INTEGRATED SAFEGUARDS DATA SHEET
APPRAISAL STAGE

Report No.: ISDSA553

Date ISDS Prepared/Updated: 21-Sep-2012

I. BASIC INFORMATION

1. Basic Project Data

Country:	Uzbekistan	**Project ID:**	P127486
Project Name:	SUSTAINABLE AGRICULTURE AND CLIMATE CHANGE MITIGATION PROJECT (GEF) (P127486)		
Task Team Leader:	Dilshod Khidirov		
Estimated Appraisal Date:	25-Sep-2012	**Estimated Board Date:**	06-Dec-2012
Managing Unit:	ECSS1	**Lending Instrument:**	Specific Investment Loan
Focal Area:	Multi-focal area		
Sector:	Irrigation and drainage (30%), Other Renewable Energy (30%), Agricultural extension and research (20%), Crops (20%)		
Theme:	Climate change (70%), Land administration and management (30%)		
Financing (In USD Million)			

Financing Source	**Amount**
BORROWER/RECIPIENT	0.00
Global Environment Facility (GEF)	12.70
GLOBAL ENVIRONMENT - Associated IDA Fund	67.96
Total	80.66

Environmental Category:	B - Partial Assessment
Is this a Repeater project?	No

2. Global Environmental Objective(s)

The Global Environmental Objectives of the proposed Project are to (i) promote the introduction of renewable energy and energy efficiency technologies of relevance to agri-businesses and farms; and (ii) strengthen capacity for improving degraded irrigated land and water conservation.

3. Project Description

The GEF SACCMP project would be implemented over a four year period and will conclude at the same time as the RESP-2 project (December 2016). It will include three components designed to complement the four RESP-2 components (Rural Financing, Irrigation and Drainage, Rural Training

and Advisory Services, and Project Management). The three GEF project components are: (i) Investments for Sustainable Technologies; (ii) Irrigated Land Degradation Mitigation; and (iii) Project Technical Support and Advisory Services (this component also includes the additional project management costs).

SACCMP will comprise a GEF-funded environmental addition to the RESP-2, with the objective of mainstreaming environmental considerations into agricultural activities undertaken by RESP-2 and its AF. The RESP-2/SACCMP collaboration would broadly be on three levels: (i) provision of grants to introduce renewable energy and energy efficiency for climate change mitigation; ii) grant-funded irrigated land degradation improvement measures, linked to the I&D activities under RESP-2; and iii) grant-funded training for farmers, agribusiness owners, rural advisory service providers and RESP-2 credit officers, to complement ongoing training provided under Component 3 of RESP-2.

Component 1: Investments for Sustainable Technologies (US$9.0M GEF funding; US$36.7M co-financing)

This component would be implemented in close association with the RESP-2 Rural Enterprise Finance component throughout all eight regions covered by RESP-2 and its AF. This component would promote the market for low carbon technologies (both renewable energy and energy efficient) in the agricultural sector and is consistent with the GEF Climate Change (CC) Mitigation focal area objectives. It would also contribute to the CC focal area Strategic Objective 3 “promote investment in renewable energy technologies,” with emphasis on agri-businesses and rural communities. It would also be consistent with GEF’s Climate Change Mitigation objective 2 (CCM-2) “promote market transformation for energy efficiency in industry and the building sector”. The proposed project would directly respond to the strategic goals of the GEF-5 strategy in the Climate Change Mitigation focal area, namely, promoting the use of renewable energy and enhanced energy efficiency in the provision of rural energy services. As such, it supports the adoption of new, low-GHG emitting energy technologies. This component addresses priority needs identified by the Government through supporting measures to mainstream renewable energy in Uzbekistan’s energy. It will support the introduction of relevant renewable and energy efficient technologies and undertaking related capacity building in rural areas.

While RESP II and its AF support improved rural access to credit, they do not provide dedicated resources to introduce renewable energy or energy efficient technologies in agribusinesses or on farms. Rural communities, large private farmers and small farmers, especially those in remote regions subject to unreliable power and gas supply, would benefit greatly from off-grid energy from renewable sources. At the same time, the introduction of renewable energy technologies in rural areas throughout the country would support a key Government development objective. The rural communities and agribusinesses depend on irrigation and livestock for their livelihoods, creating both opportunities for renewable energy utilization (eg., use of manure for biogas) and enhanced energy efficiency (eg. for water pumping). While Uzbekistan has good supplies of natural gas, the Government is keen to develop renewable energy sources and increase energy savings by efficiency improvements both to free up for export gas currently sold at low domestic prices, to stimulate sustainable rural development and to fulfill their obligations under UNFCCC.

1.1 – Technology Demonstrations (US$ 1.0M GEF funds; US$0.3M beneficiary co-financing)

Activities under this sub-component would aim to demonstrate renewable energy technologies in small- and medium-sized (SME) agribusinesses and on small, medium and large farms in the eight

RESP-2 project oblasts. The GEF grant would su pport the introduction of innovative technologies that could have a significant impact in the long run on reducing GHG emissions and developing capacity for adaptation to climate change. This could also include renewable energy (RE) technologies that are available but have not yet been tested and or widely adopted in Uzbekistan, such as bio-gas digestors, solar water heaters, solar photovoltaics, biomass, wind and micro-hydroelectric installations. Emphasis would be given to remote agribusinesses and farms that are prone to disruptions in electricity supply. Energy efficiency (EE) upgrades would be introduced through demonstrations of more efficient use of energy in irrigation water pumps, focusing on the seven RESP-2 I&D project raions. Selection criteria, typologies and preliminary calculations for the demonstrations have been prepared. It is estimated that the demonstrations could include approximately 20 small biogas digestors, 2 medium-sized and 1 large installation; 4 PV pumping demonstrations for watering animals (and humans) in remote locations; and 5 solar water heaters for rural farm applications. Except for the largest biogas demonstration, all demonstrations will receive a grant to cover 80% of costs and require a 20% loan/equity contribution from the applicant. Grant support to the largest biogas demonstration unit will be capped at $500,000, estimated at slightly more than 60% of the cost, with the owner required to contribute the remainder. Further preparation and dissemination of information on the demonstrated technologies would be supported through workshops and materials produced under Component 3.

1.2 -- Renewable Energy Technology Investments (US$8M GEF funding, US$36.4M co-financing from RESP II)

This sub-component would provide matching grant funds to scale up and expand the introduction of renewable energy (RE) technologies in small- and medium-sized (SME) agribusinesses and on small, medium and large farms in the eight RESP-2 project oblasts. Typologies (e.g., technical parameters, inputs required), vendors and costs would be identified for several technologies, including bio-gas digesters, solar collectors, PV-powered applications, biomass, wind and micro-hydroelectric installations. Energy efficiency (EE) upgrades through installation of more efficient irrigation water pumps would also be eligible for matching grant financing. The number and type of investments cannot be predicted, as the selection would be driven by client demand. The beneficiaries of the grant program are expected to be farmers and rural entrepreneurs who (i) meet the eligibility criteria for the RESP-2 Credit Line, as spelled out in the RESP-2 Rural Enterprise Investment Guidelines, and, (ii) are interested in investing in the types of renewable energy technologies mentioned above. Sub-projects would have to be financially viable and economically justified. Under the investment activities of the project, early beneficiaries would receive grant financing for 60% of the RE investment cost during years 1 and 2 of the project. During years 3 and 4, the grants would cover a maximum of 40% of the investment costs, with loans and/or equity required to cover the balance. The need for subsidies is expected to decrease as the renewable industry grows, costs decline, and financing of renewable energy investments becomes more familiar to the participating rural financing agencies. The declining subsidy is also expected to ease the transition to the post-project no-subsidy market regime. The decline in the rate of the subsidy from 60% to 40% means that over the project's lifetime, the grant element will have financed an average of 50% of investments. However, if at the time of mid-term review, the Steering Committee perceives that the market is not growing fast enough to justify the reduction in the grant element, they may choose to alter this proposed pace and level of subsidy reduction. In all cases, the beneficiaries would be expected to provide the remaining funding through their own equity and/or loans from the RESP-2 credit line, or other banks.

By providing grants to eligible sub-projects financed from the RESP-2 credit line, the environmental

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sustainability of the RESP-2 sub-projects would be improved, while at the same time encouraging credit line portfolio diversification under RESP-2. Information about the availability of the grant financing, credit line resources and application procedures would be extensively publicized to potential beneficiaries through outreach activities supported under Component 3.

Component 2: Irrigated Land Degradation Mitigation (US$1.09 million GEF funding, approximately US$26.6 million co-financing from RESP-2 and a US$6.6 million contribution from the GOU)

Resources from RESP-2, the GEF project, and Swiss Development Corporation (SDC) (parallel grant financing) would be pooled to support improved management of agricultural systems and water resources through the introduction of technologies and good practices for irrigated land. Activities under this component would aim at introducing technologies and management approaches for controlling and reversing irrigated land degradation. This includes the introduction, testing and demonstration of integrated low-cost, low-risk water and land management technologies, such as drip irrigation, salinity mitigation of marginal land, water re-use, soil quality enhancement, pumping for groundwater extraction, alternative cropping, and other techniques and practices to increase water use efficiency and agricultural productivity. This component would improve knowledge, skills and know-how of farmers (including women farmers) and local communities and promote the transfer of demonstrated technologies and SLM practices through the Farmer Field School (FFS) approach. These activities would be targeted to the raions participating in the Irrigation and Drainage Component of the parent project, which are receiving funds and technical assistance to repair and upgrade irrigation infrastructure.

The fundamental reform of the structure of farming created a new challenge in relation to I&D. There is now a specific division of responsibility, with inter-farm and upstream infrastructure and works being the responsibility of GOU, while the on-farm I&D is now the responsibility of the newly privatized farmers. Much of the I&D infrastructure is over 30 years old, and has suffered from a lack of investment and maintenance (funding currently estimated at 40-50 percent of required levels) in the past 15 years. Of equal importance is the establishment of Water Users' Associations (WUAs) for managing on-farm I&D operations and maintenance. While initial steps have been taken in this area, success to date in creating viable, sustainable WUAs has been elusive or mixed.

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2.1: Farm-Level Land and Water Conservation Demonstrations (US$1.0 million GEF funding, approximately US$33.0 million co-financing from RESP-2 and SDC)

Resources from RESP-2, the GEF project, and Swiss Development Corporation (SDC) (parallel grant financing) would be coordinated for expenditures to demonstrate technologies and management approaches for land and water conservation. The approach is to test and demonstrate an integrated package in each subproject area, packaging low-cost and low-risk water and land management practices and technologies. One demo package would target each of the seven raions participating in RESP-2, which are receiving funds and TA to repair and upgrade I&D infrastructure. Each of these seven subprojects may require a different demo package (e.g., depending on soil, crop type, climate, etc.). Examples of technologies and management approaches for controlling and reversing irrigated land degradation that could be introduced in the seven subproject areas include:

(i) Farm-level (farmer/WUA command): Improved land leveling techniques (laser) to improve on-field distribution uniformities; deep ripping to improve soil internal drainage and utilize soil-moisture storage; micro-irrigation of various degrees of sophistication; soil-quality enhancement (e. g., combined irrigation and fertigation techniques to improve fertilization efficiency); salinity coping

measures; diversify cropping (water-saving varieties, salt-tolerant crops).

(ii) On-farm level (tertiary canals within WUA): Irrigation re-scheduling (amend irrigation rotations to utilize Readily Available Moisture); pilot sub-surface drainage and vertical drainage; groundwater pumping to supplement surface irrigation; salinity mitigation of marginal l and.

(iii) Inter-farm level (main/secondary canals within BAIS): Alternative canal lining options with geo-textiles; managed reuse of land drainage (marginal water).

The goal is to: (a) introduce novel water management practices/technologies adapted to the local system, and/or (b) reintroduce existing, successful but underutilized agricultural practices.

Subcomponent 2.2: Farmer Field Schools (US$0.09 million GEF funding; US$0.2 million co-financing from RESP-2)

This sub-component would provide training for farmers (including women farmers) and WUAs on using and scaling up the practices/technologies that prove successful. This sub-component would be implemented in close coordination with Component 3, in cooperation with SDC, which is already supporting the Farmer Field School (FFS) under RESP-2. Farmers would receive hands-on training at the plots, and successful demonstrations would be compiled in technology packages for dissemination via the BAIS, AIS, and the Rural Training and Advisory Services component of RESP-2.

Component 3: Project Technical Support and Advisory Services (US$2.609 million GEF funding; US$2.6 million co-financing from RESP-2)

Activities under this component would support key capacity development and analytical services needed to introduce and scale up adoption of renewable energy technologies. This component would provide (i) advisory services for the analysis and development of a regulatory framework to support broader adoption of renewable energy technologies, this work would be undertaken in close cooperation with the ADB; (ii) financial analyses of the technically feasible renewable energy options in Uzbekistan in order to ascertain which options are the most financially attractive investments; (iii) workshops for information dissemination on the technologies that would be demonstrated and to publicize the RESP-2 credit line; and (iv) capacity building for carbon accounting, mobile data systems, renewable energy equipment and technical service providers. These activities would complement the Rural Training and Advisory Services Component of the RESP-2 and strengthen environmental oversight and impact of RESP-2 throughout all of the eight regions covered by RESP-2.

The Bank team would also work in close cooperation with the Uzbekistan office of the Organization for Security and Cooperation in Europe (OSCE), which is providing technical assistance to the ecological movement of Uzbekistan in drafting new law on Renewable Energy Development. It was agreed with OSCE to further coordinate activities in development of legal and regulatory framework for RE development.

This component would support the RRA's additional costs associated with implementation of the GEF project, including: (i) the baseline, mid-term and end of project surveys; and (ii) supplemental RRA HQ staff who will provide technical backstopping, environmental and monitoring and evaluation (M&E) support for implementation of the GEF project activities. Fiduciary support would

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be provided by current RRA financial management and procurement staff through 2016, when both projects are scheduled to close.

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

The RESP II Irrigation and Drainage component will concentrate on a set of seven administrative districts: Andijan (Ulugnor district), Bukhara (Alat district), Kashkadarya (Mirishkor district), Samarkand (Pastdargom district), Syrdarya (Bayavut), Tashkent (Buka district), Fergana (Yazyavan district)., while other project activities, including the Rural Finance component, will cover larger area in eight provinces: Andijan, Bukhara, Kashkadarya, Samarkand, Syrdarya, Jizzak, Tashkent and Fergana regions. The AF and the GEF Project will operate in the same oblasts (provinces) and rayons (districts) as RESP II:

5. Environmental and Social Safeguards Specialists

Amy Evans (ECSHD)

Roxanne Hakim (ECSSO)

Ahmed Shawky M. Abdel Ghany (ECSAR)

6. Safeguard Policies	Triggered?	Explanation (Optional)
Environmental Assessment OP/ BP 4.01	Yes	The GEF project will co-finance renewable energy investments under the RESP II credit line for on-lending to farmers and rural business related to farming (including but not limited to agro-processing, storage and distribution facilities, agricultural inputs and investments in tree-crops). The RESP Environmental Management Framework (EMF) provides a screening checklist and mitigation measures for the minor impacts that could occur as a result of the investments.
Natural Habitats OP/BP 4.04	No	
Forests OP/BP 4.36	No	
Pest Management OP 4.09	No	
Physical Cultural Resources OP/ BP 4.11	No	
Indigenous Peoples OP/BP 4.10	No	
Involuntary Resettlement OP/BP 4.12	No	
Safety of Dams OP/BP 4.37	No	
Projects on International Waterways OP/BP 7.50	Yes	OP 7.50 was triggered by RESP II because the project is on the Amu Darya and Syr Darya,

		which are international waterways under the OP. However, it was determined that RESP II falls under the exception to the notification requirement under OP 7.50 as the works to be financed are limited to rehabilitation of existing inter-farm and on-farm works within the irrigation and drainage systems, and do not entail an expansion or other change that would negatively affect the quality or quantity of water flow to other riparians. No new or additional irrigation and drainage investments would be supported under the GEF project, such that the exception to notification approved by management prior to appraisal of RESP II remains in effect for the GEF project.
Projects in Disputed Areas OP/BP 7.60	No	

II. Key Safeguard Policy Issues and Their Management

A. Summary of Key Safeguard Issues

1. Describe any safeguard issues and impacts associated with the Restructured project. Identify and describe any potential l arge scale, significant and/or irreversible impacts:

There are no large scale, significant and/or irreversible environmental impacts or other safeguards issues anticipated under the project.

The Rural Finance activities related to Participating Financial Institutions (PFIs) will deal with medium-to-small loans which are expected to be used for agricultural inputs and implements, equipment and trading activities with a minimal environmental impact. The project will not finance pesticides. Members of PFIs involved in lending will also be provided with training on the potential environmental impact of sub-projects and on mitigation measures. The participating financial institutions (PFIs) for RESP-II are the commercial banks and leasing companies for the mid-size credit line and leasing services. The AF would extend and expand the Rural Finance component of RESP II, and would provide co-financing of renewable energy and energy efficiency technologies together with the GEF Project. The GEF Project Component A (investments in sustainable technologies) would support investments in renewable energy and energy efficiency for farmers and agribusinesses. This will improve the environmental sustainability of the sub-projects financed under the credit line, and contribute to Uzbekistan's efforts to address climate change adaptation and mitigation.

Rehabilitation and small-scale construction works on irrigation and drainage networks, as in RESP II, usually cause little environmental impact, however these still demand special precautions. The GEF Project Component B (irrigated land degradation mitigation) would focus on the same rayons as RESP II , and be designed to enhance the positive environmental impact of the RESP II I&D Component.

The project would not involve any involuntary resettlement as it is financing improved technologies that are used on existing farms and there is no land acquisition or restriction of access

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to resources or services involved. There are no indigenous people issues nor is there any cultural property that would be threatened as a result of project activities The GEF project will benefit from the institutional capacity developed under RESP I and II, which stressed awareness of safeguard policies. The GEF Project Component C (technical support and advisory services) would expand advisory services, training and information dissemination related to renewable energy, energy efficiency and land degradation mitigation technologies and practices, and would also support advisory services for analysis and development of the related legal and regulatory framework
2. Describe any potential indirect and/or long term impacts due to anticipated future activities in the project area:
No negative long term or indirect impacts are anticipated
3. Describe any project alternatives (if relevant) considered to help avoid or minimize adverse impacts.
N/A
4. Describe measures taken by the borrower to address safeguard policy issues. Provide an assessment of borrower capacity to plan and implement the measures described.
The RRA has revised and updated the RESP II Environmental Management Framework (EMF) so that it is applicable for the RESP II Additional Finance and the GEF project. The updated EMF was disclosed in country by the RRA on 7 December 2011 and by the World Bank via InfoShop the same day. The RRA has a qualified environmental specialist on staff, who will support these aspects of the GEF project as well as RESP II and its AF. RRA capacity was last assessed by the Bank environmental safeguards specialist during a November 2011 mission
5. Identify the key stakeholders and describe the mechanisms for consultation and disclosure on safeguard policies, with an emphasis on potentially affected people.
Public consultations on the revised EMF per se are not expected to be needed as these were held in 2008 for the RESP II. However, the GEF project will carry out an extensive outreach and information dissemination program within the first three months of implementation to engage the PFIs, RRA regional offices, potential project beneficiaries and other partners to describe the GEF project objectives, EMF provisions, and provide details for participation in the project.

B. Disclosure Requirements Date

Environmental Assessment/Audit/Management Plan/Other	
Date of receipt by the Bank	07-Dec-2011
Date of "in-country" disclosure	07-Dec-2011
Date of submission to InfoShop	07-Dec-2011
For category A projects, date of distributing the Executive Summary of the EA to the Executive Directors	
If the project triggers the Pest Management and/or Physical Cultural Resources policies, the respective issues are to be addressed and disclosed as part of the Environmental Assessment/ Audit/or EMP.	
If in-country disclosure of any of the above documents is not expected, please explain why:	

C. Compliance Monitoring Indicators at the Corporate Level (to be filled in when the ISDS is finalized by the project decision meeting)

OP/BP/GP 4.01 - Environment Assessment	
Are the cost and the accountabilities for the EMP incorporated in the credit/loan?	Yes [×] No [ ] NA [ ]
OP 7.50 - Projects on International Waterways	
Has the RVP approved such an exception?	Yes [×] No [ ] NA [ ]
The World Bank Policy on Disclosure of Information	
Have relevant safeguard policies documents been sent to the World Bank's Infoshop?	Yes [×] No [ ] NA [ ]
Have relevant documents been disclosed in-country in a public place in a form and language that are understandable and accessible to project-affected groups and local NGOs?	Yes [×] No [ ] NA [ ]
All Safeguard Policies	
Have satisfactory calendar, budget and clear institutional responsibilities been prepared for the implementation of measures related to safeguard policies?	Yes [×] No [ ] NA [ ]
Have costs related to safeguard policy measures been included in the project cost?	Yes [×] No [ ] NA [ ]
Does the Monitoring and Evaluation system of the project include the monitoring of safeguard impacts and measures related to safeguard policies?	Yes [×] No [ ] NA [ ]
Have satisfactory implementation arrangements been agreed with the borrower and the same been adequately reflected in the project legal documents?	Yes [×] No [ ] NA [ ]

III. APPROVALS

Task Team Leader:	Dilshod Khidirov	
Approved By		
Sector Manager:	Name: Dina Umali-Deininger (SM)	Date: 02-Oct-2012

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