INTEGRATED SAFEGUARDS DATA SHEET
CONCEPT STAGE

Date ISDS Prepared/Updated: 30-Jul-2012

I. BASIC INFORMATION

A. Basic Project Data

<table>
<thead>
<tr>
<th>Country:</th>
<th>Uzbekistan</th>
<th>Project ID:</th>
<th>P127764</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Name:</td>
<td>SOUTH KARAKALPAKSTAN WATER RESOURCES IMPROVEMENT PROJECT (P127764)</td>
<td></td>
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<tr>
<td>Task Team Leader:</td>
<td>IJsbrand Harko de Jong</td>
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<tr>
<td>Estimated Appraisal Date:</td>
<td>19-Feb-2013</td>
<td>Estimated Board Date:</td>
<td>30-May-2013</td>
</tr>
<tr>
<td>Managing Unit:</td>
<td>ECSS1</td>
<td>Lending Instrument:</td>
<td>Specific Investment Loan</td>
</tr>
<tr>
<td>Sector:</td>
<td>Irrigation and drainage (80%), Crops (20%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Theme:</td>
<td>Water resource management (70%), Rural services and infrastructure (20%), Other public sector governance (10%)</td>
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<td></td>
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</table>

Financing (In USD Million)

<table>
<thead>
<tr>
<th>Financing Source</th>
<th>Amount</th>
</tr>
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<tbody>
<tr>
<td>BORROWER/RECIPIENT</td>
<td>50.00</td>
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<tr>
<td>International Bank for Reconstruction and Development</td>
<td>100.00</td>
</tr>
<tr>
<td>International Development Association (IDA)</td>
<td>50.00</td>
</tr>
<tr>
<td>Total</td>
<td>200.00</td>
</tr>
</tbody>
</table>

Environmental Category: B - Partial Assessment

Is this a Repeater project? No

B. Project Objectives

the PDO of SKWRIP is to sustainably improve water management and restore irrigated area in South Karakalpakstan in a financially efficient manner.

C. Project Description

The project contains the following components:

(i) Development of Irrigation Systems.
This component will invest in the improvement of five sections of the Right Bank Canal (to increase the conveyance capacity from 75 to 165 m³/s), construction of the Bustan Canal (concrete lined canal of 70 km length with a design duty of 75 m³/s) and rehabilitation of existing main canals including Pakhta-Arna, Keltaminor, Old Bozgap and Bogap canals. The main canal rehabilitation would eliminate the need for secondary pumping to distribution canals. In addition to earth and concrete works, there are 90 main structures (control, cross drainage and bridges) to be constructed and rehabilitated. More than 20 distribution canals (inter-farm canals) have been identified for rehabilitation. Finally, hydromet measurement stations will be installed in the project area for measuring key water management indicators.

(ii) Institutional Strengthening
The project will improve the quality of main system irrigation management through capacity strengthening as explained below, introducing performance indicators to provide incentives for improved main canal I&D management, and developing a canal automation pilot. The pilot will take advantage of a canal automation pilot that was financed by SDC in the Ferghana Valley, and that provides valuable lessons.

Capacities will be strengthened at various levels. In the first place, PAN-ISA and Amu Darya Basin Water Organisations (BVO) staff will be trained in better water resources management in the lower Amu Darya to take advantage of the opportunities that the investments will provide. Secondly, water management staff at regional and district authorities responsible for I&D management (AIS and BAIS) will be trained in principles of rational management at main and secondary scheme level, including M&E and feedback of information into improved operations. Thirdly, O&M plans will be developed, and scheduling and prioritization for repair works will be agreed. Furthermore, capacities for irrigation operation will be improved by establishing agreed operating rules, preparation of a scheme operation plan and training of staff in its use and implementation. Lastly, water management staff in AIS and BAIS will also be trained in the training of WCAs. In addition, WCAs will be trained in I&D management and O&M at tertiary level to help ensure the sustainability of the investments. They will be provided with modern tools that will be developed in close association with stakeholders. The project will pay in particular attention to the involvement of women in WCAs, and will provide tailor-made training to women.

Farmer Field Schools (FFS) will be organized to disseminate good agricultural and water management practices among farmers in the project area. FFS are implemented through the local authorities of the three districts involved in the project. The project would provide the resources and trainers, but the level of input would reduce over the implementation period with Districts authorities encouraged to provide inputs to compensate. Special attention will be paid to the promotion of a second crop after winter wheat. Three demonstration plots (DPs) will be established for each project village (nine in total). DPs will include the following issues: deep ripping (sub-soiling), land levelling / grading, crop rotation, crop diversification, field level irrigation water measurement, and using appropriate watering methods to improve in-field water distribution. It is anticipated that at least one DP in each village will focus on non-cotton/wheat crops. DPs will also be used as an opportunity to strengthen capacities of WCAs through on-the-job training. As mentioned above, women will be targeted specifically in FFS training.

(iii) Project Management and Monitoring/evaluation
The component would (i) support the operation of the PIU, and finance overall project management, as well as technical assistance in such areas as detailed design, contract administration and construction supervision, procurement, financial management, capacity strengthening and
agricultural development; (ii) prepare a feasibility study and bidding documents for a follow-on
investment operation, possibly including the Right Bank Main Collector Development Project; and
(iii) establish a Monitoring and Evaluation (M&E) system and arrange for data collection and
reporting on key performance output and impact indicators, through baseline surveys, participatory
assessments and mid-term review and final evaluation.

While the impact of the project on water resources in the lower Amu Darya are negligible, the team
will investigate economically feasible options to further reduce the impact of the project regarding
international waterways in terms of water quantity, and to continue pursuing dialogue between
riparian countries on the project.

Important lessons were learned during implementation of DIWIP. These include:
1. Overall improvement of irrigation management requires addressing both “hardware” issues as well
   as strengthening of capacities and institutions and providing incentives to adopt innovations;
2. Local water management authorities and local governments need to be closely involved in the
design and implementation of the project. This applies in particular to attempts by the project to
introduce more rational management of irrigation water, and to elaborate and implement operating
rules for Tuyamuyun dam.
3. While the overall environment in Uzbekistan is particularly unfavorable to a meaningful role of
WCAs in irrigation management, efforts need to be undertaken to strengthen capacities through
Farmer Field Schools and Demonstration Plots. These activities were highly satisfactory during
DIWIP.
4. Organizational arrangements should take into account the difficulty of coordination among key
government agencies, as well as between MAWR and the Government of Karakalpakstan;
5. Procurement requires pro-active implementation support from the Bank, and the procurement plan
will need to contain consistent packages that will attract adequate number of bidders and competitive
prices. Consistent responses by the Bank to attempts to negotiate prices after QCBS are required,
including declaring misprocurement.
6. Implementation of safeguards instruments will require close monitoring and supervision to ensure
full compliance.
7. Pro-active communication of key results will help MAWR, PIU and local authorities take
ownership and ensure sustainability of the project achievements, and will help clarify some of the
sensitive issues that the project will be involved in.
8. Competent and efficient national management staff is necessary and should be recruited before
project effectiveness.

The design of the proposed project will fully incorporate the lessons learned from past experience.
The project will ensure involvement of all stakeholders at national level and in Karakalpakstan. It
will strengthen capacities at various levels, while project implementation will be entrusted to a
competent PIU that has already demonstrated its capacity to run a large and complex operation.
Adequate resources will be allocated to addressing critical “software” needs, including for canal
automation, capacity strengthening and institutional support.

D. Project location and salient physical characteristics relevant to the safeguard
analysis (if known)

The project area is entirely located in South Karakalpakstan. Almost the entire drainage system of the
project area (100,000 hectares) has been rehabilitated under the on-going Drainage, Irrigation and
Wetland Improvement Project (DIWIP, P009127). The major change introduced by DIWIP has been
the suspension of Beruni and Kyzylkum pumping stations that released mineralized drainage water
into the Amu Darya and Lake Ayazkala. All drainage water from the project area now is now drained via the former channel of the Janadarya to the Aral Sea. The newly constructed main drain and the rehabilitated on-farm and inter-farm drainage system now flow by gravity, the areas of high water table are considerably reduced, and some of the institutional issues were addressed.

Following improvement of drainage, the major issues that threaten productivity and sustainability of irrigated agriculture in the project area include the deteriorating irrigation infrastructure, the low water use efficiency and associated high costs of pumping to the public budget, and the lack of farmers’ incentives to improve production and productivity. In addition, as a result of hands-on involvement of regional authorities mindful of meeting cotton and wheat quota, irrigation management has been described as “routine emergency management”. More rational management of irrigation and water resources is also constrained by over-caution and by the lack of pro-activity as a result of weak water resources forecasting capacity.

Over 40 percent of the irrigation supply in the project area continues to depend on two major pump stations that abstract water from the Amu Darya. The total annual electricity costs of pumping amount to US$ 2.39 million. The project will remove this dependence on pumping by developing a gravity off-take from Tuyamuyun reservoir and decommissioning the pumping stations, thereby improving the reliability of supply and eliminating the need to release large amounts of water into the Amu Darya to serve these stations. Studies have demonstrated that this will be possible without increasing the annual volume of water abstracted from the Amu Darya (see annex A for a water balance before and after the project). This will require construction of a new 70 km canal and rehabilitation of the Right Bank Canal (RBC). In addition, secondary canals will be rehabilitated, and deteriorated and damaged structures will be refurbished or replaced. To complement the investments in hardware, the project will also strengthen institutions and capacities, introduce more rational irrigation management at all levels that is more accountable to stakeholders to help ensure sustainability, and promote production of a second non-cotton/non-wheat crop after winter wheat.

Expected benefits include increased production from rehabilitated, previously abandoned land in downstream project areas and from vertical intensification on rehabilitated and existing land, as well as reduced costs of pumping. Production of a second non-cotton/non-wheat crop after the wheat harvest will become possible in parts of the command area.

Land acquisition is anticipated in the project design. The project activities are expected to affect over 300 ha of agricultural land, some access roads and commercial enterprises (service and petrol stations). The preliminary assessment carried out by the borrower estimated that about 63 houses could also be affected. The Borrower will implement RAP (s) for all project activities requiring land acquisition.

**E. Borrowers Institutional Capacity for Safeguard Policies**

The Ministry of Agriculture and Water Resources (MAWR) will have the overall responsibility for project implementation. In view of the good experience during implementation of DIWIP, the project will support MAWR in implementing the project through establishment of a Project Implementation Unit (PIU) that is adequately staffed with irrigation, agricultural, capacity strengthening and fiduciary specialists. Close involvement of I&D management staff at Oblast, Raion and WUA level will be ensured, as well as of regional governments. The PMU will maintain a main office in South Karakalpakstan under the supervision of a Deputy Director. The PIU will be assisted by national and international consultants for all aspects of project management and implementation, including
contract administration, management and supervision; M&E; preparation of follow-on investment operations; and institutional development.

F. Environmental and Social Safeguards Specialists on the Team
Ahmed Shawky M. Abdel Ghany (ECSS1)
Lola Ibragimova (ECSS4)

II. SAFEGUARD POLICIES THAT MIGHT APPLY

<table>
<thead>
<tr>
<th>Safeguard Policies</th>
<th>Triggered?</th>
<th>Explanation (Optional)</th>
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<tbody>
<tr>
<td>Environmental Assessment OP/BP 4.01</td>
<td>Yes</td>
<td>A draft ESA/ESMP has been prepared for SKWRMIP. The report is being revised to more clearly indicate the safeguard policies that will be triggered.</td>
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<tr>
<td>Natural Habitats OP/BP 4.04</td>
<td>Yes</td>
<td>Improved water management is needed to sustain the required seasonal water flow to Baday Tugay, a seasonally flooded forest.</td>
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<tr>
<td>Forests OP/BP 4.36</td>
<td>No</td>
<td></td>
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<tr>
<td>Pest Management OP 4.09</td>
<td>TBD</td>
<td>The recently prepared draft ESIA mentions only small amount of agro-chemicals being used at the moment. Yield increases as a result of the project are expected to be small and mostly derive from better water management. The team will confirm this during project preparation and determine whether or not OP4.09 will be triggered. If so, the IPMP that has been prepared during the predecessor DIWIP will be used during project implementation.</td>
</tr>
<tr>
<td>Physical Cultural Resources OP/BP 4.11</td>
<td>TBD</td>
<td>One Mosque might be affected as a result of project activities, particularly land acquisition required for construction works. During project preparation, the team will ascertain whether or not this is the case. No other project activities will have impacts on physical cultural resources. However, “chance find” provisions will be incorporated in all works contracts.</td>
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<tr>
<td>Indigenous Peoples OP/BP 4.10</td>
<td>No</td>
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<tr>
<td>Involuntary Resettlement OP/BP 4.12</td>
<td>Yes</td>
<td>Preliminary results of ESIA identified 83 households (including small commercial structures), which will be affected by construction/rehabilitation works on Buston canal. There is a likelihood of demolition of 63 houses. Land acquisition of about 427 ha is currently estimated with majority of territory representing agricultural land. The Resettlement</td>
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<tr>
<td>Safety of Dams OP/BP 4.37</td>
<td>Yes</td>
<td>The project will affect Tuyamuyun Dam. The 2001 Tuyamuyun Dam Safety Inspection Report identified a number of dam safety issues, notably (i) safety of Sultansanjar Dam, (ii) rehabilitating the hydro-mechanical equipment; (iii) improving dam instrumentation; (iv) updating the O&amp;M manual; and (v) preparing an Emergency Preparedness Plan (EPP). The GOU will provide an updated “Dam Safety Assessment” report on Tuyamuyun dam that would clarify which of the proposed measures have already been implemented. In addition, the team's dam safety expert will visit Tuyamuyun dam.</td>
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<tr>
<td>Projects on International Waterways OP/BP 7.50</td>
<td>Yes</td>
<td>The project area covers irrigation network which will affect flows in the Aral Sea. Thus the project triggers World Bank OP 7.50 (Projects on International Waterways). The proposed investments under the project are for renovation of irrigation canals, and improvements of drainage infrastructure along with the purchasing of agricultural machinery. Water balance studies that have been conducted indicate that additional water abstractions are expected to be minimal, and that the quality of water of these rivers will not be significantly changed. Nevertheless, the Government of Uzbekistan will be asked to notify Aral Sea riparian countries to ensure compliance with OP7.50. Uzbekistan has indicated that it is willing to notify Aral Sea riparian countries.</td>
</tr>
<tr>
<td>Projects in Disputed Areas OP/BP 7.60</td>
<td>No</td>
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### III. SAFEGUARD PREPARATION PLAN

A. **Tentative target date for preparing the PAD Stage ISDS:** 31-Dec-2012

B. **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:

   Safeguards studies have almost been completed. A draft ESIA and EMP have been completed on July 5, 2012 and have been submitted for approval.

### IV. APPROVALS

| Task Team Leader: | Name: IJsbrand Harko de Jong |

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1 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.
### Approved By:

<table>
<thead>
<tr>
<th>Position</th>
<th>Name</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional Safeguards Coordinator</td>
<td>Agnes I. Kiss (RSA)</td>
<td>13-Aug-2012</td>
</tr>
<tr>
<td>Sector Manager</td>
<td>Dina Umali-Deininger (SM)</td>
<td>08-Aug-2012</td>
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