga district. This proved to be a rewarding experience equal to that of Valmeria to return again and be of assistance in helping their dairy industry progress. Many key contacts with influential people in their Ministry of Agriculture and in their dairy were made.

Activities

Having an initial meeting with Mr. Gundars Kleinbergs, the head of the livestock produce department on the first day after arrival was positive. I was impressed with his concern about the demise of the dairy industry and the desire to improve it. He gave me the general plan of privatizing the dairy industry. In five years they want everything privatized. He expressed two serious difficulties of their industry. 1) They are experiencing lower than normal acidity in their milk supply 2) a fair number of cows are being lost to leukocytosis. Helping to solve these problems would be appreciated. Mr. Kleinbergs assured me that the seminar scheduled to begin on Monday would have the best professionals their country has in the dairy industry. The seminar would be held Valmiera, their largest dairy district.

The seminar on milk procurement and assembly was held at Valmiera from Monday through Thursday. I was impressed with the quality of people in attendance. All in attendance had a college degree or higher. They all expressed the desire to grasp more knowledge of their industry.

Cooperative structure - They see the need to establish cooperatives. Many questions were asked in regards to the relationship between membership and management.

Milk sanitation practices - They understood the needs and concepts but expressed disgust with farmer cooperation and availability of supplies.

There was an agriculture exhibition at a trade center. They gave me a tour of this show so I could see the type of equipment that is being offered to the farmer.

I had the opportunity to meet with Baudouin de Marcken of U.S. A.I.D. He gave me more insight to what is transpiring in the Latvian economy and their dairy industry.

At my hotel I was able to meet with a couple individuals who are on assignment as accountants to assist the Latvian government on proper accounting procedures in the dairy industry. These people are Benita Pulins and Conrad Fritsch. I spent an entire Sunday afternoon with Conrad Fritsch to gain more insight as to the privatization plans for the dairy industry.
On the final day I was pleased in being able to meet with Andris Skele. He is the first deputy Minister of the Ministry of Agriculture. I was able to explain to him what I saw from my viewpoint and he in turn presented what his government's plans are in privatization. He gave a grateful thanks to me and Land O'Lakes to offering assistance and a warm welcome to us to continue in our endeavors.

**Significant Findings**

The Latvian personnel that are involved in the dairy industry that I met are devoted to their careers and have the desire to improve their industry. There appears to be a void in getting expertise about milk quality from the leaders I met to the rank and file dairy farmers. It probably is the result of not having private industry. Continued work with these people is needed.

- **Proper refrigeration of milk** is a major problem. Maintaining milk at 48°-50°F is not good. There was only one farm that I visited that had good cooling. They used a plate cooler.

- **Cleanliness of equipment** - Proper detergents and sanitizers along with brushes were a void. Almost all the equipment I saw was aluminum.

- **Mastitis management** - Cows are kept on peat as bedding. This is ideal for bacteria to grow in. The cows aren't kept in partitioned stahls nor are trainers used so the cows aren't kept in clean environment. I'm sure their cows are infected with strep or staph organisms.

- **Collective farms** - I was impressed with one farm with the pride and dedication all the workers had. On a different farm the overall sanitation was not good.

- **The new farms** - I was impressed with a couple of the new farms that I saw. The young farm couples had clean operations and had the desire to succeed. I hope they can maintain their operation until the milk prices rebound. It will be a slow process to proceed with these farms. But is is a positive move.

- **Milking equipment** - The aluminum equipment is a hex. The stainless steel equipment I saw at the exhibition had a poor finish also.

- **Cost of milk gathering** - The expense of servicing the many small farms at each milk shed is excessive. Either a service charge be assessed of the small farm or the larger farm should receive a volume premium.

- **Cooperative structure** - There is desperate need for cooperatives. Supply co-ops are needed to get the basic supplies to the farmer. Marketing cooperatives are needed to develop marketing, packaging, and the need to have quality milk. I am concerned about the idea of having small independent cooperatives. It would hamper marketing strength, economics of scale, and milk balancing concept.
**Recommendations**

To improve the general milk quality, a dual plan should be implemented.

1. Have personnel trained to assist the farmer in understanding the need for milk quality and how to obtain it.

2. Have a supply type cooperative available so the needed materials to maintain a sanitary environment can be purchased at a reasonable price.

- Some general regulations need to be adopted to phase out the aluminum milk contact equipment. Aluminum is not conducive to proper milk quality.

- Refrigeration - A process to mechanically cool milk on the farm need to installed. Fluid milk flavor can’t be improved until proper refrigeration is attained.

- Cooperative structure - Basic cooperative concepts and organizations with all the benefits should be reviewed with the key dairy leaders and passed on down to the farmer. Then have the farmer organize. Without cooperative concepts presented to the leaders they could undermine the efforts.

- Marketing - A cooperative system that can utilize effective packaging and processing machinery. With quality products in an attractive package, then dairy products can be effectively marketed.

- Assistance to the new farms - Have available consultants or county extension agents that can train the new farmer on modern farming techniques. Farming needs to be viewed as a business not a way of life.

- Follow up - Have a few key people who experienced my seminar and I worked with come to America. Have them work a week with Land O’Lakes personnel in milk quality so they can see how everything does function in gathering quality milk.

This project was a learning experience for both parties. The people from Latvia learned that Land O’Lakes has the people who have the expertise and desire to help their dairy industry. I in turn captured the true situation of their industry and the economy. There is a huge challenge in Latvia. But by taking one step at a time and working together we can help Latvia alleviate some of their dairy industry challenges.

GS/bb
RMilkProLatvia (WP)
TECHNICAL ASSISTANCE REPORT
DAIRY PROCESSING AND MANUFACTURING
IN ESTONIA

NOVEMBER 23 THROUGH DECEMBER 4, 1992

Prepared By
Joel Stangeland
December 18, 1992
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The Estonia Dairy Industry is going through a time of great change. Fifty years of being an integrated past of the former Soviet Union has left the industry with limited ability to market products internally and internationally. This has caused a large surplus of butter (72% butterfat), which has affected the profitability of the industry.

Estonia has a limited amount of capital to invest in upgrading the industry with new technical energy-efficient equipment. The industry is looking to out-of-country interest to invest and/or partnership as they become privatized. Land O'Lakes being a regional USA cooperative is not in the position to be investing in capital but can provide technical assistance to the Estonia dairy industry.

Areas of technical assistance and training that were identified to be needed by Estonia dairy industry are:

- Marketing of dairy products both existing product and new products.
- Management styles and techniques to compete in a World Market. (Total Quality Management).
- Raw milk quality at the farm to the processing plant.
- Product quality and standardization.
- Energy conservation and the use of alternative energy sources.
With this type of technical assistance, it would help to streamline the industry to make it more efficient and produce a quality product that could compete on the world market.

**SCOPE OF WORK**

Land O'Lakes was awarded a grant by the U.S. Agency for International Development to review the dairy industry in Estonia. Determine what type of training and technical support is needed, in the restructuring and privatization of Estonian agriculture, making it globally competitive. Providing training and technical assistance to the dairy industry at both the managerial and operational level.

**ACCOMPLISHMENTS**

Four days were spent in visiting six different dairy plants. These plants produced consumer milk, cheese, quark, keefer, butter, skim milk powder, and lactose. Two days of training the management and technical personnel on management styles, cooperatives organization, raw milk and product quality, pasteurizer functionality, and energy conservation. Three days were spent in the Paide Dairy Plant inspecting equipment and reviewing pasteurizer design with engineers and technical employees. A day was spent of visiting three different dairy farms, both collective farms and privatized. Many questions were asked during my visit from, "How does Land O'Lakes market a new product? to "How do you pay farmers for milk?"
**FINDINGS AND CONCLUSIONS**

Estonia dairy facilities are very large with antiquated energy-consuming equipment. The amount of quality raw milk is declining making the plants very inefficient to operate. The facilities lack in capital and technical skills needed to streamline their operations to produce quality dairy products that can compete on a global market.

**RECOMMENDATIONS FOR FOLLOW-UP**

Recommend that training be provided for management and operational personnel in the following areas:

1. Marketing of dairy products both existing and new product.
   - Advertising healthy, quality dairy products.
   - Researching new products and learning how to introduce them into the market.
   - Establish marketing plan for exporting dairy products that meet International Dairy Federation (IDF) standards.

2. Management Skills
   - Total quality management.
   - Team building.
   - Empowerment.

3. Raw milk Quality
   - Trained field service experts who work with producers.
   - Raw milk quality standards.
(continued of #3. Raw milk quality)

- Quality and quantity raw milk pricing.
- Milk collecting and transporting.

4. Product Standards

- Nationalized dairy regulation and standards for dairy products and sanitary processing equipment.
- Developing quality into dairy products.
- New dairy technology.

5. Energy Conservation

- Use of alternative energy to fuel oil.
- Operating equipment more efficiently (boiler, evaporator, and pasteurizer).
- Heat loss due to steam leaks, open door and windows, etc.


All of these areas of training are essential if the dairy industry in Estonia is going to survive.

APPENDIXES

Please see attached pages.

ESTONIA4_JS
The programme of Mr. J. Stangeland from Land OLakes, Inc. and Mr. A. Gregory from Galagen Inc. staying in Estonia November, 20th - 28th 1992

November, 20th

9.30 Visit to Development Centre of Meat and Dairy Industry, meeting with the representatives of the quality control laboratory
12.00 Meeting in the boarder of Estonian Dairy Association
13.00 Lunch
14.00 Town excursion
20.00 Dinner

At November, 21th

9.00 Visiting the old town
12.00 Lunch
13.30 Departure from Tallinn to Tartu
17.00 Arrival to Tartu, accommodation to hotel "Taru"
19.00 Visiting theatre "Vanemuine"

November, 22th

Sightseeing programme

November, 23th

9.00 Visit to the Tartu Dairy
12.00 Lunch
14.00 Visit to the Tartu Dairy Cooperative

November, 24th

9.00 Departure from Tartu to Viljandi and Pärnu, visit to the Viljandi Dairy and Pärnu Dairy

November, 25th

9.00 Departure from Tartu to Võru and Põlva, visit to the Võru Dairy and Põlva Dairy

November, 26th

10.00 Tartu Dairy
Lecture: 1. New processes and technique comparing with nowadays situation in Estonian dairies by Mr. J. Stangeland
2. Law energy processes in dairies by Mr. A. Gregory

November, 27th

Departure from Tartu to Tallinn, accommodation to hotel "Viru"
19.00 Dinner at "Peoleo"

November, 28th

Sightseeing programme
17.25 Departure of Mr. A. Gregory to Frankfurt
LITHUANIA

Ken Wahlin
Nov. 27, 1992 - Dec. 20, 1992

Food Plant Operations Seminar

I. Two seminars were held in Vilnius, Lithuania:
   Nov. 30 - Dec. 4, 1992; and Dec. 14 - 18, 1992

II. The course was successful and the people were very willing to learn.
   a. The course material needed to be altered a little, because some of the technical
      material was too complicated for the mixture of people in the class. However,
      I was able to cover all the topics, leaving out only the actual butter-making part
      of the lecture.
   b. The women who attended the seminars were especially interested in beginning
      new businesses, balance sheets and profit and loss statements.

III. Recommendations for the future.
   a. Have a less diversified group; either all farmers or all dairy specialists. It will
      help zero in on specific problems of each. The course leaders in Lithuania also
      agreed with this approach.

PERSONAL NOTES

Country

Lithuania is a beautiful country and has the opportunity to become successful.

Assets are:
  1. Agriculture
  2. Forest Products
  3. Access to the Baltic Sea and the West
  4. Amber
  5. Tourism could be developed with better facilities.

Agriculture

The farmers need a lot of help with the re-distribution of the land. They need to become
productive. Fifty years ago, when the Russians took over, they moved the farmers to
villages and took their land away, burned their buildings and set up large, state run
farms. The process now is reversing and they are finding it very difficult.
Help Needed

1. Technology and training for farmers who have not farmed and now have land and want to begin.

2. Long-term, low interest loans so they can rebuild on their land and get new equipment and livestock.

3. Laws allowing sale, rental or trading of land without reverting back to the government.

4. Laws allowing formation of cooperatives. The country had many successful cooperatives prior to invasion by Russia in 1938. They would like to work toward that again.

Dairy Plants

The dairy plants tend to be overbuilt and their technology is much behind the western world. They will not all succeed because of poor facilities and lack of raw milk. I believe the ones that will succeed are the ones that improve their technology and sanitation.

Sanitation practices need much improvement from farm to dairy plants and beyond. It should begin at the farm. Plants are very dark and dreary looking inside, with rather poor incentive to keep it clean.

The receiving stations I visited, where farmers deliver their milk, should be cleaned up. Sanitation is talked about, tested for, but nothing is done to improve it.

People

The people are and will be the major asset Lithuania has. The women are especially interested in improving the system, I'm sure, because they want things better for their children than they had it. They all want to learn and improve; they just don't know where to begin after so many years of Soviet rule.

Leaders

The leaders I worked with were Mr. Alvaydas Mikelionis and Mr. Vladas Lasas. They are very interested in forming cooperatives for farmers and dairy plants and are working hard to make this happen. THEY NEED MUCH HELP.

The country is beautiful and the people are very friendly. The opportunities are there, but help and guidance is needed--much more than I could give them in only 3 weeks. But they said they have gotten a good start and have begun to think for themselves. They would like to have young people who speak English come to the United States to work and learn for a few weeks. Of all the areas in the country, I would say farmers need the most help.
KEN WAHLIN

Trip Throughout Lithuania

December 7 - 11, 1992

I. Visits to Dairy Plants in:

1. Rokiskis
2. Kupiskis
3. Klaipeda
4. Kaunas

a. These plants are housed in large buildings. They produce fluid milk, ice cream, fermented cheese, cottage cheese, butter, sour cream and other smaller amounts of dairy products. The equipment was fairly new, made in the Soviet Union. Very little equipment is from the Western world.

b. It's hard to determine if all these plants will survive privatization because of shortages of raw milk, due to the closing of large state farms and drought. New farmers are having difficulty getting started because of the expense involved with cattle, feed, equipment and buildings.

c. The people in the dairy industry do understand what it takes to run a processing plant; however, they need help in learning how to think for themselves, after being under Soviet rule for so many years.

d. I also visited the Dairy Research Institute at Kaunas. The equipment there was very old and the work being done there seemed to be of very little value to the industry. However, if the extension services, colleges and universities could get together with the research institute, it could be a very valuable tool. They need to work together.