

Nangarhar Regional Development Plan

Bridging A Rich Past with a Bright Future



“Nangarhar Inc”

*Serving the Greater Nangarhar Community
through the creation of one
of Central and South Central Asia’s
Premier Commercial Trade and
Transit Hubs*

Table of Contents

Introduction.....	3
The Nangarhar Inc. Vision.....	5
Mission.....	6
Plan Objectives.....	8
Management Plan.....	10
Analysis of Situation.....	14
Promotions and Developments.....	20
Sources and Uses.....	56
Funding Needs, General.....	62



Introduction

Nangarhar Province sits astride part of the historic Silk Road that runs through the capitol city of Kabul to the economic gateway of Peshawar, Pakistan. Predominantly Pashtun in population, 30 percent of Afghanistan's inhabitants live and work within 50 miles of the province. The burgeoning capitol city of Jalalabad rests inside an agriculturally rich valley at the confluence of the Kabul and Konar Rivers.

Jalalabad city has historically been the epicenter for trade and commerce in the region, exporting its considerable agricultural surplus to the nearby cities of Kabul and Peshawar. Nangarhar's climate is ideal for a wide variety of vegetables, fruits, and grains. For centuries, its fertile lands were irrigated by a simple, local canal system harnessing the abundant runoff from the Hindu Kush. In the 1960s, a system of canals and dams, integrated with existing *karez*s, was built, bringing water to an additional 25,000 hectares of land.

Nangarhar's importance to overall social and economic growth in Afghanistan cannot be overstated. While significant needs exist throughout the country, Nangarhar presents several unique advantages and opportunities that make it worthy of a focused development effort:

- **A progress oriented Provincial Government that supports commercial development**
- **One of the largest and most modern cities in Afghanistan (Jalalabad); possessing significant labor and resource advantages**
- **Both a temperate climate and rich soil exist in the Kabul and Konar river valleys; forming an ideal agricultural region**
- **One of the most secure provinces in all of Afghanistan; Nangarhar has been known as *Da Solei Koor* or "The Peace House" throughout the past several decades**
- **The national standard for successful counter-narcotics efforts**
- **Strategically located at the cross-roads of major Central Asian markets**



Because of these and many other comparative and competitive advantages, Nangarhar is poised to become an economic leader in Central and South Central Asia. Nangarhar Inc. is the vision and strategy for facilitating that success and providing for a flourishing environment for business and community at home. This business plan outlines the Nangarhar Inc. vision; mission goals; and specific, actionable objectives required to achieve success. Additionally, the specific capital requirements and funding sources have been identified for each of the prioritized development opportunities contained herein. First and foremost, the Nangarhar Inc. business plan focuses on leveraging currently planned and on-going United States Government (USG) and donor country capital investments being made in the Nangarhar region and nationally, in order to create and manage sustainable long-term infrastructure and service outcomes.



The Nangarhar Inc. Vision

- **One of Central and South Central Asia's premier commercial and logistics centers**
- **Central Asia's most technologically advanced center for value-added production, processing, and distribution**
- **Afghanistan's leading development environment, fostering both public and private investment returns**
- **Afghanistan's and Pakistan's highest rate of region-wide investment recapitalization**
- **Central and South Central Asia's most highly skilled labor force measured by productivity per capita**
- **Central Asia's benchmark for socially responsible economic development, harmonizing public and private capital ventures within the overarching framework of the Afghanistan National Development Strategy (ANDS)**



Mission

Fulfilling the Nangarhar Inc. vision requires capital intensive solutions. The investments this business plan outlines in “Promotions and Developments” below are the primary goals of a bold and attainable mission.

Joining these investments are a full compliment of accompanying developments that encompass public-private management, legislative and regulatory measures, and an aggressive marketing and promotional package. The scope and focus of these initiatives are in no way limited to the confines of Nangarhar Province. Collectively, they aspire to reach out across the entire region and seek to leverage other USG and private sector initiatives within Pakistan’s nearby border region in a coordinated and complementary approach. Without these developments, the quality and outcome of these capital projects will fall severely short or fail.

The following are the specific mission goals that aim to fulfill the Nangarhar Inc. vision:

- **Fully fund and sustain an advanced public-private economic development association charged with integrating both public and private regional investments in a complementary manner by end of 2nd quarter, CY 2008**
- **Create both the final development plan and an efficient promotional and management framework by end of 2nd quarter, CY 2008 to accomplish short, mid, and long-term economic development projects, coordinate public and private economic ventures, and synchronize these activities within the overarching framework of the ANDS**
- **Establish and implement an aggressive overall marketing campaign by 3rd quarter, CY 2008**
- **Develop adequate industrial power capacity by brokering power purchasing agreements capable of supporting long-term, sustainable economic growth and development within Nangarhar by 2nd quarter, CY 2009**
- **Become globally recognized as the flagship province for local governance, economic growth, and business opportunity in Afghanistan by 2010**



- **Create a comprehensive watershed district and management plan by 2011, providing for current and planned needs for power, erosion protection, potable water, irrigation, reforestation and re-vegetation**
- **Construction of an integrated intermodal transportation system in Nangarhar, linking specifically the eastern-most Central Asian corridor to global markets through the Arabian Sea by 2012**
- **Establish the greater Nangarhar and Peshawar Community's promotional entity for creating one of Central and South Central Asia's premier commercial and logistics centers by 2009**
- **Lobby the GIRoA to institute both a well-established system of transferable property rights and comprehensive package of regulations that will support economic growth and investment in the Nangarhar region by 2009**



Plan Objectives

In view of Nangarhar Inc. mission goals, the following are the specific task objectives to be performed and managed to achieve the goals:

- First and foremost, fund and establish an implementing association for the execution of all objectives. This managing body shall mimic commonly known and highly successful economic development agencies. For Nangarhar Inc. it shall be called the Nangarhar Regional Development Association (NRDA). (*See Management Plan below*)
- Establish and rank Nangarhar's large-scale capital investment initiatives to provide overall prioritization of the Province's economic development efforts; ensure that all projects are complementary and ultimately lead toward self-sustained, large-scale economic growth within both Nangarhar and the greater Afghanistan-Pakistan border region, proceeding in-concert with the overarching framework of the ANDS. (*See Promotions and Developments below*)
- All possible efforts should be made to locate, qualify, and recruit new industries into Nangarhar. The NRDA shall leverage all potential public and private sector sources of investment and continually seek out companies desiring to expand or relocate to the region. Host an annual industrial-based exposition in Jalalabad to help attract potential industries and investors to the area. (*See Promotions and Developments below*)
- Recruitment of industry and government partners will be made with an emphasis on increasing overall employment; take into account the abundant agricultural crops available and the potential for value added industries, while maintaining an eye toward diversification that ensures a stable economic future. Target industries to be considered should include, but not be limited to: power generation and distribution, intermodal transportation, natural resource refinement, industries that add value to agricultural products, financial and lending institutions, and waste management. (*See Promotions and Developments below*)
- Complete and upgrade as needed the existing industrial parks to provide adequate building sites, required infrastructure, ample power supplies, tied to existing and planned intermodal transportation, and access to future clients. It should seek to create additional industrial parks to entice foreign and domestic



investment and accommodate anticipated future growth. *(See Promotions and Developments below)*

- Evaluate and train the workforce to build necessary human capital to support and sustain both technically advanced and value added industries. *(See Promotions and Developments below)*
- Promote Nangarhar Inc. efforts by informing and educating internal as well as regional and global audiences. Employ all forms of media to inform the community and potential investors on a regular basis. Detailed literature, information packets, and internet materials need to be produced to enhance these efforts. Ultimately, the long-term success of this effort depends on a well-informed and supportive base. *(See Promotions and Developments below)*
- Lobby GIROA for legislation and regulations that support major development projects, entice foreign and domestic investment, promote trade, and establishes broad ranging systems for the transfer of property rights, utilization of natural resources, taxation, commercial zoning, and public services. *(See Promotions and Developments below)*



Management Plan

Introduction - Nangarhar Inc. is a USG backed initiative servicing the stakeholders of the greater Nangarhar community. The management of the goals and objectives serving the Nangarhar Inc. mission shall have an organizational structure and operating framework and mandate as follows:

Organization Structure -

- Stakeholders – the stakeholders are comprised of the people of the greater Nangarhar community, including the cultural and resident Pashtun community cross-border with Pakistan’s Peshawar District, and the key organizations dedicated to the overall development of the region (to include elements of the Government of the Islamic Republic of Afghanistan and agencies of the USG, such as the Department of State (Does), the United States Agency for International Development (USAID), and Department of Defense (Dodd)).
- Directors – the directors shall be comprised of the designated representative of the senior military commander responsible for the greater Nangarhar region, the senior Does representative for the greater Nangarhar region, the senior USAID representative for the greater Nangarhar region, the GIRoA appointed or elected Governor for the province of Nangarhar, and the elected Chairman of the Nangarhar Provincial Council. This directorate shall represent the interests of the stakeholders and serve as the decision-making body for Nangarhar Inc.
- Nangarhar Regional Development Association (NRDA) – the NRDA is a non-profit association comprised of a full-time, fully funded staff that includes a Chief of Staff, an Executive Assistant and four implementing management divisions – a Public Relations and Marketing Management Division, an Infrastructure Development Management Division, a Government Liaison Management Division, and a Private Sector Management Division. NRDA is accountable to the public, maintaining open and transparent records of its finances. While members of the GIRoA sit on the board of directors, NRDA is not to be absorbed, controlled, or directly regulated by the central, provincial, or local government.
- NRDA Management Divisions
 - The Public Relations and Marketing Management Division is comprised of two primary sections - Public Relations and Marketing. The Public Relations and Marketing Management Division’s primary functions are to both articulate



the Nangarhar Inc. concept and promote its investment opportunities to local, regional, and international audiences.

- The Infrastructure Development Management Division is comprised of four sections – Power, Transportation, Canals and Irrigation, and Industrial Development. The Infrastructure Development Management Division’s primary functions are to monitor the planning and construction of Nangarhar Inc. associated infrastructure, coordinate with parallel development efforts, and identify solutions to infrastructure shortfalls that obstruct economic development.
- The Government Liaison Management Division is comprised of three sections – Public Services, Legal Assistance and Government Regulations, and Ministerial Assistance. The Government Liaison Management Division’s primary functions are to monitor the evolution of GIRoA economic policies and regulations, monitor the progress of public service delivery in Nangarhar, facilitate dialogue between the Nangarhar community and national/international leaders, and identify and facilitate solutions to regulate policy and improve public service shortfalls that obstruct economic development.
- The Private Sector Liaison Management Division is comprised of three sections – Economic Development, Agriculture Development, and Natural Resource Development. The Private Sector Liaison Management Division’s primary functions are to monitor the progress of economic, agriculture and natural resource development initiatives, determine successful models and best practices for private-public enterprise, and identify sustainable solutions to agricultural and natural resource issues that obstruct economic development.
- Additional NRDA Staff Requirements
 - NRDA Chief of Staff will be given oversight of a facilities budget from which the NRDA will secure facilities, security personnel, drivers and additional facility staff as required.
 - NRDA Chief of Staff will be given oversight of an operational budget from which NRDA will resource office equipment, supplies and utilities as required.



- NRDA Chief of Staff will be given oversight of the Management Division budgets from which the NRDA will hire additional staff, contract projects and studies, and produce promotional and marketing materials as required. The Management Division Chiefs will propose Management Division budgets; nominate additional staff positions; and design projects, studies, and promotional and marketing materials.

- Nangarhar Regional Development Association Control and Operational Framework
 - The Nangarhar Regional Development Association decision making process will require a majority (three) decision by the Directors with a quorum of three members; comprised at a minimum of two USG Directors and at least one GIRoA Director

 - NRDA Chief of Staff will propose and the NRDA Directors will approve the annual NRDA budget

 - NRDA Chief of Staff selection will be conducted by majority consent of all members of the Directorate

 - NRDA Executive Assistant and Management Division Chiefs selection will be conducted by unanimous consent of a staff selection board that will include the NRDA Chief of Staff and three members of the Directorate; comprised at a minimum of two USG Directors and at least one GIRoA Director

 - The NRDA Directors will meet on the second Tuesday of every month to monitor progress on Nangarhar Inc.'s mission and plan objectives and hold necessary discussion on NRDA operations. Additionally, NRDA will provide the Directors with a semi-annual progress report (March 15th and September 15th of each year).

 - Within nine months, establish and publish a long-term comprehensive development plan, utilizing a twenty year planning horizon, spanning from the year 2010 to 2030. The plan will be presented to the Directors on January 15th, 2009 and reviewed for update during the semi-annual progress report to be held on September 15th of each year.



- Nangarhar Regional Development Association Funding Requirement - NRDA Funding Requirements will be discussed in the Promotions and Developments Section below.

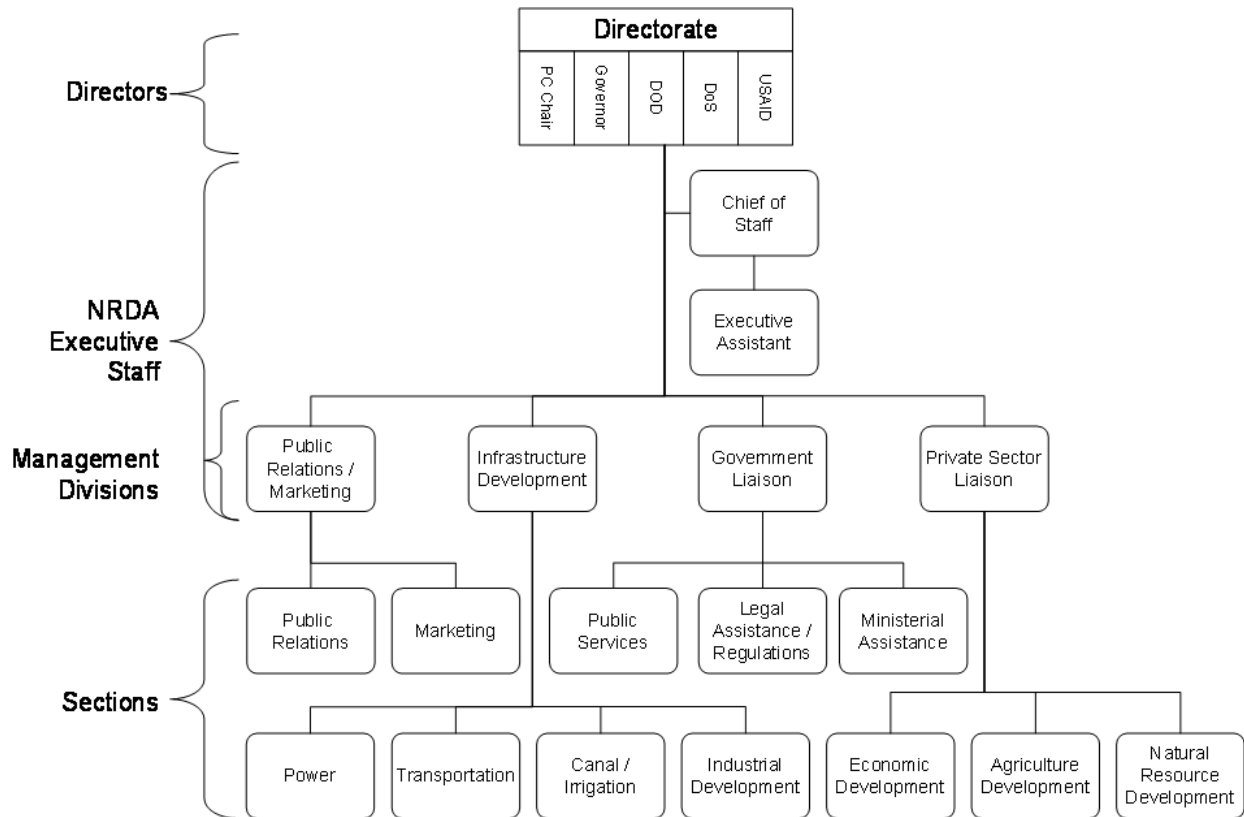


Figure 1 – Organizational Structure of the NRDA



ANALYSIS OF SITUATION

Introduction –

Nangarhar is located nearby the vital strategic thoroughfare connecting Central Asia to the Arabian Sea. Centrally located within the region, Nangarhar sits at the economic and transportation crossroads for this section of the world.

Highway 1 runs from the Ring Road in Kabul, through Jalalabad, and onward to Peshawar, Pakistan. These roads provide access to ports in both India and Pakistan where goods can be globally shipped. Additionally, the extension of existing rail transportation would allow bulk goods to be rapidly shipped to ports in India and Pakistan at low rates. This is the most economically feasible route from Kabul to the Indian Ocean. Because of this, Nangarhar is the trade and transit hub for Afghanistan.

Nangarhar is extremely rich in natural resources. Its moderate climate, year round water supply, and highly developed canal and irrigation system, allows the province to produce multiple crops per annum. Additionally, its nearby mountains are rich in mineral deposits and semi-precious stones.

Nangarhar's geography and august rivers possess extraordinary potential for hydroelectric power. Once tapped, Nangarhar will produce an abundance of electrical power, capable of supporting high-demand industries and commercial ventures.

Given its ample natural resources, viable potential for inexpensive electric power, and budding transportation infrastructure, Nangarhar can easily become one of the premiere industrial and commercial powerhouses in the Central Asian Region. Raw materials such as agricultural produce, timber, and mineral deposits can be processed into intermediate goods, thereby adding value to the products. Moreover, the Province's centralized location and growing intermodal transportation system will allow these goods to be rapidly and economically shipped to vendors around the world. With the addition of processing, manufacturing, and value-added industries, Nangarhar's economic growth and development would be unparalleled in the region.

While this strategy is not without weaknesses and threats, its strengths and opportunities far outweigh these negative factors. The following analysis of Strengths, Weaknesses, Opportunities, and Threats (SWOT) more specifically outlines these attributes as they apply to Nangarhar's investment opportunities.



SWOT Analysis -

STRENGTHS

- Abundant water resources year round and convergence of several river systems
- Vast potential for hydroelectric power
- Grand canal and extensive irrigation system
- Extensive arable land and natural agriculture capacities
- Favorable year round climate allowing multiple crops per annum
- Historical trade and transit corridor coupled with well developed border crossing facilities
- National rail line within close proximity to Afghan/Pakistan border
- Exceptional national road ways
- Relatively skilled labor force when compared with the rest of the region; existing trade schools, universities, and NGO support to sustain this human capital
- Geographic location lies in close proximity to major markets and other economic centers (roughly 30 percent of Afghan population within 50 miles)
- “Actionable” investment opportunities exist in various sectors:
 - Transportation
 - Power
 - Infrastructure construction
 - Agribusiness
 - Non-banking financial sector
 - Textiles
- Progressive provincial government
- Strong USG interagency capacity; committed to long-term, sustainable economic development
- Incubation catalytic resources
- Extensive USAID Small and Medium Enterprise (SME) financing projected
- Dodd Commander’s Emergency Relief Funds available

WEAKNESSES

- Underdeveloped or over-utilized infrastructure:
 - Limited bridges and ability to link suburban and rural economic development zones
 - Current airport incapable of supporting large-scale, international trade; not available for significant private commercial use



- Lack of cold storage and transport capacity and integrity
- While an abundance of water exists:
 - Much of the water flow is unchanneled
 - The Grand Canal has high probability of catastrophic failure of its siphons and gates; other irrigation systems are in need of rehabilitation
 - A single hydroelectric facility exists in the province and its reservoir is in need of major rehabilitation in order to meet existing demand
- Existing electricity distribution system is underdeveloped and not able to meet the needs of industry
- Limited inland customs clearing capacities and complex inter-ministerial jurisdiction
- Limited capacity of GIRoA ministries
- Need to import all commercial fertilizers and fuel sources for heating
- Illicit economies exist:
 - Forestry
 - Mining
 - Narcotics
- Limited access to reasonably priced development capital
- Currently, no valid economic development road map:
 - No professional feasibilities across economic sectors
 - No master plans for developing critical infrastructure
- Small and medium enterprise sector underdeveloped with limited value chain in:
 - Textiles
 - Forestry
 - Agribusiness
 - Transportation
 - Marble
- Property rights are not clearly defined or enforceable

OPPORTUNITIES

- Transportation:
 - Cold chain – storage and transport capacity
 - Air cargo
- Agricultural and industrial parks
- Financial:
 - Non-banking financial sector
 - Fleet leasing

- Private placement, mezzanine financing
- Capturing new wealth for reinvestment
- Vertical integration of successful small and medium enterprise activities
- Energy:
 - Independent power production
 - Alternative fuels:
 - Coal
 - Biodiesel

CRITICAL NEEDS

- Re-brand Nangarhar, recognizing its capacity for developing the regional trade corridor for over 30 percent of the country's population and its role as an economic engine in the eastern region. It is critical to leverage the diverse economic opportunities in Nangarhar – not just within the agricultural sector.
- Key Infrastructure:
 - Additional hydroelectric capacity and managed distribution scheme
 - Rehabilitated canal and irrigation system
 - Intermodal facilities
 - Linkage to rail systems in Pakistan
 - Airport established as an international gateway designed to support and sustain economic growth and international trade
- Trade schools and agricultural extension services
- Economic developmental tools
- Understanding of Nangarhar Inc.'s potential and importance to developing regional trade corridor
 - Feasibility studies
 - Master plans
 - Preliminary information memorandum and prospectus
 - Road shows
 - Strategies for competing for capital – public and private sector
- GIRoA support and capital budget allocation
- System of property rights allocation, protection, and enforcement

THREATS

- Catastrophic failure of siphons and gates on Grand Canal and resultant restrictions of water flow to irrigation systems
- Silted reservoir and failure to develop additional hydroelectric capacity and unfulfilled demand for energy in the industrial sector



- Unmanaged distribution of hydroelectric capacities
- Amount of time needed to mobilize funding and development of key infrastructure
- Continued reliance on importation of strategic materials:
 - Diesel and other fuels
 - Fertilizers and seeds
- Failure to:
 - Capture new capital resources
 - Promote and fund small and medium enterprises to invest in additional value chain components and vertical integration opportunities
 - Achieve coordinated turnover of critical interagency resources
 - Address illicit economy:
 - Nuisance taxes
 - Narcotics, forestry, and mining activities
 - Develop new labor force and skills
 - Undertake and complete key economic development tools:
 - Feasibilities and master plans
 - Preliminary information memorandum, prospectus capital strategies, and road shows
 - Sustain commitments to economic development by GIRoA
 - Engage intermediary capabilities and develop strategies and programs for competing for development capital from public and private sectors
 - Resolve trade and transit complexities and unfair trade practices
 - Address transportation needs:
 - Roads
 - Intermodal capacities
 - New airport optimally designed and located

CONCLUSIONS

Albeit there are gaps in infrastructure development and value chain production in Nangarhar; vendors, corporations, and organizations that invest in these sectors stand to become a part of what will become one of the most powerful economic centers in Central and South Central Asia.

Jalalabad City's geographic location and enormous potential gives it a clear economic advantage over neighboring centers of commerce. Today, many of its economic opportunities are only partially being taken advantage of. As a first-stop market and global distribution center, the prices of imported goods will be vastly



cheaper in Jalalabad. Lower costs will encourage more trade, a benefit for both investors and the greater Nangarhar community.

While Nangarhar, Inc is not without a modicum of risk, the opportunities it affords potential investors for economic development are immense. As a result of the SWOT analysis, the following outlines selected Nangarhar Inc. investments for promotion and development.



PROMOTIONS AND DEVELOPMENTS

The mission objectives and management plan described above are designed to achieve the Nangarhar Inc. vision of a productive and sustainable industrial and business environment. The following promotions and investments will support this vision and develop the commercially driven public-private infrastructure required for the success of Nangarhar Inc.

These promotions and developments are major investments that will require the deployment of significant capital. This funding will be recruited from various external resources, not from the balance sheet of the government of Nangarhar itself.

Listed below are achievable investments for a developing Nangarhar Inc. including an estimated \$200 million in quick-impact projects; an additional \$300 million in short-term projects; 1.5 billion medium-term total sources and uses; and a \$1.2 billion for the long-term outlays.

The investments are presented in order of a scoring that was based primarily on significant weighting given to projects that demonstrated either a strong capacity to provide sustainable, value-added economic growth or produce an immediate tangible impact for the government in its efforts to both counter narcotics in the region and/or connect itself with the local populace. Jobs creation figured considerably into the prioritization of the promotions and developments.

The targeted funding sources for each of these uses are also listed. Multi-lateral resources (i.e. The World Bank, ADB, and bi-lateral resources), USAID, and GTZ, are targeted for promotional efforts throughout. Where private equity from international funds and private placement is possible, this too is listed.

The first project listed is for the creation of the Nangarhar Regional Development Association (NRDA). Its founding is critical for both the promotion and creation of spin-off investments, leveraging the momentum created by USG funded initiatives in 2008 to 2009.



NRDA

The Nangarhar Regional Development Association (NRDA) will be a full-time management association to oversee the daily operations of Nangarhar Inc. and work towards fulfilling the Nangarhar Inc. vision and mission. The NRDA funding requirement will be \$20 million and last for a term of 5 years with an option to renew for an additional five years.

		0-12 Months				13-36 Months								37-72 Months									
		2008		2009		2010		2011		2012		2013		2014									
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2
Project	Funding Sources																						
	Cost (\$M)																						
	Annual Cost (M)																						
NRDA	USG			6.5		3				3				3				3				3	



40 Megawatt Generator Sets

The major obstacle to economic development in Nangarhar is the lack of sustainable and affordable power. The immediate purchase and deployment (over a 6-month period) of large diesel generators to the two emerging Jalalabad industrial parks is a quick impact solution that will maximize the efficient distribution of power to business consumers. The purchase of two 20 megawatt generators would cost approximately \$35 million. Without including anticipated cost recovery or Power Purchase Agreements (PPA), annual operational and maintenance costs would cost approximately \$40 million.

Error! Objects cannot be created from editing field codes.



Darunta Dam Rehabilitation

The people of Jalalabad view the Darunta Dam as the primary public utility source for electrical power. Originally designed and constructed to produce 13 megawatts, Darunta currently outputs at approximately 50 percent efficiency. USAID has committed \$8 million to rehabilitating the Darunta Dam. Execution of an 18-month, \$8 million rehabilitation project would double the public power source for Jalalabad and demonstrate a commitment to providing public utilities as a reward for a successful Provincial counter narcotics effort.

			0-12 Months				13-36 Months								37-72 Months										
Phase																									
Fiscal Year			2008		2009		2010		2011		2012		2013		2014										
Quarter			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	
Project	Funding Sources	Annual Cost (M)																							
Darunta Dam Rehabilitation	USAID	\$8			8																				



Solar Power Wells

Distribution of Solar Power Well systems represents a quick impact program that will reinforce the success of the 2007-2008 Nangarhar Counter Narcotics effort and support poppy eradication efforts. Community well systems in Nangarhar currently rely on costly diesel powered generators for pumping. Solar energy will provide an inexpensive and renewable alternative power source for irrigation and human consumption in remote areas. A system of solar panels, well, pump, and 1,000 gallon storage tank will cost approximately \$10,000 per village and provide irrigation water for approximately 20-25 families. Implemented in five year-long phases over a five year period, the Nangarhar Solar Power Wells program will provide 250 villages and over 5,000 families with a sustainable source of irrigation water and train a cadre of repair personnel to ensure the sustainability of the program. Costing approximately \$.5 million per phase, a comprehensive counter narcotic Solar Power Wells distribution program will cost approximately \$2.5 million.

		0-12 Months				13-36 Months								37-72 Months							
Phase																					
Fiscal Year		2008		2009		2010		2011		2012		2013		2014							
Quarter		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
Project	Funding Sources	Cost (\$M)	Annual Cost (M)																		
Solar Power Wells Phase I (50 Villages)		\$0.5		0.5																	
Solar Power Wells Phase II (50 Villages)		\$0.5				0.5															
Solar Power Wells Phase III (50 Villages)		\$0.5						0.5													
Solar Power Wells Phase IV (50 Villages)		\$0.5								0.5											
Solar Power Wells Phase V (50 Villages)		\$0.5										0.5									



Solar Power

Distribution of solar power panels represents a quick impact program that will reinforce the success of the 2007-2008 Nangarhar Counter Narcotics effort and support poppy eradication efforts. Implemented in three phases over a three year period, the Nangarhar Solar Power program will provide 15,000 families with approximately 60-100 Watts of renewable energy and train a cadre of repair personnel to ensure the sustainability of the program. Costing approximately \$2.5 million per phase, a comprehensive counter narcotic solar power distribution program will cost approximately \$7.5 million.

		0-12 Months				13-36 Months								37-72 Months											
		2008		2009		2010		2011		2012		2013		2014											
Quarter		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
Project	Funding Sources	Annual Cost (\$M)		Annual Cost (M)																					
Solar Power Phase I (5,000 Families)	USG			3																					
Solar Power Phase II (5,000 Families)								3																	
Solar Power Phase III (5,000 Families)												3													



Comprehensive Watershed Management

A Comprehensive Watershed Management program is needed to ensure that the northern valley of Dara Noor and the southern valleys between Torkham and Hesarek maximize their agri-business potential. This program includes the reconstruction of road infrastructure, rehabilitation of existing irrigation systems, and establishment of sustainable power sources. In addition to maximizing agricultural production, this initiative is integral to shifting momentum away from poppy cultivation in these areas. A three-year Comprehensive Watershed Management program, to be executed over two phases, will establish a valley-by-valley system that will demonstrate the long-term effects of remaining poppy-free. These projects will be a performance-based initiative, fully dependent upon continued counter narcotics success.

- Phase I will provide a \$3.7 million quick-impact reward for counter narcotics success through road construction (\$3 million), check dam construction (\$.5 million), and planning and preparation work for a mid-range hydroelectric power dam (\$.2 million).
- Phase II will support continued counter narcotics successes through a \$4.3 million long-term watershed development project consisting of hydroelectric power dam construction (\$1.8 million), reforestation and re-vegetation (\$.5 million), erosion control projects to protect intakes and structures (\$1 million), and irrigation system improvements (\$1 million).

Comprehensive Watershed Management	Phase 1				Phase 2							
	Year 1				Year 2				Year 3			
	1	2	3	4	1	2	3	4	1	2	3	4
Quarter												
Project	Cost (\$M)											
Valley Road Construction	\$3	3										
Check Dams Construction	\$0.5	0.5										
Power Dam Planning and Preparation	\$0.2		0.2									
Power Dam Construction	\$1.8				1.8							
Reforestation/Re-vegetation	\$0.5				0.5							
Erosion Control	\$1				1							
Irrigation System Improvement	\$1				1							
TOTAL	\$8	3.7			4.3							



Grand Canal

Nangarhar’s primary irrigation system is the Grand Canal. The Grand Canal system draws 50 cubic meters of water per second from the Darunta Dam and runs for 72 kilometers from West to East through Nangarhar Province. The canal, along with the dam, was built in the 1960s with Soviet assistance and provides irrigation to 35,000 hectares of arable land. The majority of the canal is unlined which results in significant loss of water across the breadth of the irrigation system. An estimated 600,000 farmers (and their families) derive their livelihoods from the Grand Canal System. Of chief concern are deteriorating siphon and control gates that pose a significant risk of causing a total canal failure. Grand Canal renovation will be executed in three phases: (1) immediate repair of at risk siphon and control gates (\$3 million Provincial Reconstruction Team (PRT) Nangarhar project), (2) comprehensive repair of siphon and control gates (\$8 million) and (3) canal lining and extension (\$20 million) The proposed renovations and improvements will cost approximately \$31 million and greatly improve efficiency of the canal system, enable all land associated with the Grand Canal to yield at least two crops a year and will generate at least a 25% increase in overall arable land.

Phase		0-12 Months				13-36 Months				37-72 Months													
		2008		2009		2010		2011		2012		2013		2014									
Quarter		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2
Project	Funding Sources	Cost (\$M)		Annual Cost (M)																			
Grand Canal I (Siphon and Control Gate Repair)	PRT			3																			
Grand Canal II (Siphon and Control Gate Repair)						8																	
Grand Canal III (Lining and Canal Extension)												20											



District Development Planning / Governance Capacity

The Task Force Bayonet District Development Plan is a comprehensive capacity building plan which develops the districts in the N2KL (Nangarhar, Nuristan, Konar, and Laghman) region within the ANDS concept. The areas developed at the districts include: Governance, Rule of Law, Education, Health Care, Agriculture, Public Works, and Economic Development. JIM (Joint, Interagency, Multinational) teams sequentially deploy to assigned districts for 4-6 months per district until all districts are complete. It encompasses two major areas:

1. **Capacity Building.** Develop the capacity of the district government, staff, and civil servants to meet the basic needs of the people in accordance with the Afghanistan National Development System. Develop a transparent and effective district government capable of meeting the basic needs of the people with all the tools at their disposal. In coordination with Focused District Development, develop the ANSF forces in each district concurrently with the other Rule of Law components.
2. **Infrastructure Development.** In cooperation with the district and provincial governor, create the “endstate” for each district by creating a district vision map and refining a prioritized project list in accordance with the existing DDP and district sub-governor. This creates a common operating picture that can be used by the PRTs, USAID, NGOs, and the GIRoA (NABDP, CDCs, etc.) in developing the district infrastructure, to ensure that the district is developed in accordance with district priorities.

The District Development Plan will ensure sustainability of the Nangarhar Inc. plan. A fully developed district level government with effective Rule of Law capability in Nangarhar and the surrounding area will ensure that the Nangarhar Inc. projects are efficiently implemented through transparent governance. With an effective district government, the GIRoA can effectively use information operations to inform the populace of Nangarhar Inc. projects, successes, and effects. By utilizing eight teams of eight experts in the training areas that sequentially deploy to assigned districts for six months at a time, the District Development Plan will take four-six years to complete each of the districts. The initial cost to equip the teams will be less than \$1 million. The cost of employing 70-80 experts at an average of \$1500/month for full-time work will cost \$1.2 million/year, with annual operating costs of approximately \$1 million.



District Development Planning / Governance Capacity (Continued)

Phase	0-12 Months				13-36 Months								37-72 Months							
	2008		2009		2010		2011		2012		2013		2014							
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2		
Project																				
Funding Sources																				
Cost (\$M)																				
Annual Cost (M)																				
District Development Planning / Governance Capacity I			1.6		1.6															
District Development Planning / Governance Capacity II						1.6	1.6													
District Development Planning / Governance Capacity III								1.6	3.2			3.2			3.2			1.6		



1,000 Metric Ton Cold Storage Network

The lack of cold storage in the Nangarhar region is a significant obstacle to optimizing profits and completing the agri-business value chain. A 1,000 metric ton Cold Storage Network would provide basic temperature controlled post harvest preparation, logistics, storage, and transport for the region’s horticulture industry. Tied into centrally located value-added processing facilities, the network would provide cool, cold, and frozen storage as well as refrigerated transport, enabling local farmers to maximize profits. The cold storage network would consist of several strategically located small-scale multi-temperature storage facilities set-up in the agricultural areas of Nangarhar, Laghman, and Kunar provinces. These smaller facilities would also be connected via existing and planned road networks to a central refrigerated warehousing and processing facility in Jalalabad. Given its location, this refrigerated warehouse would have easy access to the intermodal transportation system, thereby increase overall produce exports. Utilization of these storage facilities would be fee-based and run by private entrepreneurs and/or growers associations. Additionally, the successful development of such a cold storage network will help to provide local farmers with a viable alternative to growing illicit crops. Construction of a 1000 metric ton cold storage network, tied to processing facilities and the intermodal transportation system, would require one year for construction and would cost approximately \$21 million.

		0-12 Months				13-36 Months								37-72 Months							
Phase																					
Fiscal Year		2008		2009		2010		2011		2012		2013		2014							
Quarter		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Project	Funding Sources																				
	Cost (\$M)																				
	Annual Cost (M)																				
1000 Metric Tons Cold Storage				21																	



Agri-Business Development

Agri-business development goes beyond the basic practices of raising and selling crops. A proposed package of initiatives will help the Province complete the agricultural value chain. These include, but are not limited to:

- Developing value-added processing facilities that convert fresh products into less perishable and more easily transportable goods. Smaller primary processors would be located throughout the rural district areas. Further processing facilities will be located in the industrial center of Jalalabad, such as the current Jalalabad Slaughter Facility.
- Develop peripheral agriculture related businesses to provide quality farm inputs and increase overall profits. These will include, but are not limited to:
 - Expanding USAID's existing Durukhshan Association (DA) - Rural Farm Store to the agricultural areas in Nangarhar, Laghman, and Kunar provinces. This program establishes a center in the rural community for farm information, technology transfer, quality seeds, and farm supplies.
 - Expanding USAID's CFNA large-scale agribusiness and other similar programs to the cities of Jalalabad, Mehtar Lam, and Asadabad. The CFNA program provides farm supplies and equipment on a much larger scale the aforementioned Durukhshan Association project. Its goal is to make affordable, value-added technologies accessible to rural farmers. More specifically, it provides agricultural equipment services on a rental basis for plowing, threshing, cleaning, husking, cultivating, intercropping, and transportation of farm products. Generally, high purchase prices prevent small farmers from buying such equipment, thereby constraining their potential output and efficiency.



Agri-Business Development (Continued)

- Expanding USAID's programs for farm inputs, such as the Timely Agricultural Market Access System (TAMAS), the Agricultural Marketing Support Program (AMPS), and other micro-enterprise programs across the greater Nangarhar agricultural basin.
- Providing low and no-interest loans, grants, and private venture capital to encourage value-added agribusinesses.
- Establishing a system of transferable and enforceable property rights in order to provide farmers with the capacity to leverage capital, secure loans, and build wealth.
- Initiating a system of enforceable property rights to increase investor confidence and promote private investment in the agricultural sector.

The initial cost of establishing transferable and enforceable property rights, to include surveying, titling, and the development of a district land office that records and stores the property deeds, will cost up to \$1 million per district and will be completed by 2013. The Rural Farm Store program should support up to 50 community-level centers at a cost of approximately \$5,000 each. The CFNA program will cost about \$50,000 per center. Both programs will be completed by 2009.



NANGARHAR INC. BUILDING A PATH TO A BRIGHT FUTURE

Phase	0-12 Months				13-36 Months								37-72 Months									
	2008		2009		2010		2011		2012		2013		2014									
Quarter	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2
Project																						
Agri-Business Development I (Land Titling/Agribusiness Promotion)			5																			
Agri-Business Development II							4															
Agri-Business Development III											18											
Funding Sources																						
Annual Cost (\$M)																						



Kama Irrigation / Hydroelectric Power

The Kama Irrigation and Hydroelectric Power (KIHP) project is the GIRoA Ministry of Energy and Water (MoEW) identified mid-term power source for Jalalabad. This project is necessary because power capacity provided by a rehabilitated Darunta Dam, the 40 Megawatt Generator Sets, and an additional 15 megawatts obtained through the Naghlu-Jalalabad Transmission Line (under construction) will fall short of even the most modest projection for power needs in Nangarhar. In addition to generating 45 Megawatts, the KIHP will expand current irrigation systems in Kama and Goshta districts – providing potential relocation site for returning refugees. The MoEW has contracted a pre-feasibility and feasibility study for the KIHP through an Iranian firm, Mahab Quds, which should be finished by mid-2010. The design and construction of the KIHP, which can be completed by 2013, will cost approximately \$147 million.

Phase	0-12 Months				13-36 Months				37-72 Months											
	2008		2009		2010		2011		2012		2013		2014							
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
Project																				
Funding Sources																				
Cost (\$M)																				
Annual Cost (M)																				
Kama Irrigation/Hydro Pre-Feasibility and Feasibility Study																				
Kama Irrigation/Hydro-Electric Final Design							7													
Kama Irrigation/Hydro-Electric Project							140													

= Project already initiated



Surkh Rod Irrigation / Hydroelectric Power

The Surkh Rod Irrigation and Hydroelectric Power Project (SIHP) concept has been identified by Provincial Reconstruction Team (PRT) Nangarhar as a mid-term power source for Jalalabad. This project is necessary because power capacity provided by a rehabilitated Darunta Dam, the 40 Megawatt Generator Sets, and an additional 15 megawatts obtained through the Naghlu-Jalalabad Transmission Line (under construction) will fall short of even the most modest projection for power needs in Nangarhar. In addition to generating approximately 85-100 Megawatts, the SIHP will expand current irrigation systems in Qarghayee (Laghman), Surkh Rod, and Chaparhar districts – providing potential relocation site for returning refugees. Additionally, the SIHP will feed into the Grand Canal, expanding its overall capacity. The SIHP will be executed in four phases: (1) Pre-Feasibility, Feasibility and Plan (\$7 million); (2) Design (\$2 million); (3) Canal Headway and Generator House Construction (\$120 million); and (4) Irrigation Canal and Surkh Rod – Jalalabad Transmission Line Construction (\$150). The SIHP would be executed over a 4.5 year timeline and cost approximately \$280 million.

Phase		0-12 Months				13-36 Months				37-72 Months									
		2008		2009		2010		2011		2012		2013		2014					
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2
Project	Funding Sources																		
	Cost (\$M)																		
	Annual Cost (M)																		
Surkh Rod IHP Pre-Feasibility, Feasibility Study and Final Plan	USG			2															
Surkh Rod IHP Phase I (Design)					7														
Surkh Rod IHP (Canal Headway, Canal and Hydro)						120													
Surkh Rod IHP Phase III (Irrigation and Surkh Rod-JBAD Distro)									150										



Kunar Dam

The Kunar Dam project is the GIRoA Ministry of Energy and Water (MoEW) identified long-term power source for the Nangarhar region. Once harnessed by a series of dams in the vicinity of Asadabad, Kunar Province, the Kunar River has an estimated capacity for 1,100 Megawatts of power generation and will more than meet the projected mid-term power needs of Jalalabad City. The potential exists for excess power to be exported to Pakistan or distributed to Kabul and the rest of Afghanistan via the Naghlu-Jalalabad Transmission Lines (currently under construction). The Kunar Dam project will provide a series of control dams for the Kunar River, reducing the effects of seasonal flooding. This control of flood damage will offset some of the costs of re-routing the Kunar Valley Road. The MoEW has contracted a pre-feasibility study for the Kunar Dam through an Indian-based firm, CES, which should be finished by 2010. A feasibility study and plan for a three dam complex will cost approximately \$7 million. Design, construction, and road re-routing for each dam will cost approximately \$260 million, with an additional \$100 million required for transmission lines and distribution networks between Jalalabad and Asadabad as well as along the Kunar Valley. Earliest completion dates for the Kunar Dam complex are mid-2013 to 2014 and the total cost for the Kunar Dam project will be approximately \$890 million.

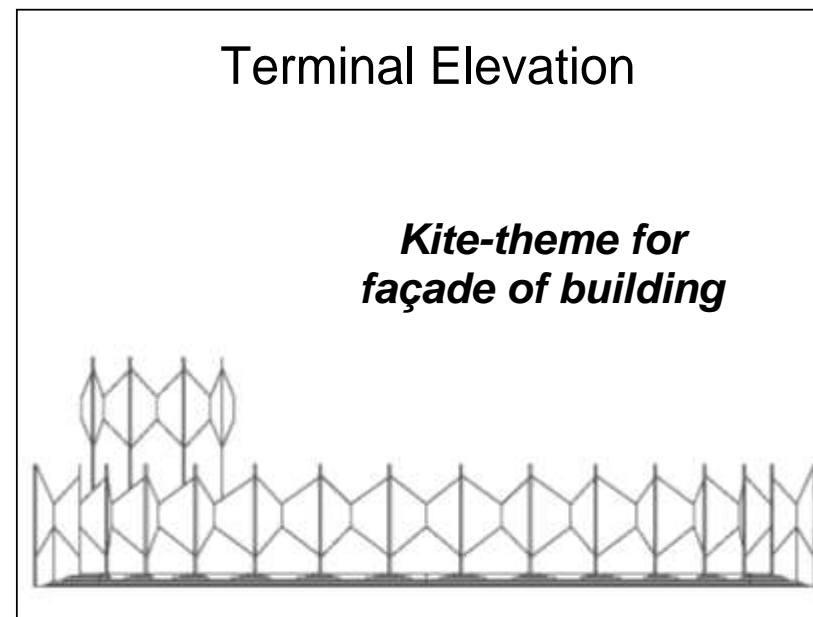
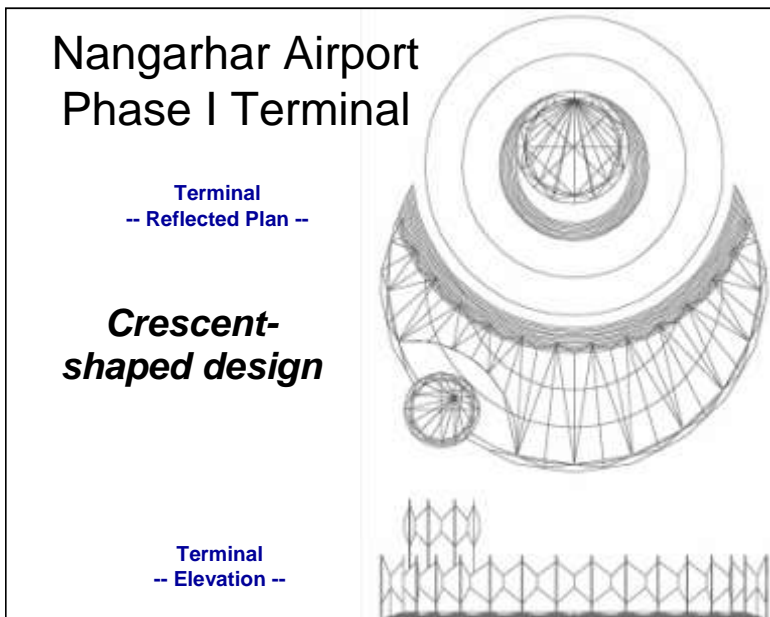
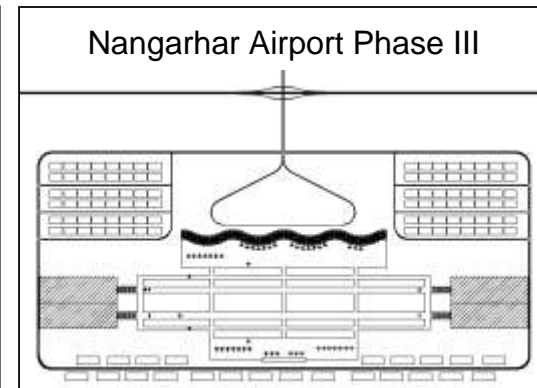
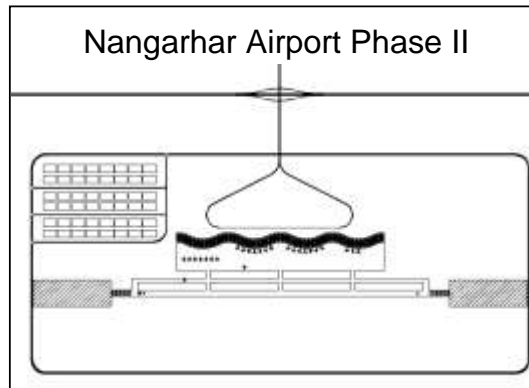
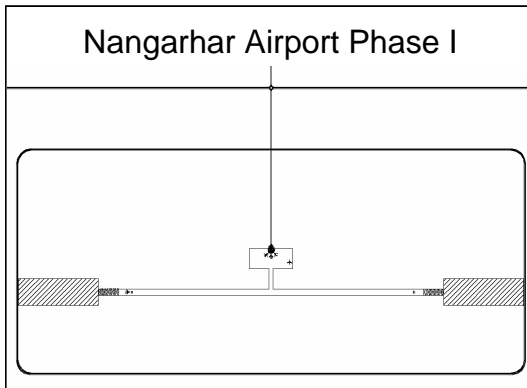


Nangarhar Regional Airport

The Nangarhar valley area (including Nangarhar, Nuristan, Kunar, Laghman), has only one airfield. Referred to as Fenty Airfield by the coalition forces, it is a major logistical facility for their efforts and is very restricted on available space. As a result, very few commercial flights are possible at the airfield. Furthermore, Fenty's runway is in very poor condition and considered as 'failed' (for large frame aircraft) due the degradation of the pavement. The Nangarhar Region is presently constrained economically due to lack of access to commercial air. The Nangarhar Regional Airport project will enable goods grown and produced in the greater Nangarhar area to reach more profitable foreign markets and will facilitate Afghanistan's ability to obtain a greater value for the goods it produces. The Nangarhar Regional Airport project will also enable international passenger service, facilitating expanded regional access to the Hajj. Additionally, the Nangarhar Regional Airport will benefit from year-round warm climate and provide an alternative to Kabul International Airport, which is often unserviceable due to winter weather. The Nangarhar Regional Airport requires a feasibility study, plan, and final design (\$2 million) and will be executed over three phases: (1) construction of a 7000' runway, basic apron and facilities (\$30 million); (2) expansion of terminal, facilities, ramp, and runway to 11,000' (\$20 million); and (3) construction of a second runway and expanded ramp and terminal (\$30 million).



Nangarhar Regional Airport (continued)





Nangarhar Southern Ring Road

The only high volume East-West route through Nangarhar is Highway 1, linking Kabul to Peshawar through Jalalabad. This route isolates the population centers and valleys of the 10 southern Nangarhar Districts of Dor Baba, Nazyan, Shinwar, Achin, Kot, Deh Bala, Pachir Agam, Khogayani, Sherzad, and Hesarak. The construction of a “Spinghar Highway” Southern Ring Road between Torkham Gate and Hesarak would link the North-South routes of the Highway 1 connector roads currently under construction and the proposed Southern District Roads project. The Southern Ring Road will support economic development through better access to markets, help tie the government to the populous by connecting the people to emergency and essential services, and will support counternarcotics and security by providing better access for the Afghan National Security Forces (ANSF). The Nangarhar Southern Ring Road will take approximately three years to construct and will cost approximately \$55 million.

Error! Objects cannot be created from editing field codes.



Four Lane Highway

By the beginning of 2009, a four-lane asphalt road will connect Jalalabad City to Peshawar, Pakistan. This road project will double the capacity of the Khyber Pass which has been the Nangarhar region’s most significant trade route for centuries. The road through Nangarhar and the Khyber Pass is the direct land route between Kabul and Islamabad and is the mid-point of the most direct land route between Tehran, Iran, and New Delhi, India. Highway 1, the primary route between Kabul and Jalalabad, runs through Qarghayee District (Laghman Province). The valley, which Highway 1 runs through holds the Kabul River and is the location of the proposed Surobi II hydroelectric dam and two proposed dam complexes. These dams will flood the valley and render the current route impassable. An alternative and more direct route from Jalalabad to Kabul is possible through Hesarak District. The Hesarak Route is the historic East-West route, but has been relatively unused since the completion of Highway 1. A four lane asphalt road from Jalalabad to Kabul on the Hesarak Route will enable plans for needed hydroelectric power dams in the Kabul River Valley to be constructed and will provide a four lane road linkage between Kabul and Jalalabad (and eventually a four lane road between Tehran and New Delhi). Construction of the Kabul-Jalalabad Road will take approximately two years and cost an estimated \$100 million.

Phase	0-12 Months												13-36 Months								37-72 Months											
	2008				2009				2010				2011				2012				2013				2014							
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
Project																																
4 Lane Highway I (Torkham - JBAD)																																
4 Lane Highway II (JBAD - Kabul)																																
Funding Sources																																
Cost (\$M)																																
Annual Cost (M)																																

 = Project already initiated



La Pur Bridge

Nangarhar’s 22 districts are divided by the Kabul and Kunar Rivers. Each river can only be crossed at one point, the Kabul River at the Jalalabad Asmar Bridge and the Kunar River at the Kama Bridge, isolating the residents and businesses in Lal Pur, Goshta, and Kama Districts. The La Pur Bridge will cross the Kabul River and connect the La Pur District Center to Muhmand Dara and decrease the travel time from La Pur to the Torkham-Jalalabad Highway from four or five hours to just 30 minutes. The La Pur Bridge will support economic development through better access to markets, help tie the government to the populous by connecting the people to emergency and essential services, and will support counternarcotics and security by providing better access to Afghan National Security Forces (ANSF). The feasibility study for the La Pur Bridge has been completed and the design process is currently underway. Work on the \$7 million bridge can begin immediately and will take approximately 18 months to complete.

Phase	0-12 Months				13-36 Months								37-72 Months							
	2008		2009		2010		2011		2012		2013		2014							
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2		
Project																				
Funding Sources																				
Cost (\$M)																				
Annual Cost (M)																				
La Pur Bridge Feasibility Study																				
La Pur Bridge Phase I (Design)																				
La Pur Bridge Phase II (Construction)			7																	

= Project already initiated



Nangarhar Northern Ring Road

The only high volume East-West route through Nangarhar is Highway 1, linking Kabul to Peshawar through Jalalabad. This route isolates the population centers and agricultural regions of the three North-East Nangarhar Districts of La Pur, Goshta, and Kama. The construction of a Northern Ring Road would link these regions to the rest of Nangarhar by connecting the Kama Bridge over the Kunar River and the proposed La Pur Bridge over the Kabul River. A Northern Ring Road will support economic development through better access to markets, help tie the government to the populous by connecting the people to emergency and essential services, and will support counternarcotics and security by providing better access to Afghan National Security Forces (ANSF). The Northern Ring Road will consist of three segments: the La Pur Road (a USAID cobblestone road project to be completed in Mid-2008), the Kama Road (a USAID programmed project), and the La Pur-Kama Road (a nine-month, \$15 million project).

Phase	0-12 Months				13-36 Months								37-72 Months							
	2008		2009		2010		2011		2012		2013		2014							
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2		
Project																				
Funding Sources																				
Cost (\$M)																				
Annual Cost (M)																				
Nangarhar Northern Ring Road Phase I (La Pur Road)																				
Nangarhar Northern Ring Road Phase II (Kama Road)																				
Nangarhar Northern Ring Road Phase III (La Pur-Kama Road)					15															

 = Project already initiated



Nangarhar Industrial Parks

There are currently two industrial parks under development in Nangarhar, one in Sheikh Misrei Township (South-West of Jalalabad) and one in Rodat District. Both industrial park sites are along road construction projects that will provide direct access to the Four Lane Road project between Torkham Gate and Jalalabad, but are in need of a sustainable and affordable power source. The proposed 40 Megawatt Generator Set project would provide this power source.

Phase	0-12 Months				13-36 Months								37-72 Months							
	2008		2009		2010		2011		2012		2013		2014							
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
Project																				
Funding Sources																				
Cost (\$M)																				
Annual Cost (M)																				
JBAD Industrial Parks																				

= Project already initiated



GIRoA Legislation, Regulations, and Policies

Successful economic development in the greater Nangarhar region is dependant on a favorable package of legislation, regulations, and policies that promote and support long-term, sustainable growth. The GIRoA must make a sustainable commitment to economic development in the region. Specifically, favorable land use and property rights laws, basic public service regulations and policies, natural resource regulations, and taxation and trade laws that support entrepreneurial ventures and international exchange are essential to fostering a business-friendly economic climate. Land use policies spell out zoning requirements and restricted land uses. Enforceable and transferable property rights policies set a basis for taxation and provide a basis for wealth accumulation, capital leverage, and provide confidence to prospective investors. Basic public service policies provide government support and oversight of essential quality of life amenities necessary to attract capital and sustain growth. Natural resource regulations establish sustainable best-management practices for renewable and non-renewable resources, as well as establish clear usage rights. Taxation laws, such as tax credits and other incentives, can be used to entice new ventures and promote Value-added industries. Favorable trade regulations open the door to world markets by eliminating “nuisance” taxes and promoting the free flow of goods and services, thereby reducing overall transaction costs. Additionally, efforts should be made to persuade national leaders to support provincial and local leaders in their efforts to resolve conflicting property claims. In order to provide the best legal and regulatory environment, NDRA will need to hire a regulation and policy specialist to promote and lobby for favorable laws that support economic development. This specialist should be fully engaged with lawmakers by the end of 2008. The cost of this program is already programmed within the NDRA’s proposed operational budget, but has been expressly identified here as a separate initiative due its overall importance.



Jalalabad Potable Water Distribution

The existing Jalalabad water storage and distribution system is insufficient. Over the last decade, the city has doubled in size to 780,000 residents and is expected to increase to over 1,000,000 by the end of this decade. The rapid growth in the city’s population has placed tremendous strains on the city’s water infrastructure: water is only supplied for two hours a day on a rotational system and the chlorination system is ineffective. The Jalalabad Potable Water Distribution project will address this issue in three phases: (1) expand storage capacity (\$3 million); (2) repair/replace 145 kilometers of existing pipes (\$25 million); and (3) expand water storage and distribution networks (\$40 million).

		0-12 Months				13-36 Months								37-72 Months									
		2008		2009		2010		2011		2012		2013		2014									
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2
Project	Funding Sources	Cost (\$M)	Annual Cost (M)																				
JBAD Potable Water Distro Phase I (Expand Storage)		\$3			3																		
JBAD Potable Water Distro Phase II (Repair/Replace 145 Km Existing Pipes)		\$25						25															
JBAD Potable Water Distro Phase III (Expand Water Storage and Distro)		\$40																40					



Jalalabad Power Distribution Upgrade

The existing Jalalabad electrical grid operates at 6 Kilovolt/Amps (KVA) and is only capable of handling 43 megawatts, falling far short of the estimated demand for Jalalabad (150 Mega Watts and growing). Over the last decade, the city has doubled in size to 780,000 residents and is expected to increase to over 1,000,000 by 2010, placing an increasing strain on an inadequate electric infrastructure. Additionally, the national electrical distribution standard is 20 KVA, which is more efficient than the existing Jalalabad distribution grid. The Jalalabad Power Distribution Upgrade project will expand the capacity of the Jalalabad grid allowing it to transmit electrical power more efficiently and meet the power demand essential for future development.

Phase		0-12 Months				13-36 Months				37-72 Months													
		2008		2009		2010		2011		2012		2013		2014									
Fiscal Year		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2
Quarter		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2
Project	Funding Sources	Cost (\$M)	Annual Cost (M)																				
Power Distro Upgrade I		\$6			6																		
Power Distro Upgrade II		\$6				6																	
Power Distro Upgrade III (tie dams to greater JBAD area)		\$20												20									



Hesarak-Azra Road

The Hesarak-Azra Road project would provide a direct link between Nangarhar and Lowgar Provinces. This road is integral to the Nangarhar Inc. concept, as it will dramatically expand the transportation network of the greater Nangarhar area. The Hesarak-Azra Road project will connect the road networks of Nangarhar to the provincial and Ring Road networks south of Kabul and create a more direct link between the population and economic centers of Peshawar, Jalalabad, Ghazni and Kandahar. The eventual expansion of the Hesarak-Azra Road to four lanes will provide a high volume by-pass to the congestion of Kabul and enhance a key link in the most direct and efficient trade corridor between Tehran, Iran, and New Delhi, India. USAID has programmed this road for construction; however, there is no current proposed start date for this 18 month, \$30 million project.

			0-12 Months				13-36 Months								37-72 Months							
Phase																						
Fiscal Year			2008		2009		2010		2011		2012		2013		2014							
Quarter			1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2		
Project	Funding Sources	Annual Cost (M)																				
	Hesarak-Azra Road	USAID \$30																				



Jalalabad Bridge II

Nangarhar’s 22 districts are divided by the Kabul River. The river can only be crossed at one point: the Jalalabad Asmar Bridge which is located in Jalalabad City. While the La Pur Bridge will add another crossing of the Kabul River, due to the projected increase in economic development and population growth in the Nangarhar Region, an additional bridge at or near Jalalabad City will be needed in the near future. The four lane Jalalabad Bridge II project will meet the projected transportation demands of the growing City of Jalalabad and cost approximately \$14.1 million.

		0-12 Months				13-36 Months								37-72 Months																	
Phase																															
Fiscal Year		2008		2009		2010		2011		2012		2013		2014																	
Quarter		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2				
Project	Funding Sources	Cost (\$M)		Annual Cost (M)																											
JBAD Bridge II Phase I (Design)																															



Sources and Uses

Phase	0-12 Months												13-36 Months								37-72 Months															
	2008				2009				2010				2011				2012				2013															
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4												
Project																																				



Funding Needs, General

Given the large-capital outlays required to achieve the proposed objectives, Nangarhar Inc. will draw upon both the public and private sector to obtain the necessary sourcing. Currently, the Afghan SME sector cannot vertically integrate their existing industries because reasonably priced capital is simply not available. While many of these infrastructure development initiatives will be supported through existing USG funding programs, ultimately private investment will be required to generate the catalyst to achieve long-term, sustainable regional economic growth and development.

In keeping with this cooperative financing initiative, an emerging market investment fund will be created to operate as a leveraged investment activity and will concentrate primarily in early stage, high growth small and medium cap opportunities in select economic sectors. Organized as a public-private partnership with a regional focus, the fund will use various investment vehicles and leverage debt and/or equity positions through participations. It seeks to provide investment and incubator assistance by leveraging both private sector expertise and stimulus to develop a thriving indigenous Afghan private enterprise sector. It will employ a strategy of prudent investments, seeking to optimize returns by focusing on a wide margin of industries and working directly with private sector experts, corporations, and entrepreneurs to develop greater economic stimulus and an increased capacity for goods and services that are competitive within regional and global markets.

Additionally, the NRDA, working in concert with the City of Jalalabad, will strive to establish a framework for municipal bonds. The creation of these securities is aimed at providing a mechanism for the local government to raise the necessary capital to address small and medium scale infrastructure improvements, intended to build and sustain the basic services required to support economic growth and investment. As well, a system of levies will be instituted to raise funds specifically earmarked to facilitate the maintenance and upkeep of these basic services, thereby ensuring their continued and unimpeded access. Together, these initiatives will serve as the foundation for developing an independent Afghan capacity to entice further investment in the region.

Nevertheless, kick starting such a bold regional economic development program will initially require significant USG financial backing. Generating such considerable resources will require agencies to combine existing programs with multiple new capital initiatives, each of which will be required to adhere to the basic tenants and framework outlined within this business plan.