AGFIN+ THIRD QUARTER REPORT

APRIL - JUNE 2005

JULY 2005

This publication was produced for review by the United States Agency for International Development.
It was prepared by Development Alternatives, Inc.

AGFIN+ THIRD QUARTER REPORT

APRIL – JUNE 2005

SUBMITTED TO THE
UNITED STATES AGENCY FOR INTERNATIONAL DEVELOPMENT

CONTRACT NO.: PCE-I-00-99-00002-00 TASK ORDER 822

IN ASSOCIATION WITH: WINROCK INTERNATIONAL

The authors' views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

Table of Contents

I. Executive Summary

II. Success Stories and Notable Events

III. Progress Towards SO Goals – Constraints and Challenges

IV. Activity Profiles

Third Quarterly Report - Tomato+

Third Quarterly Report – Cheese+

Third Quarterly Report - Diversification+

Third Quarterly Report – Greenhouse+

Third Quarterly Report – TFI+

Third Quarterly Report - Market+

V. General Program Activities and Cross-cutting Issues (gender, environmental, etc.)

VI. Contract Modifications

VII. STTA

VIII. Financial Information

Quarter 3 AgFin+ Financial Report; April – June 2005

AgFin+ Subcontractor Reporting and Payment Information – Regional Breakdown

AgFin+ Subcontractor Reporting and Payment Information – Expenditure Rate

Appendices

Appendix 1: Indicator Tables

Tomato+

Greenhouse+

Phoenix+

Diversification+

Appendix 2: Baseline Information and Templates

Appendix 3: Gross Margin Baseline Calculations

Milk Production Budget - Gross Margin Template

Cheese Processing - Gross Margin Template

Open Field Crops - Gross Margin Template

Greenhouse - Gross Margin Template

Appendix 4: Trip Reports

Dairy Processing Trip Report - PE Vallmatove

Dairy Project Feasibility Mission - report

AgFin+ Third Quarter Report

For the Period of April – June 2005

I. Executive Summary

AgFin+'s first agricultural season has commenced with a number of activities already developing, with a monitoring system in place for the management of its subcontracts and the collection of data for its indicators.

In Kyrgyzstan:

Tomato+ Early tomato growers have been trained and are already harvesting for the early Bishkek market. Two areas of production are under development, in the Osh region and in the Jalalabad region. Both areas, participant farmers are being credited by *Agrocredit+and Association of Agribusiness in Kyrgyzstan AAK* are providing the required inputs. Tes Centre are charged with the extension responsibility in Osh for approximately 500 farmers and the Regional Advisory Service (RAS) in Jalalabad region, again for approximately 500 farmers

In both areas, farmers have received the majority of their training, however the extension services continue to monitor farmers and identify ongoing agronomic problems.

In Tajikistan:

Cheese+ Training for the post harvest development of improved cheese production has started this quarter with an Israeli study tour for the selected cheese makers. The micro-credit bank Development Fund has dispensed $28,000 to farmers to purchase dairy cows however during the quarter, allegations were received from the ACDI/VOCA CAMFA, USAID funded, project that the Development Fund (DF) was stealing its own funds. In response, AgFin+ arranged a USAID audit. The result of this audit suggested that DF required restructuring. AgFin+ decided to cease work with DF and develop a new micro-credit bank (Phoenix+). This fund has taken on the majority of the original employees of Development Fund but enacted the required and recommended restructuring.

Diversification+ activities have been limited by the delay in the importation of the machinery required to cultivate and plant the selected new crops. It was decided to limit activities to two crops this season. Baby corn and Tomato paste production. Sugdh Agro Serve will concentrate specifically at costings for tomato growing and paste production in the North of Tajikistan as a comparison to the work being done by Tomato+ in Kyrgyzstan. Baby corn plantings have taken

place for the first time in Central Asia. The project proposes to strengthen processing techniques for both crops by the use of a "farmer to farmer" expert in the next quarter.

In Uzbekistan:

Greenhouse+ ***A bad quarter for Uzbekistan and especially for Andijan, the project has had to be very sensitive to both the people of Andijan and the Uzbek government's neurotic reactions to its own actions. Activities have had to be curtained, even though AgFin+ efforts have no political content and only concentrate on the economic development of small farmers. The project continues to develop its credit element in conjunction with its agronomic training plan.***

Packhouse+ ***concepts has been developed in the quarter, after long discussions, it is now clear that the focus of this activity should be focused on the creation of Chill-rooms rather than a specialized pack house.***

Regional:

Market+ ***the project continues to identify the correct local service provider (LSP) for this vital activity.***

TFI+ no activity has been initiated apart from discussions with TFI (Pragma) project.

II. Success Stories and Notable

- Tomato farmers began harvesting and marketing in Bishkek fresh market. Farmers have experienced excellent prices due to continuing export of Uzbek tomatoes to Moscow and the closure of the borders due to political unrest
- $40,000 in funding was awarded to AgroCredit^{+} ($13,000 advanced)
- Tomato farmers have started to repay credit in Uzbek and Kyrgyzstan
- Diversification+ - baby corn production initiated
- Greenhouse+ helps host a workshop attended by 800 greenhouse growers

III. Progress Towards Strategic Objectives – Constraints/challenges

Indicator Summary Tables

- Political disruptions caused some minor delays in Kyrgyzstan and considerable difficulties in Uzbekistan

IV. Activity Profiles follow tables

AgFin+ Summary Table

Year: 2005

Quarter 3 (April - June 2005)

Indicators	Measure	Baseline	Yearly Target	Completion by Quarter				Cumulative for Year	% Complete to Date	Cumulative - Life of Project
				1	2	3	4			
IR1: On-farm Agribusiness Increased										
1.1: On-farm Profitability Increased for AgFin+ Beneficiaries	$ inc.	TBD						0		
Open-field Crops	hectacre	TBD						0		
Greenhouse	sq. meter	TBD						0		
Dairy Cattle	Liters milk	TBD						0		
1.1.1: Number of Beneficiaries Trained During the Reporting Period	# farmers							0		
Male								0		
Female								0		
1.1.2: Farmer Production Techniques Improved	# farmers trained		500		916			916	183%	
Male			400		72			72	18%	
Female			100		194			194	194%	
1.1.3: Farmers linked to Processors/traders	# contracts		700		638			638	90%	
Male			500		508			503	101%	

Female			200		130			130	65%	
1.2: New On-farm Products Increase Profitability	$							0		
1.2.1: Market Studies Completed	#		5					0	0%	
1.2.2: Processing Studies Completed	#		2					0	0%	
1.2.3: Input Analysis Completed	#		1					0	0%	
1.2.4: Economic Crop Studies Completed	#		5					0	0%	
1.2.5: Logistical Studies Completed	#		4					0	0%	
1.2.6: Trial Shipments Completed	#		6					0	0%	
1.2.7: New Market Trial Products Sold	#		5					0	0%	

Indicators	Measure	Baseline	Yearly Target	Completion by Quarter				Cumulative for Year	% Complete to Date	Cumulative - Life of Project
1.3: Access to On-farm Finance Increased	$ inc		$ 400,000		$ 227,821			$ 227,821	57%	
Male			300,000		$ 202,013			$ 202,013	67%	
Female			100,000		$ 25,807			$ 25,807	26%	
1.3.1: AgFin+ Facilitated Loans	# loans		500		748			748	149%	
Male			400		607			607	152%	
Female			100		133			133	133%	
1.3.2 Percentage of Loans Repaid	%		95						0%	
MVMARD			95		100				105%	
Tomato+										
Phoenix+			95		100				105%	
1.3.3: Credit Trainings Delivered	# trainings		1000		501			501	50%	
Male			700		378			378	54%	
Female			300		118			118	39%	
Off-farm Agribusiness Incomes Increased								0		
2.1: Off-farm Profitability Increased for AgFin+ Beneficiaries	$/ business		$10,000					0	0%	
Change in gross revenues for cheese processor - yearly	$							0		
Tomato Processing / other	$							0		
2.1.1: Input Techniques Improved	#		25					0	0%	
2.1.2: Products Linked to Processors/traders	#		10					0	0%	
2.2: New Value-added Products Sold	#		5					0	0%	
2.2.1: Value of New Inputs Available	$/business		$5,000					0	0%	
2.2.2: New Markets for Existing Products Developed	#		5					0	0%	

2.2.3: New Products Developed	#		5					0	0%	
2.2.4: Logistical links and nodes developed	#		3					0	0%	
2.2.5: Value of raw materials delivered	$/business		$20,000					0	0%	

Indicators	Measure	Baseline	Yearly Target	Completion by Quarter				Cumulative for Year	% Complete to Date	Cumulative - Life of Project
2.3: Off-farm Finance Increased for AgFin+ Beneficiaries	$		$ 500,000					0	0%	
Male			400000					0	0%	
Female			100000					0	0%	
2.3.1: AgFin+ Facilitated Loans	#		10		1			1	10%	
Male			7					0	0%	
Female			3					0	0%	
2.3.2 Percentage of Loans Repaid	%		95					0		
Business A										
Business B										
Business C								0		
Local Service Providers Strengthened								0		
3.1: Project Implementation Abilities of LSPs Strengthened	assessment score							0		
3.1.1: LSPs Created	#		10		1			1	10%	
3.1.2: AgFin+ Funds Committed	$							0		
3.1.3: Dollar Amount of LSP Funds Expended	$							0		
3.1.4: Training by Project Staff	# days							0		
3.1.5: External Donor Funds Leveraged	$							0		
								0		
								0		
Previous Indicators								0		
3.1.1: Donor Funds Leveraged			500,000					0	0%	
3.1.2: LSPs Created								0		

3.1.3: Value of New LSP Services Provided to AgFin+	$		100,000					0	0%	
								0		

Third Quarterly Report - Tomato+

AgFin+, Kyrgyzstan

June 30, 2005

1) Activity Indicator Tables

- Activity Indicators table from TES Centre Osh, RAS Jalal Abad and AgroCredit+ is attached

2) Qualitative Assessment

- Field visits to tomato growers indicate quality inputs and improved production practices are having a positive impact on quality and yield of tomatoes

3) Significant Accomplishments/events during Quarter

- "AgroCredit+**,** with significant assistance of AgFin+ staff, was registered and is operational for AgFin+ beneficiaries
- AgFin+ Project, in coordination with TES Centre, participated in a "test training" in Tomato Sun Drying Technology
- AgFin+ Project, in coordination with TES Centre, developed a training plan for "Bull Fattening" with AED START/Bishkek funding
- AgFin+ Project provided STTA consultancy for AgroCredit+ in credit management (loan policy, business planning, book-keeping, reporting, etc.)
- AgFin+ continued to develop relationships with foreign investors from Holland and the US with the Manzini processing plant in Jalalabad
- Planned a workshop "Focus for AgFin+ Partners and Further Joint Activity Plans" for 70 participants to be held in August

4) LSP Progress vs. Workplan - Constraints/Challenges

- All LSP workplan activities were carried out as planned
- Price of fresh market tomatoes increasing and may have an impact on the farmers compliance with contracts to processors

5) Key Activities Planned for Next Quarter

- Develop scope of work for STTA consultancy for "Manzini" processing plant in Jalal Abad oblast

- Carryout a seminar "A Focus for AgFin+ Partners, and Further Joint Activity Plans " August 17-19, 2005 At the "Asia Trekking camping"(Arslanbob village, Jalal Abad oblast, Kyrgyzstan)
- Preparation of AgFin+ Kyrgyzstan activities for 2006
- Promote a new extension system for TES Centre agricultural outreach programs
- Assist for AgroCredit+ in design of loan policy for livestock production
- PMP review and setting baselines

Third Quarterly Report – Cheese+

AgFin+ Project Tajikistan

June 30, 2005

1) Activity Indicator

- Cheese+ LSPs are in the process of developing their activity indicator tables for their activities. LSPs include Development Fund, BSAID and PE Vallamatov, private small-scale cheese plant

2) Qualitative Assessment

- No Qualitative Assessment can be provided as the period from April to June was dedicated to preparation and discussion with the LSPs involved in the Cheese+ activity.

3) Significant Accomplishments/events during the Quarter

- Workplans of the LSPs developed
- PE Vallmatov, 2 staff of private mini-cheese plant traveled to Israel for study tour and identification of cheese making equipment. Cheesy report attached.
- LSPs have drafted their work plans till end of the year.

4) LSP Progress vs. Work plan - Constraints/Challenges

- BSAID work plan activities were carried out as planned

- Development Fund hired staff, disbursed $28,000$ in loans to farmers and provided 2 trainings but continued collaboration was cancelled due to USAID auditing findings. Auditors recommended not continuing working with DF while the Fund is under the current management structure. Due to allegations submitted by the CAMFA project all activities of DF were ceased
- The decision is made towards DF to change the structure by forming and registering a new Micro Loan Fund “Phoenix+” which will employ a more appropriate Board structure managed and supervised by AgFin+
- In mid June “Phoenix+” received registration from Ministry of Justice of Tajikistan

5) Key Activities Planned for Next Quarter

- Review BSAID workplan to develop new activity in livestock extension
- Hire economist to set required baselines
- Register new Micro Loan Fund “Phoenix+” at National Bank of Tajikistan and receive certification from the bank for micro-crediting activities
- Develop a budget for cheese making equipment and including milk collecting centres for the Cheese+ activity
- Organize a seminar “A Focus for AgFin^{+} Partners, and Further Joint Activity Plans " August 17-19, 2005 At the "Asia Trekking camping"(Arslanbob village, Jalal Abad oblast, Kyrgyzstan)
- Preparation of AgFin^{+} Tajikistan activities for inclusion in the AgFin+ 2006 workplan

Third Quarterly Report - Diversification+

AgFin+ Project Tajikistan

June 30, 2005

1) Activity Indicator

- Table appended

2) Qualitative Assessment

- Sughd Agro Serve has identified pilot field area for trial of alternative crops as baby corn and tomatoes.

3) Significant Accomplishments/events during the Quarter

- AgFin+ provided SAS with seeds of sweet corn
- SAS has planted the seed in its pilot field.

4) LSP Progress vs. Work plan - Constraints/Challenges

- SAS has submitted its workplan through the end of current year and is following it accordingly.
- SAS faced difficulties in receiving the container of the machinery from Australia due to custom tax issues in Tajikistan, as SAS is not a tax exempt organization
- USAID provided some assistance to deal with custom issue by providing SAS with the agreement of US Government with Tajikistan Government. SAS has written a justification letter to the custom department that the equipment will remain the property of USAID till the end of project, afterwards SAS will have the ownership and then will pay required custom tax.

5) Key Activities Planned for Next Quarter

- Receive container with the machinery, unpack it and set up the machinery for use.
- Harvest baby corn and identify market of fresh and processed baby corn in local markets and in Russia.

Third Quarterly Report – Greenhouse+

AgFin^{+} Project Uzbekistan

June 30, 2005

1) Activity Indicator Tables

- Activity Indicators table from FV-MARD is attached

2) Qualitative Assessment

- Political situation, in May 2005, in Andijan region required some activities to be postponed.
- "Horun ar Rasul" Greenhouse farm requested the importation of a Greenhouse construction from Moscow for strawberry production demonstration site due to the political situation in Uzbekistan.

3) Significant Accomplishments/events during Quarter

- AgFin+ provided $250,000 to a local micro-credit organization FV-MARD to give working capital loans to AgFin+ beneficiaries.
- AgFin^{+} Project in coordination with "Horun ar Rasul" Greenhouse farm organized the annual conference of Greenhouse Growers of the Ferghana Valley. Some 800 greenhouse growers attended the conference which focused on innovative approaches to greenhouse management such as heating and ventilation systems, drip irrigation technology, new varieties of tomatoes and provided opportunities for growers to meet individually with technical experts, equipment dealers as well as attend various types of demonstration.
- AgFin^{+} Project in coordination with FV-MARD created new loan product for purchasing Drip Irrigation Systems, which is believed to increase the greenhouse productivity by at least 50%. USD$88,000 has been dedicated for this purpose.

4) LSP Progress vs. Workplan - Constraints/Challenges

- All LSP workplan activities were carried out as planned with the exception of several issues mentioned below.

- FVMARD contract for $250,000 has been problematic due to difficulty in depositing funds in a personal account. At present the only method of depositing funds in an Uzbekistan bank is through personal accounts. Accounts for organizations are subject to government meddling and in some cases opening new accounts for organizations has been stopped. To date $161,721 has been provided through AgFin+. To FVMARD Average loan is $200 - $300. FVMARD interest rate is 4%/month. Repayment rate is 100%.
- Difficulties in registering Greenhouse Growers Association has delayed training but this is expected to be resolved through the contract with "Horun ar Rasul" Greenhouse farm.
- FVMARD's unregistered status may pose future constraints on Greenhouse+ growers, additionally, the future of FVMARD is uncertain after close of project.
- Packhouse activity to be restructured to Chill house activity as major constraint to marketing have been identified as perishability due to lack of facilities to cool products, although packing and grading will also be done.

5) Key Activities Planned for Next Quarter

- AgFin+ Project in coordination with "Horun ar Rasul" Greenhouse farm will develop a training plan for 500 Greenhouse growers on "General Greenhouse Management" with AED START Tashkent funding.
- Organize a seminar "A Focus for AgFin+ Partners, and Further Joint Activity Plans " August 17-19, 2005 At the "Asia Trekking camping"(Arslanbob village, Jalal Abad oblast, Kyrgyzstan)
- Begin preparation of AgFin+ activities plan for 2006
- PMP review and baseline development
- Training for 500 greenhouse growers will begin in August.

Third Quarterly Report - Market+

AgFin+ Project Tajikistan

June 30, 2005

- Market+ LSP contract expected to be signed in August 2005 and LSP expected to be operational in September 2005. Subsequently no report is included.

Third Quarterly Report - TFI+

AgFin+ Project Tajikistan

June 30, 2005

- TFI^{+} contract signing date no yet defined. Subsequently no report is included.

V. General Program Activities and Cross-cutting Issues (gender, environmental, etc.)

- Gender specialist programmed for July 2005

VI. Contract Modifications

- Awaiting budget modification. In June, Winrock submitted a modified budget to DAI, which included regional funds as instructed by USAID. DAI subsequently submitted the full budget to USAID.

VII. STTA

- W. Wolf – Phoenix^{+} credit LSP development, Tajikistan

VIII. Financial Information

Economic Activity: Tomato+

Year: 2005

LSPs: TES, RAS, AgroCredit+

Indicators	Measure	Baseline	Yearly Target	Completion by Quarter				Cumulative for Year	% Complete to Date	Cumulative - Life of Project
				1	2	3	4			
IR1: On-farm Agribusiness Increased										
1.1: On-farm Profitability Increased	$ inc.	TBD	100							
1.1.1: Farmer production techniques improved	# farmers trained	0	1,000		916			916	92	
Male		0	700		722			722	103	
Female		0	300		194			194	65	
1.1.2: Farmers linked to processors/traders	# contracts	0	250		633			633	253	
Male		0	200		503			503	252	
Female		0	50		130			130	260	
								-		
1.3: Access to On-farm Finance Increased	$ inc	0	40,000		38,426			38,426	96	
Male		0	28,000		27,162			27,162	97	
Female		0	12,000		11,263			11,263	94	
1.3.1: AgFin+ facilitated loans	# loans	0	1,000		319			319	32	
Male		0	700		214			214	31	
Female		0	300		105			105	35	
1.3.2 Percentage of loans repaid	%	0	95					-	-	
1.3.3: Credit trainings delivered	# trainings	0	1,000		450			450	45	
Male		0	700		348			348	50	
Female		0	300		102			102	34	
								-		
3.1: Institutional capacity of LSPs increased								-		
3.1.1: External donor funds leveraged	$	0	37,000		13,000			13,000	35	
3.1.2: LSPs created	#	0	1		1			1	100	

Year: 2005

LSP: FV-MARD

Indicators	Measure	Baseline	Yearly Target	Completion by Quarter				Cumulative for Year	% Complete to Date	Cumulative - Life of Project
				1	2	3	4			
IR1: On-farm Agribusiness Increased										
1.3: Access to On-farm Finance Increased	$ inc	0	200,000		161,395			161,395	81	161,395
Male		0	100,000		156,451			156,451	156	156,451
Female		0	100,000		4,944			4,944	5	4,944
1.3.1: AgFin+ facilitated loans	# loans	0	500		378			378	76	378
Male		0	400		363			363	91	363
Female		0	100		12			12	12	12
1.3.2 Percentage of loans repaid	%	0	100		100			100	100	100
1.3.3: Credit trainings delivered	# trainings	0	500		0			-	-	-
Male		0	400		0			-	-	-
Female		0	100		0			-	-	-
								-		-
3.1: Institutional capacity of LSPs increased								-		-
3.1.1: External donor funds leveraged	$	0	-					-		-
3.1.2: LSPs created	#	0								-
3.1.3: Value of new LSP services provided	$	0	200,000		161,395			161,395	81	161,395

Economic Activity: Cheese+

Year: 2005

LSP: Phoenix+

Indicators	Measure	Baseline	Yearly Target	Completion by Quarter				Cumulative for Year	% Complete to Date	Cumulative - Life of Project
				1	2	3	4			
1.3 Access to On-farm Finance Increased	$	0				28000				
Male	$	0				18400				
Female	$	0				9600				
1.3.1 AgFin+ facilitated loans	#	0				46				
Male	#	0				30				
Female	#	0				16				
1.3.2 Percentage of loans repaid	%	0				100				
1.3.3 Credit trainings delivered	#	0				46				
Male	#	0				30				
Female	#	0				16				

Economic Activity: Diversification+

Year: 2005

LSP: Sughd Agro Serve

Indicators	Measure	Baseline	Yearly Target	Completion by Quarter				Cumulative for Year	% Complete to Date	Cumulative - Life of Project
				1	2	3	4			
IR1: On-farm Agribusiness Increased										
1.1: On-farm Profitability Increased	$ inc.					n/a				
1.1.1: Number of beneficiaries trained during the reporting period	# farmers male/female					TBA				
1.1.2: Farmer production techniques improved						TBA				
Male						TBA				
Female						TBA				
1.1.3: Farmers linked to processors/traders	# contracts					5				
Male						5				
Female										
1.2: New on-farm products increase profitability	$					n/a				
1.2.6: Trial shipments completed	#					n/a				
1.3: Access to On-farm Finance Increased	$ inc									
Male										
Female										
1.3.1: AgFin+ facilitated loans	# loans					5				
Male						5				
Female										

1.3.2 Percentage of loans repaid	%					-				
1.3.3: Credit trainings delivered	# trainings					5				
Male										
Female										
2.2: New Value-added products sold	#					n/a				
2.2.3: New product developed	#					n/a				
2.2.4: Logistical links and nodes developed	#					n/a				
2.2.5: Value of raw materials delivered	$					n/a				

Gross Margin Baseline Calculations

Gross margin baselines have been calculated for cheese processing, milk production and a template has been developed for crops. These are illustrated below.

Greenhouse+ has been given a template to enter relevant costs to develop gross margins for tomatoes, cucumbers and other crops that may be targeted such as strawberries. It is expected that this will be complete before the end of September.

Crops and value-added post-harvest off-farm activities in the Diversification+ project will be developed by SAS economist Ben O'Brian. It is expected that these will be complete before the end of September.

Tomato+ baselines will be calculated by an economist employed by the AgFin+ project and should be completed before the end of September. The AgFin+ economist will coordinate with all project personnel to ensure a similar methodology is applied to all activities.

Reporting the gross margin proxy in the summary table will require independent presentations for some of the activities due to the different units/dimensions baselines are calculated in. For example, open field crops are reported in increases per hectare, greenhouse increases in square meters, Cheese increase in gross revenues on an annual basis and milk production per head of dairy cattle. Such a presentation is more illustrative of the actual change in gross margin than developing coefficients for each activity that yield one dimension.

It should be noted that as on-going production activities, such as tomatoes, move into post-harvest processing additional baselines will need to be calculated for any value-added product transformation activities, also, as new on-farm activities are developed baselines will need to be set for those as well.

Milk Production Budget (cow/month, cow/annual)

Gross Profit Margin (monthly - 30 days)	**$9.47**
Gross Profit Margin (annual - 360 days)	**$113.69**

Milk Production Budget (cow/day)

Items	
Revenue	
Milk Yield (Liter/day)	**9.1 Liters**
Price ($/Liter)	**11.80 cents**
Gross Revenue	**107.38 cents**
Expenses	
Coarse forage and silage	**31.1 cents**
Root crops and melons	**3.1 cents**
Grains	**3.9 cents**
Byproducts	**35.6 cents**
Combined feed meal	**0.7 cents**
Other feed costs	**0.2 cents**
Other costs	**1.2 cents**
Total Expenses	**75.8 cents**
Gross Margin	**31.6 cents**

Cheese Processing Gross Margin Template

Milk Processor Budget

Daily milk process (Liters)	**2,000**
Gross Profit Margin (daily)	**$131.96**
Gross Profit Margin (monthly) /30 days/	**$3,958.80**
Gross Profit Margin (annual) /360 days/	**$47,505.60**

Budget for 1000 liters of milk processed

Revenue	**Unit**	Quantity	Price ($/unit)	Amount (US Dollars)
Revenue				
Cheese	kg	90	2.25	$202.50
Milk Cream	kg	15	1.35	$20.25
Gross Revenue				**$222.75**
Direct Expenses				
Milk	**Liter**	1000	0.14	$140.00
Ferment Pepsin	$			$0.64
Calculium Chloride	$			$1.60
Salt	$			$0.64
Packaging	$			$4.80
Labeling	$			$0.64
Electricity	$			$1.00
Natural Gas	$			$0.16
Total Direct Expenses				**$149.48**
General Expenses				
Transportation	$			$0.65
Repairs and Maintenance	$			$1.00
Tax	$			$0.64
Total General Expenses				**$2.29**
Fixed Expenses				
Labor	$			$5.00

Total Fixed Expenses	**$5.00**
Total Expenses	**$156.77**
Gross Margin (per 1000 kg) $	**$65.98**
Gross Margin (per 1000 kg) %	**42.1%**

Open Field Crops - Gross Margin Template – (Illustrative)

			Gross Margin per ha	**$233.20**
		Quantity	**Price per unit**	**Total $**
Revenue				
Production and Sales	**kg**	**1600**	**$0.06**	**$96.00**
Expenses				
Ag. Management (Plough, Cultivation, etc)				**$4.50**
Seeds or Seedling (kg, quantity, etc.)	**kg**	**0.06**	**$80.00**	**$4.80**
Fertilizer				
Ammonium Nitrate	kg	20	**$0.16**	$3.20
Amorphous	kg	24	**$0.18**	$4.32
Ammonium Sulphate Phosphate	kg	16	**$0.19**	$3.04
….				
Fertilizer Total				**$10.56**
CPP				
Traditional				$2.25
New				$3.25
CPP Total				**$5.50**
Others costs				**$4.00**
Area	**ha**	**0.2**	**$20.00**	**$4.00**
Transportation				**$2.00**
Interest Costs				**$14.00**
Total Expenses				**$49.36**
Gross Margin				**$46.64**
Gross Margin per Hectare				**$233.20**

Greenhouse Gross Margin - Template

Greenhouse Budget - per one square meter

		Quantity	Price per unit	Total $
Revenue				
Production and Sales	**kg**	**9**	**$0.15**	**$1.35**
Expenses				
Ag. Management				**$0.50**
Seeds or Seedling (kg, quantity, etc)	**quantity**	**3**	**0.05**	**$0.15**
Fertilizer 1				$0.02
Fertilizer 2				$0.03
Fertilizer 3				$0.01
….				
Fertilizer Total				**$0.06**
CPP				
Traditional				$0.01
New				$0.01

CPP Total				**$0.02**
Natural Gas				**$0.02**
Plastic sheet				**$0.05**
Other costs	**ha**	**0.2**	**20**	**$0.04**
Transportation				**$0.01**
Total Expenses				**$0.85**
Gross Margin				**$0.50**
Gross Margin per Square Meter				**$2.50**

PE Vallmatov Trip Report

During the whole event from 5th to 11th of June 2005, we, Mukimkhon Valamatov and Murodkhon Valamatov had great opportunities to establish business contacts with Israeli colleagues. We had visited two dairy plant companies: ARBEL Processing and Packing Machines Ltd and PLADOT MINI Dairy. We made an informal agreement for purchase of appropriate equipment from ARBEL Processing and Packing Machines Ltd as PLADOT MINI Dairy equipment was too expensive. We had a meeting with a Director of the ARABEL dairy production factory and identified the equipment needed for our mini-plant. We also developed a draft price list of needed equipment for our mini dairy plant. We plan to continue our collaboration through joint business and participation in different projects.

We were satisfied with the program content but the program was too short and very compressed. We made field visits to different dairy farms. Most beneficial part of this study tour was acquaintance with the Israeli enterprises.

DRAFT

TAJIKISTAN

DAIRY PROJECT FEASIBILITY MISSION

A REPORT

by

Dr. Ezra Shoshani

NATIONAL SPECIALIST ON DAIRY FARM MANAGEMENT,
Milking and Farm Buildings,

EXTENSION SERVICE, MINISTRY OF AGRICULTURE AND RURAL DEVELOPMENT

STATE OF ISRAEL

MINISTRY OF FOREIGN AFFAIRS
CENTER FOR INTERNATIONAL COOPERATION (MASHAV)

MINISTRY OF AGRICULTURE AND RURAL DEVELOPMENT
CENTER FOR INTERNATIONAL AGRICULTURAL DEVELOPMENT COOPERATION (CINADCO)

March 2005

TABLE OF CONTENTS

ACKNOWLEDGEMENTS 4

INTRODUCTION 4

FINDINGS 4

PROJECT GOALS 6

RECOMMENDED PROJECT STRUCTURE 7

_Toc99782662

ACKNOWLEDGEMENTS

The Mission wishes to thank Dr. Andrey Sadovskiy, who accompanied the Dairy Mission to Tajikistan, to Dr. Martin West, Mr. Daniyar Tillaev, Mrs. Zumrad Saidolimapova, and Nodir Saifoullozosa from the AgFinPlus group for their participation and assistance in the success of the Mission. Special thanks to Dr. Ray Clark as well.

The Mission also wishes to express thanks to the Israeli Embassy team for assisting the Mission and for their hospitality. Special thanks to Mr. Ofer Moreno, Deputy Head of the Mission.

Thanks also like to Mr. Yehuda Rozenblum, Director of Projects and Special Assignments, from CINADCO for his guidance and assistance with the preparation of this professional Mission.

INTRODUCTION

This report was prepared for The Centre for International Cooperation of the Ministry of Foreign Affairs, **MASHAV**, and the Centre for International Agricultural Development Cooperation, **CINADCO,** following a feasibility mission to Tajikistan to observe the dairy situation.

The dates of the visit were from March14 to 17, 2005.

Prior to Tajikistan, three dairies were also visited in the Kibray Valley of Uzbekistan, that are currently included in a project running by MASHAV. The representative of MASHAV in Uzbekistan, Dr. Andrey Sadovskiy, accompanied the Dairy Mission to Tajikistan as well. Dr. Martin West (manager), Mr. Daniyar Tillaev, Mrs. Zumrad Saidolimapova, and Nodir Saifoullozosa from the AgFinPlus group also participated in visiting several farms followed by discussions. A number of representatives from the Development Fund company were also involved in arranging the meetings and discussions mentioned above.

On the last day in Tajikistan Dr. Ray Clark, a feeding specialist, joined the discussions concerning the second project that is planned to be concurrently applied to the Israel-USAID Project – constructing a feed station that will hopefully collect grains in the future from agricultural farmers who are not necessarily involved in dairying.

FINDINGS

1. The farms visited could be categorized into three sections:

Small farms – While these farms have only 1 to 3 cows in their herd, this is the dominant herd size in Khujand region (80%). The cows are fed by cotton pulp, whose quality is doubtful due to a process of oil extraction before selling it as a dairy feed. The daily cotton pulp quantity for cows is between 4 to 6 kg, depending on milk quantity. Those so-called "grains" are given twice daily-morning and evening. During the day cows are receivie 5 kg alfalfa hay and about 2 kg rice or wheat straw. Corn or sorghum stalks, cut or not, are given to the cows as alternative to the above mentioned straws. Water is given to the cows in morning and afternoon only with buckets. Milking is done by hand. The cow "barn" is usually a small, open-sided shelter in which cows are tied. The milk is not cooled nor pasteurized after milking and is sold to the neighbors as is.

Medium-sized herds – A few private farms have 20 to 30 cows per herd. Only two farms were visited belonging to this category. One farm was in the past a "kolhoz" before the collapse of U.S.S.R. Sixteen families decided to continue as a cooperative farm. All previous cows were sold/taken by others and only 40 cows were left. The cows are kept in an old barn, tied, milked by hand twice a day, and the feeding strategy is similar to that mentioned above. The maintenance is not efficient and it appears that this kind of cooperation will not last for long.

The second farm (Eldar from Gabor Rasulov District) is totally private. There are 22 milking cows, all growing heifers and bulls. In contrast to all other farms visited, all the cows were in excellent physical condition. The cows are kept in an open shed where they are given good quality corn silage with grains, about 30 kg per cow per day, alfalfa hay in the feeding bank all day long and a continuous supply of water. These cows are milked twice a day and are supplied with a mixture of grains. For instance, for a cow yielding 30 kg of milk, a mixture of 3 kg corn, 3 kg of wheat, and 5 kg of cotton pulp with 2 kg wheat straw is supplied twice: morning and afternoon. In addition 5 kg alfalfa hay is supplied at noon. During the night and in severe climates, cows are kept in a closed barn, tied in place. Heifers (1st lactation) are kept separately from the adults and the latter receive more food due to their higher milk yield. Milk yield was exceptionally high relative to the other farms: 4000 kg per lactation. The land for growing the crops is around 20 hectares.

Big herds – the number of cows in these herds is between 200 to 1000 cows. All of these herds are located on "state farms", meaning that government personnel are involved. Unfortunately all the facilities viewed by the Mission (milking machines, running water, etc.) that worked in the past are presently out of operation. Feeding strategy includes silage (approximately 30 kg per cow per day), cotton pulp (3 kg in morning and in afternoon) and rice straw. Alfalfa is also supplied either fresh or as hay. Cows are milked by hand twice a day, and breeding is applied by artificial insemination. Milk yield per cow per lactation is 3050 kg. After milking, the milk is cooled in a cooling tank and taken by a truck to a dairy plant.

The land these big herds are situated on is quite ample. However, district/state regulations force these big herds to grow crops on only 30 to 40% of this land while on the rest (70 to 60%) they must grow cotton, called here "the white gold". However, the market prices in the

last two years dropped dramatically the feasibility to continue growing this crop. Minerals and vitamins are not supplied on all the farms and the milking process is done only by hand.

If taken collectively, almost all the farms are based on giving cotton pulp as a source of grain. The small farms do not produce silage and are based on roughage. Sufficient water is supplied to cows in all herds, milking is done by hand, and artificial insemination is not applied in most of the herds. Most of the cows are of local breeds with a very low genetic value. Their body size, as well as body condition, is far below the recommendations.

Mini-dairies – Mini-dairies collect milk from the farms in the region. However, the milk isn't cooled to 4°C, and without analyzing the quality of the milk for the following tests: bacteria count, somatic cell count, water addition, and residual antibiotics. The only milk by-product being produced by those mini-dairies is a hard cheese, called "Holland Cheese".

At one mini-dairy visited, milk was collected from several farms the hard cheese produced was exported to Tashkent. The motivation of the owner to expand the dairy and be more efficient by collecting high-quality milk and processing it in a modern way brought the Mission to suggest his name to be supported by this Project. This matter was strengthened after a discussion with Mr. Valiev Ilhom, Manager of livestock production of this district, who stated that increasing the production in this area might be encouraged by the local authorities if the by-products will be exported out of Tajikistan.

In addition it was also understood that there is a section of the population that consumes exclusively milk products imported from abroad. This fact led to the conclusion that other types of cheese, as well as other products (such as yogurt, ice cream), might be produced by the mini-dairies. This would bring the mini-dairies to process more milk and therefore give the opportunity for dairy farmers to expand their small herds.

PROJECT GOALS

The goals of the project are to increase the milk yield of the local cows, thus improving the standard of living of the dairy farmers. If the goal is to increase milk yields, then actions must be taken in four issues: feeding, breeding, milking and management. The second goal is to improve milk quality, increase milk products and their diversity, either in this region or in other regions.

This goal will be achieved by constructing a new mini-dairy plant which will work together with the milk collecting center. Our input in this project during all stages would be to train the local personnel, planning the mini-dairy, selling Israeli equipment to this mini-dairy plant, selling semen from selected bulls, and mobile milking machines.

For the medium-size herds, it could be decided to combine them with this project, by building milking parlors and Israeli milking equipment.

RECOMMENDED PROJECT STRUCTURE

Selected farms –It was decided that small farms will be the candidates for the project, due to the involvement of the government in the big farms, which might interfere with the proposed project goals, and due to the fact that the small-farm sector is the majority of the farms.

However, it is recommended not to neglect the medium-size private farms since they have the ability to feed the cows better, by using for instance corn silage; they can cool the milk within the farm; their ability to grow different crops on their land and also their ability to implement new technology such as milking machines.

The farm named Eldar (see above) can be used as a demonstrative farm for all the neighboring dairy farmers. It is recommended to build a milking parlor with automatic machines on this farm as was done in the Kibray Valley in Uzbekistan.

2. Milk-Collecting Center - It was suggested to select between 20 to 30 farms for the Project in one or two villages, and to build a milk-collecting center at a location which keeps the distances between the farms and this center at not more than 3 km.

Farmers who on the one hand would show a willingness to join this project and, on the other hand would have the potential to improve their milk yield and milk quality, would bring the milk to the collecting center after morning and afternoon milkings.

The milk would be tested for quality by an employee under the supervision of the mini-dairy plant. The tests that should be carried out are: water addition, a Rezazorin test which is a titratable test to analyze the bacteria count, and CMT test which roughly indicates the level of the somatic cell count. A procedure of "penalty and reward" would be assigned by the mini-dairy plant according to the quality of the milk. Milk would be cooled in this collecting center and transported to the mini- dairy once a day by a refrigerated truck owned by the dairy plant.

3. Extension Service – It was suggested to find a young veterinarian who will be selected by Zumrad and Andrey. The latter will train him in the Tashkent area and it was also recommended to train him in Israel by a special training program. This veterinarian will be responsible for the following tasks:

Advising the farmers how to improve the feeding strategy.

Insemination of the cows with semen of selected bulls, either from Israel or from other countries.

Advising the farmers how to produce high quality milk.

General management such as: colostrum supply strategy, raising heifers, etc.

It is also recommended to train local personnel met during the Mission in Israel in a course organized by MASHAV and in Gavish program (see below).

4. Time schedule

It is recommended that the Project will run according to the following stages:

Stage 1 – selecting the farms to be involved in the project (under responsibility of AgFinPlus and Development Fund). After selection they can be advised how to increase milk yield two-folds by supplying water to the cows all day and by giving them the current so-called roughage cut into pieces.

Stage 2 – selecting the owner of a mini dairy plant. Due to the Mission's recommendations, this person was already selected and an agreement between him and Martin West will be assigned on the day of writing this report (Friday 18.03.2005) or in the next week. **MASHAV** may be a potential partner in planning a mini-dairy plant and training him in Israel to run a new modernized plant which includes using the Israeli equipment and producing large varieties of cheeses and other products.

Stage 3

Training the extension service trainer by Andrey and by Mashav. This stage will take place 2 months.

It is also recommend training Nodir Saifoullozosa from AgFinPlus to be the coordinator of this project.

It is recommended to purchase the Herd Management Program "Gavish" that will be run by both- the vet and Nodir. It will require them to continuously enter data which will later help them to follow up on every cow of the project. Such a system is operated by Dr. Andrey Sadovskiy in the Kibray Valley with good success.

The new vet will start to inseminate the cows of the project at this stage using Israeli bulls' semen. The results of the improved insemination process will appear 3 years later (i.e. after calving of the heifers that will be the first generation).

Stage 4 –Implementation of adding grains to the feed of the cows. This stage is linked to the second project of AgInfPlus which is planned to run in this region: building a feed station which collects grains (soybean, corn, wheat) from farmers in the area who have owned at least 5 hectares and more. It is not necessary that these farmers be dairy farmers. When this project is realized, we than can discuss combining the grains in the current feeding strategy that is professionally called: "Capiteria". Martin West suggested importing grains for a short time and supplying it to the farmers without charge just to "stimulate" them. However, this suggestion might not help in the long run because they will not be able to pay for imported grains. At this stage, if the size of herds will increase up to 10 cows in a herd, the implementation of mobile milking machines could be suggested. If herds with more cows are involved in this project, it is feasible to consider building a milking parlor with Israeli equipment. Eldar Farm could be used as a demonstration farm much earlier.

Stage 5 –Construction of a feed center adjacent to the milk-collecting center. This feed station will produce silage, buy grains from the meal station, vitamins and minerals from abroad, and produce a mixture using all the ingredients together. When a farmer brings his milk to the center in the morning he will collect the feed mixture for his cows. If this stage becomes

realistic we could then offer an Israeli Mixing Wagon. Under these circumstances, milk yields might be increased up to 8000 - 9000 kg. Israeli nutritionists would help to produce the appropriate feed mixture.