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Afghanistan Alternative Livelihoods Program Northern Region – Badakhshan and Takhar (ALP/N)

Contract No. GS-10F-0305P

Task Order No. 306-M-00-05-00517-00

2006-2007 Annual Work Plan July 2006-June 2007

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submitted by

PADCO

1025 Thomas Jefferson Street, NW

Suite 170

Washington DC, 20007-5204

T 202.337.2326 F 202.944.2351

E padco@padco.aecom.com

www.padco.aecom.com

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List of Acronyms

AICC	Afghanistan International Chamber of Commerce
AISA	Afghanistan Investment Support Agency
AKF	Aga Khan Development Foundation
AL	Alternative Livelihood
ALP	Alternative Livelihoods Program
ALP/E	Alternative Livelihoods Program/Eastern Region
ALP/N	Alternative Livelihoods Program/Northern Region
AMPS	Agricultural Marketing and Production Support
ARC	Afghan Relief Committee
ARG	Afghan Resources Group
BDS	Business Development Services
CFW	Cash-for-Work
CN	Counter-narcotics
CO	Contracting Officer
COP	Chief of Party
CTO	Cognizant Technical Officer
DCOP	Deputy Chief of Party
EA	Environmental Assessment
EU	European Union
FAO	UN Food and Agriculture Organization
GIS	Geographic Information System
GOA	Government of Afghanistan
GTZ	German Technical Assistance
IR	Intermediate Result
M&E	Monitoring and Evaluation
MRRD	Ministry of Rural Rehabilitation and Development
MPW	Ministry of Public Works
NGO	Nongovernmental Organization
NREDC	Northeastern Region Economic Development Council
NSP	National Solidarity Program
OPIC	Overseas Private Investment Corporation
OPIN	Online Presidential Initiative Network
PADCO	Planning and Development Collaborative International, Inc.
PCB	Provincial Coordinating Body
PDC	Provincial Development Council
PEP	Poppy Elimination Program
PMP	Performance Monitoring Plan
PRT	Provincial Reconstruction Team
RDA	Reconstruction and Development Association
RefWID	Refugee Women in Development
RF	Results Framework
SME	Small or Medium Enterprise
SO	Strategic Objective
UIP	United Infrastructure Project
UNODC	United Nations Office on Drugs and Crime
USAID	United States Agency for International Development
USG	United States Government

Overview

In February 2005, PADCO was awarded the contract to implement the Alternative Livelihoods Program/ Northern Region (ALP/N) under MOBIS Contract No. GS-10F-0359M, Task Order No. 306-M-00-00517-00. The contract has an initial value of \$59.99 million and will run, subject to availability of funding, until February 16, 2009. The work area of the program is composed of the provinces of Badakhshan and Takhar (Figure 1), in the Northeastern Region of Afghanistan. The core ALP/N team consists of Planning and Development Collaborative International, Inc. (PADCO), ACDI/ VOCA, Afghan Relief Committee (ARC), Afghan Resources Group (ARG), Reconstruction and Development Association (RDA), and United Infrastructure Project (UIP). Additional subcontractors are being competitively selected to implement specific projects under the supervision of the core ALP/N team.

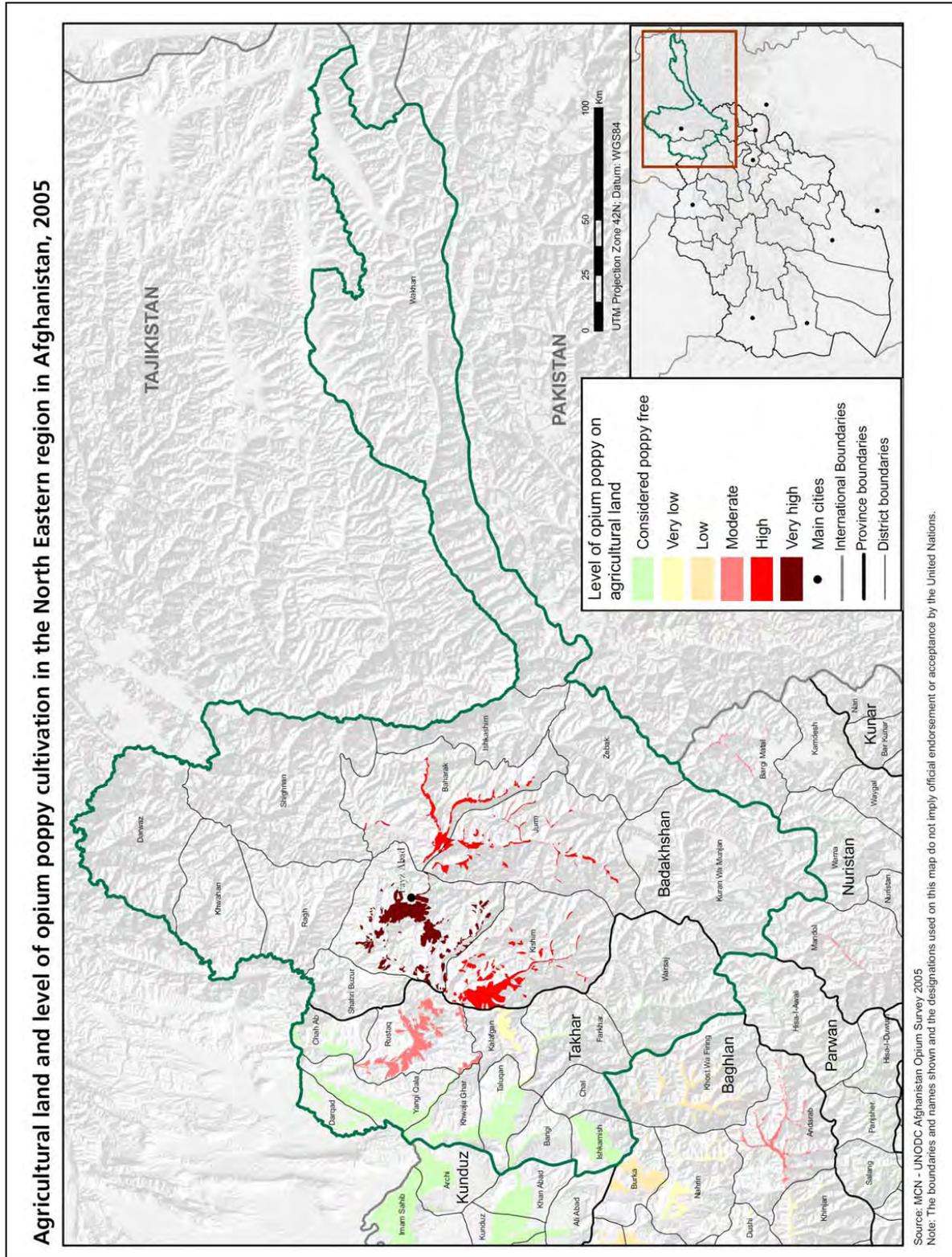
This document presents the *ALP/N 2006-2007 Annual Work Plan*, which covers July 1, 2006 through June 30, 2007. The Work Plan follows the broader program strategy and life of project planning that was laid out in the *ALP/N Implementation Strategy* and the *ALP/N Life of Project Work Plan* that were updated in June 2006. The next annual plan will be prepared in June 2007 to cover the July 2007 through June 2008 time period.

The *ALP/N 2006-2007 Annual Work Plan* is organized by program component.

- **Section 1** presents Component I: Cash for Work (CFW) and describes the activities will be designed and implemented to support the geographic and technical priorities of Component II: Sustainable Enterprises and presents the results planned from these activities in accordance with the ALP/N Performance Management Plan (PMP).
- **Section 2** presents Component II: Sustainable Enterprises by three major sector programs; livestock, trees, vegetables and spices. There is a brief description of each sector program and its technical and geographic priorities followed by a list of activities, how each will be implemented, and the expected outputs. The planned results for each sector program and Component II are also presented.
- **Section 3** describes activities for Component III: Investment Environment in each of five key areas—infrastructure, business assistance, institutional capacity, women’s programs, and communications. There is a brief description of each key area, followed by a list of activities, how each will be implemented, and the planned results.
- **Section 4** discusses program management plans covering personnel, international travel, subcontracting, procurement of non-expendable equipment, performance monitoring, compliance with environmental requirements, and reporting.

As presented in the *ALP/N Implementation Strategy Update* and the *Life of Project Work Plan Update*, the ALP/N objectives will be accomplished by working to increase agricultural productivity and market opportunities with the public and private sectors to foster economic growth increasing the competitiveness and diversity of agricultural businesses and agricultural processing in three sectors — livestock, trees, and vegetable and spice production. The program is focused in three geographic areas, the Kishem, Faizabad, and Jurm areas and surrounding districts. In each of the selected geographic focus areas support will be channeled on a priority basis to economic activities for development of one of the three identified sectors. Component I CFW and Component III Investment Environment activities will be carried out in support of sustainable agricultural enterprise development. By having ALP/N offices in the identified geographic focus areas that are staffed by a team with expertise in the respective sector (from inputs to marketing), program integration will be ensured. The Work Plan activities are described below by Component, but implementation will be integrated at the district office level to ensure coordinated impact, strong linkages to market demand, and clear communications with local groups.

Figure 1



1. Component I: Cash for Work

The ALP/N strategy calls for CFW resources to be closely integrated into Component II (Sustainable Enterprises) to support the ALP/N identified enterprises in the geographic focus areas. Nevertheless, there will continue to be a need to track CFW funding levels and results in terms of short-term employment created. Therefore, while the identification, preparation, and completion of CFW small infrastructure activities are incorporated into Component II to allow for appropriate site selection and sequencing, they will also appear in Component I work plan tables to allow for tracking, monitoring, and reporting.

The on-going 2005/6 CFW program will end in June 2006. ALP/N is planning and preparing for the upcoming 2006-2007 CFW program that will commence from July 2006 onwards.

Only few CFW activities are planned during July to September 2006 work plan period, since during the summer most all the populations of Badakhshan and Takhar are engaged in agricultural activities. Also irrigation improvements are not possible during the summer months when there is water flowing in canals. Only canals that can be cleaned at this time are those canals that are completely blocked with soil so that there no water flowing. New CFW programs will be conducted primarily in the fall, winter, and spring to provide employment and income at a time that will encourage farmers not to plant poppies.

Program Description

Cash for Work payments support infrastructure projects such as market roads and irrigation systems improvement projects. The work can be timed to either affect poppy planting decisions or to mitigate the income lost due to poppy eradication activities. However, it is worth noting that the direct impact of CFW on poppy planting decisions is ambiguous since many poppy growers farm on a tenant basis and there is excess labor and labor mobility in Northeastern Afghanistan. To be successful, CFW needs to be carefully targeted and tightly managed so that the increased availability of roads and irrigation infrastructure from CFW does not result in increased poppy production.

Following earlier consultations with USAID, ALP/N is changing the CFW management system. A separate CFW Unit is being established to manage and operate the CFW program. The program will be led by a CFW Director, who will be supported by a Deputy Director CFW and other staff. The CFW Director will report directly to the DCOP. Support for the operations of the CFW Unit will be provided by three Divisions – Administrative Operations for financial controls; Infrastructure for engineering design; and Agriculture/NRM for irrigated farming. An expatriate consultant will arrive in Faizabad at the end of June 2006 to assist in setting up the CFW management procedures and in training staff.

Priorities

CFW priorities are canal improvements and road repairs. A third important area will be support for women's activities that are integrated into all sector programs. See Section 3.4 for further discussion of the women's program.

CFW activities will continue in both Badakhshan and Takhar Provinces. In Badakhshan, CFW will be targeted and managed to support Component II Agricultural Enterprises in line with ALP/N strategy. In Takhar, the program is smaller and focused on agricultural productivity increases. Financial support is being provided to the Governor and Provincial Irrigation and Agricultural Departments to improve agricultural productivity in key areas. This assistance is being provided through two programs: Cash for Work and Agriculture.

ALP/N will shortlist and prioritize CFW activities focused on improving productive or marketing infrastructure. The approach ALP/N is taking to prioritize CFW projects is as follows.

- ALP/N will decide on the districts where CFW is to be implemented. Selection of districts will be based on progress in reducing poppy cultivation. ALP/N will avoid dangerous districts like Darayem, and minimize activities in districts that are not reducing poppies such as Argo.
- Identification of projects will be done jointly by ALP/N staff working with the Provincial Council, Government Departments, and local communities that are committed to and making progress in reducing poppy cultivation. ALP/N staff will work to ensure that whenever possible CFW projects support Component II: Sustainable Enterprise activities.
- ALP/N will analyze CFW projects, survey the sites, estimate costs, and prioritize projects, based on their fit with ALP/N objectives, planned results, and available budget. A prioritized shortlist of feasible projects will be given to the Governor and Provincial Counsel for concurrence.
- ALP/N will implement new CFW projects from October onwards. ALP/N will see that CFW projects are distributed over communities reducing poppy cultivation in Badakhshan. In Takhar, which is getting assistance as a “Good Performer” in poppy reduction, ALP/N will support Government and community priorities.
- Prior to starting work on a project, ALP/N will meet the district governor, other government department heads and the community leaders and agree on:
 - (i) selection of workers and supervisor;
 - (ii) date of implementation and completion date;
 - (iii) designs and technical details; and,
 - (iv) outputs of the project.

Activities

Proposed activities during 2006-2007 are shown in the Table below. Details are provided on the projects that have already been approved by USAID and on the projects that have come from the previous work plan period.

During summer of 2006, ALP/N will plan for the upcoming late fall, winter and spring CFW program. The districts that are likely to be included in the program in Badakhshan are Jurm, Baharak, Khash, Wardoj, Faizabad, Yaftal, Kishem, Tagab and Teshkon. In Takhar, the districts will be identified with the Governor and Department of Irrigation as stated above. ALP/N will also start community reforestation with a program in Baharak in the spring of 2007

Results

The cumulative target results of CFW projects to be achieved by the end of the 2006-2007 Work Plan are:

- Short term employment provided to unemployed farmers and workers will have been 540,000 person-days
- Short term employment to women will have been 8,000 person-days
- Total wages paid to workers will have been \$2.6 million paid in Afghani. (The workers are paid \$4/day plus \$1/day for lunch.)
- Total length of market roads improved will have been 172 kilometers.
- Total length of irrigation and drainage canals improved will have been 800 kilometers.
- Community reforestation will have been implemented covering 500 hectares.

The list of CFW activities and the target results in terms of employment, wages, and infrastructure is presenting in the following chart.

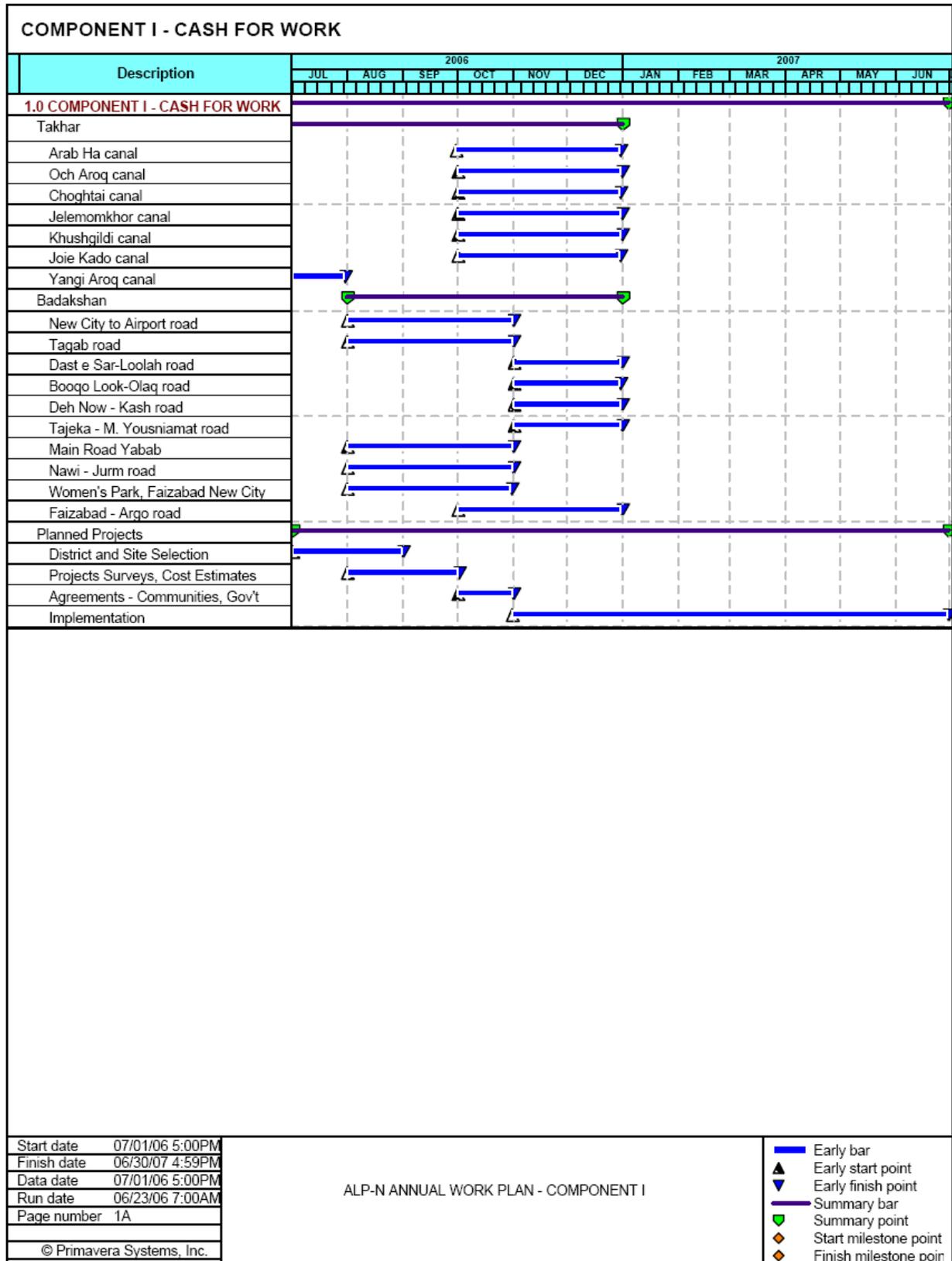
Chart 1: CFW Projects List and Target Results
Work Plan 2006-2007
Cash-for-Work

Title	Description	Location	Wages	Employment	Infrastructure
Takhar Province			US\$	Person-Days	Kms Canals/Roads
Arab Ha	Canal	Barak	1,645	329	1
Och Aroq	Canal	Barak	23,030	4,606	4
Choghtai	Canal	Khoja Ghar	17,365	3,473	7
Jelemomkhor	Canal	Khoja Ghar	14,500	2,900	7
Khushgildi	Canal	Khoja Ghar	55,500	11,100	14
Jo e Kado	Canal	Khoja Ghar	14,700	2,940	6
Subtotal Approved			184,490	56,356	57
Planned	Canals	Takhar	657,290	112,000	239
Total - Takhar			841,780	168,356	296
Badakhshan Province					
New City/airport	Road	Faizabad	44,500	8,900	15
Tagab	Road	Tagab	41,500	8,300	12
Dast e Sar-loolah	Road	Khash	8,325	1,665	5
Booqo Look-Oilq	Road	Khash	4,995	999	3
Deh Now-Khash	Road	Khash	1,665	333	1
Tajeka-M Yousniamat	Road	Khash	8,325	1,665	5
Main road-Yabab	Road	Jurm	10,000	2,000	9
Nawi-Jurm	Road	Jurm	4,995	999	3
Faizabad New City	Womens' Park	Faizabad	3,000	600	
Argo	Road	Argo	90,490	18,098	15
Subtotal Approved			217,795	43,559	103
Planned	Canals		240,000	48,000	
Planned	Roads		160,442	32,088	20
Planned	Other		440,000	88,000	(500 ha.)
Total Badakhshan			1,058,237	132,448	113
Grand Total CFW			1,900,017	380,003	384

Implementation Timeline

As mentioned above CFW program includes both projects that have already been approved by USAID as well as new projects being identified with the Government and communities.

Chart 2: Component I Cash for Work Timeline



2. Component II: Sustainable Enterprises

In accordance with the *ALP/N Implementation Strategy Update* and the *ALP/N Life of Project Work Plan Update*, this section describes the activities planned under each of three sectors: (1) livestock, (2) tree crops and (3) vegetables and spices. The chart at the end of the section presents the timelines for the planned activities. The three principal geographic areas chosen for ALP/N are the Keshem, Jurm/Baharak and Faizabad market centers and surrounding districts.

As the second largest city in Badakhshan, Keshem is a favorable location for transport and trade and is a year-round market center for sedentary livestock (cattle, sheep, and goats). It is on the main road between Taloquan and Faizabad and is situated in a large arable valley with excellent potential for sedentary livestock production. The area can support a large livestock population with fodder from wheat and rice residues and expanded forage and feed under irrigation.

The Jurm/Baharak area, also large poppy growing area, is the third largest population and market in the province. The region suffers from poor roads, lack of market access and extensive but poorly maintained irrigation. On the other hand, the region is known for high quality fruit and a good existing orchards while nearby there is considerable nut production. With improved pruning and water management yields can increase significantly. There is also good potential for expanding local value-added processing, primarily fruit drying. Expanding to other processing is constrained by lack of electricity; a problem that may be addressed by ALP/N micro-hydropower projects.

The Faizabad area has significant poppy production. It is the largest city in Badakhshan, is the provincial capital and has the largest regional market. It is close to large productive areas for agriculture, and with good soils and climate is a potential market and value-added processing site for increased productivity of vegetables. It has the best power supply and business potential in the province. Development in Faizabad will focus not only on primary production, but will target infrastructure including a land transportation center as well as farm-to-market roads, improved irrigation systems and the enhancement of local hydro-power.

In all three areas covering a total of 10 districts, ALP/N will stress the dissemination of new technologies to farmers and the strengthening of agricultural enterprises. For agricultural technology dissemination, we have multiple locations of controlled field plots where ALP/N staff and subcontractors are growing various varieties of fodder grasses, wheat, trees, vegetables, or spices and local farmers are brought to these locations during the year to learn planting, cultivating, and harvesting techniques as well as to see and compare the results of the various varieties and cultivation regimes. Second, ALP/N staff, subcontractors, and extension agents of the Department of Agriculture, who have been trained by ALP/N, are providing on-farm extension assistance and training to farmers in the ten Badakhshan Districts that are the geographic focus area under the ALP/N Work Plan. Third, ALP/N is strengthening farmer cooperatives and associations that will further reach out to their members to provide information on new technologies, loans for equipment and inputs, and technical assistance. Finally, ALP/N has a communications program that will be using radio and other media to inform a broad audience of 400,000 plus persons in the focus areas of agricultural technologies, business opportunities, market prices, and other relevant information.

Our estimates are that during the 2006-2007 Work Plan period, ALP/N will help 10,000 local farmers adopt new varieties of fodder grasses, wheat, trees, vegetables, or spices through the controlled field plots. ALP/N will provide on-farm extension assistance and training to another 3,600 farmers, and farmer

cooperatives and associations will reach 10,000 farmers. Ten percent of these 23,600 farmers that ALP/N is directly assisting will be women. In addition, the FM radio stations messages of ALP/N will reach 400,000 persons with agricultural messages.

2.1 Livestock Sector

Program description

Badakhshan has a large population of cattle, sheep, goats and donkeys. The livelihoods of approximately 80 percent of rural people depend in part on livestock. Livestock is kept for local milk and meat consumption and for live animal trade, most walked to market. There are also large numbers of Kuchi nomads who shift pastures to high pastures in eastern Badakhshan in the spring and summer. In many areas of Badakhshan livestock is the key sector of the farm economy. Grazing is the traditional source of animal nutrition and remains the principal food source. Natural pasture is unmanaged and degraded and winter feed is poor in quality and quantity. Livestock are malnourished resulting in poor health, low fertility, low weight gain, and poor lactation. Badakhshan and Takhar provinces are mountainous, isolated provinces with low quality road infrastructure and transportation networks. All this severely limits the ability of farmers to access livestock health services, quality feedstuffs, extension services, processing facilities, and markets. The Keshem area, while closer to pavement going to Kunduz and Mazar-i-Sharif still lacks many services need to initiate value-addition livestock activities. Nevertheless, Keshem also has one of the most productive areas for agricultural production, a key to maintaining healthy livestock for meat and milk production.

Priority

The sector studies conducted during year one and ALP/N's experience in the area have identified animal health and nutrition as the two major problems which must be ameliorated before any value-added livestock related activities have a reasonable chance of success. Therefore, year-two activities in the livestock sector will focus on these two areas with expanded and improved veterinary services and practical training in livestock management, feeding, and forage production. The programs described under this section will be implemented in coordination with processing and marketing programs (described under Business Assistance in Section 3.2 and with women's programs for livestock described under the Women's Programs in Section 3.3 and together all will strengthen institutional capacity as described in Section 3.4. We have separated the programs for presentation purposes. As stated above, implementation of all activities is integrated at the ALP/N district office level to ensure coordinated impact, strong linkages to market demand, and clear communications with local groups.

Activities

- ParaVet Clinics. The ALP/N animal health program is starting during this work plan period with the development of a central facility in Faizabad and 9 ParaVets clinics in five districts. This will expand over the next two and a half years to 30 ParaVets in the ten focus districts of ALP/N. By the end of the project, the ParVet system will be assisting 30,000 farmers each quarter and an estimated 150,000 animals will be treated each quarter. The clinics are being designed and set up as private operations so that the results will be sustained beyond the life of the project.

ALP/N has subcontracted with the Dutch Committee of Afghanistan (DCA) to develop ParaVet services in the ALP/N target districts. The first batch of 11 local ParaVet trainees from Badakhshan

were selected and 9, including one woman, will complete their 6 month training program in early August. These ParaVets will be located in communities to provide integrated livestock services to improve animal health and livestock productivity. The districts initial districts for ParaVet clinics include Faizabad, Yaftal, Keshem, Baharak, and other to be determined. The ParaVets are expected to return to their home districts, but in some cases this will not be possible. The ParaVets are being set up in a small clinic and supplied with high quality vaccines, drugs, and veterinary equipment. Since women in Afghanistan are typically the predominant caretaker of animals on the farm, i.e. within the household compound, a woman was selected as a participant in the first selection and others will be selected in future groups.

- Basic Veterinary Workers (BVW). To create an outreach network for the ParaVet clinics, 20 Basic Veterinary Workers (BVW) will be trained and setup to assist the paravets and as the first responder in their villages during the upcoming year.
- Training Livestock Extension Agents and Farmers. ALP/N will give the Provincial Agricultural Department staff a three day, “Train the Trainers” course to enable them to better train farmers in livestock management and feeding technology. ALP/N staff will provide periodic field assistance and further refresher training to help ensure better fieldwork.
- Feeding and Forage Production. ALP/N is setting six livestock feeding and forage production controlled field plots and extension operations in targeted areas to encourage the commercial livestock development through of good animal nutrition and animal health. This activity will work closely with the DCA program. In conjunction with this program, an additional fifty farmers in all of the provincial target areas will be given various forage and pulse seeds to grow and encourage adoption by their neighboring farmers. This will give wide exposure to the demonstrated feed crops, and the best adapted feeds in each region can be distributed and planted the following year.

2.2 Trees Sector

Program description

This sector has been identified by some as the most competitive alternative crop to opium production in Afghanistan. The Northeastern region was internationally renowned for its wild pistachios and walnuts. It is also know for the production of high quality apples, apricots and cherries. However, most perishable fruits (cherries, apricots, peaches, apples and pears) are consumed at home or marketed locally. Farmers have lost or lack the skills for orchard management that would improve productivity. Decades of war and destruction and aggravated poverty have denuded the hills, greatly reducing the supply of nuts and fruits resulting in the need to import many commodities at high cost from other countries. While some fruit such as cherries are dried (on building roofs), the development of the sector is limited by poor post-harvesting practices. There is a lack of grading practices, cold storage facilities, adequate packing materials and no capable farmer organizations to market the produce. Also, because of neglect, the existing trees have grown into unmanageable plants prone to diseases and insect-pests, reducing their productivity. Because of widespread cutting of timber trees and lack of new planting, there is a severe shortage of timber and firewood.

Priority

The long term revival of nut and fruit tree production in the province will come from new and better varieties and technology. However, ALP/N recognizes the need for immediate impact assistance to improve the incomes in this sector while the longer term activities are coming to fruition. Therefore the ALP/N priority is to assist in the revitalization of existing orchards focusing on five districts Jurm Baharak, Khash, Shuhada, and Wardoz, where this makes commercial sense, while going ahead on a

parallel course with the introduction of new varieties and technology. It should be noted that while new varieties with better shipping quality and higher solids will be necessary to spur the development of exports and processing, there will remain a significant domestic market for the older local varieties. The planned revitalization of these existing plantings should enable productivity gains of 50% or more. This should insure their ability to compete in the local fresh market when the plantings with the necessary longer term improvements come into production.

ALP/N can quickly have an important impact on fruit markets in the region. From the ALP/N fruits and nuts assessment carried out in May-June 2006 by our subcontractor, Roots of Peace (RoP), there is major potential for walnuts, cherries, apricots, and apples, as well as lesser potential for peaches, pears, and mulberries in the target districts. For example, the number of trees and current production for the highest potential fruits are nuts are: Walnuts - 120,000 trees with 7,500 MT production; Cherries – 60,000 trees with 2,700 MT production; Apricot – 24,000 trees with 1,900 MT production; and, Apple - 36,000 trees with 5,700 MT production. With the quick improvement of existing orchards and movement into broader commercial production and processing to supply the strong market for dried cherries and apricots, ALP/N will have a broad economic impact on 30,000 farmers engaged in horticulture in this area.

A similar situation exists with timber trees in Badakhshan, and similar kinds of approaches and activities will be undertaken to revitalize the timber production and utilization program in the province. These activities will be focused in the higher elevation areas with good soils and sufficient rainfall for widespread cultivation of fast growing indigenous poplar or other species of trees.

Roots of Peace (RoP) is the principal subcontractor selected to accomplish many of ALP/N's programs in the fruit and nut sector. RoP will demonstrate and enable the use of appropriate production, processing and marketing techniques that will increase revenues associated with fruit, and nut, products to increase their attractiveness as alternatives to poppy production.

Activities

- Foundation Fruit Nurseries. ALP/N will expand to new locations the foundation nursery that has been established by RoP in the Baharak/Jurm area for cherry mother stock and other varieties will be added including: almonds, apricots and pistachios. These nurseries of improved varieties will provide the bud wood necessary to support the commercial nursery industry, and the commercial nurseries will supply new trees for expansion and revitalization of the sector. ALP/N will provide extension services out of these facilities and will cooperate with and train MAAHF extension agents who are working in the area. Field Days at appropriate times to demonstrate the seasonal activities necessary to improve production will be held at all field locations.
- Fruit Drying. A solar dryer will be installed and operated in the Baharak/Jurm region with RoP assistance. Training courses will be given for both men and women to operate this equipment in a manner to produce competitive, high quality, and sanitary products for sale. It is planned that this activity will be undertaken with a rejuvenated cooperative or farmer association in the area as is described under Business Assistance in Section 3.2.
- Fruit, and Nut Trees Assessments. ALP/N through assistance from RoP will expand their ongoing assessment of fruit, and nut trees in the region to include almonds, apricots, pistachios, walnuts, and existing nurseries for all of the above.
- Commercial-style Demonstration Orchards. ALP/N will establish commercial-style demonstration orchards with larger, bare root trees approximately 2 M tall that will bear some fruit the first year and significant quantities the following year. These plantings will more rapidly demonstrate the profit potential of the new technology and stimulate interest in the purchase and planting of smaller saplings

of the same varieties from the local nurseries. Field Days at appropriate times to demonstrate the seasonal activities necessary to improve production will be held at all field locations.

- Small Scale Fruit Processing. ALP/N will study and, if justified and approved, implement small scale fruit processing and nut hulling and shelling facilities. Open houses will be held to demonstrate the capability of these operations and to disseminate information on the economic advantage of this added value operation.
- Marketing Assistance to Producers and Merchants. ALP/N will continue and expand assistance to producers and merchants to market existing products and test market improved versions of existing fruit and nut products. This will be done with assistance from RoP as well as through Business Assistance activities described below in Section 3.2 and Women’s Programs in Section 3.4
- Training Agricultural Extension Agents. ALP/N will conduct a 3 day “Training of the Trainers” course for the Provincial Agriculture Ministry staff on tree production and management to better enable them to train local farmers in these technologies. ALP/N staff will provide periodic field assistance and further refresher training to help ensure better fieldwork.
- Timber Tree Production. ALP/N with assistance from ARC is conducting a survey of timber trees and assessing community production experience in the Province. Using this ALP/N will be developing an action plan and start implementation of an accelerated reforestation program in areas that are most appropriate technically and have strong community program support.
- Women’s Home Based Nurseries. ALP/N NRM in cooperation with the ALP/N Women’s Program Group will continue to support the expanded development of the women’s home based nurseries that were successfully demonstrated during the last work plan. The activity is further described in Section 3.3 below.

2.3 Vegetable and Spices Sector

Program description

As a result of a number of production constraints, including access to improved seed varieties and fertilizers and improved management practices, vegetable yields are low. The majority of vegetables are grown in small-scale household gardens, so their potential as field crops has not been developed. With proper technical management and through use of improved seed varieties and fertilizer, the current yields can be significantly increased

ALP/N will integrate and build upon the work of the AMPS project. The goal of the ALP/N vegetable program is to increase the productivity of vegetable production by expanding the use of improved seeds and fertilizers. This will increase farmer income by increasing sales for the regional market. It is estimated that local vegetable production meets only 80 percent of local demand and that 20 percent of vegetable produce is imported. The increase in productivity will be achieved by use of varieties that can be planted and harvested at different times, extending the season from three to potentially nine months. At the very least this will reduce expensive imports and reduce prices, aiding the poor.

Priority

It is possible to grow a great variety of different vegetables in Badakhshan, some of these will be consumed by the farmer’s family and some will be grown for sale on the domestic market. While both are important to the family’s well being, ALP/N is placing the priority on those vegetables that can be sold at a profit to provide cash to the family. This means that farmers need to be able to competitively produce vegetables for delivery at a time when a favorable market exists. This requires inputs,

technology, and market information. The ALP/N Ag/NRM Division is working in close coordination with the ALP/N Business Development Division to develop the market information requirements and explore value-added process possibilities. All ALP/N activities will be coordinated with the MAAH Provincial Offices in the Badakhshan.

Historically worldwide, a majority of farmers have not been able to make the leap in mind set from producing what they want when they want, to producing what the market demands when the market demands it. The challenge for ALP/N is to help Badakhshan farmers make this transition successfully. We will continue to support all farmers in the target areas with seed, fertilizer, technology, and market information, but the biggest impact will be made on those that recognize that they have to produce for identified market demand.

Experience gained through competitive production of high value fresh vegetables will prepare the farmers to produce the lower-value raw material for processors, when infrastructure improvements and scale of production increases allow vegetable processing to become a viable industry in Badakhshan.

Activities

- Identify Markets for Vegetables. ALP/N will compile all of the results of the ongoing seed variety trials and compare this with the results of the ongoing market information activity of the ALP/N BD unit. The purpose of this is to identify underserved market niches that may be exploited by Badakhshan farmers willing to break with traditional planting dates and/or crops.
- Vegetable Demonstrations. ALP/N with ARC assistance will manage many “On Farm” vegetable demonstration plantings located in all the priority areas. These plantings will demonstrate new varieties, improved technologies adaptable to Afghan conditions, a variety of planting dates, and post harvest technology to improve the quality of the product. The results of these demonstration plantings will be widely disseminated through field days held at all locations at appropriate times during the growing season.
- Women’s Training Vegetable and Fruit Drying and Processing. In Baharak/Jurm, ALP/N with assistance from RoP will conduct a women’s training program in small scale vegetable and fruit drying and processing. Further assistance and training using the RoP experience in Baharak/Jurm will be undertaken in other locations with Women’s groups as described in Section 3.3 below.
- Training Agricultural Extension Agents and Farmers. ALP/N with ARC assistance will conduct training for MAAHF Provincial staff and target farmers on vegetable production, post harvest handling and marketing.
- Vegetable Seed Industry. ALP/N with a contractor to be determined will conduct an assessment of the potential for Afghan vegetable seed production, processing, and marketing. This business could provide an alternate cash crop in some of the higher altitude regions of Badakhshan that are needed for some vegetables to properly flower and set seeds.
- Vegetable Storage. ALP/N is building two small underground “on farm” proto-type storages facilities for vegetables. Based on the results and lessons learned from these prototypes, the program will be expanded and lessons widely disseminated during the coming year. The engineering department of ALP/N is assisting with design of low cost plans for rolling this program out in large volume in the following years.
- Black Cumin and other Spices. ALP/N with ARC is establishing a demonstration planting of Black Cumin and 2 other spices to determine their potential as a cultivated crop in Badakhshan. Based on the results and lessons learned from these demonstrations, the program will be expanded and lessons disseminated during the coming year.

- Fall Wheat Seeds. For Fall Wheat Seeds, ALP/N will distribute certified wheat seed and fertilizer to 6,000 farmers in targeted regions for fall planting. ALP/N has decided to work through farmer associations for the selection of the seed/fertilizer recipients. Certified seed produced in Northern Afghanistan and certified by FAO, as available, will be purchased from local seed dealers. Ten percent of the seed and fertilizer will be reserved for female recipients. The associations and the recipients will agree to a 50% repayment (Est. at \$30/jerib) to the associations, based on the value of the seed and fertilizer received.

ALP/N is currently completing an assessment of cooperative associations and will be working to strengthen these groups. (See section 3.2 below for a description of ALP/N business assistance planned for these groups.) The funds the associations obtain from the repayments for wheat seed and fertilizer are to be used for agricultural equipment/inputs as directed by a vote of the participating association members. The collection of the repayment will be the sole responsibility of the cooperating associations. Collection of the funds and the purchase of equipment or inputs to be used for agricultural activities of the participating members should strengthen the associations and help make them sustainable institutions. Strong associations will enable small Afghan farmers to work together to develop marketing strategies, credit facilities, etc.

- Improved Wheat Varieties. ALP/N with ICARDA assistance will test 20 varieties of improved wheat in the ALP/N target areas. The best improved varieties will then be feeder stock for replication and ultimately distribution to farmers.

2.4 Component II Results

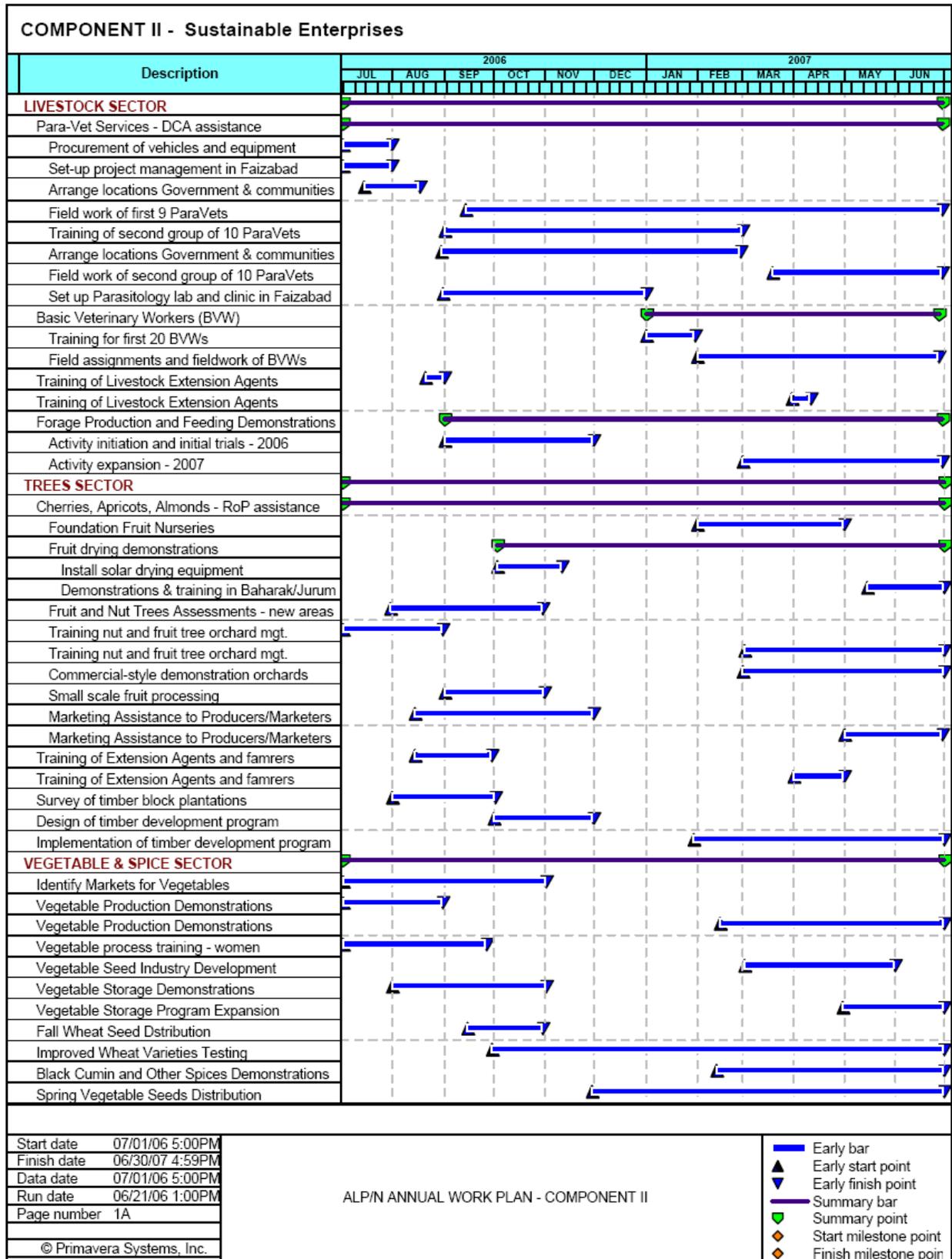
The cumulative target results of the combined Components II activities at the completion of the 2006-2007 Work Plan are planned as follows: (See Section 3.4 for the results for women)

- The total number of agricultural enterprises that ALP/N has targeted to improve over the next two years is 335. These include: agricultural input dealers (150 enterprises strengthened); ParaVets clinics (30 established and strengthened); agricultural cooperatives and associations (50 to be established and strengthened); agricultural processing enterprises (5 to be established and strengthened); and women's agricultural enterprises for milk products, tree nurseries, and vegetables and spices (100 to be established and strengthened). Approximately 150 of these groups will be assisted during the coming year.
- Percent increase in production of high value livestock, trees, and vegetable products as measured by sales in market centers will have been 5 percent.
- Total number of farmers having received agricultural inputs under ALP/N livestock, trees and vegetable and wheat activities will be 113,000.
- Total number of farmers receiving some training in new livestock, trees, vegetables and wheat practices will be 40,000.

Implementation Timeline

The detailed timelines for 2006-2007 activities under Component II are presented below. The chart presents the planned start and finish dates for completing all activities needed to ensure that the ALP/N target results for the year are achieved. As mentioned in the ALP/N Implementation Strategy and Life of Project Work Plan, Component II activities will be located in communities that are moving out of poppy cultivation and seeking alternatives. The ALP/N will dialogue with communities and select areas committed to the objectives of ALP/N and willing to provide security for our personnel.

Chart 3: Component II Timelines



3. Component III: Investment Environment

The ALP/N strategy calls for Investment Environment resources to be closely integrated with Component II (Sustainable Enterprises). This will provide critical support the ALP/N identified activities in the geographic focus areas. The complexity of successfully implementing ALP/N activities in a remote region where the Government has only fragile governance structures in place, requires flexibility to respond to new information and opportunities, and to rapidly shifting program priorities.

Investment Environment activities will be closely integrated into the geographic and agricultural elements through coordinated program support from the Faizabad Office and integrated program management at the district and field levels, and senior level oversight from PADCO domestic headquarters. Due to the limited infrastructure and fragmented markets in Northeastern Afghanistan, ALP/N will also undertake activities to facilitate business development. Component III includes key investment environment activities (infrastructure, business assistance, institutional capacity building, women's programs and communications) planned for the duration of the project.

Infrastructure

Infrastructure activities include road and irrigation (typically rehabilitation and improvements) and other supporting civil works for business development. The Northeastern region is particularly deficient in the rural productive and market infrastructure needed to support economic growth. The ALP/N strategy uses a selected combination of contractors, communal resources, and CFW-labor intensive resources to execute infrastructure projects which are supporting the agricultural enterprise development priorities of the farmers and business enterprises of the ALP/N target areas.

The program covers for four main types of infrastructure improvements:

- (1) Roads and Bridges. This element includes the repair and improvement of inter-district secondary market roads to improve access to the business market centers in focus geographic areas. Road conditions need to be improved to lower transport cost and improve market access for crops and products in Badakhshan. In the first instance road beds and surfaces need to be reshaped, leveled and filled; secondly broken down road retaining walls need to be reconstructed; narrow and often rocky curves need to be cleared; and surface drainage improvements installed. Bridges need to be repaired and strengthened, and in some cases reconstructed. In selected locations new bridges (short span standardized designs) will be the appropriate solution. Cash for Work will be used to provide labor for repair of small-scale and feeder road infrastructure. In addition, the income provided from CFW generates income that can help mitigate partly the loss of income due to the expected reduction of the cultivation of opium poppy.
- (2) Irrigation. Improvement and extension of irrigation canals, small-scale irrigation works, water diversion and flood protection projects are included in this element. Better functioning irrigation over larger acreages is required to support an ever increasing rural population and is a key factor in enabling required increase of per capita income. Irrigation infrastructure activities will be directed to rehabilitate, repair, improve and extend existing irrigation systems. Some specific flood protection projects will be constructed where villages, irrigation and road infrastructure are at risk. The activities include provisions for water drops in canals so that micro-hydropower systems can be installed if economically viable. Enhancement of existing, affordable energy sources throughout the Province is a widely recognized, critical component of the ALP/N Program

- (3) Micro-Hydropower. Development of micro-hydropower systems which are defined as systems providing less than 1 Megawatt (1 MW) of electric power. The emphasis of ALP/N will be at the higher commercial level systems from 100 Kilowatts (KW) up to 1 MW, rather than smaller household or social micro-hydropower systems. ALP/N micro-hydropower is target to provide power for agricultural enterprise development in the several key market centers. Development of these hydropower systems will reduce the energy restriction regarding growth of value-added business. Drops in irrigation canals also provide opportunity for shopkeepers and wealthier households to install self-funded micro-hydropower (generally less than 25 KW) for the provision of household electricity to other houses in their villages on a commercial basis. Such systems have been supported by the National Solidarity Program (NSP) and equipment and support services are available commercially in many local markets.
- (4) Market infrastructure. Development of supporting infrastructure for delivery of government agricultural and other services and for facilitating the development of private enterprises in urban market centers will stimulate production and economic growth. ALP/N will do this in a sensitive manner that maintains incentives for private investment and conforms with ALP/N Task Order requirements.

3.1.1 Market Roads

Program description

ALP/N resources will be used to improve market roads in a targeted manner, focusing on the priority agricultural sectors and geographic areas elaborated in Component II. ALP/N will assess road conditions and undertake cost-effective options for repair and maintenance. Many improvements will involve a combination of CFW resources for labor-intensive construction where possible, and subcontracting for additional engineering, skilled construction labor, heavy equipment and materials as merited. Coordination will be undertaken with other organizations through the Provincial Infrastructure Sector, and a locally based Coordination Committee that will ensure there is no duplication of efforts. District and community involvement will be sought for all projects to ensure local support and linkages to poppy reductions and to develop ways of providing continuing maintenance of infrastructure.

Activities

Keshem Area:

- Keshem to Tagab Road Improvements. This is an important inter-district road from Keshem to Tagab District, with a total length of 24 kms. It connects to farm to market roads in both Districts. Under the 2006 Work Plan 13 kms of the road starting from Kishem were upgraded under a CFW activity. Further CFW is planned in 2006-2007 to complete the remaining 11 kms. of road to Tagab. A local subcontractor will be engaged for installation of retaining walls, cross-drainage and other structures.
- Keshem Upper Valley Road. This activity will improve a 40 km. stretch of poor quality road from Keshem to Darai Jim through an important agricultural area in the Upper Keshem Valley. During 2006 ALP/N will survey road and assess the suitability of the project for CFW. Final design, environmental assessment, and construction bids documents will be prepared during the fall 2006 so that construction can begin late in 2006 and be completed during 2007.
- Kokcha Valley to Teshkon Road. A rough, poorly maintained road of approximately 50 km. runs down the length of the Teshkon Valley to meet the main road along the Kokcha River north of Keshem. ALP/N will undertake a survey and planning, including an environmental assessment, in

the fall and winter of 2006, so that construction can begin in the spring of 2007 through a combination of subcontract and CFW.

- Tagab small bridges. A number of small bridges are needed across secondary streams in Tagab that lead into the Keshem River. Ten sites have been identified by ALP/N with spans of up to 8 meters.
- Jarehawa Bridge. The bridge is an important link in the road connection from Keshem to villages on the left bank of the river. The foundations of the bridge are showing deterioration and pre-emptive repair will be undertaken.
- Karaste Bridge. This bridge is of local importance. One abutment has collapsed and the span has fallen down. A repair of the abutment will be undertaken and the span will be righted again.

Faizabad Area:

- Faizabad Main Road Rehabilitation. This project was approved in the 2006 work plan and construction started in June. The road length of 10.3 kms. is being improved with a new surface and proper drainage. It will improve access to the Faizabad airport and is the start of the main road south along the left bank of the Kokcha River to Keshem.
- Farghambul Road Rehabilitation. This project is improving an important market road into Faizabad from the community of Farghambul. The project, which begun in 2005 in response to the Governor's Emergency Response Committee, consists of the installation of retaining walls and drainage structures. Survey and design were completed during the last work plan and construction can be carried out during the coming months. Construction will be performed by a selected local contractor with possibly a combination of CFW assistance, depending on the requirements stated in the final design.
- Faizabad-Baharak Road Rehabilitation. This activity will consist of selected improvements to the existing, deteriorated 40 km. road between Faizabad and Baharak. This is a key road for the transport of agricultural products from the Baharak/Jurm area to Faizabad and other regional markets. Initial surveys and estimates have been completed to quantify the level of rehabilitation that is possible. Final survey and design will be completed in the next few months and construction will start in the fall 2006 and be completed in the 2007. Construction will be implemented by a to-be-selected road contractor with some assistance from CFW.
- Faizabad Connector Road to Khash. With the completion of a cable ferry over the Kokcha River by others, the rehabilitation of this 20 km. section of the road from Faizabad to Khash will provide a new, shorter route to Khash and then on to Jurm versus the existing route along the Kokcha River via Baharak. Because of the long climb through a mountain pass the route will save time for four-wheel drive vehicles, but will be less suitable for trucks.
- Faizabad North Kokcha Valley Road. This 15 km. road will link villages on the north side of the Kokcha Valley to Faizabad. Surveys and assessment of options will be completed in the fall of 2006 and construction design, environmental assessment, and implementation will be in 2007.

Baharak/Jurm Area:

- Shohada/Baharak Bridge Project. This bridge will permit road access from Baharak into the Shohada Valley, an important agricultural areas bordering Baharak. Planning and procurement for this project commenced in 2005. The project consists of replacing a previously existing, failed bridge near the town of Shohada. A 27 meter long pre-fabricated steel bridge has been acquired and is currently in secure storage in Kabul. It will be placed on new concrete and stone masonry abutments. Construction bids for installation are currently being solicited by PADCO. Plans are for installing

the bridge in August as soon as summer flood levels in the river recede enough to permit construction.

- Badakhshan Bridge No. 2. This project will utilize components from the Shohada Bridge Project to construct another 20 meter structure. The new bridge will use the special launching structure that will be used to install the Shohada Bridge. A site selection study will be performed in 2006 to find an acceptable bridge location. Then the final design and plan development will continue by a PADCO selected consultant and construction procedures will follow immediately with completion planned for late spring 2007.
- Baharak to Jurm Road Rehabilitation. This 20 km. road linking Jurm market center to Baharak is a transport link needed to expanded commercial market-oriented horticultural enterprises in Jurm. ALP/N technical review will assess the suitability of using CFW, but it is anticipated that construction subcontractor will be required for some road engineering, retaining walls, drainage, and other structures.
- Jurm City Center Road Improvement. Approximately 15 kms in the central bazaar area of Jurm will be improved to make the Jurm market more attractive to agri-business enterprises, particularly for fruits and nuts, sorting, grading, packaging, and processing. The layout of the roads will be included in the urban development plan for Jurm that is covered in the section 3.1.4 below.

Provincial Road Maintenance:

- Provincial Road Maintenance. ALP/N will set up a Badakhshan roads maintenance team through a local subcontractor to demonstrate the technical and economic benefits of periodic road maintenance. The subcontractor will provide a flexible way to repair roads that are damaged by weather and other natural conditions. The project will seek to link with CFW and communal projects in order to identify ways to raise revenues source required to pay for maintenance services in the Province.

East Badakhshan Area:

- Eshkashem Road. There is 66 km road that runs along the Afghan border with Tajikistan north to the village of Zich in Shughnan District. It is an important road for better linking Eastern Badakhshan with markets in Tajikistan and through Tajikistan to China. Since this road is outside the priority geographic areas, ALP/N would undertake work in this area under USAID approval for add-on work.

During this work plan period, ALP/N will begin work that USAID has approved for the reconstruction of 9 kms of road in and around Eshkashem to the bridge crossing the border to Tajikistan, using cobblestone technology if plans for the road are accepted by the local government and community. This initial project will provide a good demonstration of cobblestone technology in this region of Afghanistan. The area is flat and suitable to cobblestone, there are good sources of stones nearby, and labor for construction is plentiful with few options for employment in the surrounding areas other than traditional agriculture. If the work can be started immediately, it could be completed between July and the onset of winter in November.

During this Work Plan, ALP/N also plans to undertake a survey and design for the rest of the Eshkashem-Shughnan road so that USAID will have good costs to consider whether or not it wants to provide additional funding for this road.

3.1.2 Irrigation

Program description

During the last work plan period, ALP/N undertook a program-wide *Irrigation Improvement Priorities Study* that reviewed available information and plans, identified needs, and assessed potential projects in consultation with local stakeholders. The design of projects will be prepared and implemented to maximize complementary benefits for Component II enterprise clusters. The requirement that farmers voluntarily subscribe to the reduction of cultivation of poppy is an important criteria for final selection of target areas.

Activities

- **Implementation of Priority Projects.** A portfolio of irrigation related projects has been developed through the *Irrigation Improvement Priorities Study* conducted by ALP/N during the last work plan period. The priorities study will guide the final design and implementation of irrigation activities during the 2007-2007 annual work plan. Details of initial projects selected for the 12 month period 2006 July – 2007 June are provided in the table below.

Title	Description	Location	Results	Status
Upper Qaraqzee canal	Canal rehabilitation (upper section of the existing canal) 0.5 kms.	Faizabad	Supplies 300 ha.	Prelim design and estimation complete
Sari Jangal Canal Repairs	Canal repair - 0.5 kms.	Faizabad	Supplies 300 ha.	Opposite Qaraqzi Canal
Sumdara Canal	Construction of intake, 5 works, 1 km canal (including rocky sections)	Faizabad	Improved 50 ha.; New 20 ha.; Water for 5kw hydropower	Also, CFW opportunity for repair of another 10 km of canal.
Farakh Canal	Construction of intake, 7 works, 9 km canal (including some rocky sections)	Baharak	Improved 500 ha; New 100 ha; Water 10 kw hydropower.	Irrigation new potential 300 ha (with additional project)
Baharak power canal	Construction of new power canal	Baharak	Continuous provision of water for Baharak city power plant.	Water not used for power will be used for improvement of irrigation.
Khustak Canal	Construction of intake, 5 works, 2 km canal (including rocky sections)	Jurm	New 70 ha.; Water for 10 kw hydro power	Irrigation new potential 300 ha (with additional project). CFW opportunity for repair of another 10 km of canal.
Dargaw canal	Construction of protection wall	Jurm	Protection from flood water	Temp stopped because of Jurm security problem; may be restarted soonest
Jurm city irrigation	Culverts for city irrigation	Jurm	Inundation of city streets will be strongly reduced.	Review with Jurm Market Urban Development Plan
Khash various	Construction of some 20 works	Khash	Improved 500 ha. 2 hydro power sites (20 kw each)	
Sarajdara Canal	Construction of intake, 5 works, 1 km canal (including steep pied mont sections)	Argo	Rehab 300 ha. Water for 10 kw hydropower	
Argo city irrigation	Culverts for city irrigation	Argo	Inundation of city streets will be strongly reduced.	Review with Argo Market Urban Development Plan

Karasty	Intake and canal protection	Tagab	Protection from flood water 1000 ha	
Chochook canal	Construction of intake & canal protection	Keshem	Improvement 100 ha. and extension 150 ha	Contractor issues under review, project in suspension until resolved.
Sarband Kangurchid	Reinforcement of the intake	Keshem	Improvement 1,000 has.	Review also combining with canal below and avoid the intake there.

- Assessment and Design of Priority Irrigation Projects.** The initial portfolio of irrigation related projects from the *Irrigation Improvement Priorities Study* will have to be updated and new projects added during the coming year. Since ALP/N targets communities moving out of poppy cultivation, sites will have to be periodically assessed through community dialogue and agreement to ensure the validity of the projects. Similarly new sites will be added in additional communities as ALP/N expands and more communities decide to get out of poppy production. Sites for approximately 1,000 has. of improved irrigation will be identified and designs completed for implementation in the spring of 2007.
- Provincial Irrigation Support.** Within Takhar Province, ALP/N works closely with the Provincial Department of the Ministry of Irrigation in the identification, design, and implementation of CFW projects for irrigation improvement. ALP/N will extend its technical collaboration with the Government in Badakhshan with training to gradually build some institutional capabilities for irrigation support. Because of the expanded focus on irrigation, ALP/N will be expanding its capabilities to plan, design, subcontract, and supervise of irrigation improvement projects (whether by sub-contract; communal administration, or CFW). As far as terrain and its morphology allow, the modifications and extensions of irrigation systems will be planned and designed in such a way that at a later stage it will be easy to incorporate household micro-hydro electricity systems. These household micro-hydro systems, up to some 25 kw capacity, are available commercially on the Afghan market. Normally they are started up by local business persons, like shopkeepers and car repair persons, utilizing whatever fund for the required investment. They usually charge a monthly fee from the neighbors to whom they supply power. The decision to effectively fund, obtain and install a micro-system is left to the stakeholders.

3.1.3 Power

Program description

Development of micro-hydropower systems, with between 100 Kilowatt (KW) and 1 Megawatt (MW) capacity, will be pursued in several key market centers to permit expansion of regional inputs and marketing and value-added business, especially for processing facilities needed for promoting the enterprises identified in Component II. The ALP/N contribution will be limited to funding micro-hydro power schemes that, amongst other, directly support agro-processing and marketing activities in district market centers. The feasibility analysis will also promote, collaterally, larger projects that could be supported by other programs. The impact of developing the sector by expanding power supply, reducing the costs of production, will be of importance for the Northeastern Afghanistan economy.

Maunsell Ltd, under the direction of ALP/N staff, performed the *Conceptual Study of Hydroelectric Generation for Jurm* in the fall of 2005. Development of the large power-dam projects on the Kokcha River, upstream of Jurm, is not part of ALP/N. However, the project will encourage the mobilization of other resources for the purpose.

ALP/N has dropped earlier plans for Chatta micro-hydropower expansion and for a project in Jurm because the Ministry of Public Works had designated these for other donors. There are no conflicts with other donors on the proposed sites. Furthermore, all the proposed sites are included in the Badakhshan Provincial Plan and have been identified through the Governor's district consultation process. The Provincial Council and Governor have reviewed and approved ALP/N plans.

Activities

- Faizabad Hydro Plant Rehabilitation. This project will consist of rehabilitation and expansion of the existing Faizabad Hydro Plant, which currently produces about 80 kW of power. Consultants will be brought in to determine the requirements for repair/rehabilitation of the existing turbine/generator units and civil works. They will identify environmental and/or social issues that may impede the successful implementation of the system rehabilitation and develop cost estimates for the rehabilitation/repair/expansion work, including preparing an implementation schedule and appropriate contracting arrangements, after preparation of final design and bid documents.
- Baharak Hydro Power. The Aga Khan Foundation (AKF) built a micro-hydropower plant several years ago in Baharak. However, this plant has faced numerous problems and not worked as designed, and AKF has continued to invest to improve the plant's performance. Nonetheless, there has been strong local demand for additional power and a new facility. ALP/N staff visited Baharak in April with representatives from USAID and the Ministry of Electricity and identified a potential site for this new micro-hydropower plant. The site will have to be further assessed and feasibility studies prepared, as well as proper community mobilization undertaken.
- Jurm Micro Hydro Power. This energy related program was identified and analyzed in the *Conceptual Study of Hydroelectric Generation for Jurm* that was completed by PADCO/Maunsell Ltd. in 2005. It will consist of construction of new micro hydro stations in the Jurm district, utilizing existing small canal systems or streams as a water source. The initial activities planned for 2006 were to undertake a site reconnaissance and screening phase, possibly leading to a project implementation program; with final completion of all stations in 2008. The Winrock International mobilized a team to begin this work in late May 2006, but the study was aborted due to security concerns in the Jurm area, and the bombing of an ALP/N vehicle in Darayem on May 30th in which two Afghan project staff were killed. The activity will be reviewed and shifted to another district market center.
- Kishem Micro-Hydro Power. ALP/N will assess options for the development of micro-hydropower to provide electricity for the Keshem market center. This will consist of construction of new micro hydro stations near the town of Keshem, utilizing existing and/or new small canal systems as a water source. The initial activities planned for 2006 will be performance of a site reconnaissance and design, leading to project implementation during 2007 and final completion of the activity in 2008. The irrigation study for Keshem concluded that a consolidated canal along the right bank of the Keshem River may facilitate a 1 MW power development. This would justify high voltage transmission lines between the station and the center of Keshem and the center of Tagab. A further reconnaissance and pre-feasibility study is required. As a result a two stage project may be developed: one reduced capacity project to be completed in 2007 and a second to be funded separately according to the development of the demand for power.

3.1.4 Market and Business Development Infrastructure

Program description

ALP/N resources will be used to improve market and business development infrastructure to facilitate Component II activities. Some of the projects are designed to improve the delivery of supporting services

like agricultural extension and training, and paravet services; others will improve transport of inputs and marketed products, and encourage local business investment. Improvements will be small scale and focus on the renovation of existing infrastructure and some activities will involve CFW resources as well as local subcontracts. Coordination will be undertaken with other organizations to ensure there is not duplication of efforts and district and community involvement will be sought to develop ways of sustaining infrastructure improvements.

Activities

- Agricultural Extension Upgrading. ALP/N is reviewing the need and possibilities to rehab/repair and upgrade small extension and training centers located in target production areas around Faizabad, Kishem, and Jurm, and will proceed with these plans as required to support Component II activities and permissible under the ALP/N Task Order.
- Livestock Extension Upgrading. Under the subcontract with DCA, ALP/N will provide support to renovate an small animal health clinic in Faizabad that is in the same compound as the newly ALP/N renovated agricultural extension center. To support the local paravet operations in key ALP/N livestock production areas, ALP/N will also upgrade storerooms for vaccines and medicines in Jurm and Keshem, and then upgrade existing structures to serve as paravet service centers. All are small scale one to two room installations. These set-ups will support the animal health programs in ALP/N focus areas. Initial infrastructure activities will be site selection for the centers, design, and selection of construction subcontractors. Completion of the centers is scheduled for each site as soon as the paravets complete their training and are ready to start fieldwork. Other assistance for building staff capacities of counterpart Government of Afghanistan institutions are discussed under each ALP/N program.
- Radio Transmission Facilities. This activity will follow-on the Radio Capacity Assessment being conducted by InterNews that will assess current radio facilities and potential sites for new radio stations in market centers in Baharak, Jurm, Khash, Argo, Keshem, Rustaq, and Taloqan. If appropriate, further action will include design of facilities and implementation.
- Market Center Urban Planning. ALP/N will assist the focus market centers with urban planning to address anticipated economic growth and plan infrastructure needed to guide development. Scopes of work for this assistance will be developed with the city mayors and District Governors. Assistance will be provided in the coming year to Kishem and Faizabad and if this is successful it will be expanded to the other market centers in future years. ALP/N will undertake some small-value but socially valuable construction like providing bread and vegetable sheds for young women.

3.1.5 Infrastructure Results

The target results of the infrastructure development activities to have been achieved by the end of the 2006-2007 Annual Work Plan are:

- Total length of market roads to have been improved will be 250 kms.
- Total length of irrigation and drainage canals to have been improved will be 35 kms.
- Total area with improved irrigation will be 4,300 has.

3.1.6 Implementation Timeline

The detailed timelines for 2006-2007 activities under infrastructure development are presented at the end of the Component III section below. The chart presents the planned start and finish dates for completing

all activities needed to ensure that the ALP/N target results for the year are achieved. As mentioned in the ALP/N Implementation Strategy and Life of Project Work Plan, infrastructure activities will be located in communities that are moving out of poppy cultivation and seeking alternatives. The ALP/N will dialogue with communities and select areas committed to the objectives of ALP/N and willing to provide security for our personnel.

3.2 Business Assistance

Program description

ALP/N is committed to working with private sector investors to encourage development of businesses that have potential for adding value to regional production and employing large numbers of people. ALP/N will work with the Afghanistan International Chamber of Commerce (AICC) to identify investors through business and trade networks, and look for ways to help them structure business ventures.

The Afghanistan Investment Support Agency (AISA) is a government-run agency devoted to helping businesses thread through the maze of red tape and attain the necessary approvals. AISA appears to be relatively effective, but has not been active in the Northeastern Region. ALP/N is helping AISA to expand operations in the Northeastern Region by adding services specific to regional business needs, to help AISA to promote its services and to expand its client base.

By coordinating activities and building on and complementing the regional successes and growth of other projects, ALP/N will expand its client coverage. Trade relations between farmers and processors from different districts (either within a province or across provinces) tend to form due to economic forces rather than organizational boundaries. ALP/N will span geographic areas in vibrant, functioning clusters.

ALP/N, although not directly implementing either credit, equity or other financing type programs, will remain aware of, sensitive to, and work in coordination with organizations' projects which are working in ALP/N target areas in Northeastern Afghanistan throughout the life of project. More specifically, ALP/N at the earliest possible opportunity will meet with representatives of the soon-to-be-awarded USAID 'agriculture/rural and SME finance' program to coordinate, as appropriate, project technical activities that will draw upon the resource base of both the finance and ALP/N projects. By doing so, ALP/N will expect to enhance the number of potential local beneficiaries, i.e. private entrepreneurs, gaining access to financing to promote alternative, licit private enterprise development activities. ALP/N staff will assist the USAID-funded implementing partner in disseminating finance program information to ALP/N target communities and stakeholders throughout the ALP/N life of project.

Priorities

The priority for the ALP/N Business Assistance Unit is to develop and support activities which create jobs for Afghan men and women, and which support the development of the Badakhshan licit economy through better utilization of local natural and human resources. These activities include: training people to fill the jobs created by an expanding licit economy, providing marketing information and other assistance for producers of agricultural and industrial products, and opening business resource centers to give entrepreneurs access to facilities, information, and expertise necessary to compete in the market place. Other types of assistance may also be provided as may be needed to support the development of the licit economy.

Activities

- Business Education Training. ALP/N will continue to conduct Business Education Training courses to give new and existing entrepreneurs the management, accounting and marketing skills needed to

manage a successful small business. These courses will be given in Faizabad, Keshem, and Baharak/Jurm. These courses will also be given to women and are included in Section 3.4 below.

- Business Resource Centers. ALP/N with a subcontractor will open fully equipped Business Resource Centers in Faizabad, Keshem, and Baharak/Jurm, which will teach computer use, internet skills, and assist entrepreneurs in developing the business plans that will be required to obtain credit from the upcoming USAID Credit Activity..
- Farmer Associations Strengthening. As approved in the 2006 work plan ALP/N is conducting a assessment of existing Cooperatives in Badakhshan. Utilizing the recommendations of the study, ALP/N will work through Business Development subcontractor RDA to strengthening select existing Cooperatives and assist the formation of new producer associations. ALP/N assistance will focus on teaching necessary cooperative management skills as well as basic business skills to cooperative and producer association members.
- Transportation Terminal. The planned Faizabad transportation terminal was stalled because of unclear title to the land for the proposed site. ALP/N is working to resolve this issue and is also looking at other alternative sites and locations including Baharak. ALP/N will be further working with the local governments in Faizabad and other market centers to establish urban development plans, as presented above in section 3.1.4. These comprehensive plans will include issues of transportation as well as industrial development. PADCO has a long history of work in the area and will provide a consultant to work with the resident ALP/N staff in this area.
- Vocational/Apprentice Training Program. ALP/N through a subcontractor will start an Apprentice Training Program to address the problem of a lack of skilled workers in the market centers of Badakhshan. The activities will provide an opportunity for landless and unemployed Afghan men and women to learn new skills by working with skilled trade and crafts persons.
- Market Information System for Agricultural Products. The market information system established by ALP/N includes the process by which pricing data is collected from markets on key items and communicated in the region. Currently, the items being surveyed are agricultural items. These include fresh seasonal vegetables and fruits plus some dried fruits. The prices are collected from different points in the Badakhshan region, collated and prepared for radio broadcast. The broadcast is equivalent to farms reports heard in numerous countries throughout the world. During the coming year ALP/N will expand upon this experience to create a reliable price network and information dissemination system that will also provide market information to the business resources centers in Badakhshan. This will be complemented by training and other assistance in the business resource centers as presented above.

There is consideration of expanding the pricing data to include industrial inputs as well. These would be items such as rebar, lumber, oil as well as possibly some consumables such as sugar. The process would be the same as for the perishables and there will also be a radio-based report. If met with success, there may eventually be a corporate sponsor for data gathering; particularly since the expense is not very great. Otherwise, it is expected that the Ministry of Agriculture, the Chamber of Commerce or some other similar state-run institution will continue with the information since this is a good service for local producers.

Results

As noted above in section 2, ALP/N has identified 335 agricultural enterprises to be strengthened during the life of the project. In addition, we have identified another 150 enterprises in other sectors as follows: Transport (20 companies); Input Supplies and Marketing (30 companies); Construction Crafts (wood and metal working, etc. 30 companies); Machinery service and repair (30 companies); Construction (20 companies); Other Business (20 companies).

By adding these additional companies to the agricultural enterprise targets above, there are a total of 485 enterprises that ALP/N plans to strengthen. The target results of the business development activities, excluding those counted in section 2 above, during the 2006-200 Annual Work Plan are the following:

- Total number of trainees benefiting from basic business skills training will have been 260.
- Total number of persons provided improved market information will have been 880.
- Total number of persons assisted in understanding and accessing rural finance programs will be 1,000

3.5 Government and Community Capacity Building

3.5.1 Provincial Government

Program description

ALP/N staff, along with USAID/Badakhshan and representatives of other international development implementing partners have been working with the Provincial Governor's Office, Department of Economics, and other provincial-level government representatives, in the discussion of sector-specific, e.g. agriculture, economic development, education, health, and infrastructure, problems and corresponding solutions that can be integrated into a comprehensive 5-year Provincial Strategic Plan to be used to coordinate the respective project activities of the various international development implementing partners working in Badakhshan. To facilitate an open participatory planning process, ALP/N organized a workshop on June 17, 2006 to present its implementation strategy and program approach to the Governor, Provincial Council, Provincial Government Departments, and leaders of selected organizations and communities in and around Faizabad. Local stakeholders were very pleased with this workshop since it was the first time that an international organization had openly discussed plans and solicited local inputs.

ALP/N will continue to support an interactive approach to publicly discuss the problems and issues the province is facing and to share information among key development partners and stakeholders that will lead to more transparency of operations and greater potential for coordination among vested parties for implementation of more appropriately designed activities that can be better managed and have greater sustainable impact.

Government capacity building is specifically important in each Alp/N program area. For example, in agriculture, ALP/N staff and subcontractors are training Department of Agriculture extension staff in the areas of fruit and nut production, vegetable production, and livestock management and health. The subcontractors in each of these areas will be holding field days periodically to train local farmers and acquaint them with their activities. The subcontractors will also be assisting extension agents in their outreach to farmers in key communities to encourage adoption of new practices. Many agricultural extension staff will be working side-by-side with ALP/N and subcontractor staff during the implementation of activities and will gain new skills and new respect in the minds of the local farmers. See the discussion above section 2 for further information on ALP/N cooperation with the Department of Agriculture and its impact.

Priorities

The primary geographical target areas of ALP/N for implementation of activities throughout the life of project are the Faizabad, Jurm/Baharak and Kishem areas in Badakhshan. ALP/N will work with Provincial Government representatives of Ministries in the economic growth sectors. These include: Agriculture, Rural Development, Economics, Public Works, Irrigation, Women's Affairs, and Communications.

Activities

- Translation of key ALP/N documents. Strategy, planning, and reporting documents of ALP/N are being translated into Dari for distribution to key Government partners in Badakhshan and Takhar.
- Training and Work with Key Departments. ALP/N will work collaboratively with key Provincial Department for economic growth, particularly Agriculture, Rural Development, Public Works, Irrigation, and Women's Affairs, and assist them in staff training and limited upgrading of facilities and equipment. These are described elsewhere under each program area and relevant activity.
- Policy Technical Assistance. ALP/N will provide technical assistance in several areas critical to the development of sound Provincial economic development policies and to strengthening the operation of key Departments. In the upcoming work period, two important activities will be: land administration to facilitate licit development and raise public revenues, and economic policies to stimulate trade and investment. ALP/N will develop scopes of work with the Provincial Government and bring in experts to work with Provincial counterparts to address issues in these two key areas. ALP/N will coordinate this assistance through the CTO with the USAID/EG office. Similarly, ALP/N will also coordinate through the CTO on matters that involve projects managed by other offices in USAID/Afghanistan. ALP/N wants to facilitate good communication and coordination among USAID projects that have an interest in the northern region.

3.5.3 Community and Local Governance

Program description

As appropriate, through each of the previously proposed interventions, ALP/N using either its local business development staff, in-country contracted consultants from international development organizations, or PADCO headquarters based technical experts will contribute to the development of the institutional capacity of the local government representatives' offices at both the district and city levels, Chambers of Commerce, and local organizations working in the sphere of private enterprise development. When appropriate, private businesspersons shall be included into respective capacity building technical training activities in order to foster direct communications between the parties which will ultimately lead to the development of more frequent communication exchanges and mutual support and trust being built between the parties for resolving or addressing, in a timely manner, issues negatively affecting private enterprise development throughout the province.

Priority

While the capacity building assistance that ALP/N will provide to the various representatives and stakeholders will be primarily focused on private enterprise development topics, it is envisioned that the training participants will be able to transfer and adapt the skills and knowledge learned to their other managerial and administrative responsibilities, including interactions with constituents and working with parliamentarians, provincial governors, and city mayors. Primary geographical target areas of ALP/N for implementation of activities throughout the life of project will be: Faizabad, Jurm/Baharak, and Kishem.

Activities

- District Level Economic Planning. Similar to the successful Provincial Annual Planning Workshop held in Faizabad on June 17th, ALP/N will organize planning and project design workshops in key districts to encourage local participation in district strategy and in project decision-making.
- Study Tours in Afghanistan. ALP/N working with Government Ministries in Kabul and with other projects will identify topics and areas where key partners in Badakhshan and Takhar can see and learn from the successful experience of others.

- Business-Oriented Events. Working through other international development implementing partners, Afghan Trade Fairs and other special events, ALP/N will be supporting topic specific trainings and awareness building events focusing on contemporary issues relevant to encouraging and promoting private enterprise development in Badakhshan.

Results

- Total number of persons benefiting from business skills training under institutional capacity building activities will be 100.

3.4 Women's Programs

Program Description

Women's' programs activities are designed to integrate women into ALP/N programs and activities wherever possible taking into account the differential roles of men and women and of the relationships between them that exist in the conservative social milieu of Northeastern Afghanistan. While gender mainstreaming is the desired approach pursued, ALP/N has found that in some instances this is not possible and has also designed activities specifically for women. The activities reflect the same strategic approach and technical focus areas as other ALP/N programs – livestock, trees, and vegetables sectors and development of agricultural enterprises. ALP/N also works directly with the Badakhshan Office of the Ministry of Women's Affairs to include women as economic stakeholders within the context of the local culture.

Priorities

To reflect the new higher priority and increased budget that will permit ALP/N to spend a total of \$1.2 million for women's activities during this Work Plan period, Women's Programs are now broken out as a separate area in the Work Plan so that ALP/N can properly account for results. We have established a new Women's Program Unit in our headquarters and are bringing in an expatriate to lead the Unit. We have also identified new program opportunities in tree nurseries, livestock processing, mulberries/silkworms, and business assistance that will greatly expand the scope and budget of the activities during the coming work plan period.

Building on the established capacity of ALP/N to support activities with women's groups in all three target sectors through our group of capable women social mobilizers and trainers who have been assigned to ALP/N provincial office and each of the district offices, the new Women's Unit (See Section 4 on Program Management) will report to the DCOP and coordinate with the four management Divisions and the new Cash for Work Unit. The Unit will work with local subcontractors as well as provide direct support for programs that involve women, especially for activities related to licit agricultural production and processing at village and district levels.

Activities

- Animal Health and Nutrition Training. While women, with the exception of widows, are not strictly considered owners of livestock in the northeastern region, most are traditionally responsible for taking care of livestock. Thus, ALP/N will provide training to women in animal health through its ParaVet and BVW programs and livestock extension programs described above in section 2.1. The ALP/N District Women's Mobilizers will assist with ensuring women's access to training offered under these programs.

- Household Milk Products. In addition to taking care of livestock, women also make dairy products. Yogurt and fresh cheese production has emerged as a home-based processing business for women in some parts of Afghanistan and there is good opportunity to expand this business in northeastern Afghanistan. ALP/N through a local subcontractor will organize women's dairy processing groups in the Keshem area and train women in skills necessary to scale up volume and quality of cheese and yogurt, develop sanitary processing techniques, improve the quality, shelf life, and safety of the products, and successfully market the projects first in local and then in regional markets.
- Agricultural Training. Many women maintain household gardens and interested in expanding the variety of fruits and vegetables in these gardens as well as improving quality and quantity of harvest. Through Roots of Peace and other activities described in section 2.2 above, ALP/N will provide training to women in home garden improvement. The ALP/N District Women's Mobilizers will assist with ensuring women's access to training offered in this area.
- Women's Home-Based Nurseries. ALP/N NRM in cooperation with the ALP/N Women's Program Group will continue to support the expanded development of the women's home based nurseries that were successfully demonstrated during the last work plan. The existing nursery program will be expanded in Faizabad and new women's home based nurseries will be initiated in the Khash, Argo, and Baharak/Jurm areas.
- Fruit and Vegetable Processing. Women will be trained in vegetable and fruit drying, vegetable storage in home cold cellars, and other techniques for adding market value to these products. The ALP/N District Women's Mobilizers will assist with identifying and developing training for women in these programs as materials are developed in the relevant fruit and vegetable activities described in section 2.2 and 2.3 above.
- Home Spice Gardens. As stated in section 2.3 above, ALP/N with ARC is establishing a demonstration planting of Black Cumin and 2 other spices to determine their potential as a cultivated crop in Badakhshan. Based on the results and lessons learned from these demonstrations, the program will be expanded and lessons disseminated during the coming year. Women will be a target group for the dissemination of this information and for starting home garden spice production.
- Home Mulberry Gardens. In the 1970's the Government sponsored and build up a local silk cocoon production industry in Badakhshan. This industry was focused on women who grew mulberry bushes in home gardens and raised silkworms and produced silk cocoons for export to Government processing facilities in Kabul and Mazar-i-Sharif. ALP/N will reintroduce appropriate mulberry bushes and explore the redevelopment of the silk cocoon production as a women's program in Badakhshan.
- Vocational Skills Training. In conjunction with the apprentice and vocation skill training activities described in section 3.2 above, ALP/N through a subcontractor will provide vocational skills training to women to address the problem of a lack of skilled workers in the market centers of Badakhshan. The activities will provide an opportunity for landless, widowed, and unemployed Afghan women to learn new skills and to gain work in trade and crafts positions.
- Business Education Training. As described in section 3.2 above, ALP/N will continue to conduct Business Education Training courses to give new and existing entrepreneurs the management, accounting and marketing skills needed to manage a successful small business. These courses will be given in Faizabad, Keshem, and Baharak/Jurm. These courses will be given to women in all three locations.

Results

- Total number of women having received agricultural inputs will be 4,000.

- Total number of women receiving some training in new livestock, trees, vegetables and wheat practices will be 2,000.
- Total number of women benefiting from basic business skills training will be 195.
- Total number of women provided improved market information will have been 225.
- Total number of women assisted in understanding and accessing rural finance programs will be 150.

3.6 Program Communications - Media Development and Public Outreach

Program Description

To promote ALP/N objectives and facilitate social and market integration in Northeast Afghanistan, the ALP/N communications strategy laid out two objectives. These are:

- to improve the media infrastructure, primarily radio, and
- to develop and promote content related to alternative livelihoods, including public education programs, informational programs, and success stories of area farmers and businesspeople involved in the licit economy.

Only by developing the radio media in Badakhshan will ALP/N be able to carry out a Public Outreach Campaign to educate and spread the messages of the Alternative Livelihood Program. Radio is by far the preferred form of information gathering in Badakhshan (and in rural Afghanistan as a whole). According to a 2005 USAID-funded media study conducted by Altai Consulting, 68 percent of the residents of Badakhshan and Takhar received their news and information from radio. Surprisingly, a large percentage of residents also received information from the television, particularly in Faizabad. Furthermore radio – and to an even greater extent television – are the most trusted sources of information. The lack of reliable electricity in the region makes radio the preferred, more cost-effective method of information transmission. As far as print media is concerned, newspapers and magazines are virtually non-existent in Badakhshan and are read by only 4 percent of the population. Newspaper readership is somewhat higher in Takhar.

Priorities

Given the statistics regarding media usage, ALP/N program communications activities will focus primarily on the development of radio in both Badakhshan and Takhar. This will include infrastructure, capacity building, and program development. Efforts will begin in Faizabad and Taloqan before expanding to areas outside the provincial capitals. Additionally, ALP/N will undertake an assessment of the feasibility of extending AM radio coverage in Badakhshan.

Activities

- Assessment of Radio Capacity. The activity was in the 2006 Work Plan and scheduled to be completed in June 2006, but because of security concerns the subcontractor, InterNews, postponed travel to Faizabad. The activity has been rescheduled to start in late June and will be completed in July. ALP/N will use the assessment to help analyze the best options for radio expansion in key areas of Badakhshan and Takhar Provinces.
- Community-Based Radio Development. Utilizing the findings of the radio assessment, ALP/N will establish and/or upgrade up to 7 small, private, community-based radio stations in key areas of Northeast Afghanistan, with an emphasis on Kishem and Jurm/Baharak. Other potential areas

include Rustaq in Takhar, as well as Khash and Argo in Badakhshan. Budget for this is included under Market and Business Development Infrastructure described above.

- Radio Station Capacity Building. ALP/N will train and build the skills of workers recruited to staff the new radio stations. Types of training will include: intensive pre-launch workshops; on-the-job training; and occasional follow-up visits from experts to provide continuing education.
- Radio Broadcast Content. ALP/N will support, develop, and contract for a radio drama program related to the objectives and activities of ALP/N. The content of this drama will include: educational programs covering agricultural practices and basic business skills; news and informational programs related to business and alternative livelihoods activity relevant to family life in Northeastern Afghanistan.
- Billboards and Other Advertising. During the upcoming year, ALP/N will design and create billboards and possibly other high-profile fixtures designed to increase awareness of alternative livelihoods in Northeast Afghanistan. The billboards will be placed in high-population areas and feature images highlighting the successful licit economy, as well as ALP/N's support for the people of Badakhshan and Takhar.
- Assessment of AM Radio Capacity. Once the FM radio programs are up and running, the ALP/N communications team will look and broadening outreach efforts to include AM radio. The first step to be taken this coming year will be to conduct an assessment of existing AM broadcast capacity and potential for growth.

Results

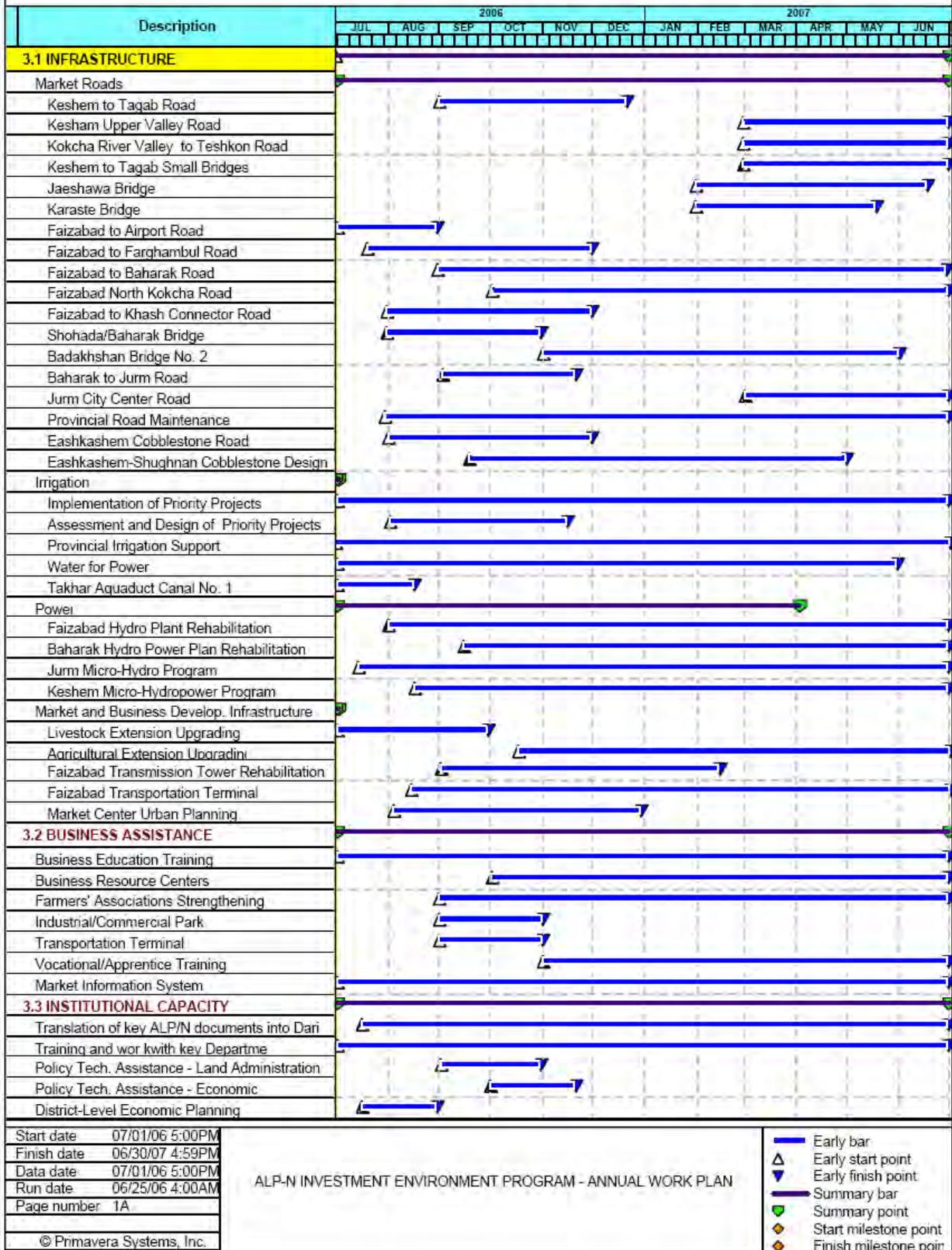
- During the work plan period, the total number of persons exposed to ALP/N broadcasts and other media will be 450,000.

This consists of: broadcast radio content to areas with approximately 400,000 listeners, assuming that ALP/N creates all the new stations planned in Kishem and Jurm/Baharak and assists existing stations in Faizabad and Taloqan, and billboards seen and read by 50,000 persons in Faizabad and Taloqan.

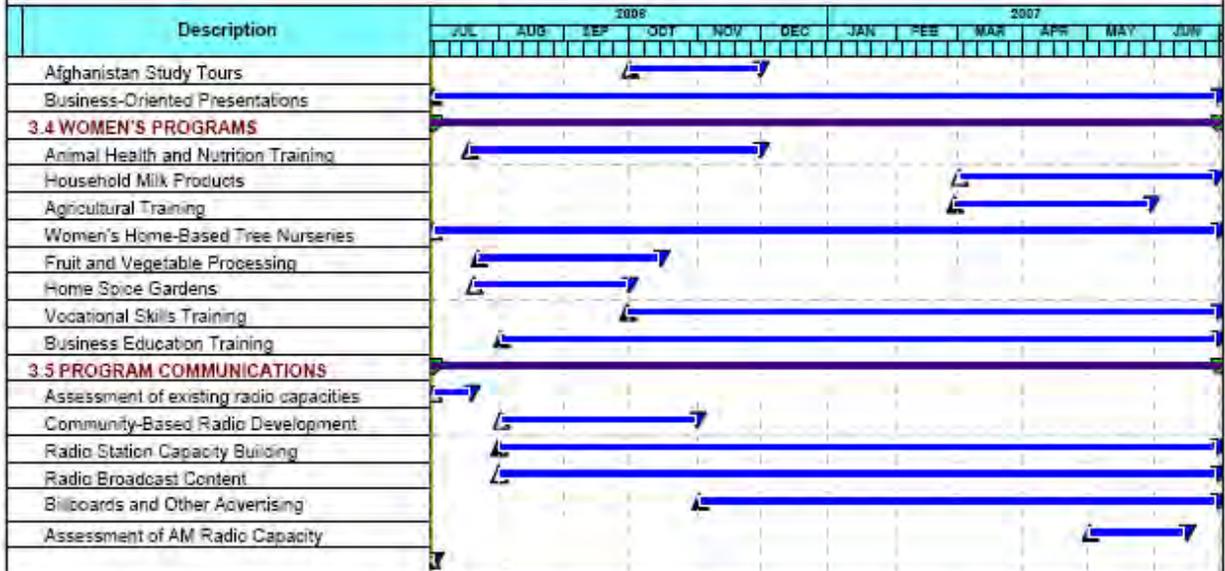
3.6 Timelines

The timelines for Component III activities are presented below.

COMPONENT III - INVESTMENT ENVIRONMENT



COMPONENT III - INVESTMENT ENVIRONMENT



Start date: 07/01/06 5:00PM
 Finish date: 06/30/07 4:50PM
 Data date: 07/01/06 5:00PM
 Run date: 07/07/06 8:00AM
 Page number: 2A
 © Primavera Systems, Inc.

ALP-N INVESTMENT ENVIRONMENT PROGRAM - ANNUAL WORK PLAN

- Early bar
- ▲ Early start point
- ▼ Early finish point
- Summary bar
- Summary point
- ◆ Start milestone point
- ◆ Finish milestone point

4. Program Management

ALP/N will carryout the *2006-2007 Annual Work Plan* using the management policies and procedures, information-sharing mechanisms, and monitoring and reporting systems that have been developed and discussed in the *ALP/N Implementation Strategy Update* and *Life of Project Work Plan Update*. The following subsections present additional elements of these that are most relevant and require USAID review and approval for implementation of the *ALP/N 2006-2007 Annual Work Plan*. At the end of the section is a chart that presents the timelines for the program management activities.

4.1 Personnel

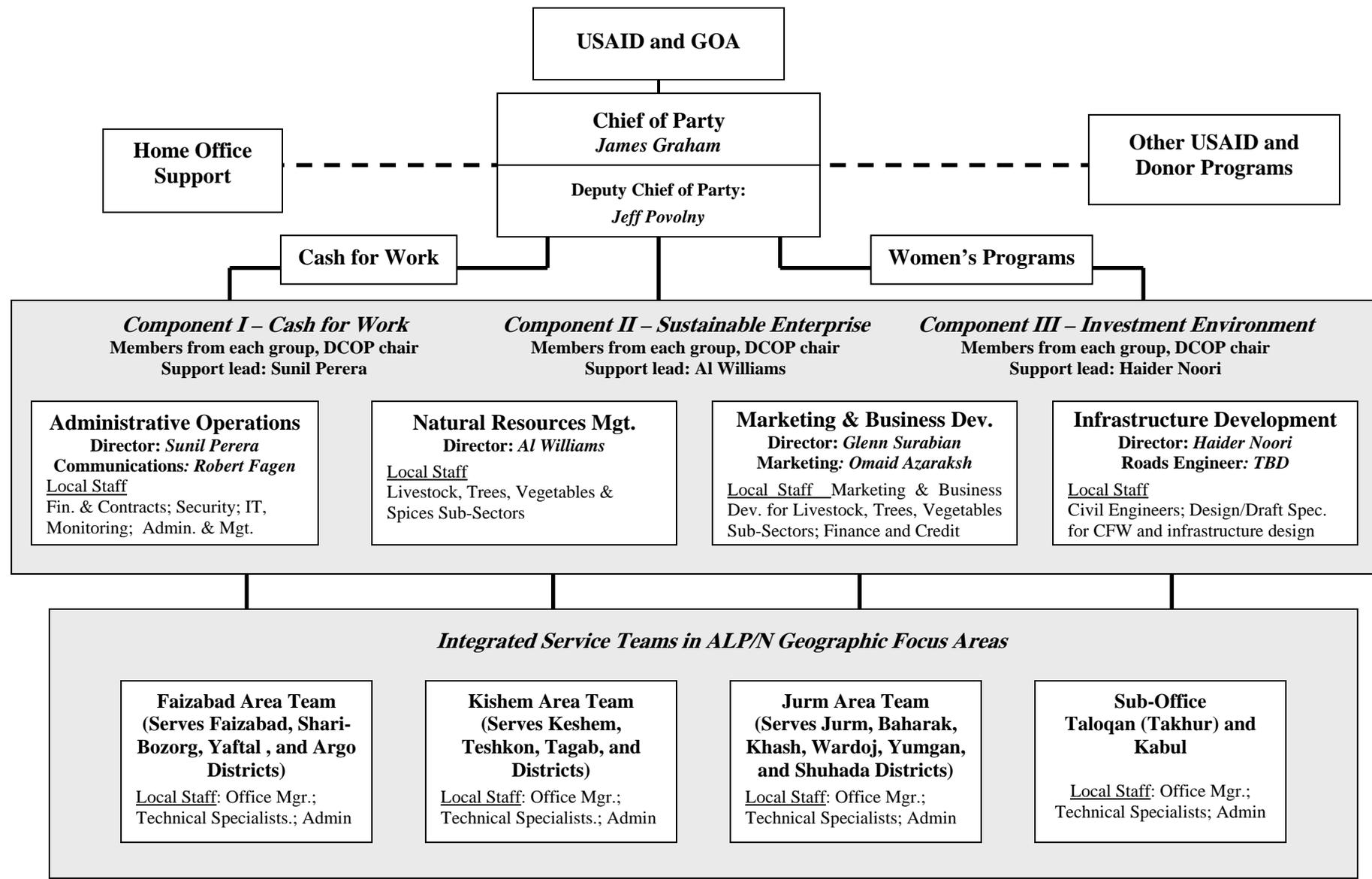
The ALP/N organizational structure and key staff positions (See Figure 3 below.) were presented and approved in the *ALP/N Life of Project Work Plan* and an ALP/N Task Order Amendment (Modification 8) has been approved by the USAID Contracting Officer with the budget lines items and PADCO labor level of effort in accordance with this structure.

As mentioned in the respective sections above, some further shifts in budget line items and in PADCO labor level of effort is required for implementing the work plan that has been presented. The following additional labor is required.

- **Expatriate Roads Engineer** to work under the supervision of the Chief Engineer/Director of Infrastructure Division and supervise the execution of the expanded AL/P market roads program.
- **Women's Programs Manager** to work under the supervision of the Deputy Chief of Party and supervise the Women's Program Unit and supervise the implementation of the expanded ALP/N women's programs t planned for the coming year.
- **Short-term Assistance** to carry-out specific new technical assistance and management tasks that are notes in each of the three components above including:
 - Under Component I, support for the new Cash For Work Unit that reports to the Deputy Chief of Party and will implement a redesigned and expanded CFW program – 30 person days of management and financial assistance;
 - Under Component II, support for quick initiation of high-value horticultural and timber production efforts – 30 person days of technical assistance;
 - Under Component III, support for short-term specialized engineering assistance – cobblestone technology from Bolivia and other assistance (80 days), for institutional capacity building economic support (30 days), for women's programs technical support (30 days) , and for communications technical support (30 days) –a total of 170 persons days.
- **CCN Professional Personnel** similarly needs to be increased to bring in additional senior Afghan specialists as follows:
 - Senior Engineers for Roads (2), Irrigation, (2) and Micro-Hydropower (1)
 - Communications and Events Manager
 - Security Manager

The proposed budget will maintain ALP/N program funds at the current level with shifts to labor and some reductions in ODCs and subcontract line items and reduction in corresponding indirect costs.

PADCO Team Organization Chart



Lines of authority ——— Lines of technical coordination - - - -

4.2 International Travel

As requested by the USAID Contracts Officer in preparatory meetings in Kabul for work plan preparation, PADCO is providing a list of planned international travel under the 2006-2007 work plan. Country clearance will be requested from the CTO by PADCO for each traveler well in advance of travel, and emergency locator information will be provided, in accordance with existing procedures. The list of international travel planned during 2006-2007 is found in Annex 2.

4.3 Subcontracting

At the beginning of the ALP/N Task Order, the USAID CO approved IQC-type contracts with two U.S. subcontractors (ACDI/VOCA and RefWID) and four local subcontractors (ARC, ARG, RDA, and UIP). Several task orders have been issued to each of them for services supporting ALP/N implementation. In February 2006, the ALP/N management team conducted an annual evaluation of the four local subcontractors and determined how best to use their respective skills for planned activities. The subcontractors have been part of the ALP/N planning process and PADCO is making an effort to use their respective skills as much as possible in the implementation of the program.

As presented in the *ALP/N Implementation Strategy Update* and *ALP/N Life of Project Work Plan Update*, PADCO is also subcontracting with a variety of local subcontractors that have been competitively selected. These subcontractors have ongoing activities in the Northeastern Region and proven capacity on-the-ground capacity to implement the type of activities needed for ALP/N. Most also have other sources of funding in addition to ALP/N and are expected to sustain many activities beyond the immediate life of ALP/N. However, in line with the *ALP/N Implementation Strategy Update* and this 2006-2007 Annual Work Plan, not all of these subcontractors will be used. Therefore, ALP/N will send to the Contracts Officer specific requests for consent to contract based on this annual work plan.

The subcontracts of over \$100,000 in value that ALP/N has identified during the work planning process for 2006-2007 are listed in the table in Annex 3. Specifics on scope of work, process and justification for selection and subcontract ceiling will be provided in specific requests for consent to subcontract.

4.4 Non-Expendable Procurement

To support the implementation of ALP/N activities under this work plan, several items of non-expendable equipment are required that were not in the original non-expendable procurement list that PADCO included in its task order proposal for ALP/N. Consequently, PADCO requests USAID approval with this work plan to procure the following items as presented in Annex 4.

4.5 Performance Monitoring

Assess Known Data Limitations

During April-May ALP/N assessed the data limitations and finalized the Performance Management Plan (PMP) for the program. The Results Framework (Figure 3) below presents the Strategic Objective and Intermediate Resources for ALP/N with the respective indicator for each. The ALP/N PMP was completed in close consultation with USAID and conforms with the USAID SO5 and the results that the Mission intends to report for AL under its Strategic Objective 5.

Monitoring Performance

Once the final ALP/N Performance Monitoring Plan is approved by USAID, the ALP/N team will track progress against all indicators, with a full-time PMP Specialist in charge of the process of designing appropriate data collection mechanisms and supervising their implementation. In particular, on a quarterly basis, the ALP/N team will track and evaluate the PMP performance indicators and make changes, as necessary. This will include:

- ▶ reviewing assumptions underlying the establishment of performance targets;
- ▶ assessing the likely reasons why performance targets were met, or not met;
- ▶ noting key findings that affected performance; and
- ▶ recommending changes to the out-quarter targets (increasing or decreasing the target values), based on the assessment.

4.6 Security Plan

On May 30, 2006, two ALP/N local employees were killed and two injured due to a roadside explosive device while they were on a field trip to Darayem District. The Governor is investigating the incident, but the motives for the attack remain unclear. However, it appears most probable that the attack was undertaken by local drug cartel who mistook the ALP/N vehicle to be associated with the poppy eradication efforts being conducted in nearby districts. Whatever the motives, it was immediately clear that ALP/N needed to quickly assess its security approach and procedures and determine how best to operate to avoid such problems.

Consequently ALP/N has brought in a security expert who will be in-country for seven weeks to advise PADCO on how to restructure ALP/N's security arrangements and to train ALP/N security personnel including drivers. The adviser will undertake the following:

- Assess the security situation in Northeastern Afghanistan.
- Review ALP/N security procedures and security staff already in place in Afghanistan.
- Determine the need to engage and hire a local security firm and if needed, provide scope of work for their assistance.
- Determine the need to harden project vehicles to include changing their appearance and taking other measures and provide recommendations to increase security and safety of project vehicles.
- Provide recommendations and guidance on how to upgrade PADCO/AECOM security operations.
- Train current project staff (a total of 58 persons including 27 unarmed security advisors) to ensure better conformance with security procedures.
- Recommend procedures for working with local police and for hiring additional local police guards for additional security as might be needed for field trips and/or by ALP/N subcontractors.

With the expectation, that stronger security management will be required. A subcontract with a local security firm is planned in the 2006-2007 Work Plan budget. Funds for this subcontract are already available under the Task Order through an earlier amendment that obligated \$200,000 for security.

4.7 Environmental Compliance

Now that the ALP Environmental Assessment (EA) has been approved by USAID/Afghanistan and USAID/Washington, ALP/N has developed procedures as directed by the EA that are specific to the project. These are presented in the ALP/N Environmental Management Systems (EMS) Manual that was completed in June 2006. ALP/N has recruited a dedicated, full time Afghan Environmental Specialist who will address the requirements for environmental review documentation and obtain USAID approval. Appropriate environmental documentation has been prepared and submitted to USAID for cover projects that have implemented to date. Similarly, the ALP/N EMS procedures will be used to examine the environmental impacts of project proposed under this work plan and the appropriate documentation will be prepared as required. The Afghan Environmental Specialist will manage this process. He will be

supported by PADCO Home Office Environmental Specialist Michael Mielke and by further consultant assistance as may be needed. The ALP/N Chief Engineer/Director of the Infrastructure Division will continue to provide supervisory guidance to ensure environmental compliance and help prepare the documentation needed for the critical, larger infrastructure activities.

ALP/N will comply with USAID's environmental procedures, as embodied in USAID Regulation 216 and associated directives in its implementation of project activities including the following:

- all environmental determinations will be signed by the COP, irregardless if this is actually required by the EA;
- there is some interpretation to be made on how to proceed, ALP/N will refer to CFR 216 for guidance;
- ALP/N will prepare necessary EMS forms and obtain USAID approval for all projects that have been done, or that are in progress. This is because approval for all of these projects was contingent upon an EMS review be performed, after it was fully defined.
- There will be a section on EAs in the ALP/N Quarterly Report that addresses how many are approved, or pending.

4.8 Reporting

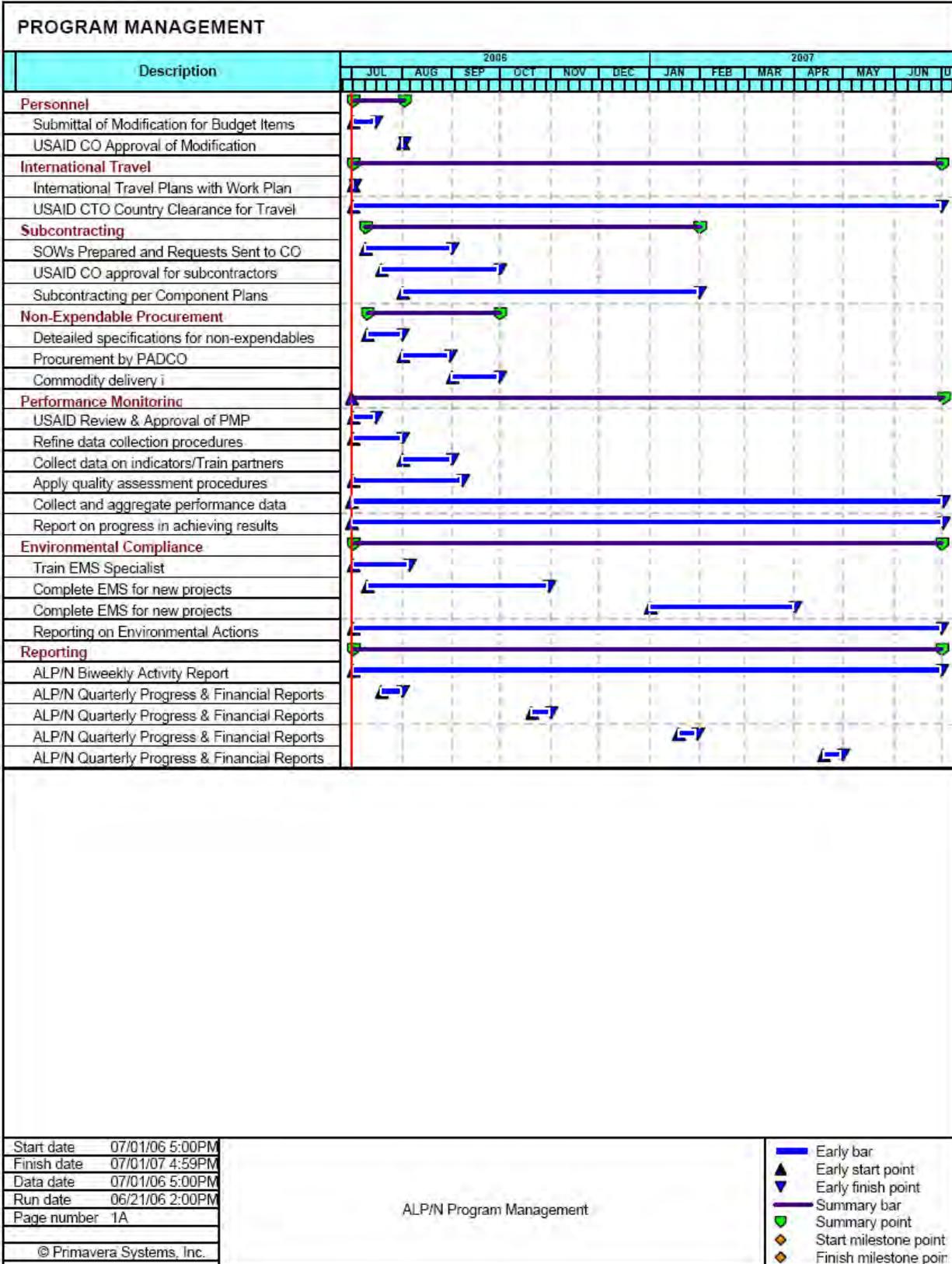
Once the final ALP/N 2006 Work Plan is approved by USAID, the ALP/N team will track progress against plans and PMP indicators. ALP/N is reporting on implementation progress using the USAID formats provided by the USAID Technical Director on Bi-Weekly Reporting dated June 14, 2006.

Similarly, the ALP/N Quarterly Report will be performance oriented and include the following:

- Summary and highlights of key activities during quarter
- Key accomplishments by ALP/N versus plans by components and sectors
 - Component I: Cash for Work
 - Component II: Sustainable Businesses
 - Component III: Investment Environment
- Results versus targets in accordance the ALP/N Performance Monitoring Plan
 - performance indicator tables that detail:
 - baseline performance levels;
 - target values to be achieved over the life of the SO;
 - actual cumulative results by quarter;
 - documentation of key findings that affected performance;
 - suggestions for improving performance;
 - recommended changes to the out-quarter targets (increasing or decreasing the target values), as required, based on assessment of the above factors
- Environmental Actions taken during the quarter with information on number approved or pending.
- Implementation Issues and Recommended Work Plan Modifications

4.9 Timelines

The timelines for 2006-2007 activities for Program Management are included below. The chart presents the planned start and finish dates for completing program management activities planned during the work plan period.



Annex 1: Subcontracting Plan

Comp.	Activity	Subcontractor	Description	Est. \$	CO Action
Agriculture: Sustainable Enterprises					
II	Livestock	ARC	Task Order for Feeding and Forage	100,000	Approved.
II	Animal Health	DCA	Support for animal health ParaVet program.	2,800,000	Approved.
II	Fruits/Nuts	Roots of Peace	Fruit production in Baharak/Jurm	3,500,000	To be requested
II	Timber Trees	ARC	Coummunity forestry activities	20,000	Approved.
II & III	Women's Nurseries	Proposals solicited	Support for women's home-based commercial	300,000	To be requested
II	Vegetable Demonstrations	ARC	vegetables demonstraitons and training	48,000	Approved
II	Wheat Seeds	Bids to be solicited	Buy seed, sort, clean, treat and package	400,000	To be requested
II	Vegetable Seeds	Bids to be solicited	Buy vegetables seeds for spring distribution	800,000	To be requested
Infrastructure Development					
III	Kishem to Tagab Road	Bids to be solicited	Inter-district road from Keshem to Tagab	130,000	To be requested
III	Keshem Upper Road	Bids to be solicited	Access to fertile Upper Keshem Valley	300,000	To be requested
III	Tagab Small Bridges	Bids to be solicited	Small Bridges on roads being improved	150,000	To be requested
III	Jarehawa Bridge	Bids to be solicited	Improve bridge on Keshem to Tabab road	20,000	Not required
III	Karaste Bridge	Bids to be solicited	Karaste collapsing bridge in Keshem area	50,000	Not required
III	Faizabad Main Road	AIRRS	Rehab. of main road Fiazabad to Airport	500,000	Approved
III	Farghambul Road	Bids to be solicited	Market road from Farghambul to Faizabad	200,000	To be requested
III	Faizabad-Baharak Road	Bids to be solicited	Main market road to Faizabad from Baharak	1,500,000	To be requested
III	Faizabad to Argo Road	Bids to be solicited	Market road from Argo to Faizabad	300,000	To be requested
III	Faizabad to Khash Road	Bids to be solicited	Connector road from new bridge to Khash	240,000	To be requested
III	North Kokcha Road	Bids to be solicited	Market road for area to Faizabad	205,000	To be requested
III	Shohada/Baharak Bridge	Bidding in process	Important bridge for Shohada to Baharak	500,000	To be requested
III	Badakhshan Bridge No. 2	Bids to be solicited	Use of Shohada launching structure for new	300,000	To be requested
III	Baharak to Jurm Road	Bids to be solicited	Market road fo Jurm from Baharak	200,000	To be requested
III	Jurm City Center Road	Bids to be solicited	Market center improvement	200,000	To be requested
III	Shohada Valley Road	Bids to be solicited	Market road to lin Shohada to Baharak	200,000	To be requested
III	Provincial Road Maint.	Bids to be solicited	Work with Public Works on Maint. Systems	150,000	To be requested
III	Upper Qaraqzee Canal II	Bids to be solicited	Improving major Faizabad canal south valley	130,000	To be requested
III	Sari Jangai Canal, Faizabad	Bids to be solicited	Canal rehabilitation	70,000	To be requested
III	Sumdara Canal, Faizabad	Bids to be solicited	Canal rehabilitation	120,000	To be requested
III	Farakh Canal, Baharak	Bids to be solicited	Construction of intake to system	200,000	To be requested
III	Baharak Power Canal	Bids to be solicited	Construction of new power canal	150,000	To be requested
III	Khustak Canal, Jurm	Bids to be solicited	Construction of intake and canal repairs	90,000	Not required
III	Dargaw Canal, Jurm	Bids to be solicited	Construction of portection wall	55,000	Not required
III	Jurm City Irrigation	Bids to be solicited	Culverts to improve canals through city	50,000	Not required
III	Kash Canals	Bids to be solicited	Construction of some 20 small structures	90,000	Not required
III	Sarajdara Canal, Argo	Bids to be solicited	Construction of intake and canal repairs	120,000	To be requested
III	Argo City Irrigation, Argo	Bids to be solicited	Culverts to improve canals through city	50,000	Not required
III	Chochook Canal, Keshem	Bids to be solicited	Construction of intake and canal repairs	120,000	To be requested
III	Sarband Kanguchid, Keshem	Bids to be solicited	Reinforcement of the intake	20,000	To be requested
III	New Design & Implem.	Bids to be solicited	New 2007 irrigattion projects	200,000	To be requested
III	Provincial Irrigation Sup.	Bids to be solicited	Work with Gov't and farmers on mainten.	90,000	Not required
III	Faizabad Hydro Plant Rehab	Bids to be solicited	Rehab work based on Manunsell study	300,000	To be requested
III	Baharak Power Plant Rehab	Bids to be solicited	Rehab work based on Manunsell study	200,000	To be requested
III	Jurm Micro-Hydropower	Bids to be solicited	Work to be based on Winrock study	200,000	To be requested
III	Kishem Micro-Hydropower	Bids to be solicited	Work to be based on Winrock study	300,000	To be requested
III	Agricultural Extension Upgr.	Bids to be solicited	Improvements to samll existing offices	60,000	Not required
III	Radio Transmission Upgr.	Bids to be solicited	Development of radio broadcasting	200,000	To be requested
III	Faizabad Transportation	Bids to be solicited	Tansportation terminal development	120,000	To be requested
III	Market Center Urban Plan	Bids to be solicited	Market center improvements planning	40,000	Not required

Annex 1: Subcontracting Plan

Business Assistance					
III	Business Resource Centers	RDA	Centers for business information & training	80,000	Not required
III	Agricultural Cooperatives	ARC	Training for Cooperative/Producer Assoc.	50,000	Not required
III	Industrial Park Plans	AISA	Feasibility and plans for industrial parks	20,000	Not required
III	Transport Terminal Plans	TBD	Assistance for planning & implementation	20,000	Not required
III	Market Informaiton System	RDA	Assistance for operation of information sys.	90,000	Not required
Women's Programs					
III	Women's Household Milk	TBD	Assistance for home milk processing	90,000	Not required
III	Women's Tree Nurseries	Proposals solicited	Assistance for home-based nurseries	300,000	To be requested
III	Vocational Skills Training	Bids to be solicited	Training for women in vocational skills	60,000	Not required
Program Communications					
III	Radio Station Capacity Dev.	Bids to be solicited	Train workers at up to 7 radio stations	140,000	To be requested
III	Radio Broadcast Content	Bids to be solicited	Provide programming for radio stations	150,000	To be requested
III	Mobile Cinema Unit	N/A	Assist mobile cinema operations	90,000	Not required
III	Mobile Cinema Film Prod.	Bids to be solicited	60-90 film on alternative livelihoods themes	90,000	Not required
III	Billboards; Other Advertis.	N/A	Advertise alternative livelihoods messages	25,000	Not required
III	Assessment of TV Capacity	Bids to be solicited	Assess enhancing TV stations	20,000	Not required
Add-On Programs					
III	Technical Assistance Sub.	Bids to be solicited	Technical support for women's activities	200,000	To be requested
III	Women's Home Mulberries	TBD	Assistance for silk indusry feasibility	50,000	Not required
	Eshkashem Cobblestone #1	TBD	Project Management/Construction Superv.	150,000	To be requested
	Eshkashem Cobblestone #1	Bids to be solicited	Local construction subcontractors	each 75,000	Not required
	Eshkashem-Shughnan Design	Bids to be solicited	Survey and Desing for 62km road	95,000	Not required
	Eshkashem-Shughnan Pk.#3	Bids to be solicited	Project Management/Construction Superv.	2,000,000	To be requested
	Eshkashem-Shughnan Pk.#3	Bids to be solicited	Cobblestones Construction; 3 local	each 80,000	Not required
	Eshkashem-Shughnan Pk.#3	Bids to be solicited	Steele Bridge Construction	250,000	To be requested
	Eshkashem-Shughnan Pk.#3	Bids to be solicited	Vented Wash Construction	400,000	To be requested
	Eshkashem-Shughnan Pk.#3	Bids to be solicited	Pvement Base Course Construction	1,170,000	To be requested
	Eshkashem-Shughnan Pk.#3	Bids to be solicited	Drainage Structures Construction (3)	350,000	To be requested
	Eshkashem-Shughnan Pk.#3	Bids to be solicited	Retaining Walls and Earthworks	860,000	To be requested

Annex 2: International Travel Plan

International Travel July 1, 2006 thru June 30, 2007				
Name	Position	Purpose	Sector	Cost \$
PADCO/ACDI VOCA				
James Graham	COP	Regional Trip	Kab/Dub/Kab	800
		R&R	Kab/Lon/Kab	1,000
		Regional Trip	Kab/Dub/Kab	800
		R&R	Kab/Lon/Kab	1,000
Jeffrey Povolny	DCOP	Regional Trip	Kab/Dub/Kab	800
		R&R	Kab/Lon/Kab	1,000
		Regional Trip	Kab/Dub/Kab	800
		R&R	Kab/Lon/Kab	1,000
Sunil Perera	Director Operations	Regional Trip	Kab/Dub/Kab	800
		R&R	Kab/Lon/Kab	1,000
		Regional Trip	Kab/Dub/Kab	800
		R&R	Kab/Lon/Kab	1,000
Rober Fagen	Communications	Regional Trip	Kab/Dub/Kab	800
		R&R	Kab/Lon/Kab	1,000
		Regional Trip	Kab/Dub/Kab	800
		R&R	Kab/Lon/Kab	1,000
Al Williams	Director Ag/NRM	Regional Trip	Kab/Dub/Kab	800
		R&R	Kab/Lon/Kab	1,000
		Regional Trip	Kab/Dub/Kab	800
		R&R	Kab/Lon/Kab	1,000
TBD	Director Infrastructure	Arrival	U.S/Kabul	2,000
		Regional Trip	Kab/Dub/Kab	800
		R&R	Kab/Lon/Kab	1,000
		Regional Trip	Kab/Dub/Kab	800
		R&R	Kab/Lon/Kab	1,000
TBD	Director Bus. Dev.	Arrival	U.S/Kabul	2,000
		Regional Trip	Kab/Dub/Kab	800
		R&R	Kab/Lon/Kab	1,000
		Regional Trip	Kab/Dub/Kab	800
		R&R	Kab/Lon/Kab	1,000
TBD	Gender Specialist	Arrival	U.S/Kabul	2,000
		Regional Trip	Kab/Dub/Kab	800
		R&R	Kab/Lon/Kab	1,000
		Regional Trip	Kab/Dub/Kab	800
		R&R	Kab/Lon/Kab	1,000
TBD	Roads Engineer	Arrival	U.S/Kabul	2,000
		Regional Trip	Kab/Dub/Kab	800
		R&R	Kab/Lon/Kab	1,000
		Regional Trip	Kab/Dub/Kab	800
		R&R	Kab/Lon/Kab	1,000
Ben Stoner	Project Director	Tech inputs	DC/Kab/DC	3,000
		Tech inputs	DC/Kab/DC	3,000
		Tech inputs	DC/Kab/DC	3,000
Surendra Bhatta	M&E	M&E	DC/Kab/DC	3,000
		M&E	DC/Kab/DC	3,000
Mike Mielke	Environment	Env. Assmnts.	DC/Kab/DC	3,000
		Env. Assmnts.	DC/Kab/DC	3,000
TBD	Environ. Training (PO)	Tech inputs	US/Kab/US	3,000
		Tech inputs	US/Kab/US	3,000

Annex 2: International Travel Plan

TBD	External Evaluator (2)	Tech inputs	US/Kab/US	6,000
Jerome Anderson	Economic Planner ST	Tech inputs	US/Kab/US	3,000
Mike Schwartz	Engineer ST	Tech inputs	US/Kab/US	3,000
TBD	Land Policy	Tech inputs	US/Kab/US	3,000
TBD	CFW (PO)	Tech inputs	US/Kab/US	3,000
TBD	Engineer ST	Tech inputs	US/Kab/US	3,000
TBD	Urban Planning	Tech inputs	US/Kab/US	3,000
TDB	Ag. Enterprise Spec.	Porducer Assoc.	US/Kab/US	3,000
Total - PADCO/ACDI VOCA				94,400
Subcontractors/Program Staff - Included under Program Costs				
TBD	DCA	Livestock	Ned/Kab/Ned	1,500
TBD	Roots of Peace	Trees	US/Kab/US	3,000
Tim Kock	Consultant	Seed distribution	US/Kab/US	3,000
TBD	Women's Programs	Training Spec.	US/Kabul/US	3,000
TBD	Women's Programs	Training Spec.	US/Kabul/US	3,000
Mike Sylvestor	Maunsell	Hydropower Expert	NZ/Kabul/NZ	3,000
Bikash Pandey	Winrock Int'l	Hydropower Expert	Pak/Kabul/PaK	1,000
Engineers (4)	Winrock Int'l	Hydropower Spec.	Nep/Kabul/Nepal	4,000
Add-On Program				
Construction Mgt.	TBD	Cobblestone Spec.	Bol/Kabul/Bol.	4,000
Construction Mgt.	TBD	Constr. Supervis. #3	US/Kabul/US	18,000
Total Other Subcontractors				43,500
TOTAL International Travel				137,900

Annex 3: Nonexpendable Equipment

Planned Non-Expendable Equipment (July 2006-June 2007)					
Description	Quantity	Est.Unit Price \$	Total Est.Price \$	Source & Origin	Planned Use
<i>Support for all Project Activities</i>					
Toyota Hilux Pickups	3	22,000	66,000	935	Faizabad office/District offices
Toyota Landcruiser	2	32,000	64,000	935	Faizabad office
Laptop computers	10	2,200	22,000	935	Faizabad/district offices/ST consultants
Desktop computers	15	2,000	30,000	935	Faizabad/district offices (incl.CFW staff)
Generators 100KVA	4	20,000	80,000	935	Faizabad office/houses
Generators 65KVA	4	14,000	56,000	935	Jurm/Kishem/Taloqan offices/FZB staff house #3
Generators 35KVA	3	12,000	36,000	935	Jurm/Kishem guest houses/FZB staff house #2
Air/Heater split units	36	500	18,000	935	Faizabad/District offices
Photocopying machines	2	8,500	17,000	935	Faizabad & Kabul offices
Subtotal			389,000		
<i>Security Upgrades for all Vehicles</i>					
Blast mats for vehicles	28	15,000	420,000	935	ALP/N vehicle safety - all vehicles inclds. Subs
Radio base station	2	6,000	12,000	935	ALP/N Project Offices and Subs Offices
Radio, mobile for vehicles	8	4,000	32,000	935	For additional vehicles, incld. Subs.
Thuraya Sat phones	30	1,500	45,000	935	Faizabad/District office staff and sub field staff
Hand-held radios	15	1,000	15,000	935	Faizabad/District office staff and subs field staff
Subtotal			524,000		
<i>Subcontractor Project Activities</i>					
Toyota Hilux Pickups	2	22,000	44,000	935	Home-Based Nursery Development Project
Laptop computers	3	2,200	6,600	935	Home-Based Nursery Development Project
Desktop computers	5	2,000	10,000	935	Home-Based Nursery Development Project
Toyota Hilux Pickups	2	22,000	44,000	935	Fruit and Tree Nursery Development Project
Laptop computers	3	2,200	6,600	935	Fruit and Tree Nursery Development Project
Desktop computers	5	2,000	10,000	935	Fruit and Tree Nursery Development Project
Subtotal			121,200		
Total			1,034,200		

Annex 4: Plan for Construction of the Eshkashem–Shughnan Road

1. Background

The geographic focus of the Alternative Livelihoods Program for Northern Afghanistan (ALP/N) is on the heavily populated valleys of Western Badakhshan where most of the poppies cultivation occurs and where there is strong opportunity for short and medium term economic growth through a strategy involving economic corridor and market center development, agricultural productivity improvement (livestock, fruits, nuts, and vegetables), and market oriented business enterprise development. The transportation and market links are via Baharak and Faizabad southwest to Keshem and on to Taloqan and Kunduz.

However, in the longer run, Badakhshan economic development will require further development of the economic corridor to the east from Faizabad and Baharak to Eshkashem and the border with Tajikistan. The eventual development of this corridor will open new trade opportunities with Tajikistan and across Tajikistan to China. This will also permit market linkages with several remoter areas of the Province to the north towards Darwaz and further east towards Wakhan. The proposed 66 km. road from Eshkashem north to Zich Village in Shughnan District is a key route in the development of the eastern corridor and a route strongly supported and demanded by populations and politicians from this area.

2. Description of the Project

The road to be developed is a 66 kms. track that runs from Eshkashem north to Zich Village in Shughnan District. The road generally follows the river which is the Tajikistan border. There have been some culverts and other improvements in the first 10 kms or so near Eshkashem, but after that there is no permanent road bed and the road is seasonally blocked by either flood in low lying areas, or by rocks and/or snow in mountainous higher elevations. To complete the main portion of the road, a topographical survey and new alignment will be needed followed by engineering and design work as well as an environmental assessment.



Logistically this project needs to be supported from Tajikistan for heavy earthmoving equipment. The main access road from Baharak to Eshkashem is closed to heavy road transport at KM 35 near Baskan village due to a collapsed bridge and the loss of the concrete floodway which is some 5-6 km from Zebak village.

In order to move forward quickly, PADCO proposes to divide the work into four packages.

Annex 4: Plan for Construction of the Eshkashem–Shughnan Road

- 1) Package 1. Undertake the reconstruction of 9 kms of road in and around Eshkashem to the bridge crossing the border to Tajikistan, using cobblestone technology. This initial project will provide a good demonstration of cobblestone technology in this region of Afghanistan. The area is flat and suitable to cobblestone, there are good sources of stones nearby, and labor for construction is plentiful with few options for employment in the surrounding areas other than traditional agriculture. If the work can be started immediately, it could be completed between July and the onset of winter in November.
- 2) Package 2. Undertake the survey and design for Package 3 (km. 4 to km. 29.5 of the road) in July, so that work can start in August and be completed by June 2007, assuming that work is able to continue throughout winter months. Also undertake the necessary survey and design for Package 4 (km. 29.5 to km 66) in the fall of 2006, so that plans and bids can be completed during the winter and construction could start in May of 2007 for completion by the end of 2007.
- 3) Package 3: This section from km 4 to km 29.5 covers some unique pristine terrain with mountain elevations to 17,500 foot down to grass covered sand-silt river flat meadows with numerous waterways and snowmelt rock strewn water courses. The experience with cobblestone technology from the Eshkashem project would be used to guide the design of the full route, using this cobblestone technology experience in appropriate areas, where there are also good sources of stones and labor.
- 4) Package 4: Since our consultants were unable to travel to this area on June 15th, this area is an unknown area in terms of costing. However, a previous visual survey was conducted in late 2004 and mentions 2 bridges and numerous retaining walls and drainage structures. The survey and design to be completed in the fall of 2006 will provide information needed for costing and structuring of subcontracting for this portion.

3. Package 1: Statement of Work for Eshkashem Cobblestone Road – 9 kms.

Project Area

The areas identified are from the main intersection of Eshkashem township (N 36 59 49.90 E 78 53 39.64) (ch 00) to the turn off to the Tajikistan boarder crossing at (ch + km 4) (N 36 44 21.63 E 71 34 21.91) on the main road and then to the border crossing some 3 km off the main highway. Approximately 1km on the Zebak- Eshkashem road will also be included as you enter the township center. With an additional 500L/m of town streets on the left and right of the main road, the total amount to be cobblestone is 9km

Structures

There are approximately 10-12 irrigation pipes which will need to be installed and or repaired that can be visually counted and it is estimated that local farmers will insist that another 10-12 be put in.

Annex 4: Plan for Construction of the Eshkashem–Shughnan Road

Storm water open stone masonry drains in the town center will amount to approximately 2200 L/m

Storm water culverts and end walls in the first 4 km = approximately 20, along the 3km to the Tajikistan boarder crossing road 6 all of which are existing but will require some repair work to the lines and or the end walls which are broken and on the 1km entrance road in to Eshkashem township 2 new lines and in the town centre area approximately 3 new lines totaling 60 L/m of new 20 inch line and 10 new end walls.



Area to be cobblestone just north of Eshkashem District Center

Re-excavation of existing table drains at ch1.8 km, 2.2 km and 2.8 km along the Eshkashem road total L/m 900

The existing road sub grade is very thin or none existent so that it is recommended that a complete 150mm re-sheet of the whole project area be undertaken to ensure the integrity of the new cobble stone pavement with additional fill material placed (up to 600mm in places) as required below the new sub grade as a corrector course to take out the humps and bumps. The sub grade shall be 6.2 meters wide and mixed to the OMC and laid out with a 3% cross fall and compacted to a density of no less than 95% MMDD

New 200 L/m x 1.5m high stone masonry retaining walls are required at the 2.8km mark and 2.4km mark

Construction Process

The sub grade material can be obtained from the river flats and all calculations will be based on hauling from the Tajikistan/Afghanistan boarder. Sub grade material can be screened off with a triple deck screening plant to meet the specification below and the oversized can be stockpiled and hand sorted for the cobblestone base course.

Specifications are the following:

Nominal sieve size	% Passing
75mm	100%
37.5 mm	80-100%
19mm	50-80%
9.5mm	35-65 %
4.75mm	25-50%
2.36mm	15-40%
0.425mm	7-20%
0.075mm	3-13%

Annex 4: Plan for Construction of the Eshkashem–Shughnan Road

Liquid limit	25% max
Plasticity index	1-6%
Linear shrinkage	0-3%
PI x % passing	0.42
CBR value	70 minimum
Required density	95% MMDD.

The cobblestone base course will be enclosed by a 150mm wide and 150mm deep concrete curbs on both sides of the road, cobble stones will be sized 150mm to 200mm. The sand base will be 25-30mm deep on which the cobble stones are bedded. The cobble stone will be laid down along the center line of the road using the larger (200mm) as the guide and the intermediate sized stones being laid outwards towards the curb line. On completion of a section dry sand will be rammed between the cracks of the cobble stones, then watered in and topped up again with dry sand and watered in again, once this operation was completed it will be rolled with a flat drum vibrator roller doing 2 passes as a static roller and 2 passes with the vibrator on low vibration. Once this operation is completed it is proposed that a bitumen sealer be applied between the cobble stones to stop rain and wind erosion of the sand bedding.

Use and Training of Unskilled Laborers

The laying of the cobble stone road by local unskilled labor can be achieved by structured (classroom-type) demonstrations and perhaps video footage combined with practical instruction in a location in Eshkashem village. We will use a small construction model and international cobblestone trainers. There is adequate labor in the area to conduct the project which will require approximately 140 labors for the 5 month duration of the project, or approximately 16,800 person-days of labor. In this area, women generally do not wear burkas and are openly engaged with men in most work, so employment of women on the project is likely.

Our plan would be to establish 8-10 work crews that would after the training period be work teams. Each work crew would include 2 men/women doing the sand layer, 3-4 people hauling rock to the 2 cobble stone layers, a sand filler team for watering and compaction of 3-4 people, and finally a 3 person crew boiling bitumen at a nearby site and then filling in the cracks to seal the pavement.

In addition, at the rock source there will be a need for 4-6 people supporting each work group by sorting and stockpiling the correct sized stone.

Consequently, the labor involved would be is estimated at 14 people per each crew with 10 crews for a total of 140 persons, plus supervision. With estimated construction duration of 5 months this will mean approximately 16,800 person-days of labor, as stated above.

Bitumen would be type R190 which is easy to work with and has a large heat range and is available in Afghanistan. Heating can be achieved by setting the drum up on rocks and heating it by a wood fire.

Annex 4: Plan for Construction of the Eshkashem–Shughnan Road

Security Arrangements

Security is not a major issue in this part of Afghanistan. The area is outside the poppy cultivation areas of Badakhshan. The largest security threat will be travel from Faizabad to the Eshkashem area via Baharak and Zebak during the poppy season. At that time international personnel should be accompanied by armed guards. At other times in Eshkashem Township and along the road to the north, normal security for personnel and property will be provided by a security advisor from our local subcontractor and by hiring of local guards in Eshkashem with advice from the local police.

Plans for Road Maintenance

Under ALP/N, PADCO is working with the Badakhshan Provincial Public Works Department to establish mechanisms for local road maintenance support. This will include taking several persons from district governments and local communities and giving them hands-on training with the construction subcontractors during the construction period under PADCO supervision. This knowledge of the basics of road construction should then enable them to do basic periodic road maintenance work. The local government and communities along the route will be the long-term end-users of this road and it is in their interest to learn how to maintain it.

In addition, the cobblestone road is being designed to be as maintenance free as possible. As a back-up to reduce maintenance, a concrete margin can be added across the road profile every 25 meters along the hilly sections of the road to contain and minimize any failures in the pavement. Truck drivers have a bad habit of racing up hills and the dropping down to a low gear when the truck is about to stall out. This causes the truck tires to spin out any large stones on a normal pavement. We do not expect a problem due to the locking properties of cobblestone pavement but such a measure would be good cheap insurance.

Quality Control / Quality Assurance

There are numerous testing companies in Kabul who are up to international standards. Soil density, CBR, particle size distribution and concrete tests can all be taken on site and sent by air to Kabul for the final analysis and reporting which would then be forwarded on to USAID for the records. The costs for this item would vary depending on the number of tests taken initially within the first 2 months it would be higher then taper down as the learning curve was achieved. Later it would be done on changes in material sources, and at 1-2 samples per km and on the various site changes for concrete works.

Project Budget

The estimate bills of quantity with unit rates and values are the following:

Item	Unit	No.	Cost	Value
12”PVC irrigation pipe and end walls	each	25	\$500.0	\$12,500
Open masonry lined drains	l/m	2,200	\$50.0	\$110,000
Repair existing culverts and end walls	each	26	\$384.0	\$9,984

Annex 4: Plan for Construction of the Eshkashem–Shughnan Road

Install new 20”concrete culverts	l/m	60	\$167.0	\$10,020
New stone masonry end walls	each	10	\$300.0	\$3,000
Re excavate table drains	l/m	900	\$5.0	\$4,500
Sub grade material supply shape compact	M/2	55,800	\$6.0	\$334,800
Earth works corrector course supply, shape and compact at required locations.	m/3	600	\$8.0	\$4,800
Stone masonry retaining wall including excavation	m/3	200	\$70.0	\$14,000
Concrete curb	l/m	18,000	\$4.0	\$72,000
Supply and install cobblestones	m/2	54,000	\$10.0	\$540,000
Supply sand bedding and gap filling	m/2	54,000	\$1.5	\$81,000
Bitumen gap filler	m/2	54,000	\$1.0	\$54,000
Mobilization and demobilization*	sum	10,000	1.0	\$10,000
Supervision International	mnths	6	\$20,000	\$120,000
National supervisor and foremen 5	mnths	6	\$3,000	\$18,000
Bolivian Technical Trainer	mnths	4	\$4,000	\$16,000
Office overheads including equipment	mnths	6	50,460.0	\$302,760
Computers, cameras, survey equip.				
Total				\$1,717,364

* The mobilization and demobilization of equipment should be negotiated on a subcontractor to subcontractor basis since it is dependant on the amount and size of the plant and the distance needed to get it to site. A general average figure was used for the estimate. The primary equipment needed will be trucks for hauling stone and compactors. There appears to be sufficient rental equipment available in the market, particularly across the river in Tajikistan.

The above unit rates are average for Afghanistan however once the project is broken down into various components and contracted out these prices will be reduced.

3. Package 2: Statement of Work Design for Eshkashem – Shughnan Road

(Includes Package 3: km 4 to km 29.5 and Package 4: km 29.5 to km 66)

Survey and Design

The road in total is 66km long and, according to a survey and estimate prepared several years ago by FOCUS (AKDN), construction will require three bridges (two of 10-12 meter spans and one 30 meter span), nine box culverts, 720 meters of pipe culvert, 860 meters of stone masonry

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with cement mortar retaining and flood protection walls with 4,795 m³ volume, and extensive earthwork including rock blasting and dry stone masonry.

It is recommended that a new survey be conducted pick up terrain data on the existing road and where ever possible 5-10-15 20 and 25meters each side of the center line. The survey should also look at some alternative routes along the river flat areas to relocate several stretches of the road out of the flood plan to high ground along the mountainside as shown in the above photo taken at above at 20 kms above Eshkashem. This work should be undertaken immediately on the first part of the road (Package 2) so construction can begin in August and completed on the remaining portion (Package 3) before December and the calculations and design completed during the winter period ready to tender for construction during the summer of 2007.



ALP/N PADCO can undertake the survey, design and preparation of bids using the roads engineering staff in the Infrastructure Division and local subcontractors that are performing similar work for other ALP/N roads. Cost would be less that \$100,000.

4. Package 3: Eshkashem-Shughnan Road from km 4 north to km 29.5

This section from km 4 to km 29.5 covers some unique pristine terrain with mountain elevations up to 17,500 ft. altitude down to grass covered sand-silt river flat meadows with numerous waterways and snowmelt rock strewn water courses. The road alignment is defined by rocks placed along each side of the road limits and in other places is up to 40 meters wide and is a case of pick your own route, further into the project the present road is 2.5-3 meters wide from what seems to have been an existing walking track which as been widened by hand. The locals informed the consultants that the river valley and Eshkashem Township receives very little snow during the December-April winter period but gets extremely cold with a constant strong wind from the north. Outside of Eshkashem there are only a few scattered villages, so that labor will be less available, and will be particularly scarce in peak agricultural periods like wheat harvest time in July-August.

Some thought will have to be put into land acquisitions. This will mean engaging the district government to discuss land issues with the owners in the area regarding giving up farmable land for road widening purposes and giving access. Also land along the river may be needed to obtain construction materials.

Construction materials are obtainable from the river for retaining wall rock, sub base, base course materials and sand and concrete aggregates. Some investigation should be done regarding the need for extractive mineral permits, licenses and mining royalties as this could add some dollars to the contract value.

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The break down of this section of road will require a 10 m span steel bridge at km 11 costing around \$250,000 and a 350-400 meter long vented wash structure in the km 15 area costing around \$400,000, along with numerous minor drainage structures, culverts and concrete floodways.

The section of road at 20 km needs to be re aligned the present switch back crosses the same stream 4 times and is in very steep terrain some consideration should be given to relocating and concreting the whole of the road in this area, any ice or snow will make this section of road impassable due to tire slippage during the winter period.



The route for the earthworks embankment will require further investigation in terms of re-routing the road along the base of the mountain slopes to avoid importing large volumes of fill materials for the river flat areas. Drilling and blasting will be required in some areas while other areas can be ripped by dozers and cleaned up with rock breakers. Retaining walls will be needed for some areas in cut and other areas requiring fill to maintain the road width.

There are 3 small villages along side the road where labor for cobblestone pavement will be available.

Package 3 could be completed using schedule of rates and or lump sum contracts for the various known components, culvert, floodways, sub grade, and base course, bridge works, concrete and cobblestone pavements and the vented wash. The earthworks cut-fill volumes would need be addressed in one of two ways, do the earthworks construction on an equipment rental hourly paid basis (broken down or equipment that could not be utilized would not be paid for) with adequate supervision to monitor costs and control and direct the contractor in the various operations.

The other option would be to slow the start of construction until a terrain data survey could be done every 25 meters along the centre line and then pick up any changes in grade on either side of the center line up to 2-3 meters outside the road limits. Long section and accurate cross section drawings could then be generated from this data and quantities taken off from a road profile which would then be built into a BOQ. The survey would have to be completed quickly in early July as proposed above in order not to delay construction.

Costs comparison for hard money unit rates versus equipment rental for earthworks to sub grade level:

Cost per hour	Equipment
\$200	2x D9 dozers

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\$360	4x D7 dozers 1x D3 dozer
\$180	2x 330 Cat excavators piped for rock breakers
\$150	2x 330 Cat excavators with rock buckets
\$240	4x 320 Cat excavators
\$250	10 x 10-12m ³ tipper trucks
\$70	1x 966 wheel loader
\$160	4x 3000 gall self loading water trucks
\$100	2x vibrating sheep's foot rollers
\$100	2x flat drum vibrating rollers
\$160	2x cat 140H graders
\$120	Air track rock drill or similar & explosives
\$55	lowboy 60ton transporter
\$120	2x international service providers
\$40	4x national monitoring engineers
\$100	survey party

Total cost per hour = \$2,405 using a conservative rate of 500m³ per hour for material moved this equates to \$4.81 per m³

Average contractor hard money unit rates would calculate out at \$ 4.50m³ in free digging material and \$20.00 m³ for drill ,blast and haul assuming 50% of the site is in hard rock this equates to \$10.00 m³ giving a average price of \$7.25for material moved .

A rough estimate for the first 26 km of earthworks is 700,000m³ for cut to spoil and cut to fill for the embankment.

700,000m³ @ \$4.50 = \$3,150,000 for equipment rental

700,000m³ @ \$7.25 = \$5,075,000 for hard money unit rates

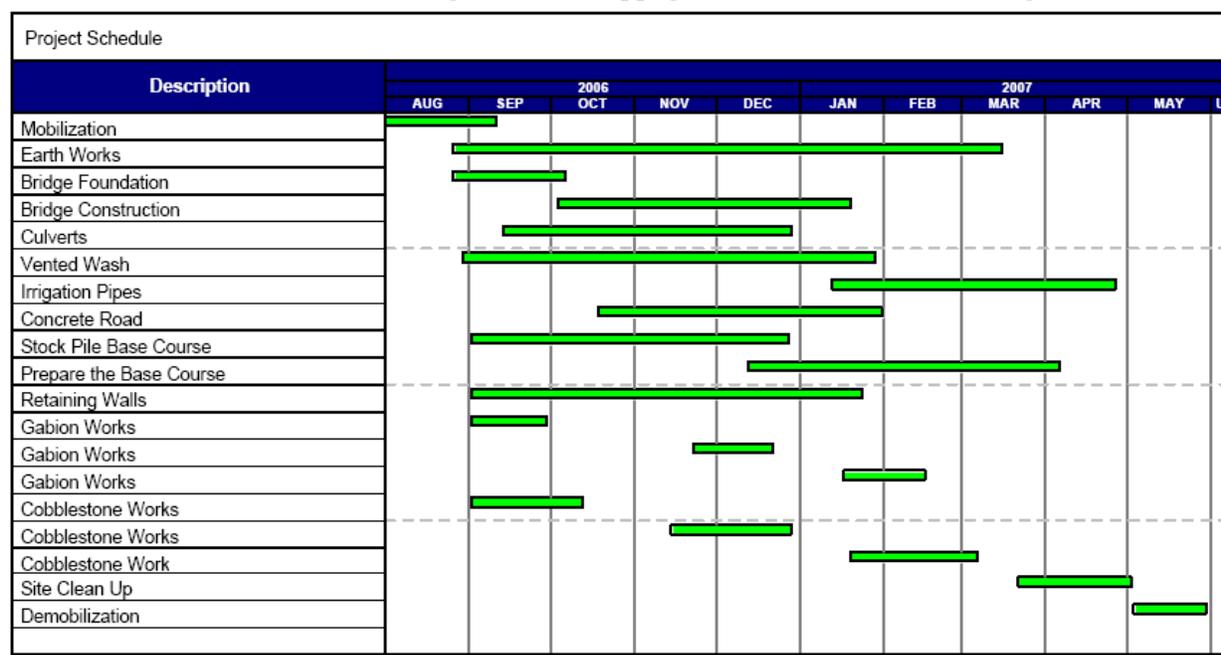
Cost estimate for the components for the first 26 kms. from km4 to km30 is the following:

Item	Unit	No.	Unit Cost	Value
Base course	m/2	180,000	6.50	\$1,170,000
Steel bridge				\$250,000
Earthworks embankment		700,000	4.50	\$3,150,000
Vented wash at km 15				\$400,000
Culverts and drainage structures				\$350,000
Irrigation pipe lines		60	50.00	\$3,000
Retaining walls assume	m/3	8,000	70.00	\$560,000
Gabion baskets assume	m/3	4,000	75.00	\$300,000
RCC Concrete road	l/m	600	150.00	\$90,000
Cobblestone rock, bedding, bitumen sealer	m/2	6,000	12.50	\$75,000
Concrete curb	l/m	2,000	4.00	\$8,000
International Engineers 6 by 12months	person-months	72	20,000.00	\$1,440,000
National engineers 24 by 12months	person-	288	3,000.00	\$864,000

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	months			
International trainers 2 months		2	20,000.00	\$40,000
Equipment rental				\$3,150,000
Total				\$11,850,000

The construction schedule assuming no work stoppage for winter is the following:



As mentioned above, the schedule is made with the assumption that the earthworks portion of the works and some of the other components could proceed through the winter, and thus there would be a total construction period of around 9 months. If work has to be stopped in the winter, as is likely to be the case, then additional three months would be required.

This work will require various equipment suppliers and 4-5 medium sized contractors and 10-12 small local subcontractors in order to meet ambitious schedule. The second important assumption for this is these local subcontractors can be sourced within the area from Tajikistan, particularly the city of Kourgh, which is Tajikistan city across the river from the northern end of the road near Zich village.

5. Package 4: Eshkashem-Shughnan Road from km 29.5 to km 66 Zich Village

Since our consultants were unable to travel to this area on June 15th, this area is an unknown area in terms of costing. However, a previous visual survey was conducted in late 2004 and mentions 2 bridges and numerous retaining walls and drainage structures.

It is recommended that for this section we conduct a full terrain data survey and design team to visit the site in the fall and then generate a BOQ as a cost comparison for the bulk earthworks. This survey and design is included in Package 2 above.

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The construction would follow the first segment and, if they are no major bottlenecks identified in the survey and design, the construction could be started in May 2007 with completion by December 2007. However, please note that like the Package 3 schedule above, these are optimistic scenarios that are based on ability to work year around in a harsh winter and remote environment, ability to source equipment and other resources across the border from Tajikistan, and ability to quickly resolve with District Government and local communities and land owners and land ownership and access issues. The expectation is that the cost would be similar to the 4 km to 29.5 km section. At the same cost/km as package 2, the total cost of Package 3 would be \$16,961,765.

6. Program Management

The proposed project management structure and subcontracting plan is presented in the figure on the next page.

PADCO would provide a supervisory engineer to director and oversee the project. On-the-ground implementation will be managed through our supervisory consulting engineers subcontractor who will provide a project manager and supervisory engineers for (1) purchasing, logistics and contracts, (2) costing, (3) survey, and (4) quality assessment/quality control.

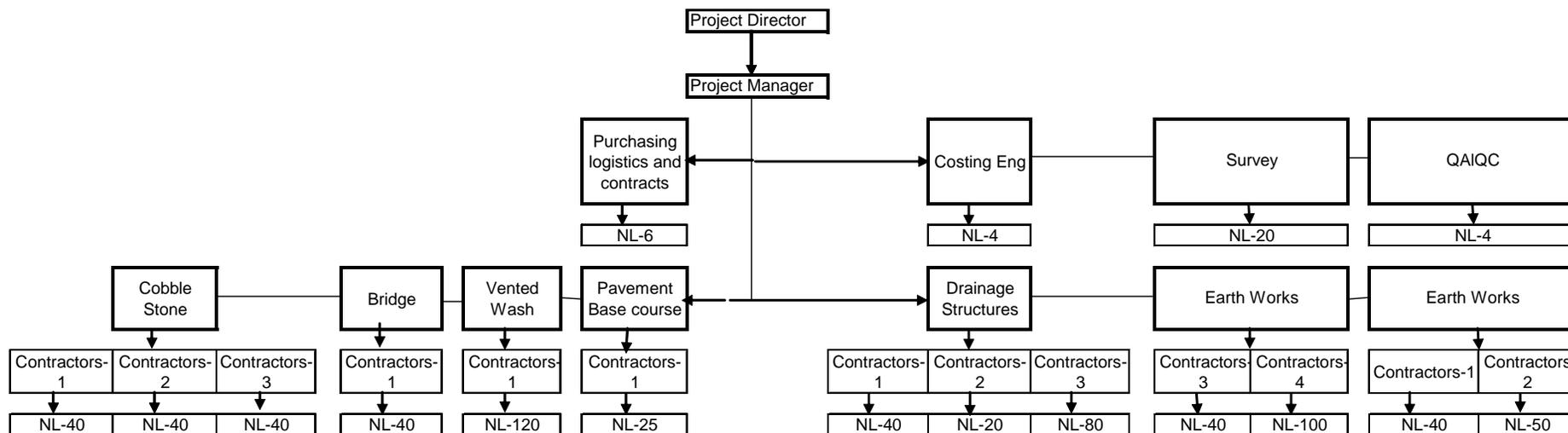
As shown in the figure, we plan to have local construction subcontractors for: cobblestones (3 subcontractors); bridge (1 subcontractor); vented wash (1 subcontractor); pavement base course (1 subcontractor); drainage structures (3 subcontractors); and, earth works (4 subcontractors).

As stated above, this management structure for Package 3 would allow the work to be completed using schedule of rates and or lump sum contracts for the various known components, culvert, floodways, sub grade, and base course, bridge works, concrete and cobblestone pavements and the vented wash. The earthworks cut-fill volumes would need be addressed in one of two ways, do the earthworks construction on an equipment rental hourly paid basis (broken down equipment or equipment that could not be utilized would not be paid for) with adequate supervision to monitor costs and control and direct the contractor in the various operations.

PADCO feels that this is the best way to organize and manage the work for fast and efficient construction in this remote project area.

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Eshkashem-Shughnan Road Project Management Structure



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7. Cost Summary

The summary costs are:

Package	Portion	Kms.	Cost	Cost/Km.
2006-2007 Work Plan Program				
1	Eshkashem	9	1,717,364	190,818
2	Survey & Design		95,000	
3	4km to 29.5 km	25.5	11,850,000	464,706
Subtotal for 2006-2007		34.5	13,662,364	396,011
2007-2008 Work Plan Program				
4	29.5 km to 66 km	36.5	16,961,765	464,706
Subtotal for 2007-2008		37	16,961,765	464,706
Estimated Total - 2 years		71	30,624,129	431,326

Only the amount of \$13,662,364 for the 2006-2007 Work Plan period is being requested at this time. As stated above, the amount for 2007-2008 is currently a rough estimate. A more precise cost will be determined based on BOQ calculations from the survey and design to be completed for Package 3 in the fall of 2006 and USAID funding will be requested in the 2007-2008 Work Plan.

The following page shows the project area. The Eshkashem-Shughnan Road follows the (west) bank of the Amu river between the towns of Eshkashem, Afghanistan and Korog, Tajikistan that are shown on the map below.

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