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Lashkar Gah Bost Airport and Agriculture Center
Helmand Province, Afghanistan

Environmental Assessment

October 2008



CHEMONICS

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I Purpose and Justification of the Proposed Action

1.1 Introduction

Projects identified for funding by USAID are subject to the Environmental Procedures, Title 22 of the U.S. Code of Federal regulations, Part 216 (22 CFR 216), which reflect the requirements of Executive Order 12114, issued January 4, 1979, entitled Environmental Effects Abroad of Major Federal Actions, and the purposes of the National Environmental Policy Act of 1970, as amended (42 U.S.C. 4371 et. seq.).

The initial step of the EA process is preparation of an EA Scoping Statement. The objective of the Scoping Statement is to summarize the results of a scoping process that has been conducted to identify significant environmental issues related specifically to the construction of Lashkar Gah Bost Airport Agriculture Center (LBAAC). The identified significant environmental issues will be analyzed and studied in greater detail in the EA for the LBAAC construction.

Additionally, NEPA requires consideration of a "no action" alternative. This will allow a comparison of the economic and environmental consequences of the proposed and alternative actions versus current conditions. The alternative analysis was included in the Scoping Statement submitted and approved by the USAID mission in Afghanistan on August 4, 2008, but for completeness has been reproduced in this document.

This project will comply with Afghanistan's Environment Law, which was promulgated in 2007 and published in issue no. 912 of the Official Gazette on 25 January 2007. Further to Article 22 of this Law, Afghanistan's National Environmental Protection Agency (NEPA), as reported by the United Nations Environment Programme (UNEP), has completed the Environmental Impact Assessment (EIA) Policy, the EIA Regulations, and the EIA Administrative Guidelines, which will be published in the Official Gazette shortly. Until the regulations governing EIA procedures are in force, the project will strictly follow established best practices and the environmental management regulations governing USAID activities.

Additionally, NEPA, with UNEP support, has prepared a pollution control policy paper, has started work on the development of a waste management policy and environmental quality standards for air, water and pollution control and has conducted a survey to identify the types of chemicals currently used by the industry in Afghanistan and the main chemical pollutants likely to have a significant impact on human health. It has also concluded a report on the determination of waste streams in Afghanistan.

1.2 Purpose of the Environmental Assessment

This Environmental Assessment was prepared to respond to the environmental issues of significance identified in the Scoping Statement in compliance with US regulation 22 CFR 216. The preparation of the Scoping Statement involved the review of all possible environmental impacts and the elimination of those deemed not relevant to the proposed action or minimally affected. Additionally, extensive consultations with the key stakeholders, both at government as well as civil society levels, were conducted (see Annex 6.2). This EA focuses on the five issues identified that required further review: seismic considerations; visual quality; land use control; energy and conservation; and re-use and conservation

1.3 Proposed Action

The Lashkar Gah Bost Airport and Agriculture Center (LBAAC) project is comprised of two components: an Agriculture Center (AC) and an Airport Upgrade (AU) commingled under the USAID funded ADP/S Intensification/Extension contract, dated November 30 2007, into one overall LBAAC project development. To develop this project Chemonics has worked closely and consulted with local and national stakeholders and continues to do so with the Islamic Republic of Afghanistan (IRoA), particularly the Ministries of Agriculture, Irrigation and Livestock (MAIL) and Transport and Civil Aviation (MoTCA) and the Afghan Investment Support Agency (AISA) to implement and operate the facility.

The Agriculture Center (AC) will be located within the secure perimeter of the Lashkar Gah Bost Airport (BST). It will provide a planned, designated commercial area development able to convey secure land tenures and be the major hub around which other major ADP/S Agribusiness initiatives and future developments will turn. In particular, the processing operations that it will contain will drive ADP/S and future contract farming developments and lead to the creation and development of 25, primarily Afghan owned, sustainable businesses. Over the last months significant progress has been made in the development of the AC.

The site has been selected, cleared and leveled, ownership of the land has been established for MAIL, and a plan has been prepared and received the support of MAIL and MoTCA for the overall site development and management of the AC.

Integral to the development of the AC will be a long lease, operating contract awarded by MAIL to a private, for-profit Management Company (MC). The contract will be awarded on the basis of an open and transparent bidding process undertaken by USAID and ADP/S on MAIL's behalf.

Bids will be evaluated by a Steering Committee comprised of MAIL representatives and other national and local stakeholders including the Governor's Office, AISA and it's sub-

department; the Industrial Park Development Authority (IPDA). The Steering Committee will also be responsible for monitoring the MC's performance under contract.

The Airport Upgrade (AU) will bring the airport up to a level whereby it can fully function as a working regional airport to support broader government development goals as well as better compliment future AC activities.

Exhibit 2. Main features of the Agriculture Center

TOTAL AREA	33ha
Small spaces available for rent (11):	13,508m ²
Medium/large spaces available for rent/lease (4):	40,324m ²
Medium spaces available for rent (4):	16,020m ²
Large spaces available for long-term lease (5):	71,127m ²
Service space (1):	1,996m ²
Truck parking:	9,930m ²
Car parking:	2,740m ²
Communal space:	14,000m ²
Weighbridge:	1
Waste water pool	1
Site road network:	3.4Km
Pipeline length:	1.2Km
Rainwater drainage:	0.7Km
Drainage pipes:	2.7Km

MoTCA stated its requirement that the project meet accepted planning and aviation standards. USAID determined that the need for a Limited Airport Master Plan (LAMP) was fundamental and issued a Technical Directive to that effect to Chemonics, dated February 14th 2008, to undertake the process on MoTCA's behalf. The LAMP was completed and approved by MoTCA on June 19 2008.

1.4 Analysis of Alternatives

The following three alternatives were considered and presented in the Scoping Statement:

- **Alternative 1: No action.** Under the no action alternative, the land would be retained in its current state and site conditions would remain unchanged. While preserving the site's existing conditions, this alternative eliminates any opportunity for economic development. If this site were left unused, developing an AC would require evaluation of other sites, including currently undeveloped or green field sites
- **Alternative 2: As needed basis.** Under this alternative, the IROA would retain the land until such time as industries desiring to locate on the site have been identified by a local Steering Committee or through self-identification. While allowing more direct control over the specific site tenants, this alternative could result in piecemeal site preparation inconsistent with a coherent strategy. The environmental effects of this alternative would be similar to those associated

with the preferred alternative. However, overall quality might suffer because the site would be developed on a piecemeal basis. This alternative would require greater resources for monitoring and administrative costs of transferring individual tracts of land instead of handling one large transfer. This alternative also would restrict the opportunity for self-direction by the local community.

- **Alternative 3: Prepare the site as a whole.** This is the preferred alternative. It provides the most economic benefits to the area and requires fewer resources. Appropriate mitigation measures would minimize environmental impacts. This alternative would provide the best overall balance between site preparation and environmental protection. By restricting development by way of governing agreements and protective covenants and restrictions, environmental quality would be maintained. Standards developed and implemented by ADP/S / MAIL / MoTCA / AISA would assure a properly planned, quality AC. This alternative would yield the best economic benefits and a better potential for community-based and directed development. This alternative provides the community with more autonomy, with restrictions limited to guidelines and commitments developed through the review process. This alternative requires less staff and budgetary resources for implementation and ensures a more even partnership.

1.5 Environmental Management in Afghanistan

1.5.1 NEPA's State of the Environment Report

Information about the state of the environment in Afghanistan is scarce and what is available is not up to date. Major efforts have been made to try to rectify this situation, but insecurity and limited available resources are such that this situation is unlikely to change in the near future. The United Nations Environment Program (UNEP) and the National Environmental Protection Agency of the Islamic Republic of Afghanistan (NEPA) in their 2008 state of the environment report summarizes: *“Given the lack of information it is difficult to obtain a clear picture of the current state of the environment in Afghanistan. The lack of systematic observation of rivers, forests, wildlife, lands, climate and atmospheric conditions in the past prevents comparison of present conditions to the situation 5, 10 or even 30 years ago. There is much uncertainty about the sources of environmental pollution, its extent and transfer as well as linkages to public health and diseases. Little is known about the scope of erosion and contamination of land, as well as their economic consequences. Without sufficient data it is difficult to predict major floods, droughts and other natural hazards. Assessments of the quantity and quality of surface and ground water are varied and generally out of date. The need for data collection and exchange is consequently a major priority for effective environmental management.”*

In spite of these challenging conditions there have been some notable advances in the last few years. The institutional and policy framework for the establishment of sound environmental management is gradually being put in place with the creation of NEPA by

the Environmental Act promulgated by Presidential Decree on December 18, 2005. Under the newly enacted Environmental Law of 2007¹ NEPA is the principal environmental policy and regulatory agency, responsible for key functions aimed at protecting the environment and natural resources in coordination with other sectoral ministries such as MAIL, the Ministry of Energy and Water (MoEW), and the Afghanistan National Disaster Management Authority (ANDMA). A signal of progress in this area, NEPA, with the support from UNEP has identified a set priority sectors, issues and actions where it will focus its efforts to protect Afghanistan's environment and natural resources (see Exhibit 3).

Exhibit 3. Issues and future actions identified by NEPA and UNEP for priority environmental sectors (Source: Afghanistan Environment 2008)²

SECTORS	KEY ISSUES	WAY FORWARD
Water resources	<ul style="list-style-type: none"> • Water use in agriculture. • Sustainable water management, impacts on irrigation and ground water sources. • Limited access to safe drinking water and sanitation • Melting glaciers, drying lakes, and other impacts of climate change. 	<ul style="list-style-type: none"> • Develop a long-term strategy (in line with IWRM) to manage water resources and reduce vulnerability to drought and other natural disasters. This should also include a plan for securing safe drinking water for the people of Afghanistan. Such planning will be crucial to rebuilding rural communities and improving public health and the economy. • Integrate pollution control and waste management into national policies addressing the impact of pollution on water resources, and develop corresponding regulatory and other mitigation measures. • Develop national water quality standards and set up a network for systematic observation. • Assess the impacts of climate change on Afghanistan's water and other natural resources, and develop adaptation plans.
Rangelands, forests and biodiversity	<ul style="list-style-type: none"> • Overgrazing. • Conversion of land. • Deforestation. • Unsustainable logging. • Land degradation. • Uncontrolled hunting and poaching. • Impacts of natural disasters. • Poor spatial planning 	<ul style="list-style-type: none"> • Develop a scientific inventory of flora and fauna. • Develop the National Protected Areas System envisioned in the Protected Areas Regulations. • Develop adequate legal instruments such as laws, regulations, policies and procedures to regulate and address the problems of biodiversity conservation. • Pilot and implement community-based natural resource management approaches to rangelands and forests. • Reduce illegal logging, especially large-scale and trans-boundary activities, by enforcing the timber moratorium issued by the central Government. • Conduct reforestation and tree planting activities, especially in areas where communities are using forest, range and other biological resources sustainably.
Land use,	<ul style="list-style-type: none"> • Desertification. 	<ul style="list-style-type: none"> • Prepare national action plan and strategy to address the

¹ Official Gazette No. 912. 25 January 2007.

² Afghanistan Environment 2008. Executive Summary. National Environmental Protection Agency of the Islamic Republic of Afghanistan and the United Nations Environment Programme.

SECTORS	KEY ISSUES	WAY FORWARD
agriculture and soils	<ul style="list-style-type: none"> • Use of agrochemicals. • Overgrazing. • Population growth. • Rising pressure on land resources. • Landmines and constrained access to the lands 	<p>problem of desertification and land degradation, and mainstreaming of sustainable land management.</p> <ul style="list-style-type: none"> • Establish an information system for quantitative assessment, mapping and monitoring the extent of land degradation and its effect on the ecosystem. • Proceed with the rehabilitation of land, as well as awareness-raising and capacity-building.
Urban environment	<ul style="list-style-type: none"> • Rapid urban growth. • Waste management. • Underdeveloped service infrastructure and reconstruction opportunities. • Access to sanitation and safe drinking water. • Air pollution and health concerns 	<ul style="list-style-type: none"> • Increase the use of cleaner fuels. • Strengthen methods and tools for integrated control of air pollution. • Promote strategic urban planning with the focus on energy, housing, waste management, sanitation, and greenery. • Establish environmental information and monitoring systems for the major urban areas.
Natural disasters and climate change	<ul style="list-style-type: none"> • Extreme weather events. • Climate change. • Poverty and vulnerability. • Manmade risks. • Adaptation 	<ul style="list-style-type: none"> • Strengthen public awareness to reduce vulnerability. • Stimulate inter-disciplinary public-private partnership on risk reduction. • Initiate capacity-building programs to address local and national needs on integrated disaster risk management: risk assessment, early warning, training and public awareness, emergency response management, recovery resources, including the strengthening of community-based organizations. • Implement climate change adaptation projects.
Energy and mineral resources	<ul style="list-style-type: none"> • Energy potential. • The prospects for the use of renewable energies. • Energy balance and its environmental implications, • Greenhouse gas emissions. • Minerals deposits and sound environmental mining practices 	<ul style="list-style-type: none"> • Analyze the environmental costs of meeting current and future demand for energy and mineral resources. • Initiate demonstration and research projects on small renewable energies, bio-fuels, and scope for switching to gas. • Explore the country's hydropower potential to improve access to electricity and the security of energy supply. • Expand reforestation and afforestation projects aimed at the efficient and rational use of biomass as an energy source. • Promote the incorporation of best international practices of environmental responsibility into extractive industries' operations, and the development of corresponding legislation. • Develop expertise for NEPA staff in assessing environmental impacts of mining operations, licensing, enforcing environmental safety and remediation.

This extensive list of issues and actions illustrates on the one hand the commitment of the IROA and key donors to move forward a comprehensive environmental management agenda. But, on the other, it shows the paucity of information about

fundamental environmental matters and the nascent stages of the environmental management framework under which all development activities are being conducted.

1.5.2 Legal Framework for Environmental Management

The purposes of Afghanistan's Environmental Law of 2007 are to: (1) improve livelihoods and protect the health of humans, fauna and flora; (2) maintain ecological functions and evolutionary processes; (3) secure the needs and interests of present and future generations; (4) conserve natural and cultural heritage; and (5) facilitate the reconstruction and sustainable development of the national economy.

In its fifth article the Environmental Law presents the fundamental principles that will be applied to achieve these purposes:

1. *Nature as a whole warrants value and respect. The integrity of the Earth's ecological systems shall be maintained and restored. All forms of life are unique and are to be safeguarded independent of their value to humanity.*
2. *All elements of the environment must be regulated, taking into account the principles of international law, the dictates of the public conscience and the fundamental values of humanity.*
3. *Peace, sustainable development, environmental protection, conservation, and respect for human rights and fundamental freedoms are interdependent.*
4. *The present generation should ensure that the health, diversity and productivity of the environment are maintained for the benefit of future generations.*
5. *The right to development must be fulfilled in a sustainable manner so as to meet developmental and environmental needs of present and future generations.*
6. *Adverse effects should be prevented and minimized through long-term integrated cross-sectoral planning and the coordination of government and non-government bodies.*
7. *Taking preventative measures to maintain and protect the environment is better than endeavoring to remedy or compensate for such harm.*
8. *Where irreversible adverse effects are likely to occur, a lack of scientific certainty shall not prevent or impair the implementation of precautionary measures to protect the environment.*
9. *Persons who cause adverse effects, especially pollution, must bear the social and environmental costs of avoiding, mitigating and/ or remedying those adverse effects.*

10. Local communities should be involved in decision-making processes regarding sustainable natural resource management.

11. Where there are environmental issues of a regional or transboundary nature, the Islamic Republic of Afghanistan shall cooperate with other States to resolve these issues.

Prior to 2005, no formal EIA process existed in Afghanistan. As a result many projects, such as deep-well drilling or large-scale irrigation, were conducted without considering the environmental consequences of such activities. Additionally, there was no, and in some circumstances, still isn't any consistent application of EIA among donor agencies and international organizations currently working in the country.

The Environmental Act of 2005 started to define environmental management guidelines and the new Environmental Law of 2007, in its third chapter (Management of Activities that Affect the Environment), describes the process and instances for the submission and approval of environmental impact assessments for projects that are likely to have a significantly adverse effect on the environment (Art. 13). It includes provisions for the approval of a preliminary assessment (Art. 14); development of a mitigation plan (Art. 15); a description of the approval process (Art. 16); provisions for appeal (Art. 17) and public consultation (Art. 19); and the establishment of an Environmental Impact Assessment Board of Experts (Art. 20) to provide guidance and expert advice. In addition, its article 22, the Environmental Law states that specific regulations will be prepared by NEPA for the implementation of this law.

Under the new Environmental Law and the resulting EIA regulations, any project, plan, policy or activity (no screening list has been defined as yet) shall submit to NEPA a brief containing enough information to enable NEPA to determine its potentially adverse effects and positive impacts. After reviewing the brief and acting on the advice of the EIA Board of Experts (as yet to be established) NEPA may authorize the project, plan, policy or activity, with or without condition, provided it's potential impact on the environment is unlikely to be significant. If NEPA considers that the environmental impacts will be significant, it may require the proponent to submit an environmental impact statement or a comprehensive mitigation plan.

No specific periods for the review and approval of the preliminary assessment, the environmental impact statement or the comprehensive mitigation plan has been established in the Environmental Law. These procedural matters will likely be defined in the EIA regulations.

The Environmental Law also provides for public participation, stipulating that NEPA cannot approve a project, plan, policy or activity that is likely to have significant environmental impacts until the proponent has provided enough evidence that the documents have been made available for public review. The specifics of this procedure are expected in the regulations governing the EIA process.

Exhibit 4. Map of Afghanistan. (Source: Afghanistan Environment 2008)



At the time of preparation of this environmental assessment, the regulations mandated under Article 22 of the Environmental Law, which according to UNEP reports had been completed, had not yet been published in the Official Gazette; a requirement for them to come into force. For that reason, the environmental guidelines used were those governing USAID with respect to the impact of activities on the environment (Title 22 of the U.S. Code of Federal Regulations, Part 216 - 22 CFR 216). Future reports prepared under the ADP/S program will however adhere to both 22 CFR 216 regulations and the EIA procedures established under the new Environmental Law and its regulations.

1.6 Project Area

Helmand Province is located in southwest Afghanistan covering an area of 61,829 km² and representing about 9% of the country. It borders Pakistan to the south and is surrounded, clockwise starting on the west, by the provinces of Nimroz, Farah, Ghor, Uruzgan, and Kandahar in the East. The Helmand River, the largest river in the province runs from Uruzgan in the northeast to Nimroz in the southwest, dividing Helmand in two halves. The northern third of the province is mountainous or semi-mountainous subject to heavy snows in winter. The other two thirds are formed of relatively flat desert plateaus with isolated rocky outcrops.

Lashkar Gah, the provincial capital, is located in the lowland desert on the Helmand River at an elevation of about 775m. The city itself has about 50,500 inhabitants, and the surrounding area, which is mostly agricultural, concentrates 11.12% of the total population of Helmand Province, which stands at 756,400³.

The site of the proposed LBAAC is to the south of Lashkar Gah within the secure perimeter of the Lashkar Gah Bost Airfield (BST). This site has been an airport for at least 40 years. Since its initial construction it has seen use of varying intensity. Currently BST receives 6 to 8⁴ flights a week, mostly from small turboprop passenger aircraft and occasional large transport planes. Use is limited by the fact that the runway is gravel. The airport saw more intensive use during the Soviet occupation when it was a refueling depot as evidenced by the large underground tanks that were found and removed from the airport following mine and unexploded ordinance clearing activities carried out on October 2007 following protocols established by the United Nations Mine Action Standards (UNMAS).

2 Issues Addressed in the Environmental Assessment

The discussion of these environmental impacts is limited to those associated directly with the proposed actions described in section 1 of this document. As mentioned elsewhere, the environmental impacts of each of the individual AC installations will be subject to separate environmental guidelines and regulations as outlined in the covenants and restrictions that will be part of the contracts to manage the AC, and purchase and lease lots within the AC. It is not possible to be more specific at this time because it is not known what type of industries, other than the broad categories listed in section 3, will lease space in the AC.

As per the Scoping Statement approved by USAID on August 4, 2008, the issues requiring further environmental analysis and mitigation measures are:

- Seismic
- Visual quality
- Land use control
- Energy and conservation
- Re- use and conservation

2.1 Seismic Considerations

³ CSO Population Statistics 2003-2004 – 388 Districts, AIMS-Afghanistan Information Management Services.

⁴ LAMP, June 2008.

Earthquakes represent a serious threat to the people, the infrastructure and the economy of Afghanistan. For that reason, with USAID support, the Seismic Hazard Mapping group of the United States Geological Survey (USGS) has prepared a series of maps of the expected frequency and strength of earthquake nationwide⁵.

Afghanistan is located in a geologically active part of the world where the northward-moving Indian plate is colliding with southern part of the Eurasian plate at a rate of about 1.7 inches per year (43 mm/yr) Exhibit 5. This collision has created the world's highest mountains and is responsible for large, often devastating earthquakes. Moderate to strong earthquakes strike Afghanistan each year. Every few years, a powerful earthquake causes significant damage or fatalities. As Afghanistan rebuilds, following decades of war and strife, new constructions and developments need to be designed to withstand the effects strong earthquakes.

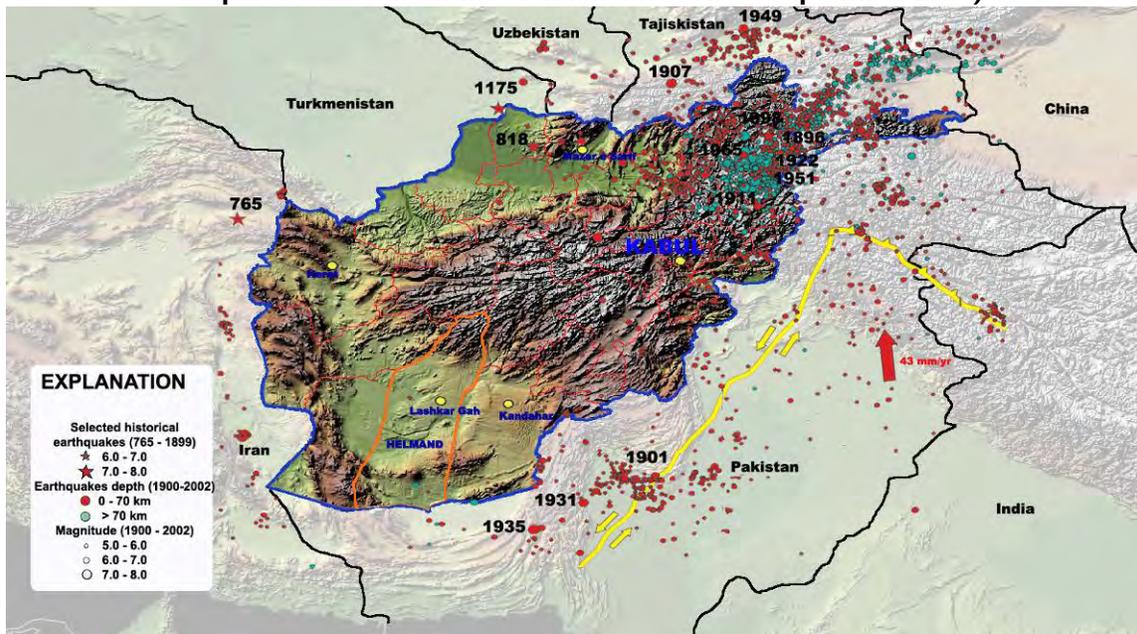
Earthquakes in Afghanistan are most frequent in and near the northeastern part of the country where the effects of the plate collision between India and Asia are most pronounced. In this region, tectonic forces have created the mountains of the Hindu Kush and Pamirs. Historical accounts show that the damaging earthquakes have also occurred elsewhere, even in the seismically less active parts of the country; the map of earthquakes in Afghanistan (Exhibit 5) shows that the frequency and size of earthquakes varies across the country.

To understand the risk of earthquake throughout the country, the USGS used data of the locations, intensity and frequencies of earthquakes with the location and estimated rates of geological activity at the larger faults to forecast the probability of earthquakes. The analysis shows that the probability of a strong earthquake in the next 50 years is higher in the northeast of Afghanistan and along the Chaman fault system (Exhibit 6).

The seismic hazard map produced by the USGS provides a general picture of the risk of earthquakes in different parts of Afghanistan and is an invaluable tool for government officials, engineers and companies rebuilding the country's infrastructure. This information can be used to create informed decisions on design, construction standards and the location of critical infrastructure projects, such as power stations, dams, pipelines and hospitals.

⁵ Preliminary Earthquake Hazard Map of Afghanistan, USGS & USAID, May 2007

Exhibit 5. Boundary of the Indian and Eurasian tectonic plates in southern Asia (yellow line) and locations of historical earthquakes. Dates of selected significant earthquakes are shown in bold. Red arrows shows the general direction and rate of the Indian plate movement. Yellow arrows show left-lateral sense of motion on the western plate margin. The collision of the Indian and Eurasian is the force causing earthquakes in eastern Afghanistan (Source: Data – Assessing the hazard contributes to reconstruction, USGS & USAID, April 2007. / Graphic – ADPS Intensification Infrastructure – September 2008)



2.1.1 Environmental Consequences

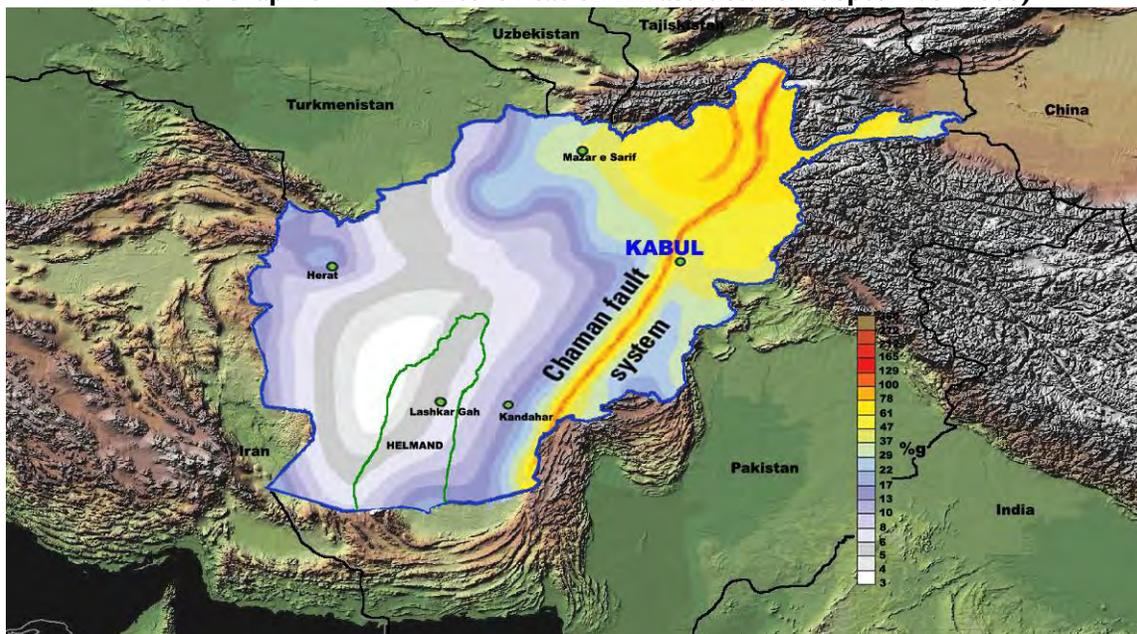
As illustrated in the earthquake hazard map below (Exhibit 6), Helmand Province is located in an area of relatively low risk of serious earthquakes. For that reason, the environmental impact of an earthquake would be limited to damage to the infrastructure—the BST airfield, installations and the AC facilities - in the form of leakage of wastewater, sewage, toxic chemicals, fuel, or other hazardous materials, or injuries to the building's occupants.

Given the relatively small area constructed and, in relation to the full size of the facility, that could be affected by a serious seismic episode the risk of a broader environmental accident is highly unlikely for the following reasons:

- Fuel spillage would be limited to the immediate area used to store the fuel to operate the BST generator. There will not be any large fuel tanks at LBAAC because BST will not have aircraft refueling capability.
- Wastewater and sewage spillage from burst pipes would be limited to the LBAAC Terminal facilities.

- If the earthquake were severe enough to rip open the steel treatment tanks, the impacts would also be localized to the fields immediately adjacent to the location of the tanks. The risk that any wastewater or sewage would reach the Helmand River (2km away) or the Arghandab River (1km away), is virtually non-existent.
- The most likely risk is that of damage to the terminal building and personal injury.

Exhibit 6. Generalized seismic hazard map of Afghanistan showing the level of shaking
(Source: Data – Assessing the hazard contributes to reconstruction, USGS & USAID, April 2007. / Graphic – ADPS Intensification Infrastructure – September 2008)



2.1.2 Mitigation Measures

The risk of earthquakes in the Lashkar Gah region is low and the probability of having one of such magnitude as to damage the LBAAC infrastructure is even lower. Because the possibility cannot be ruled out, the environmental consequences resulting from any of the circumstances described above are small, localized, and be rapidly contained with limited equipment and expertise. To minimize further such risk, the design specification of every aspect of the work at the LBAAC will follow International Building Codes and other structural-design standards. No additional mitigation measures for environmental protection are required, other than the strict adherence to the construction best management practices and the readiness of the LBAAC management to respond in the event of earthquake induced infrastructure damage.

2.2 Visual Quality

While visual quality can be important, the proposed site is of limited scenic attractiveness, with little vegetation present. However, designs will minimize discord to viewers of the property from surrounding locations and contribute to the attractiveness of the LBAAC and further enhance its long-term economic value to tenants and the local community.

2.2.1 Environmental Consequences

Under the preferred alternative, visual quality will be affected in two phases, each with its own respective mitigation measures. During the initial phase of construction of the basic infrastructure – the wastewater and sewage treatment system, street construction, etc. - the visual impact will result from the construction process itself. This will be relatively brief. To reduce excessive traffic, an access route avoiding neighborhoods to the north and northeast will be used.

During the second phase, parcels will be sold or leased on an as-needed basis, which would gradually change the existing landscape to a developed area. Visual coherence would be reduced and scenic attractiveness would be affected. Impacts would depend on the visual sensitivity of site planning and individual architectural designs. Activities, equipment, and materials used during construction would add temporary visual discord until project cleanup was complete for each project. This process could occur over many years as the individual sites are developed.

2.2.2 Mitigation Measures

Earthworks would be required as each parcel is developed. Careful design will substantially reduce impacts. Vegetative buffers around individual sites would minimize visual impacts. Extensive plantings are proposed.

Broadly horizontal buildings, with rooftops below the skyline and with a subtle scheme of natural colors, would minimize contrast with the environment and be visually compatible. Dark rooftops would provide much less contrast than light ones. Buildings with rooftops could cause adverse, contrasting and visual discord and would need special attention as to their color and structure to reduce the effect.

To minimize visual impacts, each project would need to adhere to the following development standards, which will be included in the Agreements to Lease and Covenants and Restrictions.

- The exteriors of buildings to be located in the park shall incorporate structural arrangements and color schemes that will limit visual discord with the natural background.

- Nighttime lighting for the AC and buildings located within it shall incorporate features for limiting effects on background sky darkness.
- All buildings shall be visually screened from adjacent parcels and off-site property at the front, rear, and sides, utilizing methods such as architectural fencing, berms, and plantings, individually or in combination.

2.3 Land Use Control

Land use categories in the vicinity of the proposed site can be characterized as follows:

- **Urban.** Lashkar Gah urban area located at the north and northeast of the project area.
- **Agricultural Land.** The land to the west, south and east is cultivated with corn and vegetables.

As indicated elsewhere in this document, there is no pending issue with land titling or ownership of the proposed site and no policies or controls have been identified which will impact upon the construction works programmed for the LBAAC.

2.3.1 Environmental Consequences

Potential land use impacts vary between the construction and operational phases of the proposed action as follows:

- **Potential project-affected persons (PAP).** The assessment indicates that there is likely to be little if any impact to residences near the LBAAC as a result of the proposed action and, as such, the project does not require the acquisition or use of additional land, dislocation or other impacts of current land uses (e.g., significant interruptions of water availability) possibly creating PAPs (persons whose livelihood is directly or indirectly affected by a project).
- **Potential impacts due to construction activities.** Potential impacts to land uses during the construction stage include:
 - **Creation of construction camps.** Camps for the construction workers represent a temporary land use change and could result in unauthorized activities, such as use of fuel-wood even when alternative fuel is made available by the sub-contractor; poaching of edible animals and birds of the locality in spite of prohibitions; poor sanitation arrangement and improper methods used for disposal of solid wastes and effluent; and transmission of communicable diseases to the local people by the construction.

- **Traffic disruptions.** It is possible that as a result of construction activities, the area surrounding the proposed area will suffer heavy traffic use with potential disruption to local activities.
- **Operational phase.** Once the proposed actions are completed, no change of neighboring land use is expected. The viability and productivity of existing agricultural uses will be enhanced, through the provision of additional opportunity for the processing and sale of the agricultural production of the areas surrounding the proposed site.
- **Positive environmental impacts.** As indicated above, the environmental consequences of the proposed actions under the preferred alternative will be minimal and limited to the construction phase. On the contrary, the planned construction will have a positive environmental impact because the paving of access and internal roads will reduce dust and the landscaping in the common areas will provide a more pleasant environment for workers and visitors.
- A major design feature references the iconic, and historically and culturally important, Alexander's Arch at nearby Qali Bost. Other positive impacts will be achieved by using native plants in the landscaping, which may additionally create favorable conditions for native desert fauna that is currently conspicuously absent from the project site.

2.3.2 Mitigation Measures

The sub-contractor will be required to coordinate all construction activities with neighboring land uses. Contracts for the proposed action will also require sub-contractors to attend to the health and safety of their workers, maintain and cleanup campsites, control use of firewood, prevent hunting, and respect the rights of local landowners.

2.4 Energy and Conservation

Upon review of the energy usage considerations, limited impacts are expected due to the small energy footprint of projected installations. The BST runway will not be illuminated. It will support only daylight Visual Flight Rules (VFR) operations. At the conclusion of the proposed actions under the preferred alternative, the AC will have only a few administrative buildings that will be powered by generators as well. It is expected that the energy for the entire LBAAC complex will eventually be supplied by the Kajaki Dam hydroelectric facility currently under construction and expected to become fully operational in two years. Until then, the AC tenants will have to make their own arrangements for the provision of energy.

During the construction phase, the primary source of energy use will be from vehicles and heavy equipment, which are required to be in good working order, and generators providing energy for signals, lights and office equipment.

2.4.1 Environmental Consequences

The immediate environmental consequences of the current energy provision plan for the LBAAC are minimal. However, considering that fossil fuel consumption is the major contributor to climate change, a transition from a distributed generation approach to the hydroelectric-sourced grid will be a priority. This will become more important as AC tenants move in and set up their business operations. The success of this transition, however, will depend on factors beyond the control of this project or the subsequent administration of the LBAAC.

2.4.2 Mitigation Measures

All energy requirements will be met by importing fuel. Machinery and equipment will be fitted with pollution control devices, which will be checked at regular intervals to ensure that they are in working order. Best practice pollution control technologies will be required.

2.5 Re-Use and Conservation

During the construction phase, subcontractors will be required to recycle or re-use their supplies and materials (e.g., plastic, glass, metal and paper containers), or dispose of them properly.

Once the Agriculture Center starts operating, the tenants will be bound by agreements, covenants and restrictions, to put in place and adhere to recycling practices. The extent and nature of these recycling programs will largely depend on the type of businesses established within the AC.

2.5.1 Environmental Consequences

During the construction phase of the project, the environmental consequences will be limited; although, the improper disposal of oil and other chemicals can pose a serious environmental, albeit localized, risk.

2.5.2 Mitigation Measures

The sub-contractor will use different containers for plastic, glass, metal and paper in order to dispose their waste properly and be required to make arrangements for the collection of site trash.

2.6 Other Impact Statements Required by 22 CFR 216

2.6.1 Unavoidable Adverse Impacts

Less-than-significant adverse impacts may occur during construction activities such as temporary impacts to air quality and noise levels due to rehabilitation. These impacts will be mitigated by specific contractual provisions including actions as water spraying to control dust and the restriction of excessive noise-generating activities during daylight hours.

2.6.2 Short Term Use vs. Long Term Productivity

The proposed action will enhance long-term productivity of economic activities in the area surrounding the proposed site by improving and adding values to the agricultural output of the region.

2.7 Areas of Controversy and Issues to be Resolved

- **Areas of controversy.** There have been no areas of controversy or disagreement emerging from stakeholder consultations or public comments received during the definition of the proposed action.
- **Issues to be resolved.** There are no issues to be resolved.

3 Risk Reduction Measures of Future Environmental Impacts

The potential environmental impact of tenant business operations will be evaluated on a case-by-case basis. Based on consultations with NEPA, a process has been developed, with technical and legal advice from the IPDA, for assessing the potential impacts of prospective tenants. MAIL and the MC with advice from NEPA, AISA and the IPDA will conduct this process. Individual tenants will be required to comply with the following two step process that is consistent with procedures followed for industrial parks in Kabul and Kandahar, and as proposed for Mazar-e-Sharif.

- I. Tenants must provide facility-specific information, for example, basic operations, raw materials plus their sources, type(s) of product(s), production volume, and other data, as applicable.

2. Tenants must provide detailed information on their production processes, including projected energy consumption, projected water consumption; potential waste products generated by their facility, and proposed waste management processes.
3. Tenants must process applications for environmental clearance, designed by the IPDA and NEPA, within three (3) months of the signature date of the Agreement to Lease /Purchase. Tenants will be mandated under the Agreement to Lease to complete an Environmental Impact Study (EIS) carried out by a service provider approved by the MC. Tenants will be prohibited from starting business operations before the EIS is approved by NEPA.
4. The MC, under its Agreement with MAIL, is authorized to monitor compliance and ensure that all tenants business operations comply with current IROA environmental legislation and, in particular, to ensure they incorporate all the specific mitigation measures identified by the EIS. In the event that the MC discovers any violations of the provision as outlined, MAIL further authorizes the MC to reserve the right to inform all relevant authorities and / or suspend Tenant business operations as a result.

In general terms, the following uses will be considered for the proposed site.

1. Light and medium manufacturing, assembling, and warehousing for distribution purposes.
2. Transportation and service facilities.
3. Retail sale of food, beverages, and other such convenience items to persons employed on the property, as long as these items are not offered for sale to the general public.
4. Temporary structures necessary and incidental to any construction activity.
5. Utility facilities necessary for the provision of public services and pollution control facilities associated with site use.
6. Other industrial uses not listed above, subject to prior review and approval.

The following uses are expressly prohibited.

1. Temporary or permanent residential use.
2. Retail sale of products not manufactured or handled at wholesale by the owner or lessee.

3. Wreck, junk or commercial waste processing; salvage yards; or similar activities (except as incidental and integral to permitted uses).
4. Activities associated with the rearing, slaughtering or rendering of poultry or livestock.
5. Any illicit activity; especially any considered to be associated with the production and distribution of illicit drugs /narcotics
6. Any other purpose other than such as may be expressly approved by ADP/S, MAIL and MoTCA

The buildings constructed by the tenants will conform to the following guidelines:

1. Building exteriors shall incorporate structural arrangements and color schemes that will limit visual discord with the natural background.
2. Nighttime lighting for the Agriculture Center and buildings located within it will incorporate features for limiting increased brightness in the nighttime sky.
3. The front, rear, and sides of all buildings shall be visually screened from adjacent parcels and offsite property, using methods such as architectural fencing, berms, and plantings, individually or in combination.
4. Noise levels in areas of the AC used for office buildings shall not exceed 75dB, and in areas to be used for wholesale, industrial, manufacturing, and utilities shall not exceed 80dB. Furthermore, noise generated within the AC shall not exceed 65dB at any existing residence.
5. Should there be any inadvertent archaeological discoveries during site preparation or construction, ADP/S and MAIL shall determine appropriate measures to identify, evaluate, and manage these discoveries.
6. All land disturbances shall be conducted using best management practices to control erosion and sedimentation.
7. A minimum of fifteen per cent (15%) of the total lot area will be landscaped.
8. All construction in the AC will comply with the seismic load design of the 2003 edition of the International Building Code (IBC). In addition, landslide protection will be addressed through sound site development.
9. MoTCA regulations take precedence within the confines of the BST perimeter and ADP/S and MAIL will further ensure that the designs, construction and

operation of the facilities under this proposal will comply with MoTCA regulations in force at the time of the application for approval.

4 Monitoring Priorities and Mitigation Measures of Direct Environmental Impacts

The construction of the AC and upgrade of the airport facilities will have some unavoidable direct environmental impacts, primarily during the construction phase. These impacts have been identified in the Scoping Statement and are addressed in this environmental assessment.

4.1 Monitoring Priorities

Monitoring of environmental impacts during the construction process will be the responsibility of the project manager (PM), assigned to the project. General compliance verification procedures will include routine visits to the project site and the ancillary facilities (e.g., labor camps, asphalt plants, etc.).

The monitoring for environmental compliance activities will focus on the following areas:

- **Air quality.** The PM will ensure compliance with contractual provisions by inspecting best management practices during the construction activities which include the following:
 - Controlled location of asphalt plant and similar sources of air pollution, use of quarries, etc., as detailed in Exhibit 7.
 - Proper use of water sprays on road surfaces, excavation and construction sites and other techniques employed to reduce dust.
 - Transport of dust-generating items using tarpaulins and other devices to minimize impacts.
 - Prohibitions against open fires in populated areas.
 - Proper and safe use and disposal of solvents and volatile materials.
- **Water quality.** Potential water quality impacts during the construction phase will be mitigated by placing construction facilities that pose a water contamination risk (e.g., asphalt plants, camps) in areas with lower runoff risk and by monitoring their operation using erosion controls measures where appropriate and as detailed in Exhibit 7.

- **Soils.** Potential soil impacts will be mitigated through the control of waste disposal practices and runoff as detailed in Exhibit 7 and as a routine part of construction supervision and monitoring. The PM will pay particular attention to the following activities which may pose particular risks to the project site.
 - Embankment and erosion prevention.
 - Borrow pit restoration.
 - Control of hazardous materials.
- **Social impacts.** The transport of construction materials, establishment and operation of camps for construction workers and other related activities may affect people living and working around the project site. These potential risks are part of the sub-contract compliance requirements and will be mitigated as part of the routine construction supervision process. In addition, compliance related to the sub-contract requirement for the preferential use of local labor will also be monitored by the PM.
- **Public health.** Compliance with contract provisions related to the control of potential contamination of local water supplies during construction, air pollution and noise levels; the provision of basic emergency health facilities for workers; and promotion of programs aimed at the prevention of sexually transmitted diseases as a part of all construction employee orientation programs; and other factors having a potential impact will be strictly enforced through the oversight of the PM.
- **Noise and vibration.** Contract provisions for the control of noise and vibration impacts during the construction phase through the use of site controls, time and activity constraints and public awareness efforts are listed in Exhibit 7 and will be monitored by the PM.

4.2 Mitigation Measures

The most effective way to mitigate any environmental impact is prevention and avoidance. This will be achieved through the requirement of the sub-contractor to adopt enforceable measures and precautions listed in Exhibit 7.

Exhibit 7. Environmental Mitigation Checklist for Air, Water, Soil, Noise and Social Impacts

POTENTIAL IMPACT SOURCE	MITIGATION OBJECTIVE	MITIGATION MEASURE	IMPLEMENTATION MECHANISM & RESPONSIBILITY
AIR QUALITY			

POTENTIAL IMPACT SOURCE	MITIGATION OBJECTIVE	MITIGATION MEASURE	IMPLEMENTATION MECHANISM & RESPONSIBILITY
Material transport	Minimization of dust during transport of fill and construction material	Rock, sand and other dust producing material will be sprayed prior to transport. Trucks must be covered with tarps. Only approved transport routes will be used.	Required by Project Contract. Enforced by the Project Manager (PM).
Earthwork activities	Minimization of dust dispersal due to earthworks.	Sub-Contractors will be required to spray roadways to minimize dust in dry conditions.	Required by Project Contract. Enforced by PM.
Concrete batching and structural work	Minimization of airborne particulate and gas emitted during the construction process.	Contracts specify that batch sites shall be located away from human settlements.	Required by Project Contract. Enforced by PM.
Emissions from asphalt plants	Minimization of smoke, soot, airborne particulates and gas emitted due to plant operations.	Asphalt plants may not be located within 500 meters of human settlements.	Required by Project Contract. Enforced by PM.
Emissions from construction equipment & solvents.	Avoidance of excessive emissions due to poorly maintained equipment.	Contract stipulations require all construction equipment to meet acceptable standards and to be properly maintained. Solvents and volatile materials must be used properly to the satisfaction of the PM.	Required by Project Contract. Enforced by PM.
On-site burning.	Avoidance of smoke and gases which may constitute a nuisance.	On-site burning to be banned in populated areas	Required by Project Contract. Enforced by PM.
WATER QUALITY			
Uncontrolled runoff during construction activities	Avoidance of inadequately planned runoff due to development of staging areas, labor camps, etc.	Runoff from during construction will be strictly controlled as a part of construction supervision activities. Monitoring will be undertaken as a routine part of construction supervision.	Required by Project Contract. Enforced by PM.
Disruption of irrigation	Avoidance of interruptions to irrigation flows due to construction activities.	Irrigation systems have been taken into account in design.	Required by Project Contract. Enforced by PM.
Relocation of wells	Ensure adequate planning for relocation and use of temporary sources.	Locations of existing wells have been taken into account in design. Alternative water sources will be developed as warranted due to temporary interruptions.	Required by Project Contract. Enforced by PM.
Effects of construction camps & staging areas	Avoidance of inappropriate wastewater disposal and runoff.	Provisions for the location and design standards for land use, drainage, health facilities, etc., will be established by construction documents.	Required by Project Contract. Enforced by PM.
SOILS			
Loss of agricultural land	Minimize use of farmland for road improvement purposes.	Loss of agricultural land has been avoided. All fill material will be obtained from non-agricultural areas.	Avoidance of agricultural land has been incorporated in the decision-making process.
Borrow pits in inappropriate locations	Avoid loss of agricultural land or other resources	Only government sanctioned quarries and construction material sources will be used.	Required by Project Contract. Enforced by PM.

POTENTIAL IMPACT SOURCE	MITIGATION OBJECTIVE	MITIGATION MEASURE	IMPLEMENTATION MECHANISM & RESPONSIBILITY
Inappropriate exploitation and restoration of borrow pit areas.	Minimize loss of topsoil and creation of drainage problems and unsightliness.	Borrow pit areas will be graded to ensure drainage and visual uniformity or to create permanent tanks/dams. Additional borrow pits will not be opened without the restoration of those areas no longer in use.	Required by Project Contract. Enforced by PM.
Inadequate slope stabilization	Minimize soil loss during slope creation and due to erosion and slope failure in the longer-term.	Side slopes standards have been established to reduce erosion potential.	Incorporated in design. Enforced by PM.
Soil loss due to water-related erosion.	Avoid soil loss from water use during construction.	Discharge zones from drainage structures will be furnished with rip-rap. Down drains/chutes will be lined with rip-rap/masonry or concrete to prevent erosion.	Incorporated in design. Enforced by PM.
Uncontrolled runoff from construction & labor camps	Avoid soil erosion due to poorly designed and/or maintained constructor and labor camps.	Runoff will be controlled by proper siting of construction camps and staging areas.	Required by Project Contract. Enforced by PM.
Inappropriate use of dredge material	Ensure that any dredged material is properly handled.	Dredge material free of contaminants shall be used for reclamation and agricultural uses as appropriate.	Required by Project Contract. Enforced by PM.
NOISE			
Pile driving	Minimize high noise levels, vibrations and time of occurrence.	To be mitigated through use of: <ul style="list-style-type: none"> • Time limits for pile-driving activities. • Bored piles in sensitive areas. • Shrouds where warranted. 	Required by Project Contract. Enforced by PM.
Earth moving	Minimize high noise levels and times of occurrence	<ul style="list-style-type: none"> • Limit earth-moving times. • Limit number of working vehicles. • Use of low-noise emission vehicles. • Proper maintenance of equipment. • Use of noise barriers where warranted. 	Required by Project Contract. Enforced by PM.
Paving and other construction activities.	Minimize high noise levels and times of occurrence.	<ul style="list-style-type: none"> • Limit construction hours in sensitive areas. • Use of properly maintained equipment. • Use of noise barriers where warranted. 	Required by Project Contract. Enforced by PM.
SOCIAL			
Disruption of economic activities	Minimize loss of income due to disruptions.	Contractors are required to minimize disruption due to traffic detours and construction activities.	GOA and PM.
In-migration of labor	Avoidance of social tensions due to competition for resources.	Mitigated by control of labor camps (if any) employee orientation and public information programs.	Construction requirements enforced by PM.

5 Conclusions and Recommendations

Project works are not anticipated to cause any significant environmental or social impacts on the project area. However, minor impacts will result from some construction activities as noted in Section 2. All of the identified impacts can be appropriately managed or mitigated by the measures outlined in Sections 2, 3 and 4 and as required by Project Contracts.

6 Annexes

6.1 Site Selection Process

The concept of the LBAAC evolved from a series of discussions for an industrial park for the city of Lashkar Gah under the ALP/S program. Proposed in November 2005, it was not part of the original scope of ALP/S. The idea of siting the AC within the perimeter of an upgraded BST and of integrating the two into one LBAAC project was only officially recognized under the ADP/S Intensification / Extension contract that came into effect on 30 November 2006.

In October 2006 ALP/S commissioned a feasibility study into the development of an industrial park in Lashkar Gah. It concluded “There exists a ready and willing group of buyers for developed industrial sites in Lashkar Gah and strong interest in developing agri-processing projects was revealed in meetings with potential investors”.

Two separate sites were proposed. A site adjacent to the airstrip (proposed by the then Governor Mr. Daoud) and another near Bolan (proposed by the Ministry of Commerce).

With regard to the airstrip site, the report was definite; there was little to recommend it. It had no paved road access, no electrical service and no water and there was no other economic development activity taking place on adjacent property or in the area. Both the Mayor and the Provincial Governor maintained that the airstrip site, not being under their complete control, could not be made available for development by local authorities.

Bost Airport Site



The Bolan site, unlike the airstrip site, was endorsed by both the Mayor and the Governor and, in their opinion, was under their control and could be made available for development as industrial property. The study agreed it was the better location but was not feasible to develop unless a paved road and electrical supply could be extended to meet its perimeter.

However, doubts about the vacant availability of the site were expressed by AISA early in 2007. AISA informed that, contrary to the assurances being received from the Governor and Mayor's offices, a mixed development of residential, commercial and industrial properties had already been planned in conjunction with the Ministry of Commerce and Industry (MCI) and plots were already in the process of being allocated.

Site inspections in May 2007 verified the veracity of AISA's information. A substantial site plan for an industrial park intended for Sarshahi, outside Jalalabad, covering 2.3 x 1.1 kilometers – about the same size as Lashkar Gah's town centre – had been appropriated by representatives from the MCI and the Mayor's office and been overlaid on the proposed site. It was being used as the basis for parceling out and allocating plots of land within its designated boundary.

Bolan site



The site had been seriously encroached with new, large brick enclosed spaces, and title deeds (Quabala) had already been issued to a variety of rich and/or locally important individuals. In addition, the site hosted a large number of new dwellings belonging to internally displaced people (IDPs) who had fled the series of conflicts taking place further up and down the Helmand Valley. These allocations, plus the presence of so many IDP's (regardless of their legitimacy) rendered the site unfeasible for the purposes of the project.

A third site was proposed by the local MCI Director Mr. Nazar and the MO. It lay approximately 5 kilometers south of the Bolan site on the Desert Road towards the village of Aynak. However, the location proved inappropriate in nearly all respects. Its distance from water, electrical and paved road utilities made it impractical and costly to develop. Subsequent enquiries disclosed that it was not as vacant and available as had been claimed. But, most importantly, it lay at the outermost limits of what was currently held to be secure and too proximate to the village of Aynak, an area known at the time to be deeply sympathetic to the Taleban.

Desert road site



A fourth site was identified by Chemonics in early May 2007 that proved more suitable than all considered previously; a 20.02 hectare vacant site (formerly an Afghan Army Radar Base) bordering the south side of the main road to Marja and Nad-i-Ali at Bolan. The northern boundary began approximately 1900 meters from the western end of the Helmand River Bridge, on the south side of the main road to Marja and Nad-i-Ali, and located approximately 2300 meters from the town center (as defined by the Governor's residence).

This new location benefited by being highly proximate to the town centre and at the crossroads to Helmand's most productive agricultural areas of Marja and Nad Ali and the main road down the valley to Garmser and Nawa Barakzayi. The site was opposite one supposedly being held vacant for the relocation of the Lashkar Gah vegetable market and beside an area currently receiving de facto use as a livestock market. Two USAID funded cold storage facilities were adjacent on both the northern and southern sides – owned respectively by the Traders and Farmers Associations - neither in current use. The new USAID funded chili farm was also in the immediate vicinity and on the periphery a number of other agricultural activities including a chicken farm, greenhouses and Helmand MAIL's experimental and dairy farms. The area was already reasonably served by electrical, water and transport support utilities (gasoline stations and garages at the road junctions) and relatively secure with regular patrols along the busy road and a visible security presence.

Cold storage facilities



From a purely commercial perspective, Bolan was seen as the ideal location. Bolan hosted a lot of growth with its outward signs of new construction and investment, a

phenomenon completely absent on the BST side of town. Being located on the west side of the Helmand River it was also viewed as being proximate to the most productive agricultural districts in the Province. On 17 May Chemonics produced a location Analysis for USAID incorporating a checklist weighing all the options against a set of ten criteria. The Radar Site (score – 85) emerged the clear winner beating its nearest rivals the BST and Bolan sites (both scoring 48) by 37 points in an overall possible score of 100.

In June 2007, despite the clear commercial argument for the Bolan Radar Base site, Chemonics were instructed to proceed with the industrial park at the airport site. Strategic military and security considerations necessitated that it be located on the Lashkar Gah City side of the Helmand River. Qabala for the site was secured for MAIL on June 13 2007.

For the ADP/S Intensification, the AC and AC were commingled into one overall project / development. As part of the project USAID instructed Chemonics to repave the airstrip at BST. Subsequent to the completion of the LAMP, this one activity has now grown into an instruction to complete several which, when combined, will upgrade the airport to a level whereby it can fully function as a working regional airport and better compliment future AC activities.

Subsequent discussions with MAIL as owner, and USAID as donor, have resulted in the name of the industrial park component being changed to the Agriculture Center and the overall development to the Lashkar Gah Bost Airport Agriculture Center (LBAAC).

6.2 Stakeholder Consultations

6.2.1 For the preparation of the Scoping Statement

As part of the preparation of the Environmental Assessment Scoping Statement approved on August 4, 2008 by the USAID mission in Afghanistan, Chemonics conducted extensive consultations with all the key stakeholders, in the affected area (villagers and villages, district and women's shuras, farmers, business people, etc.), which included the following individuals and institutions:

1. Governor and Deputy Governor of Helmand
2. Provincial Development Council
3. Provincial Council
4. Mayor of Lashkar Gah City
5. Head of the Helmand Kuchi minority group
6. Aynak District shura
7. Bolan District shura
8. Karez District shura
9. Qali Bost District shura
10. Deputy and Minister of Agriculture Irrigation and Livestock (MAIL)
11. Deputy and Minister of Transport and Civil Aviation (MoTCA)
12. Deputy Minister of Industry
13. Helmand MAIL
14. Helmand MoTCA
15. Helmand Ministry of Commerce
16. Afghan Investment Support Agency (AISA)
17. Industrial Parks Development Authority (IPDA)
18. National Environmental Protection Agency (NEPA)
19. Federal Aviation Authority (FAA)
20. Save the Environment – Afghanistan (SEA), Kabul-based NGO

Chemonics has been working in the area of the LBAAC since November 2004 and made detailed observations of the site with their environmental specialist and site engineering and assessment teams. This site assessment coupled with the stakeholder consultation program allows for the appropriate level of scoping being undertaken herewith.

Helmand Provincial Government

The first parties contacted, in May 2007, were the Governor of Helmand Province, Mr. Asadullah Wafa and his Deputy Mr. Pir Moh'd (Dec'd). Mr. Wafa stated that he had been living in Helmand for a year and the province badly needed agricultural industries and improved air access to develop. His Deputy Mr. Pir Moh'd had lived in Helmand all his life and said the LBAAC project would have significant benefits. Helmand could start

to develop its own agricultural industries and products that would substitute for cheap, low quality imports. The Agriculture Center would create much needed jobs and attract investment away from illicit poppy production. The ability to fly to Lashkar Gah all year and in all weathers would significantly add to the security of IROA officials, businessmen and NGO's who otherwise are forced to travel the dangerous southern section of Highway 1 and the 601 into central Helmand and Lashkar Gah. Both could not think of any negative environmental aspects that could be associated with the project.

More recently the new Governor Mr. Gulab Menghal has also been consulted. He believed that the LBAAC project was very important for Helmand and had many benefits. Underlining what the previous Governor and Deputy Governor had stated, he added that the project had the potential to open up Helmand to inward investment and export opportunities. "Reliable air transportation for both cargo and civilians is a critical component of developing Helmand Province's economy," said the Governor. "This project sets the foundation for improved access to markets and the transport of largess for the people of Helmand and for those wishing to do business in the province." It would be a highly visible reminder that the IROA and the international community were making their presence felt in Helmand. He further added that future airport expansion would accommodate aircraft capable of flying pilgrims from Helmand directly to 'the Holy Place' or Mecca. This would be an extremely important benefit to the devout Muslim population of the province. Many Helmandis apply for the Haj every year but their numbers are restricted by the availability of flights from Kandahar. When asked what environmental consequences may arise from the development, the Governor could not envisage any and believed 'nothing but good can come from this project'.

Lashkar Gah Municipal Government

The Mayor of the City of Lashkar Gah Mr. Haji Mohayuddin Khan was invited to the ADP/S office for consultations and to receive a presentation on the project on March 18th 2008. The Mayor was most enthusiastic about the project and believed it complemented the Lashkar Gah City Plan. When asked what environmental consequences may arise from the development, he could not cite any. Drako Reyes, ADP/S Intensification Infrastructure Director, and Haji Habibullah, ADP/S Senior Afghan Advisor, presented the project for consultation to the Provincial Council on March 25, 2008, at the local Provincial Council building. All parties were informed about the environmental processes involved in developing the project. When asked what environmental consequences may arise from the development, they pointed only to its positive aspects. Speaking on behalf of the Provincial Council, the Head of the Council Mr. Moh'd Anwar, particularly emphasized the airport's future potential to transport pilgrims directly to the Haj.

Consultation with the Mayor of Lashkar Gah



Helmand Provincial Development Council

On June 17, 2008, Chemonics presented the project in detail to the Helmand Provincial Development Council (HPDC). The HPDC is comprised of IROA Department Directors and representatives from the Provincial Council, NGO's, donor agencies and the local Provincial Reconstruction Team (PRT) newly convened under Governor Menghal. Many of the parties present already knew about the project in detail and had previously been consulted on any environmental consequences arising from the project. The project presentation received strong support from the HPDC. However, many questioned the length of time it was taking to move to contract and start its physical construction. When asked what environmental consequences may arise from the development only its positive aspects were highlighted and no adverse environmental impacts were cited.

Helmand Kuchi Community

Chemonics consulted with the elected Head of the estimated eighty thousand Kuchis living in Helmand Mr. Moh'd Daoud and three members of the Kuchi Shura who came to the ADP/S office on June 19, 2008. Mr. Daoud voiced his disappointment that the Agriculture Center would not be hosting livestock operations but generally welcomed the development. The other members of the Kuchi delegation expressed their hope that the airport project would quickly develop to a stage where it could facilitate pilgrims flying directly to the Haj. When asked what environmental consequences may arise from the development they could not think of any negative environmental aspects that could be associated with the project.

District Shuras

Chemonics has introduced the project for consultation to a variety of district shuras in the areas directly affected and adjacent to the development. The Karez and Qali Bost

districts are immediately adjacent to the development: Karez lies to the east and Qali Bost to the south. The other directions are bounded by areas under the jurisdiction of the Municipality of Lashkar Gah. Chemonics met for consultations with the Karez shura in the ADP/S office on September 13, and the Qali Bost shura in the district office on October 17, 2007. Both strongly supported the project and saw it as having potential to create much needed jobs and processing facilities that will support agricultural production. When asked what environmental consequences may arise from the development, neither group could think of any negative environmental aspects that could be associated with the project.

Consultation with Aynak-Shura community.



The Aynak and Bolan areas lie to the west on the other side of the Helmand River. Both areas are over flown by aircrafts approaching the airport from the north and turning to land from the south. Chemonics met with the Aynak Shura at the district office on September 22 and the Bolan Shura at the ADP/S office on November 3, 2007. Both strongly supported the project. The Aynak Shura stated that the LBAAC will provide opportunity to by-pass middlemen and sell to processors directly. When asked how increased over flight would impact, neither group mentioned any negative impacts due to over flights. The Head of the Bolan Shura believed that increased flight operations would hasten the day when pilgrims could fly directly from Lashkar Gah Bost Airport to attend the Haj. When asked what environmental consequences may arise from the development, neither group could think of any negative environmental aspects that could be associated with the project.

Consultation with Bolan Elders.



In addition to the people living and working within the vicinity of the project consultation was undertaken with a variety of other stakeholders associated with the project

Ministry Of Agriculture Irrigation and Livestock (MAIL)

In May 2007, Chemonics had their first meetings with MAIL, both at national and local levels, on the Agriculture Center component of the project. Regular meetings (averaging monthly at local and quarterly at national levels) have explored a wide variety of issues which have influenced the scope of the project and its environmental impact. Foremost is that activities center on agricultural product processing, storage and distribution plus agricultural support industries and input supplies. Livestock activities like factory farmed poultry or lamb, slaughtering or tannery activities have been ruled out. Ministry officials at all levels, when asked what environmental consequences may arise from the development, could not cite any. They believe the environmental impacts associated with the activities planned for the center to be benign.

Consultation with Helmand MAIL departmental directors



Ministry of Transport and Civil Aviation (MoTCA)

Since November 2007, Chemonics has also been engaged in discussions and consultations with MoTCA at local and national levels. Regular meetings (averaging monthly at local and quarterly at national levels) have explored a wide variety of issues which have influenced the scope of the project and its environmental impact. MoTCA and MAIL are both in agreement that activities should center on agricultural product processing, storage and distribution, plus agricultural support industries and input supplies. MoTCA's main concern was that space requirements for both components be clearly reconciled via a Limited Airport Master Plan (LAMP) exercise.

Master plan signing



The LAMP process was completed and signed by His Excellency Hamidullah Qaderi, Minister of Transport, on June 19, 2008. The LAMP will govern the development of the Airport over the next twenty year period and clearly reconciles the Agriculture Center with adjacent civil aviation infrastructure. The boundaries of the Agriculture Center have been redrawn to ensure the facility and its buildings comply with MoTCA's recommendation that they be located a minimum 500 meters from the center line of the runway. No other significant environmental impacts were identified during consultations with MoTCA during the Limited Master Planning Process.

MoTCA and MAIL were also in agreement that covenants and restrictions governing all operations and activities of the prospective management company and tenants of the Agriculture Center must reflect civil aviation environmental and operational regulations as pertaining to an Airport rated 4D under the International Civil Aviation Organization (ICAO) Aerodrome Reference Code (ARC) classification system. The covenants and restrictions will be appended to the EA.

Ministry of Commerce and Industry (MCI)

The MCI, under the Deputy Minister for Industry, also has responsibility for developing industrial parks in Afghanistan and possesses a plan for developing 21 industrial parks in 17 provinces. Lack of capacity and widespread corruption within the Ministry has contributed to continuing failure to establish any of these industrial platforms. Chemonics consulted Deputy Minister Motasil Komaki in June 2007 and has regularly updated and consulted with the Helmand Director of Commerce Mr. Nazar. Both strongly support the project. When asked what environmental consequences may arise from the development both point only to its positive aspects. They believe it will promote agri-business development and job creation and neither cited any adverse environmental impacts.

Afghan Investment Support Agency (AISA) and Industrial Parks Development Authority (IPDA)

USAID has undertaken the development of three industrial parks in collaboration with the Industrial Park Development Authority (IPDA). The IPDA is an organization which manages the development and marketing of industrial parks in Afghanistan. Funded by the World Bank, it is presently a unit of the Afghanistan Investment Support Agency (AISA). Chemonics has consulted with AISA and the IPDA in relation to the environmental impact of the LBAAC as well as covenants and restrictions governing all operations and activities. Both organizations believe it will promote agri-business development and job creation and neither cites any major adverse environmental impacts.

National Environment Protection Agency (NEPA)

The IPDA developed the environmental process for industrial park developments for NEPA – The Afghan National Environmental Protection Agency - and acts on its behalf in relation to compliance. Mr. Abdul Karzai, the IPDA's Senior Technical Advisor, introduced members of the ADP/S environmental team to the NEPA process and to Mr. Noor Moh'd Fauzly of NEPA at a July 9, 2007 meeting of all parties in Kabul. Both stated that the Agriculture Center, being focused on agro-processing and support industries, would fall into the light industry category, and environmental impacts would be far less than for other industrial parks built or in development. Demands on the infrastructure would be more moderate, and the impact on the environment would not be as adverse. A meeting was held with Mr. Sulaiman Shah Salari the head of natural heritage unit at NEPA main office in Kabul. Detailed information was provided regarding the agriculture center and airstrip. He was informed that a scoping statement has already been prepared for these two activities and the proposed mitigation measures are carefully included in the final EA. Mr. Salari's major concern was proper management of future activities in the airport location i.e. factories agriculture processing units. It was therefore, strongly recommended that any future activities conducted in this area have to be consulted and coordinated with NEPA.

US Federal Aviation Authority (FAA)

Chemonics has consulted with FAA representatives attached to the US mission in Kabul and in their role as Civil Aviation advisors to MoTCA. The FAA played a major consultative role in the LAMP process. They are satisfied that the LAMP process was thorough and that the environmental impacts associated with the activities planned for the airport to be benign. In addition, the representatives pointed out that in the USA and under FAA and Environmental Protection Agency (EPA) regulations these categories of works (i.e. existing runway paving, terminal renovations and all activities associated with them) are classed as Categorical Exclusions.

Save the Environment Afghanistan (SEA)

Chemonics has contacted this Kabul-based environmental NGO for their comments on this project. No response has been received at the time of this writing.

6.2.2 For the preparation of the Environmental Assessment

Additional consultations were conducted with the following government officials as part of the process of preparation of the Environmental Assessment: (1) the Helmand Provincial Governor; (2) the Director BST; (3) the Helmand MAIL Deputy Director; and (4) the Mayor of Lashkar Gah.

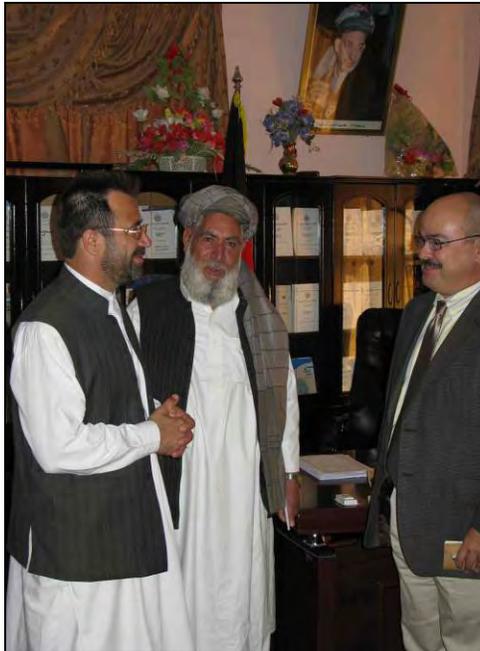
Helmand Provincial Governor

On September 21, 2008, the Helmand Provincial Governor, Mr. Ghulab Menghal, granted an audience to Carlos E. Quintela (S/T ADP/S Environmental Specialist), Haji Habibullah (ADP/S Senior Afghan Advisor), and two Chemonics Home Office staff, Chris Payne and Mary Fran Muzzi. The purpose of the meeting was to update Governor on Airport and Agricultural Park environmental compliance process progress and to introduce two visiting members from the Chemonics HO.

Mary Fran Muzzi and Chris Payne were introduced to the Governor. Both presented their best regards and deep appreciation of the support the Governor was giving to ADP/S.

Carlos E. Quintela updated the Governor on the progress of the environmental compliance process for the Airport Agricultural Park Project. He informed that the scoping statement defining the impacts and issues that need to be addressed further had been signed off by USAID. The Chemonics environmental team was now moving on to complete the substantive Environmental Assessment document that would outline the mitigation measures in respect of these impacts: (1) seismic considerations; (2) visual quality; (3) land use control; (4) energy and conservation; and (5) re-use and conservation

Consultation with the Helmand Provincial Governor



The Governor thanked ADP/S for all the good work they were doing in Helmand. He re-iterated his belief this was the most important development project for the Province and had many benefits.

When asked if he had anything comment to make in respect of these issues, the Governor stated he had none. He asked when the environmental assessment process would be over and if construction would be able to start upon its completion. He was informed by all parties that this was the last major action before contracting the physical works. He was further informed that the RFP had already been issued to speed things up in readiness for receiving notification to proceed once the compliance procedure was complete.

Director - Lashkar Gah Bost Airport

On September 20, 2008, Paul Bell (ADP/S TDCoP) and Drako Reyes (ADP/S Intensification Infrastructure Director) met with the BST Director at the Lashkar Gah Airport Terminal to provide him with an update of the work on the LBAAC project and environmental compliance process.

ADP/S took the opportunity of the pre bid conference at the Airport to update the Airport Director on the progress of the project and the environmental compliance process.

Paul Bell updated the Director on the progress of the Airport Agricultural Park Project. He informed that the conference was to give the competent construction companies bidding on the project to see the site and ask questions about the RFP which had recently been issued. He also added that Chemonics needed to complete the environmental before they could issue the actual contract and start construction.

Drako Reyes informed the Deputy Director that the scoping statement defining the impacts and issues that need to be addressed further had been signed off by USAID. The Chemonics environmental team was now moving on to complete the substantive Environmental Assessment document that would outline the mitigation measures in respect of these impacts: (1) seismic considerations; (2) visual quality; (3) land use control; (4) energy and conservation; and (5) re-use and conservation. When asked if he had any comment to make the Director informed he had none.

He thanked ADP/S for keeping him updated and looked forward to the completion of the new runway.

Helmand MAIL Deputy Director

On September 23, 2008, Paul Bell (ADP/S TDCoP), Drako Reyes (ADP/S Intensification Infrastructure Director) and Haji Habibullah (ADP/S Senior Afghan Advisor) met in the ADP/S offices with Mr. Moh'd Khan (Helmand MAIL Deputy Director) to provide him with an update of the work on the Airport and Agricultural Park project and environmental compliance process.

Paul Bell updated the Deputy Director on the progress of the Airport Agricultural Park Project. He was informed that the RFP had recently been issued and Chemonics had a last major process to complete in relation to the environmental compliance before they could issue the contract for construction to begin.

Drako Reyes informed the Deputy Director that the scoping statement defining the impacts and issues that need to be addressed further had been signed off by USAID. The Chemonics environmental team was now moving on to complete the substantive Environmental Assessment document that would outline the mitigation measures in respect of these impacts: (1) seismic considerations; (2) visual quality; (3) land use control; (4) energy and conservation; and (5) re-use and conservation.

When asked if he had any comment to make the Deputy Director informed he had none. He did ask however how progress was going on the RFP to source a competent management entity for the Agriculture Center. Paul Bell informed that the first draft had gone to USAID and was being amended in the light of their comments before being passed to MAIL in Kabul and that model lease agreements plus accompanying covenants and restriction documents were complete. He was assured that Helmand Department of MAIL would be involved in the consultative process.

Deputy Director Khan thanked Chemonics for the update and informed that his office was always available to provide help and to feel free to contact him at anytime should Chemonics require his assistance.

Mayor of Lashkar Gah

On September 22, 2008, Paul Bell (ADP/S TDCoP), Drako Reyes (ADP/S Intensification Infrastructure Director) and Haji Habibullah (ADP/S Senior Afghan Advisor) met in the ADP/S offices with Mr. Haji Mohayuddin Khan (Mayor of Lashkar Gah) to provide him with an update of the work on the Airport and Agricultural Park project and environmental compliance process.

Drako Reyes updated the Mayor on the progress of the environmental compliance process for the Airport Agricultural Park Project. He informed that the scoping statement defining the impacts and issues that need to be addressed further had been signed off by USAID. The Chemonics environmental team was now moving on to complete the substantive Environmental Assessment document that would outline the mitigation measures in respect of these impacts: (1) seismic considerations; (2) visual quality; (3) land use control; (4) energy and conservation; and (5) re-use and conservation

When asked if he had any comment to make in respect of these issues, the Mayor informed he had none but he did ask why he was being asked further questions on these issues. He stated all Lashkar Gari's wanted to see the project started without delay and when will 'the formalities' be over and construction start.

He was informed this was the last major action before contracting the physical works. He was further informed that the RFP had already been issued to speed things up in readiness for receiving notification to proceed once the compliance procedure was complete.

The Mayor thanked Chemonics for all the hard work they were doing to make the project happen and stated he was always available should we need his help at any time.

6.3 Model Agreements, Protective Covenants and Restrictions

6.3.1 Management Agreement



LASHKAR GAH AGRICULTURE CENTER

Lashkar Gah Bost Airport Agriculture Center Management Agreement

THIS AGREEMENT, made and entered into this _____ day of _____, 2008, by and between the Ministry of Agriculture, Irrigation and Livestock (MAIL) of the Government of the Islamic Republic of Afghanistan and _____, (hereinafter referred to as the Management Company (MC)) constitutes the final, complete, and exclusive statement to the terms of the agreement between the parties pertaining to the subject matter of this Agreement and supersedes all prior and contemporaneous understandings or agreements.

1. Authorization and Appointment

1.1. MAIL hereby appoints _____ (MC) to operate and maintain the Agriculture Center on its behalf, and the MC hereby accepts such appointment subject to the terms and conditions as more fully provided for and set out in this Agreement.

1.2. As operation of the Agriculture Center will involve the leasing and sale of real property, MAIL also authorizes the MC to negotiate and execute real estate contracts on its behalf for the sale, lease or rent of lots and buildings in the Agriculture Center.

1.3. MAIL further authorizes the MC to operate a commercial lending facility in the Agriculture Center. This lending organization is to be established in accordance with all the provisions of Afghan law which pertain to such activities.

2. Duration

2.1. This agreement shall commence on the Date of Signature, and shall remain in force for a period of _____ years.

2.2. On the Date of Signature the MC will take occupancy of the main office building located in the Agriculture Center, and will be responsible for its upkeep, security and staffing from that date forward.

3. Management Company's Duties and Responsibilities

The MC will submit a maintenance and security plan to the MAIL within thirty (30) days of the signing of this agreement.

More specifically, the MC will:

3.1 Ensure that the Protective Covenants and Restrictions (Annex A) are being respected by all users of the Agriculture Center and its facilities. The MC is hereby authorized to correct problems that may arise because of violation of the restrictive covenants by all legal means.



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3.2 The MC will ensure that within three (3) months of the signature date of this Agreement, that all Buyers/Lessees prepare and submit to the MC, at their own expense, an Environmental Impact Study (EIS) carried out by a service provider approved by the MC. The MC will prohibit all Buyers/Lessees from starting operation of their businesses before the EIS is approved by the Afghan National Environmental Protection Agency (NEPA).

3.3 The MC will ensure that all Buyers/Lessee's business operations comply with current IROA environmental legislation. In particular, the MC take responsibility for ensuring all Buyers/Lessee's business operations incorporate all specific mitigation measures identified by the EIS completed as a condition of the Agreement to Lease/Purchase and as approved by the Afghan National Environmental Protection Agency (NEPA). In the event that the MC discovers any violations of the provision as outlined, the MC will reserve the right to inform all relevant authorities and / or suspend the Buyer/Lessee's business operation on the Lot for a duration to be determined by the MC.

3.4. Maintain security on a 24 hour basis in the entire Agriculture Center to include inspection of all personnel and vehicles both entering and exiting the Agriculture Center.

3.5. Provide services such as waste pickup, cleaning of the streets and sidewalks, and all other common areas.

3.6. Maintain the surface and underground drainage system free of any obstructions.

3.7. Manage the provision of water service to certain users in the Agriculture Center.

3.8. Maintain the underground system of cabling, wiring, water and sewer pipes, pumps and hydrants.

3.9. Maintain all public lighting in the Agriculture Center.

3.10. Employ and supervise the maintenance, security and cleaning staff necessary to perform these duties and responsibilities.

4. Marketing the Agriculture Center Property

The MC will submit a marketing plan to the MAIL within thirty (30) days of the signing of this agreement, and the plan will treat the following topics:

4.1. The MC's best estimation of the market value of the industrial sites in terms of direct sale, in terms of owner financing, and in terms of short and long term leasing.

4.2. The MC's best estimation of the market value of lots and / or shell buildings in terms of direct sale or lease.

4.3. Recommendation concerning implications of a development plan for the Agriculture Center which would target certain industrial sectors as more preferred than others for employment, environmental reasons, etc.

4.4. The role of the commercial lending function of the MC, and its impact on the marketing effort.

4.5. Marketing goals and objectives for year one.

5. Allocation of earnings from sale or lease of property



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5.1. Income from long term leases of sites (25 years or more) for self built facilities is to be placed into an investment fund devoted to sustaining commercial lending efforts of the MC in support of the development of the Agriculture Center, and the development of the facility per se. These funds may also be used to finance improvements such as shell buildings, and will be placed in an escrow account under joint signatures (MAIL and the MC). The MC will be paid a fee for managing the investment fund, and will earn fees for originating, processing and servicing its commercial loans.

5.2. The income stream from any user fees, short term leases (up to 2 years), rentals and services will be devoted to maintaining the Agriculture Center facilities, the improvement of Agriculture Center services, and to cover the other expenses borne by the MC. The MC will earn the totality of this income.

5.3. The MC will have the option to charge fees for services such as secretarial and accounting assistance, use of IT equipment, the communications and transportation network, security services, etc. This income will accrue to the MC.

5.4. Unimproved sites and/or sites plus improvements which have been financed either by the investment fund or by donors are to be sold or leased on a first come/first served basis, and in the case where there are two or more buyers – to the highest bidder provided that the bidder's site plan has been approved by the MC. The MC will be paid a commission of 49% of the monthly lease payment over the life of the lease. The remainder of the proceeds from any long term lease will accrue to the investment fund.

5.5 In the case of a sale of property the commission to the MC will be 49% of the sales price paid at the closing of the sale.

6. Reporting on and Disbursement of funds from real property transactions

6.1. All proceeds resulting from the sale of any real property in the Agriculture Center, minus commissions and closing costs, will be transferred to the bank account of the Ministry of _____ within forty eight (48) hours of the date of closing of the transaction.

6.2. The MC will submit a monthly report on all real property transactions to the MAIL. This report will include closing statements from all sales and copies of any and all lease contracts.

7. Conformance with the law

7.1. The MC shall use its best efforts to ensure due compliance with all statutory provisions, rules and regulations of the laws of the Government of the Islamic Republic of Afghanistan.

8. Criminal and Unlawful Activities.



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The MC must abide at all times by the laws of the Government of the Islamic Republic of Afghanistan. Any criminal or unlawful activities carried out at the Agriculture Center by the MC, its agents, employees, or guests are prohibited. Any criminal or unlawful activities may also result in the suspension of the MC's operation of the Agriculture Center for a duration to be determined by the MAIL.

9. Adherence to the Protective Covenants and Restrictions.

The MC will adhere to the Protective Covenants and Restrictions of the Agriculture Center (see Annex A). The MC is responsible for complying with the rules and regulations at all times.

The MAIL reserves the right to cancel the MC's rights under this Agreement if the MC is not compliant with the Protective Covenants and Restrictions. The MAIL will notify the MC in writing of non-compliance, and the MC will have thirty (30) days to initiate conformity.

The MAIL may not unreasonably or without proper justification cancel MC's rights under this Agreement.

10. Confidentiality

10.1. The MC will employ its best efforts to assure that its personnel, sub-contractors, representatives and agents do not at any time disclose to any person, firm or company any data, specifications, documents, drawings, or other written or oral information relating to the Agriculture Center or to its dealings and transactions.

11. Governing Law and Severability of the Agreement

11.1. The parties to this Agreement hereby consent to the jurisdiction of the Government of the Islamic Republic of Afghanistan in respect to any legal proceedings which may arise in regard to this Agreement.

11.2. If any term or provision of this Agreement is determined to be illegal, unenforceable, or invalid in whole or in part for any reason, such illegal, unenforceable or invalid provisions or part thereof shall be stricken from this Agreement, and such provision shall not affect the legality, enforceability, or validity or the remainder of this Agreement.

11.3. If any provision or part thereof of this Agreement is stricken in accordance with the provisions of this section, then this stricken provision shall be replaced, to the extent possible, with a legal, enforceable, and valid provision that is as similar in tenor to the stricken provision as is legally possible.

12. Force Majeure

12.1. Neither party shall be responsible to the other for any delay or default in the performance of its obligations or any part of its obligations or any part of its obligations under this Agreement to the extent that such delay or default arises from causes

6.3.2 Land Lease Agreement



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Land Lease Agreement

This is an Agreement to Lease a parcel of land (hereinafter referred to as the Property) located in the Lashkar Gah Bost Airport Agriculture Center (Agriculture Center).

BETWEEN: _____

(the "Lessor"), a corporation organized and existing under the laws of the Government of the Islamic Republic of Afghanistan, with its head office located in Kabul, and hereinafter referred to as the Management Company (MC), and acting under the authority of the Ministry of Agriculture, Irrigation and Livestock (MAIL), with its head office located in Kabul.

I.1.

AND: _____

____ (the "Lessee"), a corporation organized and existing under the laws of the Government of the Islamic Republic of Afghanistan, with its head office located at:

I.2. _____

I.3. _____

I.4. _____

I.5. _____

I.6. _____

I. TERMS of the LEASE

I.1. The MC does hereby agree to let, and Lessee does hereby agree to lease the property situated in the Agriculture Center and described as [____DESCRIBE____], from Start Date _____ to Ending Date _____ subject to the terms and conditions set forth hereafter. The term of this lease shall be for a minimum of _____ () years, and for a maximum of _____ () years.

I.2. Lessee is engaged in the _____ industry, and desires to lease the Property for the purpose of constructing improvements and installing equipment thereupon.



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1.3. Lessee has duly submitted a Site Plan and an Application to Purchase or Lease to the MC and the MC has agreed to Lessee's proposal, and has agreed to grant a lease to the Property for the term stated above, and subject to the conditions set forth hereinafter.

1.4. Lessee warrants that Lessee's use of the Property will conform to the Site Plan and to the plans detailed in the Application to Purchase or Lease, and that Lessee will abide by the spirit and measure of the Protective Covenants and Restrictions. Any use other than the one specified in the Application must be approved in writing by the MC.

1.5. Lessee will pay to the MC a yearly rent in the amount of _____ which shall be paid at the signing of this Agreement, and on each anniversary which follows. From the second year, and continuing through each subsequent year an annual increase of _____% will apply.

2. Conditions of the Lease

2.1. Use of Leased Property.

Lessee represents that the Property will be used for construction and installation of a building and related improvements that will be utilized for an industrial purpose in compliance with the signed Protective Covenants and Restrictions here presented in Annex A, and in conformity with the Site Plan and the Application to Purchase or Lease which has been submitted to and approved by the MC. Any deviation from these plans will not be permitted without prior written approval from the MC.

2.1.1. Construction of the facility (groundbreaking):

Construction, once approved by the MC, must begin no later than four (4) months from the signature date of this Agreement, and construction of the facility must be completed not later than twenty four (24) months from the date of Lessee's breaking ground, upon penalty of forfeiture of payments and termination of the Lessee's rights under this Agreement. Lessee has ten (10) days after the above four (4) months' deadline to state its case and make a request in writing to the MC to change the above construction completion terms for good cause or force majeure. No later than ten (10) days after receiving and reviewing Lessee's written request, the MC will render a decision.

2.2. Renewal of Agreement/Early Termination.

If at least one year prior to the Ending Date, the Lessee gives the MC written notice requesting a renewal of the Agreement, the MC shall grant the Lessee a further lease of



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the Property at a rent and duration as may be agreed between the Lessor and the Lessee. In the event the Lessor and Lessee fail to agree to the terms upon which the Agreement is to be renewed before the expiry of the Term, the Lessee shall leave the Property at the Ending Date.

2.2.1. After _____ () years, if any party decides to terminate the Lease prior to the Ending Date, it shall give the other party one (1) year's written notice of termination and the result will be a new Ending Date. Failure to give one (1) year's written notice of termination will automatically result in the continuation of the Lease Term. In this case Lessee will have one year prior to the Ending Date to find a new lessee who will purchase his lease at some negotiated sum.

2.3. Utilities.

Lessee shall pay lessor for all water / waste water charges, electricity or telecommunications where provided and used or consumed by the Lessee.

2.4. Assessment for Common Area Maintenance (CAM) Charges.

The Lessee hereby agrees to annually pay to the MC CAM charges as a user fee in an amount that the MC assesses to raise the funds needed to perform the operation and maintenance of the Agriculture Center during each fiscal year, this fee to be charged to the Property, and shall be a continuing lien upon the Property against which such assessment is made.

2.4.1. The CAM charges levied by the MC shall be used exclusively to provide the specified infrastructure, security and amenities to the Lessee for the improvement and maintenance of the common areas and to carry out the MC's obligations. Furthermore, the MC, at any time, may levy a special assessment in order to raise funds for unexpected operating or other costs, or such other purposes as the MC in its discretion deems appropriate.

CAM charges shall be collected on a yearly basis unless the MC directs otherwise. The MC shall use its best efforts to fix the amount of the CAM charges of each lot and send written notice thereof to every Lessee at least sixty (60) days in advance of each assessment period, provided that failure to comply with the foregoing shall not affect the validity of any charge levied by the MC.

2.4.2. Lessee covenants and agrees to allow the MC to enforce any CAM charge lien established hereunder by non-judicial proceedings under a power of sale or by any other means authorized by law.

3. Bankruptcy.



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Neither this Lease nor any interest herein, nor any estate hereby created shall pass to any trustee or receiver or assignee for the benefit of creditors of Lessee, or otherwise by operation or law, so as to jeopardize the MC's interest herein or the rights of any lot owner.

4. Default.

In the event Lessee fails to pay any rental amount due hereunder within thirty (30) days after written notice of non-payment, or any failure to perform any other of the terms, conditions, or covenants of this Lease for more than thirty (30) days after written notice of such default, or if Lessee shall abandon the Leased Property, then the MC shall have the immediate right to pursue all rights and remedies available under the Law on Private Domestic and Foreign Investment in Afghanistan.

Upon breach or default of the Agreement by the MC, Lessee, at its option, may treat this Agreement as terminated, and be entitled to the return of previous payments made under Section 3 during the default period. The MC shall not be liable to Lessee for consequential damages (including but not limited to loss of profits and the like).

5. Environmental Provisions.

Within three (3) months of the signature date of this Agreement, the Lessee agrees to the MC, at his own expense, an Environmental Impact Study (EIS) carried out by a service provider approved by the MC. The Lessee is prohibited from starting operation of the business before the EIS is approved by the Afghan National Environmental Protection Agency (NEPA).

6. Criminal and Unlawful Activities.

The Lessee must abide at all times by the laws of the Government of the Islamic Republic of Afghanistan. Any criminal or unlawful activities carried out on the Lot by the Lessee, its agents, employees, or guests are prohibited.

Any criminal or unlawful activities may also result in the suspension of the Lessee's business operation on the Lot for a duration to be determined by the MC.

7. Mutual Indemnity.

The Lessor shall indemnify, defend, protect and hold harmless the Lessee from all damages, liabilities, claims, judgments, actions, attorneys fees, consultant's fees, costs and expenses arising from the breach of its obligations or representations under this Agreement as well as the gross negligence or willful misconduct of the Lessor or its agents, contractors, employees, or invitees.



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The Lessee shall indemnify, defend, protect and hold harmless the MC from all damages, liabilities, claims, judgments, actions, attorney's fees, consultant's fees, costs and expenses arising from the gross negligence or willful misconduct of the Lessee or its agents, contractors, employees or invitees, or the breach of Lessee's obligations or representations under this Agreement.

8. Force Majeure.

No party shall be liable for any failure to perform its obligations in connection with any action described in the Agreement if such failure results from any act of God, riot, war, civil unrest, terrorism, flood, earthquake, or other cause beyond such party's reasonable control.

9. Adherence to the Protective Covenants and Restrictions.

The MC is responsible for ensuring the adherence to the Protective Covenants and Restrictions of the Agriculture Center (see Annex A). The Lessee is responsible for complying with the rules and regulations at all times.

The MC reserves the right to cancel the Lessee's rights under this Agreement if the Lessee is not compliant with the Protective Covenants and Restrictions. The MC will notify Lessee in writing of non-compliance, and Lessee will have thirty (30) days to initiate conformity.

The MC may not unreasonably or without proper justification cancel Lessee's rights under this Agreement.

10. Invalid Provision.

If any provision of this Agreement shall be found to be invalid or unenforceable, the remaining provisions shall remain in full force and effect.

11. Language.

This Agreement has been drafted in the official languages of the Islamic Republic of Afghanistan and in English. In any case of ambiguity the English version of this document shall prevail.

12. Governing Law.

This Agreement shall be governed by and construed and enforced in accordance with the laws of the Government of the Islamic Republic of Afghanistan.

13. Dispute Resolution.



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Any disputes between Lessor and Lessee shall be resolved in accordance with Articles 26 and 27 of the Law on Private Domestic and Foreign Investment in Afghanistan.

14. Non-Waiver.

In the circumstance that the MC does not demand compliance with any particular term or condition herein established, Lessee may not interpret such action or non-action as a waiver to the rights and actions granted by means of the present Agreement or the laws applicable to the case.

15. Access to the Property.

The Lessee will permit the MC and/or its duly authorized agents to enter the Property at reasonable times.

IN WITNESS WHEREOF, this instrument has been executed on the day and year last above written.

For the Lessor:

Mr. _____
Mr. _____

Date: _____

Place: _____

For the Lessee:

Date:

Place:

6.3.3 Protective Covenants and Restrictions



LASHKAR GAH AGRICULTURE CENTER

Protective Covenants and Restrictions

Article I

Subject Property and Conditions

1.1. The real property referred to as the Lashkar Gah Bost Airport Agriculture Center, hereafter referred to as Agriculture Center, is owned by the Ministry of Agriculture, Irrigation and Livestock (MAIL) of the Government of the Islamic Republic of Afghanistan. This property lies within the secure perimeter of Lashkar Gah's Bost Airfield which is owned and regulated by the Ministry of Transport and Civil Aviation (MoTCA). The attached Exhibit A shows the Agriculture Center property, and its physical location in and in relation to the Lashkar Gah Bost Airport.

1.2. MAIL, as the owner of the property, hereby adopts the following Protective Covenants and Restrictions to apply to and to run with the land included in the Agriculture Center.

1.3. Any purchaser, renter or Buyer/Lessee of land and/or buildings in the Agriculture Center agrees to the applicability of these Protective Covenants and is thereby bound to them. The Agriculture Center Protective Covenants and Restrictions apply to all lots created and/or sold or leased, and all building modifications, additions or construction.

1.4. MAIL, without the consent of any party to the covenants, may from time to time amend, modify or cancel these covenants as it deems appropriate and necessary. Any amendment, modification or cancellation of the covenants may not be imposed retroactively upon any party to these covenants.

Article 2

The Management of the Agriculture Center

2.1. MAIL, as owner/developer of the Agriculture Center and all improvements thereon, will authorize a private sector Management Company (hereafter referred to as MC) to act as its exclusive agent in all matters pertaining to the management, maintenance and marketing of the Agriculture Center. The agent/management company will be empowered to enforce the Protective Covenants and Restrictions, and, in addition, to perform all real estate transactions in the name of MAIL to include renting, selling and leasing the land and improvements in the Agriculture Center.

2.2. The MC will be responsible for the maintenance of the Agriculture Center in a clean and secure condition. The MC will be authorized by MAIL to charge fees to lot owners and Buyer/Lessees for services such as refuse pickup, security and inspection, provision of water and sewer, street cleaning and other essential services.



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2.3. The MC shall have the right to enforce the provisions of these covenants by any proceeding at law. Failure to enforce any covenant or condition contained herein shall in no event be deemed a waiver of the right to do so thereafter.

2.4. The MC will provide written notice of any alleged violation of these covenants to the owner of the property on which the alleged violation is occurring or has occurred. The owner will correct such violation within 30 days of the notice, or in the case where a violation cannot be corrected within 30 days, the owner shall commence correction within the 30 day period and shall diligently proceed with the corrective action. If the property owner does not do so, the MC may take enforcement action.

2.5. No notice prior to taking enforcement action is necessary in an emergency situation, or when the enforcement action is to stop construction or excavation.

2.6. Once ownership of seventy five percent (75%) of the lots has transferred to individuals or companies in the form of either purchase or long term lease, MAIL reserves the right to pass responsibility for the preservation and enforcement of the covenants to a Property Owner's Association whose membership will be composed of the aforementioned individuals or companies.

Article 3 Site Plan Review

3.1. No construction will be permitted on any lot in the Agriculture Center without prior approval of a site plan by the MC. The site plan will indicate the following:

1. Lot size and dimensions.
2. Lot number.
3. Percentage of lot coverage of any structures.
4. Building dimensions in square meters.
5. Location to scale of driveways and parking.
6. Building setbacks.
7. Building and roof lines.
8. Finished grade of the lot.
9. Location of drainage, utility lines and connections.
10. Landscaping plan.
11. Building elevations including building heights, construction materials, colors and finishes of exterior design elements.
12. Location and type of lighting.
13. Signage plan.
14. Location of all external mechanical equipment.
15. Loading and collection facility details.
16. Projected number of employees.



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3.2. Written approval or rejection of the site plan will be forthcoming from the MC within ten days.

3.3. Approval or disapproval of a site plan shall in no way be considered to be a substitute for, or a waiver of, any approval or permit which may be required by the Government of the Islamic Republic of Afghanistan or any agency thereof.

Article 4 Development Standards

1. All buildings to be one story with a maximum height of 20 meters.
2. Front setback is a minimum of ten (10) meters for the building on the main street and minimum of five (5) meters for any side street, these and other setbacks are to be approved by the MC.
3. Buildings can have a mezzanine as long as it is not more than one third (1/3) of the open floor below.
4. Buildings should have fire escape exits as required by code, and clearly marked with illuminated signs.
5. Boundary wall height must be a maximum of two (2) meters.
6. Boundary wall construction material must be hollow concrete block.
7. Building materials for exterior walls of the building, such as columns, pillars, and pillar stones, must be hollow concrete block, plastered or fire-burned brick.
8. No mud brick or mud construction is permitted on any site.
9. Pre-engineered metal buildings shall be an acceptable use if highly visible walls are treated the same as exterior wall requirements.
10. A minimum of fifteen per cent (15%) of the total lot area will be landscaped.
11. Each lot owner will provide all on-site lighting.
12. Parking plans are to be approved by the MC.
13. The exteriors of buildings to be located in the park shall incorporate structural arrangements and color schemes that will limit visual discord with the natural background.
14. Nighttime lighting for the Agriculture Center and buildings located in it shall incorporate features for limiting effects on background sky darkness.



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15. All buildings shall be visually screened from adjacent parcels and off-site property at the front, rear, and sides, using methods such as architectural fencing, berms, and plantings, individually or in combination.

Article 5 Environmental Provisions

The Buyer/Lessee's business operations must comply with current IROA environmental legislation. In particular, the Buyer/Lessee's business operations must incorporate all specific mitigation measures identified by the EIS completed as a condition of the Agreement to Lease/Purchase and as approved by the Afghan National Environmental Protection Agency (NEPA). In the event that the MC discovers any violations of the provision as outlined, the MC reserves the right to inform all relevant authorities and / or suspend the Buyer/Lessee's business operation on the Lot for a duration to be determined by the MC.

Article 6 Utilities in the Agriculture Center

5.1. Water and sewer services: Water service will be made available to a number of the smaller lots (see Exhibit A). These users will be charged a monthly fee based on consumption. More substantial users on larger lots will be free to build their own water systems. Sanitary sewer will be provided by the Agriculture Center, and users will be billed annually by the MC according to the volume of their water usage. In the case of industries using water for manufacturing processes, there will be an additional environmental charge for biological oxygen demand (BOD). In no circumstance shall a septic system be installed in the Agriculture Center. Only the MC is authorized to tap into the main sewer line, and users will be charged a tap fee of 500 United States dollars (USD\$500) at the time that the sewer tap is installed for them by the MC.

5.2. Electrical services: Each user will provide its own electrical service until such time as the electrical mains are connected to the existing / prospective power grid. All wires, utilities and service facilities shall be located underground.

5.3. Communications: Each user will be responsible for its own communications equipment. External antennas are to extend no more than 4 meters above the roofline of the tallest building on the lot.

Article 7 Permitted and Prohibited Uses

6.1. The buildings and lots with the Agriculture Center shall be used only for manufacturing, warehousing, storing, processing, fabricating, compounding, packaging, etc. No building or lot shall be used for residential purposes in any form with the



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exception of commercial residences such as hotels which will occupy a lot dedicated exclusively to this specific purpose. Housing for security personnel is exempted from this prohibition.

6.2. Junk or salvage yards are strictly prohibited, and the use of tractor-trailers, shipping containers, or of other trucks or vehicles for storage is also not allowed.

6.3. The MC is authorized and encouraged to preserve and enhance the appearance of the industrial park, and to eliminate any excessive or confusing sign displays. One entry sign shall be constructed on each lot, and it must include the company name, address number and street name. Sign materials should be consistent with the material content and architectural style of the building. Outdoor advertising signs, special event signs, billboard signs or signs illuminated by flashing or blinking lights will not be permitted. Ground and wall signs are preferred.

Article 8 Terrorist Financing Prohibition

The Buyer/Lessee is prohibited from conducting transactions with, and the provision of resources and support to, individuals and organizations associated with terrorism in accordance with the Laws of the Government of the Islamic Republic of Afghanistan. It is the legal responsibility of the Lessor to ensure compliance with these laws. The MC is obligated to inform the relevant authorities upon discovery of such activity. In the event that the MC discovers any violations of the provision above, the MC reserves the right to suspend the Buyer/Lessee's business operation on the Lot for a duration to be determined by the MC.

Article 9 Narcotic Production Prohibition

The Buyer/Lessee is prohibited from engaging in activities or provision of resources and support related to the production of narcotics in accordance with the Laws of the Government of the Islamic Republic of Afghanistan. It is the legal responsibility of the Lessor to ensure compliance with these laws. The MC is obligated to inform the relevant authorities upon discovery of such activity. In the event that the MC discovers any violations of the provision above, the MC reserves the right to suspend the Buyer/Lessee's business operation on the Lot for a duration to be determined by the MC.

Article 10 Child Labor Prohibition

The Buyer/Lessee will not engage in nor condone unlawful employment, or exploitation of children in the workplace. Consistent with Afghan labor law, the minimum age for full-



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time employment is 15 years of age. The minimum age for employment of individuals performing hazardous work is 18 years of age. Hazardous work is defined as:

- Work underground, under water, at dangerous heights or confined spaces;
- Work with dangerous machinery, equipment and tools, or which involves the manual handling or transport of heavy loads;
- Work in unhealthy environments which may , for example expose children to hazardous substances, agents or processes, or to temperatures, noise levels, or vibrations damaging to their health;
- Work under particularly difficult conditions such as work for long hours or during the night or work where the child is unreasonable confined to the premises of the employer

The MC is obligated to inform the relevant authorities upon discovery of such activity. In the event that the MC discovers any violations of the provision above, the MC reserves the right to suspend the Buyer/Lessee's business operation on the Lot for a duration to be determined by the MC.

Article 11 Nuisances

10.1. Occupants will refrain from all activities that may become an annoyance or nuisance to their neighbors. This specifically includes any noxious or offensive trade or activity. Allowed uses shall not cause or produce a nuisance to other property such as, but not limited to: excessive vibration, noise, electromechanical disturbances, heat, glare, radiation, air or water pollution, or the emission of odorous or toxic matter.

10.2. No animals, livestock or poultry of any kind shall be raised, bred or kept for any reason on any lot or common area within the Agriculture Center. The MC is authorized to capture and remove any such animals.

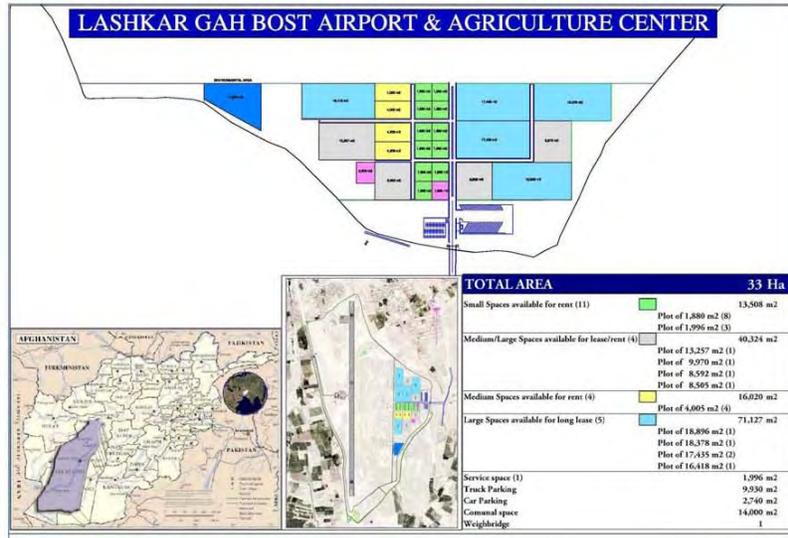
10.3. Rubbish. No rubbish, trash, garbage or other waste material shall be kept or permitted upon any lot or common area, except in a sanitary container located in an appropriate area, screened and concealed from view.

Article 12 Variances

8.1. MAIL authorizes the MC to reserve the right at any time and from time to time to permit variances from the strict application of these Protective Covenants or any one (1) or more of them where the circumstances, in its sole and exclusive judgment, justifies the granting of same. Any variances shall be in writing, and shall be executed by an officer of the MC.



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IN WITNESS WHEREOF, this instrument has been executed on the day and year last below written.

(For the Lessor)

(For the Buyer/Lessee)

Mr. _____

Mr. _____

Date: _____

Date: _____

Place: _____

Place: _____

PROTECTIVE COVENANTS AND RESTRICTIONS

7

6.4 NEPA Application for Environmental Clearance Forms

All prospective purchasers or lessees must, using the enclosed forms, apply to IPDA and NEPA for environmental clearance as stipulated by the agreements, covenants and restrictions presented above. These forms were prepared by IPDA.

6.4.1 Form I

INDUSTRIAL PARKS DEVELOPMENT AUTHORITY - IPDA



**National Environment Protection Agency (NEPA)
 APPLICATION FOR ENVIRONMENTAL CLEARANCE-I**

Reg.No: _____
 2005

Date: / /

For Office Use Only

Code Number	_____
Date of Receipt	_____
Approval No. & Date	_____

To be filled by Applicant:

1. GENERAL	
1.	Name & address of the Industry
2.	Present Address for correspondence Phone Number Fax Number
3.	Number and date of AISA registration
4.	Name and address of applicant for AISA
5.	Name of Directors/ Partners
2. LOCATION	
1.	Plot # and name of Industrial Park
2.	Area of land assigned or to be assigned
3. PRODUCTS AND RAW MATERIAL DETAILS	
1.	List of main products proposed to be produced with designed daily production capacity
2.	List of by-products proposed to be produced with daily production capacity
3.	List all raw materials with daily consumption at full production capacity
4.	List all processing chemicals materials consumed daily with expected quantities
4. MANUFACTURING PROCESS	
1.	Process flow diagram
2.	Brief write up on process and technology
3.	Critical process parameters such as

	pressure build up, temperature rise and run-away reactions.	
4.	Other external effects critical to the process having safety implications, such as ingress of moisture or water, contact with incompatible substance sudden power failure	
5.	Highlights of the built-in safety/ pollution control devices or measures incorporated in the manufacturing technology.	
5. POWER LOAD REQUIREMENTS		
1.	Energy source	
6. DOMESTIC SERVICE FOR EMPLOYEE		
1.	Number of persons to be served	
2.	Water Supply, sources & daily consumption M ³ /day	
3.	Sewerage collection system	
4.	Sewerage treatment	
7. WATER REQUIREMENT		
1.	Source of Water Supply	
2.	Average daily consumption of water for: a. Process b. Washings c. Cooling d. Sanitary purpose e. Others Total	Quantity (in M ³ /day)
8. WASTE WATER DISCHARGE		Quantity (in M ³ /day)
1.	Waste Water Discharge a. Process b. Washings c. Cooling d. Sanitary (Sewage from toilets/ sludge from hand washing etc.) e. Other Total	
2.	Does industry proposed to re-circulate any or all the above waste streams	Yes () No ()
3.	If yes, a. Quantity to be re-circulated cooling purposes b. Quantity to be re-circulated trade effluent	
4.	a. Whether effluent need any treatment: b. If yes, whether conventional or special	

	(give detailed description)	
9. SOLID WASTE		
1.	Total quantity or solid wastes in tonnes per day along with its characteristics.	
2.	Method proposed for disposal including treatment plant sludge (Land fill/ Dumping/ Composting/ Incinerator)	
3.	Other special toxic substance proposed to be discharged? Please specify nature and concentration (inorganic, organic including pesticides and organo chloro-compounds phenol, Lignin, mercaptan, heavy metals and radioactive substance)	Quantity (in M ³ /day)
10. TECHNICAL INFORMATION		
1.	Site plan with clear identification of boundaries and total area proposed to be occupied and showing details nearby the proposed site and septic tanks	
2.	Site plan for each lot showing all structures including septic tanks and solid waste collection space will be submitted when it is approved	
3.	Copy of the report on environmental impact assessment will be submitted in three months after the sales/lease agreement is signed Name: Signature: Address:	

	ix) Chlorine x) Halogens xi) Hydrocarbons xii) Mercaptans xiii) Other specify c) Stack Details i) Material of construction ii) Height from GL Height from the top of the building (give details of stacks for each process emission)		
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13. Whether Air Pollution Control System required to be installed? If yes, give details		
14. HAZARDOUS WASTES AND CHEMICALS (Enclose Safety data sheet of each hazardous chemical)		
1.	Hazardous Wastes [NEED TO LINK THIS TO OBJECTIVE DEFINITION OF HAZARDOUS WASTE] a. (i) Category of hazardous Wastes (ii) Quantum of hazardous Wastes generated in each category b. Method of disposal/treatment c. Mode of storage in the plant with storage capacity.	
2.	Hazardous chemicals (as defined in the _____) a. Name of chemicals used and their quantity b. Whether any isolated storage outside factory premises is involved, if yes, give details c. Whether emergency plans have been proposed for taking: i. On site measures ii. Off site measures iii. Proposed arrangements, if any, for mutual aid scheme with the group of neighboring factories.	
3.	Main and intermediate storage proposed for raw materials/ intermediates/ products/ by products (maximum quantities to be stored at any time)	
4.	Transportation method to be used for materials inflow and outflow, their quantities to be stored at any time.	
5.	Safety measure proposed for: • Handling of materials	

	<ul style="list-style-type: none"> • Internal & external transportation • Disposal (packing and forwarding of finished products) 	
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15. ESTIMATED COST OF POLLUTION CONTROL		
1.	Total project cost	
2.	Expenditure proposed for a. Water Pollution Control b. Air Pollution Control c. Disposal Arrangements d. Solid Waste handling./treatment e. Expenditure proposed for Pollution monitoring	
3.	Total Capital Investment proposed on Pollution Control as a %age of total investment of the industry. <ul style="list-style-type: none"> • Existing equipments & systems will be utilized. 	
16.	Any other additional information likely to have beneficial or adverse environmental affect.	

Place: Date:	Signature: _____ Name: _____ Designation : _____ Address: _____ _____
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6.5 Acronyms and Abbreviations

AC	Agriculture Center
ADP/S	Alternative Development Program – Southern Region
AISA	Afghan Investment Support Agency
ALP/S	Alternative Livelihoods Program
ANDMA	Afghanistan National Disaster Management Authority
AU	Airport Upgrade
BST	Lashkar Gah Bost Airport
CSO	Central Statistical Office
EA	Environmental Assessment
EIA	Environmental Impact Assessment
EIS	Environmental Impact Study
FAA	US Federal Aviation Administration
HPDC	Helmand Provincial Development Council
IBC	International Building Codes
IDP	Internally Displaced Person
IPDA	Industrial Parks Development Authority
IRoA	Islamic Republic of Afghanistan
LAMP	Limited Airport Master Plan
LBAAC	Lashkar Gah Bost Airport Agriculture Center
MAIL	Ministry of Agriculture, Irrigation and Livestock
MC	Agriculture Center Management Committee
MCI	Ministry of Commerce and Industry
MoEW	Ministry of Energy and Water
Mol	Ministry of the Interior
MoTCA	Ministry of Transport and Civil Aviation
NEPA	Afghanistan’s National Environmental Protection Agency
PAP	Potentially Affected Person
PM	Project manager (during construction phase)
PRT	Provincial Reconstruction Team
SEA	Save the Environment Afghanistan
UNEP	United Nations Environment Programme
UNMAS	United Nations Mine Action Service
USAID	United States Agency for International Development
USGS	United States Geological Survey
VFR	Visual Flight Rules

6.6 Environmental Assessment Team

In order to carry out a multi-disciplinary EA for Lashkar Gah Bost Airport and Agriculture Center activities, the following disciplines will be represented on the Team:

- **Team Leader. Drako Reyes** has 20 years experience working as an Architect, Civil Engineer and Environmental Specialist in environmental risk assessment and management systems, urban and industrial contamination issues, cleaner production, project design, evaluation and management, and institutional strengthening.
- **Environmental Advisor. Carlos E. Quintela** with over 20 years of broad experience in environmental management, including the management of environmental and social assessment programs, environmental impact oversight of large infrastructure projects, management and supervision of complex implementation arrangements involving many and diverse stakeholders.
- **Geotechnical Specialist. Wasir Akbar Khan** is currently the Director of Rise Engineering, an Afghan national company specialist in geotechnical studies.
- **Monitoring & Evaluation. Sonnya Valencia** is a Civil Engineer and Environmental Specialist with more than 5 years as M&E Director working on USAID programs.
- **Topographic Studies. Ubique Group** is a leading civil and military infrastructure development company working in the Middle East, Africa and Central Asian regions.
- **Industrial Park Development Authority (IPDA) Senior Team**
 - **Naseem Akbar** has five years as Director of the IPDA.
 - **Dr. Qassim** is Deputy Director IPDA
 - **Eng. Abdul Ahmad Karzai** is senior technical advisor.
- **Infrastructure Advisor. Henry Koner** is a civil Engineer with 30 years experience 15 of which have been spent working on USAID projects throughout the world.