I. Country and Sector Background
1. Afghanistan, due to its harsh terrain filled with mountains and deserts and arid climate, is an unforgiving place for agriculture. Nevertheless, agriculture contributes chiefly to the Afghan economy (53% of GDP, most of the exports and employs 85% of the workforce). Nearly 80 per cent of Afghan population lives in rural areas and depend on agriculture but harbor high incidence of poverty. Only 12 percent of the land is arable and 85 percent of that land requires irrigation. Adequate and reliable supply of irrigation is therefore essential for sustainable agricultural production, which is pivotal for overall economic growth and poverty reduction. High agricultural performance offers significant prospects for raising farmer incomes, contributing to food security, providing rural employment and reducing the vulnerability of resource poor rural people.

2. However, Afghanistan’s agriculture sector has suffered adversely from nearly a quarter century of prolonged war, political upheavals, damaging floods and drought, and neglected maintenance of the irrigation infrastructure. The main drivers of agricultural growth and rural poverty reduction – roads, irrigation, information and technology, education, and markets – have all deteriorated due to social conflict, lack of maintenance for infrastructure and collapse of technical information and market systems. This situation has been exacerbated by frequent droughts. Between 1979 and 2005 agricultural production grew at 0.85% per annum, compared to 1.1% per annum in the pre-conflict period of 1964 -1978. To enable faster overall economic growth and also to significantly reduce rural poverty, agriculture needs to grow at a minimum rate of 5% per annum over the next decade.

3. At present, irrigation infrastructure of the country is in a serious state of disrepair. Also the supporting traditional community based and government institutions, have seriously deteriorated or broken down. About 60 to 70 percent of the underground small canals (Karezes) are not in use; most of the river diversion structures feeding the irrigation canals are dysfunctional or temporary nature; traditional and large canal networks are silted up, breached; and most canal structures are damaged and/or dysfunctional. The irrigation schemes now operate at about 25% efficiency, where the norm is between
40% and 60%, and are feeding only about 33% of the pre-war irrigated farm areas, and consequently productivity of agriculture remains low, and its production highly variable and vulnerable to drought.

II. Objectives

4. The revised PDO is “to assist the Borrower in restoring irrigated agricultural production in its rural areas, through improved and reliable water supply to rehabilitated traditional irrigation schemes”. The KPIs are: (i) increased area under agricultural production; and, (ii) percentage increase in agricultural production in rehabilitated schemes. The revised outputs include: under Component A - rehabilitation of 750 medium and lesser schemes, and 10 large schemes; under Component B – Feasibility study for Kokcha multi-purpose water resources development and M&E studies; and Component C: Institutional Development of the MEW.

III Rationale for Bank Involvement

5. As irrigation is life blood for a large majority of rural population, investments on restoration and rehabilitation of irrigation infrastructure of the country and building capacity of irrigation institutions are high priority of the Government of Afghanistan (GOA). Such investments and institutional development are consistent with the objectives of the Interim Afghanistan National Development Strategy (IANDS) and those articulated in the World Bank’s Interim Strategy Note (ISN). The Government assigns high priority and recognizes the importance of irrigated agriculture in transforming the rural economy, food security, reducing vulnerability and expanding livelihood opportunities for the rural population. In addition, the Government is in the process of building capacity of the government institutions responsible for delivering agriculture and irrigation services to the people. The ongoing Project provided an emergency response to Government’s effort for rehabilitating the national irrigation infrastructure focusing on traditional and large irrigation systems that are managed by the traditional water user associations (mirab systems). The project is one of the key instruments of the Government to restore the damaged irrigation structures and agriculture production of the country. It has significantly contributed to the irrigation rehabilitation and capacity building program of the Ministry of Energy and Water of the Government of Afghanistan.

6. The Bank is well placed to assist Afghanistan initiate the rehabilitation of its irrigation system. The government recognizes the World Bank to be a key development partner in its efforts to promote rehabilitation, reconstruction and recovery of the irrigated agricultural sector that is at the core of Afghanistan economy at present. The Bank has a long-standing portfolio with the GOA. The Bank also financed several water, irrigation, drainage and dam projects in 1970s. Currently, the Bank is actively involved in the Afghanistan reconstruction efforts and supports projects in different sectors, such as power, urban and rural water supply and sanitation, health, education, and roads. In rural development, the Bank supported and are increasingly supporting rural development projects, such as NSP, NSP II, HLP, MISFA, NEEPRA, NERAP, which, combined with the ongoing EIRP operation, are mutually complementary and will maximize the collective development effectiveness of the investments by enhancing access to improved agricultural technologies, credit, and markets. These measures would also enhance the sustainability

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1 One of the three pillars of the Bank’s ISN is promoting growth of the rural economy and improving rural livelihoods, which include activities that deliver community infrastructure, rural access road, irrigation, and access to markets and improved services.

2 NSP – National Solidarity Project (P 084329); NSPII (P086270); HLP – Emergency Horticulture and Livestock Project (P098256); Micro Finance Support Facility in Afghanistan (P091264); NEEPRA - National Emergency Employment Program for Rural Access (P082472); NERAP - National Emergency Rural Access Project (P103343). Details of the projects are available in Infoshop.
prospects of the ongoing operations. In addition, because of its strong in-country presence and development leadership in several other sectors, the Bank is well positioned to coordinate donor efforts in rural development, with agriculture being the engine for rural growth. The World Bank is working very closely with the other multilateral (ADB, and EC) and bilateral (USAID, CIDA, JICA/JBIC, GTZ and DFID) donors that either are already involved or are planning to get involved in the water and agricultural sectors.

IV Project Description

7. The EIRP is the first Bank supported program that is designed to specifically focus on the agricultural sector. It is the core program of the Ministry of Energy and Water (MEW) for rehabilitation of traditional irrigation schemes on a national scale. It targets priority investments to rehabilitate the existing dilapidated irrigation systems. Originally, the project was designed to consist of four components: (i) rehabilitation of irrigation schemes; (ii) rehabilitation of hydro-meteorological network; (iii) preparation of feasibility studies and monitoring; and (iv) institutional development. However, after the Mid Term Review (MTR) conducted in April 2006, the project has been re-structured to refine the original PDOs and Key Performance Indicators (KPIs), revision of the project outputs, cancellation of the original Component B (Rehabilitation of Hydro-meterological System, and the reallocation of funds allocated for this component (US$ 7 million) in the original DCA among the other remaining three components, mainly for Component A on Rehabilitation of Irrigation Schemes.

8. **Component A: Rehabilitation of Irrigation Schemes** – This component finances the urgent and essential rehabilitation of existing traditional irrigation schemes (sub-projects). A total of approximately 760 irrigation schemes covering 280,000 ha are proposed for rehabilitation under the project. The project will rehabilitate about 750 medium and lesser and 10 large schemes. “Large Schemes” are defined as those whose investment cost exceeds $300,000 per scheme; and “Medium or Lesser Schemes” are those whose investment cost is less than $300,000.

9. **Component B: Feasibility Studies and Monitoring and Evaluation**: This has two subcomponents namely Feasibility studies of Lower Kokcha multi-purpose schemes and Monitoring and evaluation (M&E)

10. Preparation of Feasibility Studies: This subcomponent finances the Kokcha Feasibility Study in Amu Darya river basin. The feasibility studies are underway with satisfactory progress. International Consultants have identified two alternative diversion sites for the proposed Kokcha multipurpose headworks, carried out topographic surveys at the two sites, completed preliminary hydrological estimations, social surveys, ex-ante environmental assessments, geological and soil studies and inventory of the existing canals. The draft definition report has been submitted and the study is expected to be completed in December 2007. The contract is expected to be completed (Euro 2.2 million) in 18 months, and the final feasibility report is expected by August-September 2007.

11. Monitoring and Evaluation: This subcomponent finances a M&E study that aims to carry out M&E of the EIRP, build capacity of the MEW for long term M&E of its programs. The information collected as part of M&E will also feed into the preparation of pre-feasibility, feasibility or strategic studies. Furthermore, M&E work by the International Consulting Firm will provide an independent source of information related to the status, speed and quality of project implementation by MEW, with support from FAO. The study is underway and is expected to be completed by September 2006.

12. **Component C: Institutional Development** - The institutional strengthening is sub-divided into three sub-components, namely (i) human resources development (HRD); (ii) office rehabilitation and refurbishing, and (iii) provision of office and communication equipment. HRD is very crucial
because it is the professional staff of MEW who will be responsible for the implementation of the various project activities.

V. Implementation

13. The Ministry of Energy and Water (MEW) have the overall responsibility for project execution and implementation with the help of a Program Coordination Unit (PCU) at Kabul. The PCU is responsible for overall project management, including technical/engineering design, construction supervision, financial management, procurement, disbursement, monitoring and institutional development. The PCU implements the project with the help of six regional offices established in six regions. The PCU is assisted by a team of international and national experts hired through a contract between the FAO and the MEW. The staff of the FAO, PCU and Provincial Irrigation Department work in close collaboration in Kabul and the regions in the project implementation. An international consultancy firm assists the PCU in the monitoring of project impacts (physical, economic, environmental and social).

VI Sustainability

14. The sustainability of the irrigation rehabilitation program initiated by the MEW through the ongoing project will require additional funding. The traditional irrigation schemes financed by the project have the strength of the presence of mirab system – a time tested institutional arrangements for self management and maintenance of the schemes. The mirabs and communities have played a key role in the surveys, investigations, designs and implementation of subprojects as the activities directly benefit their livelihoods. Most of the infrastructure investments chosen are small to medium-scale and can be easily self-managed by the farmers. The project also commits itself to providing training to farmers and mirabs regarding irrigation water management and O&M of the schemes for better sustainability. The Project is also pursuing, to the extent possible, to link farmers with provincial agricultural agencies for better input supply to improve agricultural production.

VII Lessons Learned from Past Operations in the Country/Sector

15. Despite serious security problems in some project areas and parts of the country, many Bank supported emergency projects have been and are being relatively successfully implemented. However, some major problems still remain. The lack of government capacity has been the single most important factor hindering project implementation in Afghanistan. Effective and sustainable capacity building and knowledge transfer is often not viable as the base knowledge is low and the majority of staff are close to retirement. New graduates are difficult to attract due to the low pay scale. The capacity issue has been partially addressed through the establishment of program implementation/coordination units in line ministries supported by international consultants and technical assistance for core fiduciary roles of the government, including procurement, financial management and audit. However, without corresponding reform in the civil service and pay grading, it is not feasible to build effective capacity within the term of a project. In fact, it has proven difficult to find suitable counterparts in MEW for the international consultants to whom knowledge should be transferred and capacity built.

16. With respect to the ongoing EIRP project, the implementation has been slow at the startup due to, among other things, weak capacity, FAO leadership problems, and delays in procurement and payments. Nevertheless, with changes in the FAO leadership and on-job training imparted to counterpart staff, the implementation has picked up pace and is rated satisfactory at the supervision mission of Nov/Dec 2006. The experience during the implementation of ongoing EIRP has strongly influenced the preparation of the project re-structuring and supplemental package, for example, through revising the PDOs and KPIs,
strengthening the project implementation support in the ministry for the current and other potential follow-on projects.

VII Project Performance

17. Project development objectives and the implementation performance of the project is satisfactory. Of the IDA Credit of US$ 40 million, about US$ 21.6 (54%) have been disbursed to date and a total of US$ 35.5 million is fully committed. As of December 31, 2006, the project performance under Component A is as follows: 635 subproject proposals costing about US$50.3 million have been prepared. Out of these subproject proposals, 523 subprojects totaling US$34 million to bring 289,825 ha of land area under irrigation have been approved; contracts for 399 subprojects worth US$16.4 million have been awarded and are ongoing; and 267 subprojects have been completed. In addition the first phase of the works under the contract for the emergency repair works to Band-e-Sultan Dam costing about US$500,000 have been completed, and design for the second phase of this project has been reviewed and submitted for approval.

18. The feasibility studies and M&E study is being carried out satisfactorily. Under the institutional development component, following are the interventions and outcomes: (i) on-the job training by involving staff of the PCU and Provincial Water Management Departments in the investigation, design and construction supervision over the preceding project period; (ii) special subject specific training to staff ongoing and already completed at Kabul and regional staff; (iii) overseas training to project engineers on civil works construction quality assurance and control; (iv) ongoing procurement of civil works construction quality control equipment and establishment of a project–wide construction quality control system for the project in the MEW; (v) Management Information System has been developed to keep track of the Component A proceedings and which is potentially expandable to similar follow on water/irrigation rehabilitation projects of the MEW; (vi) ongoing establishment of M&E system; (vii) appointment of counterpart teams from the MEW to work with international consultancy teams for ongoing Kokcha Feasibility Study and M&E; (viii) setting up of a hydrological service within the MEW for which action has just been initiated; and (viii) provision of support for renovation and construction of provincial irrigation and water management department buildings.

19. The estimated cost of the project at appraisal was US$75 million to cover the full scope of the project and achieve its development objectives and outcomes. The IDA contributed US$40 million anticipating US$35 million co-financing from Afghanistan Reconstruction Trust Fund (ARTF). However, supporting funds from the ARTF have not materialized to date. The Ministry of Finance and the management committee of the ARTF inform that ARTF funds are unlikely to be available to the project in the forthcoming period. Since the scope of technical assistance, consulting services and other institutional arrangements were designed for a US$75 million project, there is capacity to identify/design sub-projects beyond the currently available financing under EIRP. At present, several contracts are ongoing, several other large sub-projects have been identified and rehabilitation designs have been completed and are ready for implementation if and when additional funds become available. Therefore, the Government now seeks additional financing of about US$25 million with one year extension of the Credit Closing date to cover the revised scope of the project as approved by the Board of Executive Directors in November 2006.

VI Safeguard Policies that apply

<table>
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<tr>
<th>Safeguard Policies Triggered by the Project</th>
<th>Yes</th>
<th>No</th>
<th>TBD</th>
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### VII List of Factual Technical Documents

- Emergency Irrigation Rehabilitation Project (EIRP); Technical Annex (Report T7608-AF), November 26, 2003
- Interim strategy note for Islamic Republic of Afghanistan for the period of FY07-FY08, World Bank document, Report No. 35794-AF.

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