GRAIN INDUSTRY ALLIANCE FINAL REPORT

RAMP/GIA

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Final Report
GIA/RAMP

March 2004-July 2006

GRAIN INDUSTRY ALLIANCE

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G.I.A.I.
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1. Job Order Number: 28-002-GIA
Grain Post-Harvest Training, Storage, and Milling in Afghanistan

2. Implementing Agency and Contact

Agency	Grain Industry Alliance International (GIAI)
Contact	Mr. David E. Frey, Country Director
Mobile	799-848379
Email	dfrey@giai.biz

3. Contract Line Item number:

CLIN 0004 Agricultural Technology and Market Development

	RAMP Components	Cost Share
1. Personnel Salaries, benefits and allowances	$ 773,415	
2. Travel and per diem	$ 88,033	
3. Purchase and delivery of Equipment	$ 43,572	
4. Training	$ 30,370	
5. Subcontract (KRA)	$ 40,317	
6. Other direct costs*	$ 394,222	
7. Program input and supplies	$2,004,409	
8. Overhead	$ 337,482	
Total	$3,711,820	$243,697

4. Reporting period: March, 2004 – July, 2006

5. Total Project Budget: $3,711,820, however in contract modification #7 GIA was asked to also expend at least $243,697 of third party generated funds from the project to further the project goals.

GIA/ RAMP SUBCONTRACT MODIFICATION No. 1, EFFECTIVE DATE: MARCH 15, 2004 refocused the role of GIA… "Delete Section C.3 (summary) of the original subcontract in its entirety and replace with:
This project shall develop demonstrations for proper cleaning, storage and handling of grain, and other commodities combined with a training program at selected locations in each of the five RAMP priority Provinces…Basically, over the twenty-eight month project period, this project proposes to build 50 multipurpose, holding bins suitable for use by producer associations and seed growers. In addition, 7 district

handling and storage warehouses will be built. The remaining funds allocated for the storage warehouses will be used to build and to provide technical assistance to build additional district level storage facilities, cold storage facilities, truck reefers (refrigerated containers) and other appropriate storage, handling, processing, and/or packaging facilities."

In December 2004, RAMP increased the funding for GIAI to add 9 Post-harvest sorting, grading and storage units and 3 processing units. In the later stages of the RAMP program t here was a recognized need for cold storage and GIA was asked to increase emphasis on the cold storage facilities portion of the work. Another feature of the distribution of the cold rooms is that a significant contribution was required from the recipient. Security deteriorated in the south and GIAI took the mandate it received in Modification No. 4 to other areas of the country. Ironically, this helped GIAI accomplish more in the south. For example, doing cold storage in Herat led to additional support for the women's dairy effort in Helmand.

6. Summary of Project Activities and Impact

6.1 Association Development

GIAI was the most successful RAMP partner in terms of association development. The following listings show the locations of the 13 associations which were formed with the assistance of GIAI in the provinces of Kunduz, Helmand and Herat. The target set by the RAMP program for GIAI association development was 10. All of these associations invested time, energy, land, equipment, and or funds for buildings and facilities. As of the writing of this report, all of these associations were functioning and using the facilities that were cooperatively developed by their association and by GIAI/RAMP/USAID.

6.1.1 Kunduz

Names and Leaders of Associations Developed by GIAI in Kunduz

No	Name	S/O	Positoion	Association	Distrect	Village	No of Member
1	Haji Ghafar	M.Yousaf	Chief	(SPA)	Dasht-e-Archi	Mohmandan	10
2	Habibullah	Rais Abdullah	Assistant	(SPA)	Dasht-e-Archi	Rais Abdullah Kakar	
3	Haji Lala jan	Amir Mhod	Chief	(SPA)	Chardarah	Nahr-e-Sofi	10
4	M.Hanif	M.Shah	Assistant	(SPA)	Chardarah	Qarya-e-Yateem	
5	Mulla Bashir	M.Ibrahim	Chief	(SPA)	Ali Abad	Qaram Qulli	10
6	Assadullah	H.Murrad	Assistant	(SPA)	Ali Abad	Madrassa	
7	Ghulam Sakhi	Mirajan	Chief	(CPA)	Chardarah	Khala Zai -e-	52
8	M.Muneer	Faiz.Mohd	Assistant	(CPA)	Chardarah	Khala Zai -e-	
9	ghulam Rasool	Ghulam Ali	Chief	(CPA)	Imam Sahib	Hawa Shinassi	67
10	Haider Popal	M.Naeem	Assistant	(CPA)	Imam Sahib		

6.1.2 Helmand

Helmand List of GIAI Associations of Helmand including the Widows association

Association Name	Location	Number of Members	Equipment	Type of Activities	Leader of Association	Date of Establishment
Widows Association	Lashkergha	100		Dairy Plant	Fowsea Olomi	20- Oct 2005
Farmers Association	Bolan(Lashkergha)	100	Two Cold rooms-One Generator-Building-5 Jirebs Land	Fruits and Vegetable processing	Hajji Hatam	25- Oct 2005
Traders Association	Lashkergha	20	Two cold rooms-One Generator- Building-Two Jirebs Land	Fruits and Vegetable Processing	Hajji Ghamai	27- Oct 2005
Farmers Association	Nad-e-Ali District	100	Two Cold rooms-One Generator-Building-2Jirebs Land	Fruits and Vegetable Processing	Hajji Abdul Ahad	04- Nov 2005

Note:

Land Donation: 21 Jirebs of land were donated by the government of Helmand for the Vegetable Market in addition to all donations shown above for the associations land.

Registration: All associations mentioned above have been officially registered in Helmand at the government offices.

Contributions
1-Traders association-20000$
2-Farmers association of Bolan 16000$ in cash and they spent 4000$ to the wall and water well.
3-Nad-e-Ali District Farmers association provided 8412$ via installments.. Nadi-e-Ali farmers also assisted GIAI in contacting the PRT in LashkarGah and securing a building donation.
4-Widows association of Lashkergha were given a grant without the requirement of financial contribution. However, the widows assisted GIAI in contacting the PRT in LashkarGah and securing a building donation from PRT and cash equipment donations which were channeled through GIAI for the purchase of dairy equipment as part of the GIAI, 3rd party contribution.

6.1.3 Herat

Below is a list of the associations that were formed with the work of GIAI staff in Herat.
GIAI Association Development list of Herat province

No	Association Names	Location	Numbers	Kind of Activities	Establishment date	Chief
1	**(Khurshid)** Women Association	Karokh district	100	Potato chips	10.08.05	Asifa
2	**(Khaja Abdullah Ansary)** Trader Association	Industrial town	10	Fresh fruit	10.01.06	M.Atiq
3	**(Adraskan)** Widow Association	Adraskan	33	Carpet Making	01.01.06	Negar
4	**(Turkmen)** Women Association	Baraman	66	Carpet making	02.03.06	Rabia

The top three associations have been registered by the Governor of Herat and the Ministry of Agriculture and application sent to the Kabul office (ministry of Agriculture) only the forth one (Turkmen women's association) is not yet registered, because the association was the most recently formed and the looms and accessories were distributed on 30.06.06.

RAMP Acting Chief of Party John Ames, Afghanistan Minister of Agriculture Dr. Ramin and GIAI Country Director David Frey are shown after dedication of three cold storage units at the Kabul airport by GIAI for the RAMP/USAID program.

6.2 Cold Storage

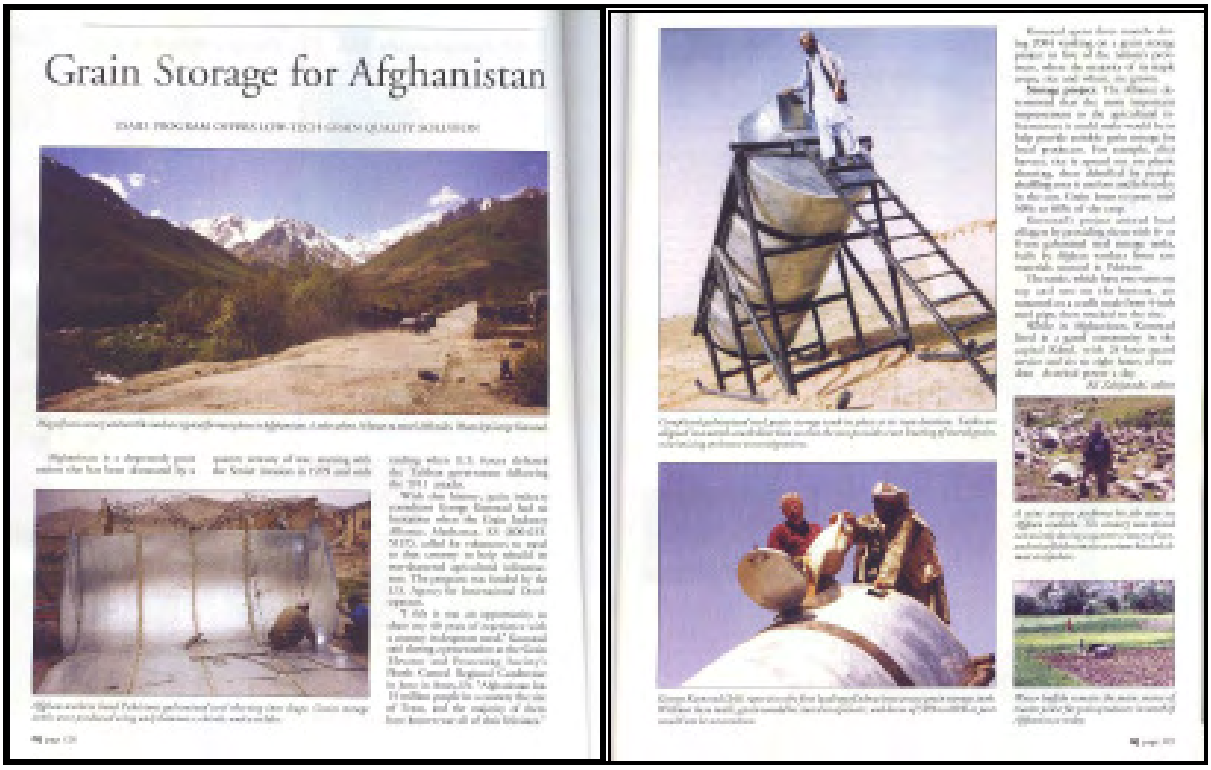
In June of 2006, three cold storage units were installed at the Kabul Airport by GIAI as a donation of the RAMP USAID program, for use on high value products requiring cold storage in air transit for the Ministry of Agriculture, Ministry of Commerce and Ariana Airlines. Acting Chief of Party for RAMP, Mr. John Ames estimated in his dedication remarks that the 59 cold storage units which have been installed across Afghanistan would have a $3,000,000 (USD) annual positive impact on the agricultural economy of the country. Fifty three of those units were purchased by GIAI as part of the RAMP program and all 59 of the cold storage units were installed by GIAI.

The cold storage chain, of which GIAI is the major Implementing Partner with RAMP, was built on investments not only from U.S. taxpayers through USAID by also by matching contributions of land, time and money from farmer and trader associations and entrepreneurs. The locations of the cold storage units are from Herat to Jalalabad, LashkarGah to Kunduz and Kandahar to Mazar Sherif, with Kabul in between. The cold storage program has buy-in from the users, as all have contributed to the success of the business operation involved.

RAMP/GIAI provided training for GIAI Afghan staff at the Frio-Latina cold storage factory in Mendoza, Argentina. Those GIAI staff members who received the factory training are now training other Afghans on upkeep and maintenance of compressors and proper installation of the cold rooms and will be available to work on the sustainability of the cold stores now in place. These cold stores are being used for fruits, vegetables, frozen and chilled fresh meat, dairy products including ice cream and animal vaccines that need to be kept cool.

What is perhaps most impressive from a cost effectiveness standpoint, is that installation and purchase of nearly one million U.S. dollars worth of these cold storage units was done as additional deliverables to the original GIAI subcontract and yet was accomplished within the budget guidelines of the GIAI subcontract with RAMP. The following page lists the locations of all 59 cold rooms installed by GIAI for the RAMP/USAID program.

Province	District	Association	std.5 x6	std. 6X6	Mini 4,3x3.4 -5C	Mini 4,3x3.4 -25C	7X7 -25C	Pre-Chill	Cu Meter Capacity	Qty
Kandahar	City	Fresh Fruit Exporters	2					1	265	3
Kandahar	City	DCA			1				34	1
Kandahar	KAFE	Private Company	2						210	2
Helmand	Bolan	ProgressiveFarmers	2						210	2
Helmand	Nad Ali	Nadi-Ali Farmers	2						210	2
Helmand	Lashkargha	Goshen Widows	1			2			173	3
Helmand	Lashkargha	Fresh Fruits Traders	2						210	2
Hirat	Indust. Park	Fresh Fruits Traders		4					448	4
Hirat	Indust. Park	Hirat Ice Cream	1			2	2		467	5
Hirat	City	Co-op Union Council		4					448	4
Hirat	Karoak	Widows		1					112	1
Hirat	City	DCA			1				34	1
Parwan	Charikar	Bagram Fruits	2						210	2
Kunduz	City	FAO Dairy			1				34	1
Kunduz	City	DCA		1					112	1
Kabul	City	Habib Hassam Co.		4			2		742	6
Kabul	City	Ariana Airlines		1					112	1
Kabul	City	DCA	2			1			244	3
Kabul	Airport	Govt. Customs		1					112	1
Kabul	City	FAO Dairy			2				68	2
Kabul	MirbashaKot	Roots of Peace	2						210	2
Kabul	Airport	Ministry			1				34	1
Kabul	Indust. Park	Hasib Omer Shop	1	1					217	2
Kabul	University	Kabul University	1						105	1
Kabul		Haji Arif Zarif		1		1			146	2
Kabul	City	Hirat Ice Cream					1		147	1
Nangahar	Jalalabad	DCA		1					112	1
Mazar Sharif	Balk	DCA			1				34	1
Mazar Sharif	Balk	FAO/LandOLakes			1				34	1
Total			20	19	8	6	5	1	5553	59



Grain Storage for Afghanistan

The farm storage work of GIA in Afghanistan was recognized by Grain Journal magazine in their international publication.

6.3 Farm Grain Storage

6.3.1 Introduction to Farm Grain Storage

The GIAI/RAMP project initially was to rehabilitate rural infrastructure and provide food security to Afghanistan by providing higher quality locally sourced commodities to regional and national markets. According to **SUBCONTRACT MODIFICATION No. 4, EFFECTIVE DATE: December 8, 20045. Section C, Statement of Work for Grain Industry Alliance (GIA) was modified to state:** 1) post-harvest storage, 2) value-added processing, 3) association development, and 4) training" shall form an integral part of Section C of the Subcontract. And further in **Section C, Statement of Work**, the subcontract modification deleted pages 4 through 17 of Section C in its entirety and states that Section C hereafter commences with the header, "Subcontractor Scope of Work".

GIAI chose our technology transfer design as part of the "on-farm" phase for the following reasons:

> To avoid merely building back the past by using brick and mud storage rooms and underground storage (photos). Such facilities experienced losses in excess of 20% due to moisture migration from convection currents within the grain created by temperature differentials from moist cool side walls. They had been used because of a centuries-old, misconception that there was a need to insulate grain from Afghanistan's heat. The purpose of the technology transfer was to overcome this belief, so GIA

designed a tank made of heat reflective galvanized metal, which was further enhanced by the bin's orientation to the sun. (simply turning the mobile tank to the north). The process requires no electrical power but utilizes a locally abundant resource, labor. Training focused on cleanliness in storage of grain and practical methods of avoiding post harvest losses.

The need for farm storage of grain was addressed very early in the GIAI program with RAMP, as GIAI led by team leader Gary Gilbert built in Afghanistan and delivered 50 galvanized steel grain bins to farm locations from Helmand Province to Gazni, Nangarhar, Kabul, Parwan and Kunduz.

6.3.2 Smaller Bins

GIAI cooperated with the FAO in a similar project for much smaller bins.
Advantages of Mobile Multi-Use Community Tanks; Easily moved from farm to farm by oxen/tractor
Central Trading Center, Blending of weathered bags, Repackaging damaged bags, Clean into tank to be bagged off onto scales, Gas-tight for insect fumigation, Rodent-proof, Seed variety holding, Easily inspect grain, Short or long-term storage.

Since then GIAI has been asked to continue our work on farm storage bins in another ongoing project in 2006. GIAI followed up with training on grain storage and small scale fumigation methods.

6.3.3 Table of distribution of Grain Storage bins designed, built, and installed by GIAI.

Tank location			Tank No	Distention From center of province	Ownership		GPS location		
Province	District	Village			Individual Name	Association	Latitude	longitude	Altitude
Kunduz	Chaka Dara	Nair sofa	8	17 Km	Lal Jan	ICARDA Seed Assoc.	N 36 43 04”53	E 68’47’45”06	337m
Nangarhar	Surkh road	Zulm Abad	7	18 Km	Akhtar M.	ICARDA Seed Assoc.	N 34 26 56.95	E 70 22 10.52	561 m
Helmand	Lashkargah	Dahna 29 loui manda	9	25 Km	Eng.Mahmod	Seed Assoc. CADG	N 31.72876,	E 64.36 897	812 m
Helmand	Lashkar guh	Bushran clay	10	10 Km	Manullah Akhondzada	Seed Assoc. CADG	N 31.63 235	E 64.32 689	808 m
Helmand	Nad Ali	Zarghon Caly	11	12 km	Haji khan Mohmad	Seed Assoc. CADG	N 31.64 408,	E 64.28176	803 m
Helmand	Nad Ali	Naqil Abad	12	15 km	Haji Shir M.	Seed Assoc. CADG	N 31.69 305	E 64 26 032	813 m
Helmand	Nawae	Khalige	13	30 km	Ali shah khan	Seed Assoc. CADG	N 31.37 767	E 64 29 080	749 m
Nangarhar	Behsoud	Janan khil	17	5 Km	M.Anwar	ICARDA Seed Assoc.	N 34.27.08.65	E 70.2753.95	552m
Nangarhar	Khogiani	Hakim Abad	14	30 Km	Hazrat Khan	I ICARDA Seed Assoc.	N 34 14 13.51	E 70 10 58.02	1253 m
Nangarhar	Khiwa	Atawar	15	30 Km	Fazul rahim	ICARDA Seed Assoc.	N 34 35 19.40	E 70 34 49.97	581m
Nangarhar	Kamah	Mustali	16	35 Km	Ahmad shah	ICARDA Seed Assoc.	N 34 24 17.37	E 70 35 08.33	493m
Nangarhar	Bati Kot	Qatar Kaly	18	34 Km	Rahmatullah	ICARDA Seed Assoc.	N 34 16 28.51	E. 70 44 10.48	474m
Parwan	Bagram	Qali Khwaja	19	18 Km	Ab Ahad	Agriculture Cooperative	N 34 55 46.64	E 69 13 06 29	1459 m
Parwan	Jabal Saraj	Taglar & zarbiya	22	15 km	Gul Agha	Agriculture Cooperative.	N 35 05 13.97	E 69 13 23 90	1535 m
Parwan	Chrikar city	Sadat Co-op	20	0	S. Amir	ACTED Cooperative	N 34 59 52.59	E 69 10 01.28	1505 m
Parwan	Center or charikar	Tutom Dara	21	8 Km	Allah bubani	Agriculture Cooperative	N 35 03 50.97	E 69 12 33.35	1523 m
Kapisa	Kohstan	First part	23	30 km	Gh.Darwish	ACTED Cooperative	N 35 07 02.24	E 69 17 38.32	1558 m
Ghazni	Khwaja omari	Qali-e-Naw	24	18 km	Haji Ayan Ali	Agriculture Cooperative	N 33 38 53.63	E 68 24 45.07	2230 m
Ghazni	Khwja omari	Chahar burja	25	8 Km	M Arif	ICARDA Seed Assoc	N 33 38’12.88	E 68 24 48.04	2274 m
Ghazni	Qara Bagh	Center of city	26	80 Km	Alli shah	Agriculture Cooperative	N 35 11 29.13	E 68 06 02.83	2063 m
Ghazni	Qara Bagh	Shir Abad Waziri	27	90 Km	Kotub khan	Agriculture Cooperative	N 35 1531.56	E 68 0125.55	2181 m
Ghazni	Andar	Band Sardah	28	80 Km	Sarajudin	Agriculture Cooperative	N 33.16.23,54	E 68.35.02,41	2068m
Helmand	Nad alli	Shin klay	30	22	Mir Wais	ICARDA Seed Assoc	N 31.38.25.33	E 64.14.01,54	786 m
Helmand	Nad Alli	Alli khil	29	25	Lal Gull	ICARDA Seed Assoc	N 31 38 12,19	E 64 14 06,64	804 m
Helmand	Nad Alli	Loy bagh	32	28	A. Ahad khan	ICARDA Seed Assoc	N 31.37.02,20	E 64 15 32,29	790 m

Helmand	Garrn sir	Hossin Abad	35	66 West of Lash.	Taj Mohad	ICARDA Seed Assoc	N 31.04.34,88	E 64.10.46,70	690 m
Helmand	Grashk		36		Gullab Shah	Agriculture Cooperative	N 31.47.47,69	E 64.32.01.94	840 m
Helmand	Grashk	Nahr-I-saraj Aob Pashak	37	50Km N.E. Lash	Haji M. Sharif	Agriculture Cooperative	N 31.47.17,22	E 64.30.51,11	806 m
Helmand	Lashkar Gah	Kochni Kariz	31	6Km S.E. Lash.	Asdullah	Agriculture Cooperative	N 31.31.52,97	E 64.21.27,95	757 m
Helmand	Lashkar Gah	Lashkari Bazar	33	3 km S.W. Lash.	M.Akram	Farmer Ass. CADG	N 31 35.06,14	E 64.23.19,13	780 m
Helmand	Nwah	Khsraw Abad	34	20km	Haji.A.Baqi	Farmer Ass. CADG	N 31.26.09.36	E 64.18.36.24	742 m
Kunduz	Alli abad	chep	38	18 km	H,Ab.Mahmod	ICARDA Seed Assoc	N 36-2929.41	E 68-54-28	424 m
Kunduz	Alli abad	Haji Hasan	39	15 Km	H.A.Aziz	ICARDA Seed Assoc	N 36-32 24.31	E 68 45 12.97	408 m
Kunduz	Alliabad	Madrasah	40	12 km	Sadullah	ICARDA Seed Assoc	N 36.36.13.85	E 68.54 01,37	397 m
Kunduz	Khan Abad	Kabuli	41	35 km	H.Qasim	Farmer Association	N 36.43 577	E 69.05 542	472 m
Kunduz	Khan Abad	Naw abad	42	18 km	Amamudin	Seed unit	N 36 40 594	E 60.04.962	485 m
Kunduz	Khan Abad	Dih wayran	43	32 km	H.A.Khaliq	Seed unit	N 36 38 914	E 69 10.034	680 m
Kunduz	Khan Abad	Nik payi	44	16 km	Alli jan	Seed unit	N 36 42 17,90	E 69 20 23.21	460 m
Kunduz	Chahr DAra	Omar khil	45	12 km	Azizullau	Seed unit	N 36.36.36,53	E 68 51 34,12	387m
Kunduz	Chahr DAra	Aynal majar	46	15 km	Aziz bay	Seed unit	N 36 45 904	E68 41 095	378 m
Kunduz	Chahr DAra	Naw Abad	47	35 km	Gh. Alli	Seed unit	N 36 42 303	E 68 44 068	398 m
Kunduz	Center	Larkhabi	48	20 km	H.A.Ghani	Farmer Cooperative	N 36 48 122	E 68 43 574	360 m
Kunduz	Center	Kila Chi	49	12 km	M.Naqim	Farmer Association	N 36 45 873	E 68 59 044	416 m
Kunduz	Center	Kutal alchin	50	15 km	Arbaba Sakhi dad	Former Cooperative	N 36 48 51,55	E 68 51 34,14	349 m
Kunduz	Center	Tobra kash	51	40 km	Habiburahman	Farmer Association	N 36 53 12,70	E 68 39 22,72	302m
Kunduz	Center	Nasiri jarguzar	52	7 km	H.A.Basir	Farmer Association	N 36 40.45	E 68 55 723	410 m
Kunduz	Archi	Mumand Kaltarash	53	120 km	Ab.Ghafoor	Seed unit	N 37 01 46,45	E 69 14 17,88	408 m
Kunduz	Emam Sahib	city	54	80 km	Haji. Haydar	Farmer Cooperative	N 37 10 756	E 68 55 756	356 m
Kunduz	Kunduz Research service Agriculture		55	2 km	Doust M sdiqi	Agriculture Research	N 36 42 43 35	E 68 51 17,31	356 m
Kunduz	Kunduz Research service Agriculture		56	2 km	Doust M.sdiqi	Agriculture Research	N 36 42 43 35	E 68 51 17,31	356 m

6.3.4 Multipurpose Store House

Multipurpose Store House – Practical, low cost grain storage structures were constructed to meet the needs at the farm, local association and sub-terminal and be used for demonstration purposes.

For a permanent storage warehouse our typical unit was a reinforced concrete structure with monolithic roof and its floor elevated about 1 meter above the ground. It was built with loading platforms and metal swinging doors on both sides of the building. It also was provided with several narrow but long ventilation windows just below the roof.

The internal dimensions of a typical warehouse unit are 18 ft high, 62 ft wide, and 100 ft long. This size of a warehouse can store about 1,100 MT of bagged wheat and 1,500 MT of wheat in bulk form. The doors and loading platforms on both sides of the warehouse will facilitate loading and unloading operations. The doors and ventilation windows must be made rodent and bird proof.

Should fumigation be needed to control insect infestation of bulk wheat, the doors and windows can be sealed to make them gas tight. On the other hand, stored bagged wheat can also be fumigated by covering it with heavy gauge plastic sheets or rubberized tarpaulins. The above storage warehouse has been found to be the most practical and convenient structure to use and build in the region for many decades. Many flour millers in the region use this type of a storage structure since it is simple and utilizes local materials and technology.

GIAI designed and built 7 district warehouses of this type for the RAMP/USAID project in Kunduz. Then in six other provinces of Afghanistan GIAI built 10 post-harvest food storage or multipurpose store houses and three food processing facilities. Each has an administrative building and guardhouse with a latrine also built. GIAI/RAMP also provided water wells for these storage and processing facilities. In some rural areas these wells are the best source of water in miles. GIAI/RAMP also provided some storage aids to the processing centers such as storage pallets and an incentive program for the warehouses to produce their own pallets; hydraulic pump, pallet jacks and bag scales.

No	Project Location		GPS Location Reading	Project completion	Description of Progress
	Province	District			
1	Kunduz	Dashti Archi	E691426.36 N370139.12	10-11-04	Warehouse, Guard & Admin room Completed 100%
2	Kunduz	Imam Sahab	E585300.12 N371034.97	07-11-04	Warehouse, Guard & Admin room Completed 100%
3	Kunduz	Char Dara	E684731.90 N364118.94	18-11-04	Warehouse, Guard & Admin room Completed 100%
4	Kunduz	Ali Abad	E685424.88 N363026.94	06-11-04	Warehouse, Guard & Admin room Completed 100%
5	Kunduz	Center of City	E685146.47 N364223.16	20-11-04	Warehouse, Guard & Admin room Completed 100%
6	Kunduz	Khan Abad	E690626.56 N364133.56	12-11-04	Warehouse, Guard & Admin room Completed 100%
7	Kunduz	Char Dara (2)	E684830.90 N364119.94	05, July, 2005	Warehouse, Guard & Admin room Completed 100%
8	Parwan	Bagram	E 69 13 27.85 N 34 56 34.97	24-10-04	Post harvest storage, Guard & Admin room, water well, Completed 100%
9	Parwan	Laghmani	E 68 35 02.41 N 33 16 23.54	23-11-04	Post harvest storage, Guard & Admin room, water well, Completed 100%
10	Herat	Widows Association, Karokh		May, 2006	Food processing facility, Guard & Admin room, water well, security wall, 100% work progressed.
11	Herat	Traders Association		May, 2006	Post harvest storage 80% completed
12	Herat	Cooperative		May, 2006	Post harvest storage complete, wall in progress
13	Kandahar	Habib city,	E065422.03 N315866.80	25, 08, 2005	Post Harvest storage, Guard & Admin room and water well Completed 100%
14	Kandahar	Daman-ShorAndam		April, 2006	Post harvest storage, guard and admin room's construction 100%
15	Kabul	Pul-e-charkhi		02/12/2005	Food processing facility, guard and admin room's construction 100%
16	Kabul	Mir Bacha Kot,		10, April, 2005	Post harvest facility, training Center, Guard & Admin room, water well Completed 100%
17	Lashkargha	Bolan, Traders Association	N 31° 34' 32,84" E 64° 19' 16,59" Alt 755m	May, 2006	Post harvest facility, guard and admin room, water well construction 100% completed.
18	Lashkargha	Widows Association	N 31° 36' 05,99" E 64° 21'55,23" Alt 784m	April- 2006	Food processing facility, guard and admin room, water well construction 100% completed
19	Lashkargha	Nad-e-Ali Farmers Association	N 31° 38' 27,43" E 64° 14'32,39" Alt 748m	April- 2006	Post harvest storage, guard and admin room, water well construction 100% completed
20	Lashkargha	Bolan Farmers Association	N 31° 34' 10,31" E 64° 19' 33,77" Alt 788m	May, 2006	Post harvest storage, guard and admin room, water well construction 100% completed.

6.4 Afghanistan Flour Milling

6.4.1 Kunduz Flour Milling

Located at the center of six district grain warehouses built by GIAI is the New Kunduz Flour Mill

December 2004

GIAI provided vital assistance to the Kunduz flour mill from the early days of its construction through the end of the RAMP project, with future cooperation planned for added storage. The Kunduz mill is the most active flour mill in the country, due in no small way to the assistance provided for the mill by GIAI/RAMP.

- Assistance to the Kunduz flour mill (now the largest production mill in Afghanistan) included hosting Kunduz Flour Mill for many days to protest taxation of exempted Agricultural Processing equipment.
- Transported Kunduz Miller to Jalalabad for signatures at Port of Entry.

Reviewed required documents with Kunduz Miller to qualify for Agriculture In-Process Loans at Afghanistan International Bank

- Assisted in writing required documents with Kunduz Miller to qualify for Agriculture In-Process Loans at Afghanistan International Bank.
- Hosted Kunduz Flour Mill for several weeks, while he qualifed for loans to complete his mill from Afghanistan International Bank. GIA started the loan process in September. He didn't know he needed money at that time. RAMP/AIB were able to respond in three weeks with the first agriculture

processor loan in Afghanistan and the Kunduz Flour Miller received $100,000 of his initial loan from Afghanistan International Bank.

This is some of the machinery that was at first taxed at 5% but 4% should have been tax exempted for the Kunduz mill. With GIAI assistance the Kunduz mill did not have to pay excessive taxes.

GIAI/RAMP provided the Kunduz mill with technical assistance throughout the RAMP program activities. This included providing a flour milling expert who had started up flour mills in India to be on hand prior to the start up of the Kunduz mill. His milling advice to the Kunduz mill was invaluable.

GIAI also provided tangible hard goods support for the Kunduz mill in the form of a computerized truck scale which is outside the mill and on the main road leading to town, where it is accessible and by agreement with the mill, free for farmers to use in the community. GIAI also designed the wheat quality lab inside the mill and provided basic wheat quality measurement instruments to the mill.

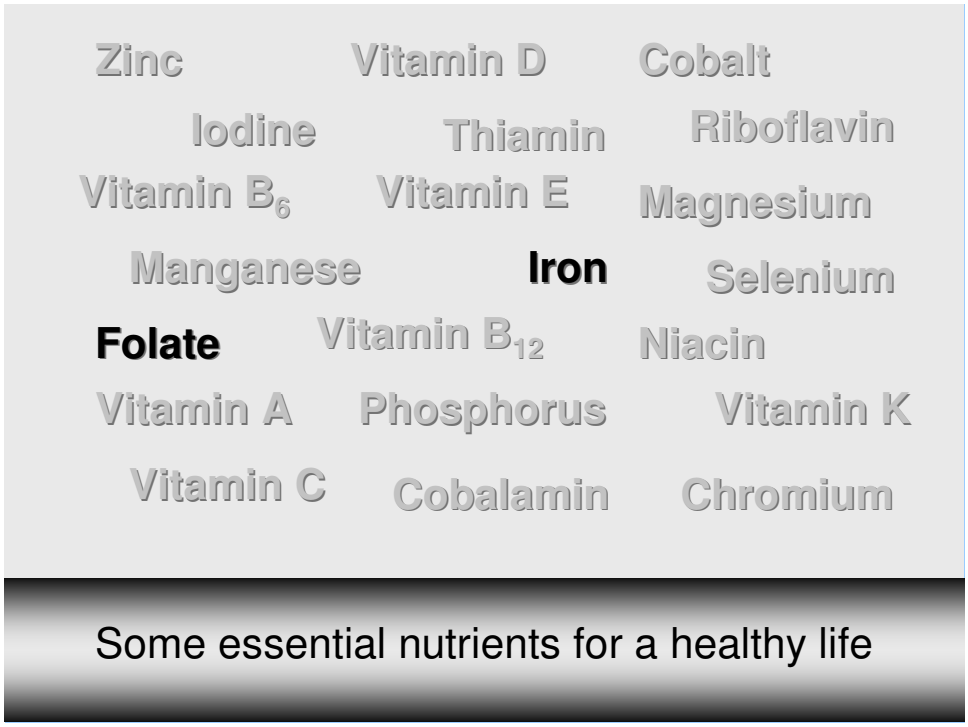
The truck is weighed empty after unloading wheat and the driver examines his scale receipt

6.5 Flour Fortification and Malnutrition in Afghanistan

FLOUR FORTIFICATION vs. MALNUTRITION IN AFGHANISTAN

In April, 2005, GIAI staff met with RAMP Chief of Party Lou Faoro and USAID officials to discuss the importance of flour fortification. In May, 2005, the Afghanistan Ministry of Public Health held a public briefing to announce the results of the first ever national nutrition survey in Afghanistan. The Ministry stated that the "Number one method for prevention of malnutrition in Afghanistan would be flour fortification." The main findings of the survey which was conducted with support from UNICEF, CDC, the Italian National Institute for Research on Food and Nutrition and Tufts University stated the following…

- Over half (54%) of Afghan preschool children are stunted (chronically malnourished), over a third (39%) are underweight and about 7% are wasted (acutely malnourished).
- 72% of children 6-59 months, 48% of non-pregnant women and 18% of adult men tested were classified as iron deficient.
- Both global malnutrition (micro-nutrients) and specific micronutrient deficiencies are prevalent in Afghanistan and are likely to contribute to the high infant, child and maternal morbidity; decreased learning capacity; lower productivity and higher mortality.



How millers can give value to flour

By adding vitamin and mineral improvers to flour millers can dramatically enhance the health, vitality and learning ability of consumers and their nation

Awareness of vitamins and minerals was low among both men and women in the survey. However, men were more aware about vitamins and minerals than women. Less than a third of men and women have ever heard of vitamins in general (33% among men and 17% among women), while 21% of women and 35% of men had heard about anemia.

By improving the nutrition of the people, lives would be saved, mortality rates would decline, cases of disease and disability would be reduced, and the quality of life would be improved.[1] As Afghanistan is a country whose people depend on bread as their main source of caloric intake, it would serve as a strategic point to add vitamins and micro-nutrients to the diet of Afghans. Currently, the flour that is being imported into Afghanistan is not fortified**.**

The exceptionally heavy nutritional role of wheat foods in the Afghanistan diet is what makes the wheat and flour sector of pivotal importance in the lives of Afghans.

[1] A Report on Large Scale Flour Fortification in Afghanistan; WFP; April 10, 2005.

6.6 Afghan Women Needs

6.6.1 Introduction to Afghan Women Needs

"In 2001, after the fall of the Taliban, improving the rights of Afghan women was at the top of the international agenda; in 2004, despite many well-intended programs for women, women's human rights appears to be more of an afterthought" (Human Rights Watch 2004: 4). Evidence from Afghanistan's Human Development Report 2004 shows that social indicator for women in Afghanistan are among the worst in the world.[2]

Afghan women are still among the most socio-economically disadvantaged in the world. Female literacy is estimated at 20%. While girls' school enrollment has skyrocketed in the last few years, there are still one-third fewer girls than boys in primary school.[3] Turning to health, according to the World Health Organization (WHO) Afghanistan has the world's second worst maternal mortality rate and fifth worst neonatal mortality rate.[4]

GIAI Womens Programs

Najiba Faiz, GIAI's Field Worker in Helmand said, "In Lashkergha City, we have 4000 widows, who are poor and most of them have had no education opportunity." Malalia Emadi , GIAI's Field Worker in Hirat said, "There is about 7000 widows in Hirat." Surveys by a number of NGOs have estimated 50,000 widows in Kabul but there hasn't been a nation wide survey of demographics since the end of the 26 years of war.

A cost effective, high impact part of the GIAI/RAMP program began with the hiring of two female Afghan staff members as GIAI regional office managers, one in Herat and the other in Helmand. These experienced development managers spearheaded programs that created women's and widows associations and leveraged donated land from the respective regional government offices to allow these women's associations to work on potato chip processing, dairy processing and carpet weaving. The first two programs mentioned have found continuing support from other NGO and government funding due to their strong nature and the hard work of the women's associations that were formed.

Grain Industry Alliance International Female Field Workers have been incredibly successful in materializing Agriculturally Based Associations for both men and women and economic development opportunities in the rural areas of Afghanistan, funded by GIAI / RAMP. Najiba Faiz and Malalia Emadi have an extremely efficient and effective methodology of working in these difficult areas in the past 20 years, during harsh times

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[2] "Lessons from Gender-focused International Aid in Post-Conflict Afghanistan…Learned?" Lina Abirafed, Friedrich-Ebert-Stiftung Division for International Cooperation Department For Development Policy Godesberger Allee 149, Germany 2005, pg 8.

[3] Literacy data from United Nations Children's Fund (UNICEF) survey in 2003 ("Afghanistan: UN Helps to Improve Literacy," IRIN News, September 9, 2004, [http://www.irinnews.org/report.asp?ReportID=43092&SelectRegion=Central_Asia&SelectCountry=AFGHANISTAN]). This nevertheless represents an improvement over 1995, when women's literacy was estimated by the Asian Development Bank at 15% [http://www.adb.org/Statistics/Poverty/AFG.asp]. Male literacy has hovered around 50%. Enrollment data from UNICEF: [http://www.unicef.org/infobycountry/afghanistan_afghanistan_statistics.html].

[4] Afghanistan's maternal mortality rate is 1,900 per 100,000 live births (second only to Sierra Leone); its neonatal mortality rate is 60 per 1,000 live births. Information gathered from WHO statistics for 2000, the most recent year, available at [http://www.who.int/globalatlas/DataQuery/default.asp].

for women. Ms. Faiz and Ms. Emadi were both teachers, operated dissident schools during the Taliban era, and worked with health education for women. GIAI Field Workers, have an extensive network of educated Afghan Women and Afghan men that support the education of women.

6.6.2 Grain Industry Alliance International (GIAI) with RAMP launched economically sustainable pilot programs for Widow's/Women's Development for the Economic Disadvantaged.

GIAI is coordinating self-defined economic development opportunities for Widows and Women's Associations. Our staff has observed women, who previously had no control of their own destiny or livelihood, come alive with the simple opportunity of self-determination, by developing a sustainable business. Promptly they become students of an economic venture. The feeling that comes from observing these women's eyes shining and reflecting the hope of a livelihood for themselves and their children is unfathomable.

After lengthy discussion and collaboration, GIAI designed a high impact program addressing the fact that "Gender disparities prevail in the Afghan rural areas."[5]

6.6.3 Lashkar Gah/Helmand Widow's Association

"On the nutritional side, survey data suggests that given the milk availability at the family level there are risks that a "milk collection scheme" could impoverish an already poor diet. This is a valid consideration at least in the first year when local milk production could not be raised significantly."[6]

LASHKAR GAH MARKET INFORMATION REGARDING MILK PROCCESSING:

1. In the summer, some people have ice cream machines.
2. Based on interviews with traders and farmers, GIAI staff estimate 20,000 liters per day of fresh milk production in the area.
3. Milk is sometimes from Iran and Pakistan and most of the milk is available from Lashkar Gah villages
4. Presently there is no quality control related to milk production and processing in Afghanistan.

Lashkar Gah City Widow's Association Development:

In November 2005: RAMP and GIAI staff met with Ms.Fowsea Olomi, of the Afghanistan Women Affairs director of Helmand Office and around 30 widows to discussion concerns about the widows association. GIAI arranged a meeting between Ms. Fowsea and the widow's delegation with Major Eric Katouc and Lieutenant Lexei from Provincial Rehabilitation Team and discussed possible location of land for the widow's association. PRT eventually committed to building and equipping a facility for the widows in cooperation with GIAI/RAMP. The size of the land is 1.5 Jeribs and is located near the PRT compound.

In January 2006 the new construction contract were signed with MRO Construction Companies for the Gulshawn Widows Dairy. Widows' project in Helmand construction began, follow specifications of the design provided by G.I.A.I Engineer Nadir.

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[5] Accelerating Sustainable Agriculture Program (ASAP), pg. 15.
[6] ibid, Pg 11.

Widow Association Warehouse (designed by G.I.A.I Engineer)
95% of the construction was complete at the time of this photo.

GIAI Coordinated and Completed the following activities:

- GIAI coordinated and funded with Herat Ice Cream the training to the Widows Association for running the Dairy Plant in May of 2006.
- GIAI provided transportation and installation of a 400-kg/day Ice Cream processing machine as support for this association.
- GIAI installed three cold rooms as support for this processing plant.
- GIAI purchased and installed 1 generator set, 30-40Kv to run the plant.
- GIAI installed acid resistant tiles to meet sanitation standards.
- GIAI is working with PRT & CNFA in purchase packaging and packing materials, for the Dairy and Ice Cream Plant

These widows learned how to make different types of ice cream, and testing of the milk as well as they learned about the machines which they will be operating. The ice cream technicians taught the members of the Widows Association.

Installation of acid resistant tiles installed in the Lashkar Guh Dairy Processing Plant.

6.6.4 Karokh Khurshid Women Association

Karokh Khurshid (Sun) Women Association (warehouse)

Karokh is one of the fifteen districts of Herat Province. Karokh is the most diverse agricultural district in the area. GIAI has selected this area for a women's development project, on the date of September 1, 2005. GIAI started its development activities, with a discussion with District Governor of Karokh and the male shuras of Karokh district

GIAI had a meeting with agriculture director of that district about productions in this district, after the discussion GIAI found the major products of this area is tomatoes, sesame and potatoes.

GIAI had several meeting with women shura of Karokh district and surveyed 13 villages of Karokh. GIAI registered 60 poor widows and established women association which consisting 60 widows GIAI added 40 landowner women in our association, to strengthen the association. GIAI meet with women shura and establishing the to potato chips activities for women.

100 members of women association have elected their leader by free voting and their name registered in district government by GIAI staff.

6.6.4.1 Market Research:

GIAI evaluated the potential of using the locally grown potatoes as potential chippers. The locally grown potatoes have low moister content and are of uniform size that has high potential for chipping. The local market potato chips are stall, out of date, poor quality (i.e. Crushed)

The widow's say the women make the potato chips in their homes and their families like them, therefore they feel it would be a good market.

6.6.4.2 Project Development:

GIAI staff negotiated 1000m2 land donated by the community for the women's association. An official letter was drafted, which is registered with district government of Karokh.

GIAI received 10 bids from construction company following the design of ware house. After the bidding process, ARCC was awarded the contract to construct the warehouse.

Three women of the Karohk Women Association participated in business plan workshop that was provided by Flag International. The women association member made their business plan themselves, the leader of women association is educated woman who is graduated from 12 grades, and the women association selected (**Khurshid - Sun**) name for their association.

The building of women association is finished but the community is working on decisions about outside wall of warehouse:

6.6.4.3 Defined needs:

GIAI's Potato Chip Group Karokh Khurshid (Sun) Women Association (ware house) expressed the need for quality snack food in Karokh and Herat:

"The estimated demand for potato chips in Afghanistan is 30 million kg per year and there is no (commercial size) production facility in Afghanistan at present. There are three imported brands available in the market, with Lays being the main competitor... The primary customer for potato chips in Afghanistan is a young child, teenagers, families and business people."[7]

The potato production in the Hirat Province is about 2,025 metric tons. The local population uses Seventy percent of the potatoes and 30% are exported. The potential production from the Karokh Khurshid (Sun) Women's Association Potato Chip Factory is from one to three tons of potatoes per day, which equals 200 to 500kg of potato chips, or from 250 to 750 metric tons per year (based on 5 days a week production).. This factory would meet up to **.43% of estimated demand for chips in Afghanistan.**

The estimated production of bags of chips per day is from 1000 to 3000. Chips sell for about 40 afs or $.80 per 175-gram bag. If the processing plant receives 50% of the retail price, then average gross income would be $400 to $1,200 per day. The cost of oil is $55 to $70 per day. Potato cost will be from $40 to $257 per ton. Bags, seasoning and other direct costs will be about $48 to $144 per day. Generator cost is $20 per day. Not including labor and replacement costs, the estimated average net income will be $473 per day, if all chips are distributed.

In addition, during off-season for potatoes the widows would like to explore the options of wheat nuts and caramel corn, snack foods. The estimated costs are a little lower for these items.

6.6.4.4 Lessons Learned

Karokh Khurshid (Sun) Women's Association Potato Chip Factory will need continued support to make the business sustainable. GIAI sought additional support through CNFA to make this business viable and stable. Six months was to short of time to develop this factory and fully establish this business.

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[7] "US – Afghan Business Matchimaking Conference 2005", pg 11
http://www.export.gov/afghanistan/pdf/afghan_company_profiles.pdf

6.6.5 Adraskan Carpet Weaving Project and Turkmen Widow's Association

6.6.5.1 Adraskan Carpet Weaving Project:

The 33 members of the Adraskan Widows Association finished weaving their first carpets. Their monthly income before receiving looms from GIAI/RAMP - $20 to $40. Potential Monthly Income after receiving Looms from GIAI/RAMP - $100 to $400.

"The knotted carpets made by women in the remote villages supply a niche market in the West. In the late 1970s handicrafts in Afghanistan consisting mainly of woolen carpets and rugs, were valued at US$20 million and carpets and rugs accounted for 9% of exports (Khan and Iqbal, 1999). In order for the women in the villages to gain a higher return, new quality assurance schemes are needed that could guarantee that Afghan carpets are genuinely made in the country and use wool produced, spun and dyed in Afghan villages. ***Private sector initiatives are needed that establish such schemes, supported by suitable government policies. This demand-driven approach would help genuine Afghan carpets compete on the international market with Afghan carpets that are actually made in Pakistan, sometimes using non-Afghan wool.****"* [8]

6.6.5.2 Market Research:

Both GIAI Carpet Weaving Groups, Adraskan Widow's Association (33 members) and Turkmen Widow's Association (65 members) expressed the potential market for quality wool and slk carpets in Afghanistan and for Export:

1) This area of Afghanistan can produce a true Persian carpet for export to the western world.
   - GIAI Female Nation Staff have applied for to separate market development training programs, in domestic and international training workshop in the US.
2) The problems are:
   - These women are working for $20 to $40 per month.
   - When the husband or brother sells the carpet in the market, the woman may never receive the money.
   - Some women are not allowed to leave their homes.

3) Need for a shop to sell their carpets at the market.

4) Value of a 1 m^2 X 3 m^2
   - The woman receives $20 to $40 per month at a carpet center.

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[8] "Lessons from Gender-focused International Aid in Post-Conflict Afghanistan…Learned?" Lina Abirafed, Friedrich-Ebert-Stiftung Division for International Cooperation Department For Development Policy Godesberger Allee 149, Germany 2005, pg 44 & 45.

- At the wholesale market $100 to $160
- Kabul market $200 to $400
- New York City shop $900 to $1500

5) Need for colors that are more diverse and more potential to meet market demands.

6) The economic potential of women needs to be developed for the women social / economic status in the community.

To date Afghan wool, silk and flax is either wasted or sold at very low prices to Iran, Pakistan, and Turkmenistan. Then it is imported back in the form of yarn or cloth at an excessive price and may be very low quality.

Afghanistan was one of the main exporters of carpet & textiles prior to the war and GIAI sees the potential of regaining that market.

Adraskan, one of the fifteen Districts' of Herat Province, is located southeast of Herat City. It consists of more than 200 villages.

The majority of the people of this district are busy with animal husbandry and carpet making. Unfortunately during the drought, the people lost their source of income, because the majority of their animals died. The villagers became extraordinarily poor and were unable to acquire supplies for making carpets. They could only collect the bushes and sell it in the bazaar, to purchases food, medicine and basic needs. Some of the men of this district started to smuggle the poppy into Iran or other places. When the men of the village did this dangerous activity, many were killed by the government of Iran and the women became widows. This is the reason that Adraskan has more widows then many other places around Herat.

Before GIAI established this association, staff had to consult with the male shura than district governor and than with women shura about GIAI's program. They agreed to participation in this program

GIAI staff meets with district governor of Adraskan and the male shura

First GIAI had planned to build one center for widows with a carpet machine, but the cost was too high. GIAI decided to distribute looms and accessories for the 30 widows. The widows requested GIAI to give them individual looms, so they could work in their homes. It is difficult for the widows to come in central building every day. GIAI gave the widows a loom and accessories and decide to provide them with a shop for selling of the rugs and carpets

The widow association of Adraskan elected their leader by voting, and elected two deputies for their association. Three members of association had invited by GIAI to Herat City to select the loom and accessories by themselves and order them from the shopkeeper.

Widows association is electing their leader

GIAI distributed widow association of Adraskan, loom and accessories:

GIAI provide widow association business plan workshop jointly with other associations:

Now the widows are doing their weaving in their houses:

The carpet of widows in Adraskan

Women are very happy to be able to make the carpets.

6.6.6 Turkmen Widow's Association

Ms. Emadi has been organizing the Turkmen Widow's, who also wish to establish a carpet-weaving center. Below is a brief on her research:

Ms Emadi has been researching markets and prices of silken carpets. Price is dependent on the quality of the carpet and the amount of silk interwoven into the carpet. Some carpets have more silk than others.

For a 2 m^2 silken carpet in the U.S., the retail price may be around $1000
For a 6 m^2 silken carpet in the U.S., the retail price is around $5000

GIAI Staff met with the Shura of Turkmen people and discussed the feasibility of starting a widow Association at this location. Malalai then started her survey for finding deserving women from that date,

Finally, the **TURKMEN WIDOW ASSOCIATION** was established with 65 members. The Turkmen shura and community had requested it!

Malalai Emadi, GIAI Project Manager had a meeting with the Women Association of Turkmen on May 22, 2006. At this house in Turkmen, the women Association elected their head (chief), deputies and secretary by free voting,

Turkmen Women Association during voting for their chief, deputies and secretary

The Turkmen Carpet Weavers

6.6.7 Lessons Learned

Afghanistan was one of the main exporters of carpet & textiles prior to the war and GIAI sees the potential of regaining that market. " Far more important is the contribution of fibers, carpets and leather fabrics to Afghanistan's exports. Although data on wool trade and the carpet industry have to be taken with much caution, the surveys referred to above show that the Afghan carpet economy is growing, partly due to the return of refugees from Pakistan where many had been making afghan carpets for the benefit of Pakistani traders. Some authors estimate the yearly ***Afghan added value of the carpet industry to be as much as from US $ 290 to 325 millions***."[9]

[9] "Afghanistan: Agriculture Master Plan – 2006", Afghanistan Ministry of Agriculture, Animal Husbandry & Forest, Pg 136.

GIAI is trying to develop a local and international market through additional support of carpet sales and marketing. GIAI had a showing at the Serena Hotel in Kabul and the carpets sold for $300 to $550, which 100% went directly back to the widow's. GIAI is continuing to try to establish continued support for market development. GIAI is also receiving guidance from the international market on size, color and designs of the carpets. The goal is to provide direct linkage from the carpet weaver to the export market so the women achieve the maximum amount of profit for her work.

6.7. Laboratories for Quality Assurance of Afghanistan dried fruits and nuts

GIAI/RAMP remodeled space, installed, equipped and trained technicians for the Ministry of Commerce dry fruit and nut labs in Kabul and Kandahar. (See Wall Street Journal Op Ed. article about this).

6.7.1 Introduction Kabul and Kandahar Quality Assurance Laboratories.

Food processing industries are highly important for stimulation of economic growth in a country as dependant on agriculture as Afghanistan. The core of the traditional irrigated and rain fed valleys contain a variety of fruit trees, with apples, pomegranates, apricots, mulberries, grapes, pistachios and almonds accounting for some 87 percent of the planting. In Afghanistan fruits have become profitable for land owners. In order to achieve expected returns on investment through good quality and right value addition, application of technology has become imperative.

In order to achieve expected returns on investment through good quality and value of dried fruits and nuts, the application of technology has become imperative, leading to an unprecedented demand for the establishment of dried fruit quality control systems that will improve the quality standards of the Afghan dried fruits and nuts and can promote exports.

At the present time Afghanistan is a market for food products of Pakistan, Iran, Dubai and Russia, even fresh vegetables are supplied from these countries. All these food products are highly susceptible to contamination and thus the percentage of health disorders in Afghanistan is increasing day by day , thus it will be better to establish food quality control system to take samples properly and test for food safety at the Afghan border. Through establishing labs, GIAI has assisted growers, processors, and traders to work according to international standards and follow phyto-sanitary (GMP and HACCP) requirements of fruits (fresh and dried) in the country and realized the establishment well equipped dried fruit quality testing laboratories and providing capacity building services.

6.7.2 Dried Fruit and Nuts

6.7.2.1 Economy and Foreign Trade of Dried Fruit and Nuts

Dried fruits and Nuts can achieve a significant role in the economy and foreign trade sector of Afghanistan

Afghan dried fruits and nuts already have an important role in the export and trade sector with 78% of the value of Afghan Agriculture exports, fresh and dried fruit. Out of these, raisins comprise 31%, Grapes 13% and Almonds 10% of the value.

6.7.2.2 Quality Testing Laboratories

Basic Purpose of establishment of dried fruits a nuts quality testing Laboratories in Afghanistan:

GIAI established dried fruits and nuts laboratories to achieve the following objective:

"To enhance dried fruit and nut quality through regular testing and a certification system and to get the industry's commitment to processed dried fruits and nuts in a safe, responsible manner and to provide the highest level of quality around the world"

6.7.2.2.1 Location of fruit testing laboratories

The Majority of Afghan dried and fresh fruit are grown in the center, north and south and south east side of the country. To provide the best service, GIAI decided to establish fruit testing labs in two important areas of the country where dried fruits and nuts were being exported to many countries of the world.

Thus GIAI installed two dried fruit and nut quality laboratories, one in **Kabul with the Raisin Institute** and the other with a sub office of **the Raisin Institute in Kandahar**.

6.7.2.2.2 Laboratory Layout:

Layout and design of these laboratories, furniture and equipment placement was considered on the basis of space available (or defining the space), sample flow, utility requirements and distribution, special requirements for hazardous sample handling, storage, sterilization, sample retention, and office/clerical/supervisory office space. Mobile or field self-contained testing units are also considered and planned. There were two separate portions in these labs, one for sample preparation and the other for sample analysis and results interpretation.

6.7.2.2.3 Laboratory Services

Dried Fruits and Nuts Analytical Laboratories offer comprehensive services to ensure dried Fruits and nuts safety, nutritional value and product quality to the dried Fruits and nuts processing industries. These laboratories providing service for the detection of Aflatoxin, microbiological and chemical analysis of dried fruits and nuts including pathogen testing, bacterial identification, grit and sand testing (in Raisin), insect detection and spoilage organism enumeration, sulpher dioxide analysis, fat and oil testing, , minerals, and physical testing(Grading).

Following are the main quality testing is doing on rotten basis in these laboratories.

- Physical Analysis
- Analytical Testing (Moisture contents, Brix and Acidity, Grit)
- Microbiological Testing (Plate count Method)
- Rapid (Flourimetric) Detection of Aflatoxin
- Sulfur Dioxide Detection
- Results interpretation

These laboratories providing support services include sample collection and registration and reporting of results, Raisin and Other Dried Fruits Export Promotion Institute is very proud of GIAI for their practical approach to situations and problems and our ability to communicate with any and all levels of management.

6.7.2.2.4 Laboratory Equipment

GIAI made a formal contract with Raisin and Other Dried Fruits Export Promotion Institute, Ministry of Commerce to transfer of two complete sets of lab equipments with 130 lab items to Kabul and Kandahar laboratories. Both parties were agreed to use this equipment in working and reasonable condition and to exercise care in their use and custody. GIAI agreed that the equipments will not be claimed back at any stage or any circumstances.

<u>Quality Control Certificate</u>

Proper certification programs play an important role, to clearly demonstrates that the dried fruits and nuts industry takes seriously its responsibility to minimize exposure to all hazards and to provide the lowest risk product. This proactive step is yet another tool handlers can use to their competitive advantage during business negotiations.

On the basis of this concept ***RAMP/GIAI designed two quality control certificates*** *related to dried fruit and nuts certification.* The critical, major and minor attributes usually described in these certificates were related to chemical, physical, and microbiological analysis of the dried fruits and Nuts.

Copies of these certificates with newly designed logos have been submitted and finally approved by Ministry of Commerce in Foreign Trade office to revise and make changes for final printing. Roots of Peace printed

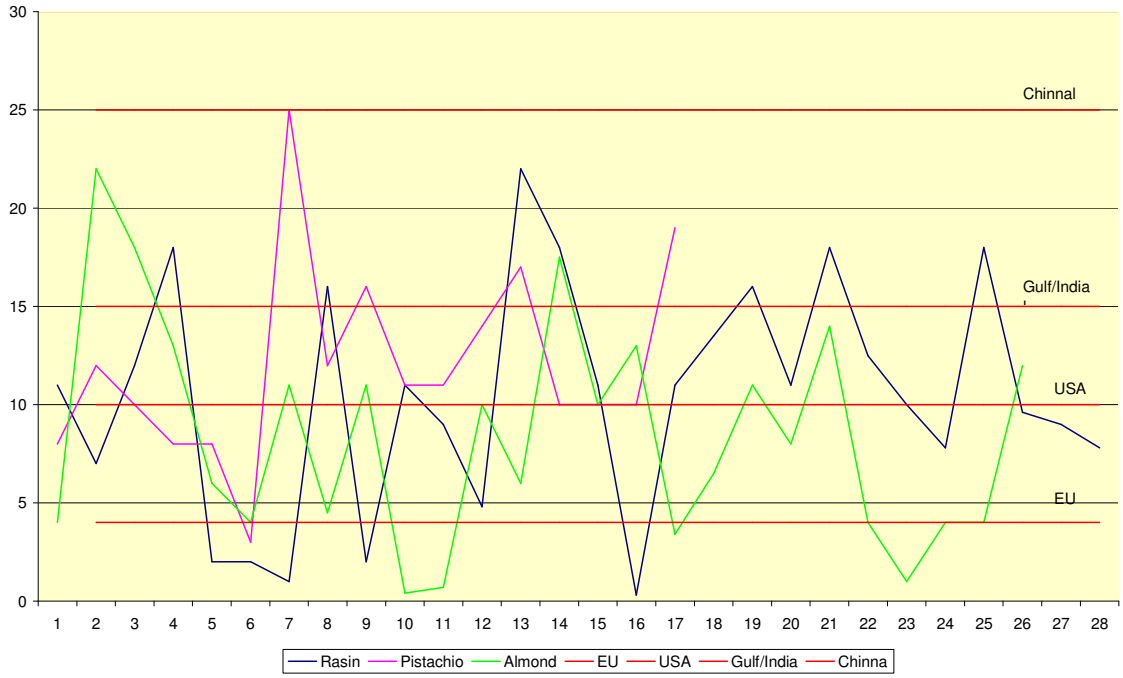
10,000 copies of these certificates that presently traders and exporters are using regularly after testing their product in the laboratory.

6.7.2.3 Aflatoxin

Those countries where Afghan dried fruit are being exported are divided into five groups based on their importing policies and regulation. Classification of the following countries of the world countries is according to the EU and WHO regulation and permitted level of Aflatoxin in dried fruits and nuts.

Aflatoxin contamination of pistachio, almond and raisin are undoubtedly a serious problem in Afghanistan. Contamination can occur in crops in the field, at harvest, during post-harvest operations and in storage. There were several comparative studies have been conducted and resulted of theses studies were presented to Ministry of Commerce, Raisin Institute staff and traders.

The following graph compares the Aflatoxin contamination in Almond, Raisin and Pistachios.



It is clear from above the data and graphic presentation that Afghan product is only suitable to send the Gulf and Russia and China, currently about 10% of our dried fruit and nuts are accepted to EU and USA.

Afghan dried fruit and nuts need much more improvement in respect to quality and safety, through proper and on time harvesting, proper methods of harvesting, suitable transportation, proper storage and application of modern processing technology and packing of dried fruits and nuts.

6.7.2.4 Marketing Services

For the awareness of the of GIAI's quality assurance program the staff of GIAI presented the importance of and key role of these laboratories in the export promotion of Afghan dried fruits and nuts. GIAI together with Roots of Peace worked on the logo designing and quality control certificates for the institute, this logo and certificates have been approved by the directorate of the institute and were finally approved by the Ministry of Commerce, Govt. of Afghanistan.

6.7.2.5 Laboratory equipment and other related supplies

To objectively determine quality of dried fruits and nuts, laboratory equipment has been purchased from different countries (UK, USA, Pakistan and India).

The details of sources with respective prices has been stated in the following tables.

No.	Types of equipments	Source
1	Aflatoxin determination Equipments	VICAM-USA
2	Microbiology determination Equipments	Narang Scientific Delhi India
3	Lab. Chemicals Equipments	Narang Scientific Delhi India
3	Microbiology determination Equipments	Bellstone International Delhi India
4	Microbiology determination /Other quality tests	Asia scientific, Rawilpindi Pakistan
5	Glassware/instruments	Biological Diagnostic Supply limited

Budget used for laboratories Installation and technical training

No.	Types of equipments	Cost $
1	Aflatoxin Equipments	24052.00
2	Microbiology Equipments	5763.00
3	Lab. Chemicals Equipments	
3	Microbiology Equipments	1668.05
4	Microbiology determination /Other chemicals	14262.76
5	Glassware/instruments	6480.64
Sub Total		**52226.45**
	Generator	**Cost $**
6	Generator	300.00
Sub Total		**300.00**
	Training	**Cost$**
7	Technical Training In India	5575.00
8	Aflatoxin Training in Afghanistan	2000.00
9	Microbiological training in Afghanistan	200.00
10	Aflatoxin/Microbiological training for Kandahar staff	300.00
Sub Total		**8075.00**

	Laboratories construction	Cost $
11	Laboratory construction in Kabul	5733.00
12	Laboratory construction+ generator for Kandahar	6213.00
Sub Total		**11946.00**
Grand Total		**$ 72,547.45**

6.7.2.6 Conclusion

- The installation of quality control laboratories and its work of issuing quality control certificates played a significant role for the export of dried fruits and nuts during 2003, 2004, 2005. Levels of export are estimated in the following table.

No	Quantity of dried fruits exported MT	Year
1	22,437	2003
2	34,414	2004
3	38,539	2005
4	13,200	With in 4 month of 2006

- GIAI dried fruits and nuts quality program results in ways that positively impact the business of Afghan traders and exporters. More importantly, now the Raisin Institute guarantees through these Laboratories, confidential and friendly service with accurate and timely results.
- GIAI/RAMP designed certification of dried fruit for export purposes and thus significant increase in export promotion of dried fruits to Europe, USA , Gulf and neighbor countries of Afghanistan.
- Local traders and exporters were made aware of mycotoxins, by their participation in various presentations and training courses and prevention techniques and to get certified dried fruits for export.
- Increased net returns of farmers that ultimately promote profit of the farmers and traders and to take precautionary measure during production, picking, and post-harvesting handling of dried fruits.
- Several foreign delegations have visited these labs, met with the director of the institute and asked different questions about the quality of dried fruits quality control. After their visits they demanded large quantities of dried fruits, thus the export ratio is increasing day by day.

6.7.2.7 Recommendations

The prevention of microbiological contamination and Aflatoxin production throughout the pistachio, almond and raisin production and distribution chain is the key issue for quality promotion of dried fruits. There is need of a systematic application of integrated phytosanitary management (IPSM) in orchards to eliminate mold growth and microbiological contamination. Mold should be reduced during the cultivation stage, coupled with a Hazard Analysis and Critical Control Point (HACCP) as a unique approach to prevent contamination during harvest and post harvest stages.

The GIAI/RAMP program was most useful for the staff of the Raisin and other dried fruit export promotion Institute staff and they have a key role to build their capacity and knowledge thus motivate the participants to participate in different training programs..

In the course of Aflatoxin and Microbiology, many preventive methods of microbiology have been declared and the participants also learned how to prevent contamination of dried fruits. The participants became familiar with the laboratory methods used in the microbiological analysis of foods, and with the identifying characteristics of the major groups of microorganisms associated with food spoilage and food borne diseases.

- There is need of establishment of quality control board/departments that will address international standards for quality assurance in dried fruits and nuts, which will help farmers dealing with local and world markets.

- Base line data should be gathered to assess the magnitude of mycotoxins (by Province) in dried fruits and nuts of Afghanistan.

- More work is required especially training is needed to producers and processors about proper picking, handling, storage and packing of dried fruits and nuts.

- Modern and safe storage techniques and equipment should be adopted to avoid fruit toxins.

- Cross country knowledge sharing communications is very important between ministries (Ministry of Agriculture and Food, Ministry of Public Health and Ministry of Commerce) should be established for better quality management systems and they should work together for export promotion.
- Food control officials and extension workers should be closely involved in this effort.
- An aflatoxin awareness program should be initiate for the owner and key worker in the dried fruit processing plant in Afghanistan to alert the about to the aflatoxin challenge, as they focus primarily on technology and economy and are possibly not aware of simple measures that can be taken to address the aflatoxin problem. An offer on joint cooperation in this regard must be made.

- Establish well-equipped laboratories both on central and outreach levels Mazar, Heart and Kunduz are requested by director of Raisin Institute.
- Food safety and hygiene training is need for the employee of the dried fruits and nuts industries of Afghanistan, to overcome food related hazards during processing.

6.8 Training Programs of GIAI/RAMP

6.8.1 The Objective of the lab training was:

"To build the capacity and skill of Raisin Institute staff by providing Microbiology reference services, to improve the standard of dried fruits and nuts quality control laboratory and promote dried fruits and nuts marketing of Afghanistan".

In this training the participants trained in understand the characteristics of these bacteria and the full scope of microbiological testing procedures for dried fruits and nuts.
They also worked on microbial groups that are associated with food and water, theory and practical and worked on enumeration identification and isolation of E.coli, Coliform, Salmonella and Listeria is raisin, almonds, pistachios, apricot and cashew nuts. They worked on mycotoxin and its significance in food and dried fruits and also worked on HPLC technique to determined Aflatoxin B1, B2, G1 and M1.

6.8.2 Technical Staff Training:

GIAI organized various training according to the need of the Raisin Institute's staff.

- Organized Aflatoxin Training program
- Presented training on introduction to Fruits Microbiology
- Overseas training of pathogenic bacteria determination at Bangalore, India.

6.8.3 Aflatoxin Training Program

Training about awareness of Aflatoxin and testing procedure in dried fruit and nuts have been organized in RAMP office on 11th to 13th of January, 2005. In this training 23 people have been invited from Raisin and

other dried fruit export promotion institute, Ministry of Agriculture , Faculty of Agriculture and Faculty of science Kabul University.

The main objective of this training was determination of aflatoxin in food with special reference to practical testing of aflatoxin in dried fruits and Nuts. In this training course the participants not only on learned the issues and problems in dried fruits but participants have been practical worked on improving their coping skills and analytical practice and determined the level of aflatoxin in Almond, pistachios, Apricot and walnut by repeatedly.

6.8.3.1 Training on introduction to Aflatoxin Fruits Microbiology

GIAI organized another training course for the Kandahar lab staff in the Raisin and other dries fruit export promotion laboratory. Technician from Kandahar worked on quality assurance tests of Aflatoxin, microbiological and chemical analysis of dried fruits and nuts including bacterial identification, Grit and sand testing (in dried fruits), insect detection and spoilage organism enumeration and sulphur dioxide analysis.

Developed manual about Aflatoxin and sampling methods and comparative studies of Raisin, Almond and Pistachios.

An Aflatoxin awareness manual were developed to introduced to the concept of Aflatoxin, how to take sample, sampling methods and determination of Aflatoxin through flourimeteric method and prevention measures. This manual will helpful for the quality control staff of the Raisin and Other Dried Fruit Export Promotion Institute and some major growers and processor to learn about the safe drying and storage of dried fruits and Nuts. This manual was also translated in Dari language for easy and better understanding for the local traders.

6.8.4 Training of pathogenic bacteria determination

To improve the capacity of institute's technical staff, 10days training has been organized by GIAI entitled "Determination of Photogenic Bacteria in Dried Fruits and Nuts". in Central Food Technological Research Institute (CFTRI), Mysore- Bangalore India. The participants this training were Moqumuddin Siraj (RAMP's Senior Food Technologist), Mr. Abdurehman and Mr. Faridoon (Laboratory Technicians of Raisin Institute).

6.8.5 Training of Afghan technicians for maintenance of the cold room chain

After four months of hard work acquiring six VISAs and a mountain of paperwork. On April 30, 2006, G.I.A.I cold room technicians (Eng. Sher Agha and Gul Rahman) travelled from Kabul, Afghanistan to Mendoza Argentina to receive factory training on installation, maintenance and repair on the cold storage rooms. Including how the panels and equipment are made. Eng. Sher Aqa and Gul Rahman met *FRIOLATINA´*s owner, Mr. Juan Bernardi. The trainer was Walter Fernandez who answered all of their specific and technical questions.

- They worked at installation of equipment for the cold rooms, while at the factory.
- May 5, 2006: G.I.A.I team were taken to an exposition named: *SITEVI* to show their machines, trucks, equipments, etc. G.I.A.I team were invited because *FRIOLATINA S.A.* had a stand in that exposition. The presentation took place for a week.

- May 6, 2006: The G.I.A.I team were introduced to some companies that had business with *FIOLATINA S.A* and were featured in pictures for a well-known Mendocinian \ magazine.
- May.08.2006: The team was taken to a fruit company named "*Brunetti*". *FIOLATINA S.A´*s owner joined them in this visit and explained them about the cold rooms that they sold for *Brunetti* full of fruit (apples) that were conserved there, in a perfect state, thanks to *FRIOLATINA S.A.´*s equipment.

6.8.6 Master Trainers Training Program on grain storage and management, in Mir Bacha Kot-Parwan

TRAINING WORKSHOP ON
GRAIN QUALITY AND STORAGE MANAGEMENT
GRAIN QUALITY TESTING AND STORAGE MANAGEMENT

- **GIAI organized a three days workshop on grain quality and storage management in Mir Bacha Kot, Parwan, Afghanistan** from May 9 to May 11, 2006. This was a follow up of Master Trainers Training Program on grain storage and management organized by GIAI in Kunduz from March 11th through March 23, 2006.

- **Purpose of this training workshop was to update and inform the participants on latest grain handling and storage techniques**. Seven Master Trainers from various farmer and seed associations and others from Kunduz participated in the workshop so to share their experience with their fellow farmers from Parwan and Kabul areas. Following were the topics and schedule of the workshop.

Participants from the following organizations attended the workshop:

- Master Trainers, Kunduz	07
- RAMP	01
- USAID	01
- VBSA Mazar C/o FAO	02
- Village Based Seed Associations Parwan C/O ICARDA:	10
- Kabul Silos	02
- Roots of Peace	01
- GIAI	06
Total:	**30**

Polyethylene Enclosure Phosphine Fumigation PEPF technique has been developed, which proved excellent PEPF fumigation techniques:

- Physical barrier and prevents the entry of fresh insects.
- Reduces the volume of the area to be fumigated with PEPF technique
- Easily maintains 200 ppm for 4 days to kill eggs, and larvae
- Minimizes insect resistance problem against the phosphine.
- Retains gas in the enclosure for required period to kill the insects stages

It was further emphasized that there are several factors i.e physical, biological, technical and chemical, which affect the stability of grains during storage. Integrated Pest Management, IPM is approach needed in order to manage the grain effectively and efficiently. House keeping and sanitation in the warehouse is very cost effective. Afghanistan Post-harvest losses are very high and are threat to national food security. No national economy can afford 20% or more losses due to: poor storage; spillage and spoilage therefore a modern grain handling; and storage practices need to be established.

- GIAI arranged practical demonstration on:

  - Polyethylene Enclosure Phosphine Fumigation, PEPF technique
  - Physical grain quality test using grain testing equipment

Wheat bags stacked in a closed the container, were covered with the polyethylene sheet and the enclosure was sealed with masking tape. The capillary tubes were inserted in the stack to monitor the concentration of gas. Several readings were taken by the participants themselves and observed the phosphine release rate concentration up to 370 ppm, Part per million in 24 hours, was just right to kill the insects.

6.8.6.1 Recommendations

- One of Afghanistan's future concerns is to improve its post-harvest grain systems to minimize Post-harvest grain losses by managing grain storage and handling systems effectively and efficiently.
- Polyethylene Enclosure Phosphine Fumigation PEPF fumigation technique demonstrated by the GIAI in the training workshop proved an effective way of fumigating grain stacks.
- Dosage for PEPF Stack Fumigation should be determined on the basis of volume and not on the basis of quantity of the grains in the warehouse.
- Some of the phosphine product available in the local market does not carry any labeling, manufacturing and expiration dates etc, whereas product with labeling must be used as it contains information including safety instructions.
- Steel containers proved a perfect chamber for fumigation and more demonstration needs to be completed.
- Determination of gas with phosphine gas detectors like Dragger pumps were very satisfactory.
- Maintenance of gas from 250 – 350 PPM (Part per million) needs to be maintained for 5 days, which is possible with PEPF.
- Safety instructions must be observed while PEPF fumigation.
- Post-harvest grain losses in the country are alarming and can be minimized through applying good storage practices and Integrated Pest Management techniques (IPM).
- House keeping can eliminate the need of insecticide and fumigants, therefore more emphasis must be given to cost effective house keeping and sanitation of stores and stored products.

- Grain quality can be maintained with regular inspection, house keeping and sanitation practices.
- Physical grain quality tests need to determine with grain testing equipment.
- There is a need for continued training activities in the country by establishing post-harvest grain centers by the farmer's associations.
- Cleaning of wheat at the farm level offers the potential to reward farmers.
- There is need to demonstrate effective integrated pest management techniques for the farmers and grain industry in Afghanistan

Location: MIR BACHA KOT, PARWAN, Afghanistan
Date: (May, 9 through May 11, 2006)
Report By: Shamsher H. Khan; GIAI Consultant; Kabul, Afghanistan

6.8.7 Grain training was also provided in Kunduz province

6.8.7.1 Summary

GIAI held another one day workshop in Ali Abad district of Kunduz province, in which more than ten people of Ali Abad seed producing association, participated.

PEPF technic is a perfect method for small scale fumigation they were not only concerned of insects, but also had problems with mice. Both issues were completely explained, participants learned about fumigation, and how to eliminate mice burrows. The participants appreciated the seminar and were asking for additional useful seminars.

GIAI conducted another seminar in kunduz center warehouse in which 24 people from various associations: Khan Abad Crop Producers Association, Chardara Seed Producers Association, Chardara Crop Producers Associations, Kunduz Center Crop Producers Associations particapated in the workshop.

- The participants said that the training was encouraging and beneficial. An improrrtant benefit that arose was that some of the farmers don't know each other. Therefore the farmers had an opportunity to be introduced, share their experience and information with each other.
- **Imam Sahib Association** attended the first training workshop on storage management, bag handling, stacking, fumigation. They also learned about new technologies on handling, processing and transportation and that is much easier than doing it manually.

By coming to the training the association members are preparing to store this year's harvest in the warehouses. GIAI/RAMP/ICARDA coordinated the associations of seed producers and crop producers to work jointly. They had a contract of operating the warhouse together. Imam Sahib warehouse will be fully utilized this year. As it is mentioned above that association is getting ready for coming harvest, Imam S association made…..pallets for good use of the warehouse. The pallets are 120mL x 80mW x 15cm H in size and a pallet jack was also given to the Imam Sahib association by GIAI.

7. Tasks Completed During Reporting Period

7.1 Chart of Project Completions

The Grain Industry Alliance International

Grain Post-harvest Training, Storage and Milling in Afghanistan

Submission Date: 14/08/2006 **Reporting Period: FINAL REPORT**

Activity Location and Description	
Nine Provinces: (Kunduz, Parwan, Ghazni, Nangarhar, Balkh, Kandahar, Kabul, Herat and Helmand) **Districts: 35 districts in the 9 provinces**	**Project Description:** **Market Development**

WORK PROGRESS

Activity Performance Indicators	Performance targets	Accomplishments
MULTIPURPOSE AGRICULTURE FACILITIES		
District grain storage market units	**7**	**7**
Farm storage bins	**50**	**50**
Post harvest sorting, grading and storage units	**9**	**10**
Processing Units	**3**	**3**
Cold storage rooms	**extra**	**59**
Dry fruit and nut quality labs	**extra**	**2**
Grain quality labs and equipment	**extra**	**2**
Public truck scale	**extra**	**1**
ASSOCIATION DEVELOPMENT		
Association development	**10**	**13**
Training Sessions		
Grain storage, cleaning, fumigation	**X**	**X**
Lab operations, microbiology, aflatoxin	**X**	**X**
Dairy and ice cream processing	**X**	**X**
Cold room maintenance and installation	**X**	**X**
Business planning	X	X

OTHER

G.I.A.I acquired from REACH/USAID twenty, 40 ft containers, to provide to project sites in Afghanistan. For example, four containers were placed at Kunduz Flour Mill for empty bag storage and fumigation purposes. The 40 foot container is well sealed for fumigation and it can be implemented perfectly. The appropriate area for putting containers was determined. The area was leveled, paved with gravel and cleaned up by the time GIAI team leader told them about putting the other two containers inside.

8. GIAI Financial Report

GIAI FINANCIAL REPORT TO RAMP

0426
Invoice Date: 30 June 2006

1213 Bakers Way ***(785) 537-4750*** **Page: 1**
Manhattan, KS 66502

Sold To: Chemonics
1133 20th St. NW
Washington, DC 20036

Quantity	Item	Description	Unit Price	Extension
		Salaries		69375 $
		Fringe benefits		52075 $
		Travel		17408 $
		Per diem		10311 $
		Other direct costs		34390 $
		Procurement		4200 $
		Training		3078 $
		Subcontracts		0
		Program inputs		254212 $
		Overhead		44505 $

Subtotal: 489,555.13
Sales Tax:
Total Amount of Invoice:489,555.13
Payment/Credit Applied:
TOTAL: 489,555.13

Financial report

G I A has spent all money according to Budget please see the last Liquidation as follow:

Expenses	Amount
a. Salaries	$769,409
b. Fringe Benefits	$61,271
c. Program Inputs	$2,056,192
d. Travel & Transportation	$79,287
e. Allowances (per diem, danger pay, etc)	$62,654
f. Other Direct Costs	$333,338
g. Equipment	$43,499
h. Training	$31,007
i. Overhead	$337,443
l. Subcontracts (if applicable)	$41,989

Total expenses _____3,816,090.73 $

Total G I A Budget is $3,711,820. But we spent more than the money from the RAMP/USAID funding on these projects.

And also here is the last month expenses report:

Quantity	Item	Description	Unit Price	Extension
		Salaries		69375 $
		Fringe benefits		52075 $
		Travel		17408 $
		Per diem		10311 $
		Other direct costs		34390 $
		Procurement		4200 $
		Training		3078 $
		Subcontracts		0
		Program inputs		254212 $
		Overhead		44505 $

Total expenses for the month of June-06: $489,555.13

MONTHLY LIQUIDATION REPORT

Grain Industry Alliance

Job Order Number:	28-00
Subcontract or FARA Number:	306-C-00-03-00502-00
Liquidation Report No.:	26
Advance No.:	23

Liquidation for Period: 6/1/2006 *through* 6/30/2006

Advance for Period: 2/1/2006 *through* 5/30/2006

	CUMULATIVE ADVANCES PROVIDED	LIQUIDATED THIS MONTH	LIQUIDATED CUMULATIVE	REMAINING FUNDS	BUDGET SUBSEQUENT MONTH
1. Expenses					
a. Salaries	$354,114	$69,375	$769,409	-$415,295	
b. Fringe Benefits	$61,130	$52,075	$61,271	-$141	
c. Program Inputs	$2,333,464	$254,212	$2,056,192	$277,272	
d. Travel & Transportation	$53,399	$17,408	$79,287	-$25,888	
e. Allowances (per diem, danger pay, etc)	$23,942	$10,311	$62,654	-$38,712	
f. Other Direct Costs	$102,006	$34,390	$333,338	-$231,332	
g. Equipment	$19,212	$4,200	$43,499	-$24,287	
h. Training	$77,408	$3,078	$31,007	$46,401	
i. Overhead	$269,962	$44,505	$337,443	-$67,481	
j. Fixed Fee (if applicable)		$0	$0	$0	
k. Other Costs (please specify)	$0	$0	$0	$0	
l. Subcontracts (if applicable)	$26,569	$0	$41,989	-$15,420	
- 2nd Tier Subcontractor #1				$0	
- 2nd Tier Subcontractor #2				$0	
- 2nd Tier Subcontractor #3	$0			$0	
TOTAL OPERATING EXPENSES	**$3,321,206.00**	**$489,555.13**	**$3,816,090.73**	**-$494,884.73**	**$0.00**

ADJUSTMENTS FOR THIS MONTH: **$0.00**

TOTAL AMOUNT OF ADVANCE REQUEST: **$0.00**

9. Articles

TRAGIC FOOTNOTE: While the first group of brave widows from the Gulshan Dairy project traveled for training to Herat from Helmand, the driver for their association was murdered and warnings were made against the association leadership.

South Asia

May 19, 2006

Taliban steps up spring offensive

By Borhan Younus, Ilyas Wahdat and Naeem Kohistani

A senior official of the Women's Affairs Department escaped unhurt in an assassination attempt that killed her driver in southern Helmand, on May 8. It was the first attack on a woman official in the lawless province, where the Taliban have targeted teachers and schools, which have opened to admit girls. The Taliban regime had banned girls from attending school, or joining the workforce.

PLEASE NOTE THE FOLLOWING Excerpts FROM THE WSJ.COM refer directly to RAMP/GIAI projects in Afghanistan!

WSJ.com

THE JOURNAL EDITORIAL REPORT

FOX News Channel
Saturday at 11 p.m. ET
Sunday at 6 a.m. ET

OpinionJournal
from THE WALL STREET JOURNAL Editorial Page

It's Raining Again

A roundup of the past month's good news from Afghanistan.

BY ARTHUR CHRENKOFF

Tuesday, September 6, 2005 12:01 a.m. EDT

USAID, meanwhile, is trying to assist the revival of the dried fruit and nut industry: Before the Soviet invasion, exports of dried fruit and nuts were significant to the agricultural economy in Afghanistan. Today, as Afghan producers re-enter the global market**, aflatoxin contamination is one of the primary constraints to meeting export quality standards. Aflatoxins are produced by the molds Aspergillus flavus and A. parasiticus. . . .**

To meet global market export standards, USAID is funding aflatoxin detection and reduction projects. In January 2005, a **training program on aflatoxins and testing procedures for detection was held**. Twenty three men and women from the Raisin and Dried Fruit Export Promotion Institute of the Ministry of Commerce, the Ministry of Agriculture and Food and the Faculty of Science of Kabul University participated in the three day, hands-on training in aflatoxin detection and measurement.

In addition to training for key Afghan personnel and ministries, on March 2005, **the renovation of the laboratory at the Raisin and Dried Fruit Export Institute was completed. The lab is now capable of detecting and measuring aflatoxin levels in parts per billion using fluorometric equipment. A suitable location for another testing laboratory in Kandahar is being identified by the Export Institute.**

In a move to build international confidence in the dried fruits and nuts of Afghanistan, the Ministry of Commerce held a conference in Kabul in June 2005. At the conference, Ministry and industry representatives decided that beginning in August 2005, **testing and certification would be required for all exports. The newly renovated laboratories are staffed with trained personnel and ready to facilitate this major step toward Afghanistan's regaining a share of the dried fruit and nut export markets.**

USAID is assisting Afghan agriculture in other ways:

During the last two weeks of July, work began on the **construction of a fruit and nut processing building at Mazar-e Sharif and work continued on two facilities with refrigeration units for fruit processing in Kandahar**

Speaking of fruit and nuts, after decades of disruption, Afghanistan's famous fresh and dried fruit are reaching foreign markets again:

Meanwhile, one American is putting his experience to use to rebuild the Afghan grain industry:
Dave Frey is using his 27 years of experience as the administrator of the Kansas Wheat Commission to help the people of Afghanistan.

Frey, 54, left for Kabul three months ago to serve as the director of the **Grain Industry Alliance**. The agency is a subcontractor of the taxpayer-funded Rebuilding Agricultural Markets in Afghanistan Program.

The country plans to import a half-million tons of wheat and flour, most coming from Pakistan. **Plans are to build a center to market grain, including a flour mill in Kunduz.** But his focus in Afghanistan extends beyond wheat.

"**We also will be expanding and building marketing centers for grapes," he said. "Most people don't realize that Afghanistan was a great grower of table grapes."**

Since Frey arrived in May, **projects have included building a fresh fruit exports marketing center in Habib City, west of Kandahar. And cold storage facilities are being built to make prolonged storage of grapes and other fresh fruits a possibility.**

After GIA had successfully built and placed 50 farm level storage facilities on farms in Afghanistan, FAO staff met with GIA staff on several occasions to consult on moving ahead with an FAO project to expand farm storage. GIA shared designs and consulted with the FAO staff in Kabul and also shared a list of farmers who would be interesting in participating with their farm level grain storage program.

Afghanistan: 14 000 grain silos to be distributed to farmers

FAO project training local tinsmiths in silo production

12 May 2005, Rome - Around 14,000 grain storage silos will be distributed to farmers in nine provinces of Afghanistan, thanks to a new FAO project funded by the Government of Germany.

The locally produced metallic silos, with grain storage capacities ranging from 120 to 1 800 kg, will be given to individual farmers, farmers' groups and cooperatives. The aim is to help reduce post-harvest losses, improve grain quality, increase the income of farmers by allowing them to sell grain during the off-season when prices are more favourable, and enhance household food security.

The $2.4 million project will also rehabilitate or construct ten community storage warehouses in major grain-producing areas of Afghanistan this year to encourage the re-establishment of local grain markets.

Around 220 tinsmiths and technicians in the country are currently being trained through the project in an effort to build local capacity and improve the quality of local silo production.

"The small metallic silo has been adopted by many developing countries as appropriate, affordable technology for small- and medium-scale farmers to prevent food losses," said Tim Vaessen, FAO's Emergency and Rehabilitation Coordinator in Kabul.

"The silos will have a positive socio-economic impact in the targeted communities. The training in silo production should also create additional opportunities for artisans to make metallic silos for sale to farmers in local markets," he added.