# INTEGRATED SAFEGUARDS DATA SHEET CONCEPT STAGE

Report No.: AC1964

Date ISDS Prepared/Updated: 03/09/2006

#### I. BASIC INFORMATION

## A. Basic Project Data

Country: Kazakhstan	Project ID: P086592		
Project Name: IRRIGATION & DRAINAGE II			
Task Team Leader: Masood Ahmad			
Estimated Appraisal Date: Estimated Board Date: March 31, 200			
Managing Unit: ECSSD	Lending Instrument: Specific Investment		
	Loan		
Sector: Irrigation and drainage (100%)			
Theme: Water resource management (P);Rural policies and institutions (S);Rural services			
and infrastructure (S)			
IBRD Amount (US\$m.): 155.00			
IDA Amount (US\$m.): 0.00			
GEF Amount (US\$m.): 0.00			
PCF Amount (US\$m.): 0.00			
Other financing amounts by source:			
BORROWER	150.00		
	150.00		

## B. Project Objectives [from section 2 of PCN]

The Project's main objectives would be to: (a) improve water resources management and increase water use efficiency in irrigation and drainage sub-sector by improving irrigation and drainage systems, better operation and maintenance with broader participation of users through water users' associations (WUAs). This would lead to increased agriculture production, employment and incomes; (b) introduce improved agricultural, irrigation, drainage and water management practices and farmers' information services to increase agriculture productivity; and (c) strengthen water management, and irrigation and drainage institutions

## C. Project Description [from section 3 of PCN]

Project Components. To achieve project objectives, the following components are foreseen under the project:

Component A: Rehabilitation of Irrigation and Drainage Systems. A systemic approach would be adopted in rehabilitation of Irrigation and Drainage (I&D) infrastructure to remove all bottlenecks in the system and to assure proper supply and/or drainage to and from the farms fields. Rehabilitation works would include reconstruction of off-farm and on-farm irrigation and

drainage systems over the project area (more than 200,000 ha) as described above. The works would include: (a) rehabilitation of headworks, main canals, branch canals, secondary canals, pumping stations, water distribution pipelines, control structures and on-farm network; (b) rehabilitation of drainage systems covering main, secondary and tertiary drains, surface, vertical or horizontal drainage systems; and (c) other works such as reconfiguration of the fields, furrow sizing, check structures, land leveling etc, for improved irrigation practices. In areas where I&D systems are to be rehabilitated, WUAs would be developed before undertaking the rehabilitation works. The WUAs would help in identification and prioritization of the construction works and would be responsible for operation and maintenance after rehabilitation. Rehabilitation of I&D systems would be carried out in hydrologic blocks of at least 20,000 ha wherever possible. However, separate contracts may be prepared for rehabilitation of major headworks, pumping stations, main canals or drains.

Component B: Community Participation and Support. To achieve the project objectives, a basic requirement would be effective community participation in all phases of project development and implementation process. The component would include development of effective WUAs for improving water management, including responsibility for operation and maintenance (O&M) of the rehabilitated system; and promotion of improved irrigation and agricultural practices. Necessary technical assistance would be provided for development of WUAs, including training, institutional development, and O&M of I&D systems that would be taking over after completion of rehabilitation.

Component C. Agricultural Development. The purpose of this component would be to enhance productivity of the irrigated lands. The activities under this component would include: (a) effective research, extension, and agricultural information services; (b) Farmers participatory training, involving training of specific target groups in various agro-technical fields and farm management; (c) demonstration of improved and modern technologies and methods to increase agricultural production through better agronomic practices such as, crop rotation, crop diversification, and crop husbandry, improved irrigation and drainage practices and better water management to improve water use efficiencies and reduce environmental degradation, including optimal field size, land leveling, and furrow irrigation. For this purpose, demonstration plots, about 5-10 ha each, would be developed in various sub-projects possibly one for each WUA or an area of 10,000 ha; (d) the establishment of a Farmers Information Services Desk in the project area to provide relevant information to farmers through different means (pamphlets, videos, radio, T.V, weekly papers etc) to advise them on making their farms more productive and sensitive to the market demands; and most importantly (e) provision of farm machinery as machinery stock have deteriorated considerably over the last decade.

Component D. Monitoring and Evaluation of the Project Impact. The project would also include a program for monitoring and evaluation of project impacts. The objective of the monitoring and evaluation studies would be to evaluate the impact of project implementation in terms of meeting the project's goals through assessing its physical, environmental/ecological, social, agricultural, and economic impacts. The project impact evaluation studies would focus on: (i) agricultural growth and cropping patterns, yields, crop diversification, and changes in use of agricultural input; (ii) impact on income and employment, and secondary effects on regional economy; (iii) impact on surface and groundwater supplies and water quality; (iv) impact on

water use and equity in distribution; (v) performance of the irrigation schemes, farmers activities, performance of water users' associations, effectiveness and approach to community mobilization for establishment of WUAs; (vi) environmental impact of construction activities; and (vii) estimation of project's overall benefits and economic rate of return.

Component E. Project Management, Technical Assistance and Training. This component would support the Government in implementing the project. It would include: (a) support for the operation of the PMU, and financing of overall project management, as well as technical assistance in such areas as detailed design, contract administration and construction supervision, procurement, financial management, and agricultural development; (b) institutional strengthening program including introduction of modern tools for irrigation scheduling in the sub-projects, at the Oblast and at the Raion level; (c) assistance in operation and maintenance of the I&D systems including budgeting, accounting and financing; and (d) training and study tours.

#### D. Project location (if known)

A major part of the project area would be located in the Syr Darya Basin in South Kazakhstan and Kzyl Orda Oblasts. The project is proposed to cover more than 200,000 hectares primarily in the southern oblasts of Kazakhstan at four major locations in Maktral region, Kzylkum canal command area, Ayers-Turkistan Canal command and Kzylorda oblast. In addition, some areas in Dzhambul and Almaty Oblasts may also be covered. Tentatively, the IDIP-II would cover: (i) the remaining 75,000 hectares in Maktaral area that has about 125,000 ha of irrigated land (of which about 10,000 ha were rehabilitated under IDIP and some 40,000 ha are covered under an ongoing ADB WRMLIP); (ii) about 90,000 ha in Kzylkum Canal area which off-takes from the Shardara dam, thus has assured water supply; (iii) about 50,000 hectare may be included from other irrigation systems in the South Kazakhstan Oblast such as the Arys-Turkistan canal system that also has assured water supply from the Bugun dam; (iv) about 50,000 ha from Kzvl Orda Oblast; and (v) 30,000 ha may be included from other Oblasts possibly Dzhambul and Almaty Oblasts, particularly the Shengeldi area close to Almaty with assured water supply from Kapchagai reservoir. The area that could be included in the project from each location would ultimately be determined based on the findings of the feasibility study, and discussions with the Government during feasibility studies and at the time of the project appraisal.

While the project feasibility study would focus on the areas listed above, the IDIP-II project investment may include funds for carrying out additional feasibility and design studies for rehabilitation and improvement of additional irrigated areas in these or other oblasts in the northern and eastern parts of Kazakhstan. IDIP-II investment would also include funds for carrying out rehabilitation and improvement of the irrigation and the drainage systems on these additional lands.

# E. Borrower's Institutional Capacity for Safeguard Policies [from PCN]

The project would reverse environmental degradation caused by mismanagement of land and water resources and provision of inadequate drainage hence it has an overall positive environmental impact. The project itself is in fact an environmental management/mitigation project for controlling waterlogging and soil salinization through improvement in water use efficiency on the irrigated land. From the outset, there are no major concerns that may need to be addressed.

However, Kazakhstan has adequate environmental legislation institutional capacity and mechanisms to deal with the environmental issues if they arise during project preparation or implementation, which include an environmental assessment procedure for projects, including a State Environment Expertise Review. Under IDIP-I 15 sub-projects were implemented all over the country for rehabilitation of I&D systems. Also, rehabilitation of I&D systems is nearing completion over about 40,000 ha in the Maktral region under the ADB assisted project. Rehabilitation of I&D infrastructure under these projects has not resulted in significant environmental concerns. Implementation of mitigation measures (e.g. covering pollution prevention, protection of natural resources, and worker and public safety) will be required from contractors who will have to follow guidelines for environmentally sound construction practices. These requirements will be included in bidding documents and meeting them will be a contractual requirement of the works, to be supervised by construction supervision consultants. The staff of the Ministry of Environment and Oblast level Environment agencies would regularly visit project sites to monitor the performance of the contractor with regard to environmental conditions.

Under IDIP, the institutional capacity for environmental assessments and monitoring was enhanced considerably. Several steps were undertaken to harmonize and streamline the Kazakh EA procedures, including the State Ecological Expertise (SEE) and World Bank Guidelines for EA. For this purpose, an EA Harmonization Seminar was held in 1997, with the aim to harmonize the environmental requirements and procedures of the Republic of Kazakhstan with those of the World Bank. Two documents were developed during the Seminar: (i) a document, "On Understanding of Requirements and Procedures of ROK for EIA and State Ecological Expertise and one for EA of the World Bank," and (ii) a letter on "Strengthening Environmental Assessment Management for World Bank- Financed Projects." The final report of the Harmonization Seminar was formally accepted by the MOA and the Ministry of Environment and Natural Resources (MOENR) in 1998. The two mentioned documents thereby became the guidelines for Environmental Impact Assessment preparation and SEE review for the IDIP subprojects. Over time, a streamlined procedure was developed for carrying out an EIA and SEE for each sub-project rehabilitated under IDIP-I. This system worked well for IDIP-I and the same procedures would be used for EA and environmental monitoring of IDIP-II.

In addition, for strengthening of monitoring and evaluation of environmental aspects of projects, the three existing hydro-amelioration expedition centers in the cities of Almaty, Kzyl Orda and Shymkent for water quality, soil salinity and environmental monitoring were outfitted with the necessary equipment and materials, and a new such center was established in Astana. The laboratories are operational and are carrying out environmental monitoring in the country. Also under the project, a detailed guideline for sub-project performance monitoring and evaluation system, based on GIS software, was developed.

## F. Environmental and Social Safeguards Specialists

Mr Frank Van Woerden (ECSSD) Mr Shahridan Faiez (ECSSD) Mr Norval Stanley Peabody (ECSSD)

## II. SAFEGUARD POLICIES THAT MIGHT APPLY

Safeguard Policies Triggered	Yes	No	TBD
Environmental Assessment (OP/BP 4.01)	Х		

An overall Environmental Assessment (EA) will be carried out to ensure that the rehabilitation and modernization works will be environmentally acceptable and cause no or minimum damage to the environment. The EA would also set out an overall framework for carrying out special EIAs for each construction contract expected to cover about 20,000 ha. The EA will include an Environmental Management Plan (EMP) aimed at enhancing the environmental benefits of the project. In accordance with the Bank guidelines, the tasks under the EA will include: (i) analysis of policy, legal, and administrative framework relevant to the proposed project; (ii) collection and analysis of the baseline data on the environmental issues and their trends, including issues identified during the implementation; (iii) identification of possible negative and positive environmental impacts of the proposed project and propose mitigating measures as required; (iv) development of key criteria for environmental quality monitoring in the project implementation areas; and (v) review of the guidelines developed under IDIP for environmentally sound construction practices, and making improvements as needed.

The site specific Environmental Impact Assessments will be carried out as a part of preparation of the detailed design and bidding documents of various work contracts, which will be subject to State Expertise including the State Environment Expertise Review and approval As the project will focus on rehabilitation of the existing irrigated areas, there are no resettlement issue involved.

Natural Habitats (OP/BP 4.04)	X
Forests (OP/BP 4.36)	X
Pest Management (OP 4.09)	X
Cultural Property (OPN 11.03)	X
Indigenous Peoples (OP/BP 4.10)	X
Involuntary Resettlement (OP/BP 4.12)	X
Safety of Dams (OP/BP 4.37)	X
Projects on International Waterways (OP/BP 7.50)	

The Project triggers OP 7.50 as project area lies in Syr Darya Basin which is international waterway of which Kazakhstan is a downstream riparian. The project works are of rehabilitation nature. Also the riparian states have signed water sharing agreements. The project works would not result in changes in water quantity or quality affecting interests of any other riparian.

Projects in Disputed Areas (OP/BP 7.60)		X	
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**Environmental Category:** B - Partial Assessment

#### III. SAFEGUARD PREPARATION PLAN

- A. Target date for the Quality Enhancement Review (QER), at which time the PAD-stage ISDS would be prepared: 08/31/2006
- B. For simple projects that will not require a QER, the target date for preparing the PAD-stage ISDS: 08/31/2006

C. Time frame for launching and completing the safeguard-related studies that may be needed. The specific studies and their timing should be specified in the PAD-stage ISDS. August 2006

# IV. APPROVALS

Signed and submitted by:		
Task Team Leader:	Mr Masood Ahmad	12/14/2005
Approved by:		·
Regional Safeguards Coordinator:	Mr Ronald N. Hoffer	01/12/2006
Comments: Cleared for safeguard	ls at the Concept Stage	
Sector Manager:	Mr Juergen Voegele	01/12/2006
Comments: Approved		

<sup>1</sup> Reminder: The Bank's Disclosure Policy requires that safeguard-related documents be disclosed before appraisal (i) at the InfoShop and (ii) in-country, at publicly accessible locations and in a form and language that are accessible to potentially affected persons.