1. Project Data

Summary project data			
GEF project ID		3232	
GEF Agency project ID		37536	
GEF Replenishment Phase		GEF-3	
Lead GEF Agency (include all for joint projects)		Asian Development Bank	
Project name		Land Improvement Project	
Country/Countries		Uzbekistan	
Region		Central Asia	
Focal area		Land Degradation	
Operational Program or Strategic Priorities/Objectives		OP 15 – Sustainable Land Management	
Executing agencies involved		Ministry of Agriculture and Water Resources (MAWR)	
NGOs/CBOs involvement		None	
Private sector involvement		None	
CEO Endorsement (FSP) /Approval date (MSP)		April 2, 2007	
Effectiveness date / project start		August 21, 2008	
Expected date of project completion (at start)		March 31, 2013	
Actual date of project completion		September 30, 2015	
Project Financing			
		At Endorsement (US $M)	**At Completion (US $M)**
Project Preparation Grant	GEF funding	0	0
	Co-financing	0	0
GEF Project Grant			
Co-financing	IA own	61.0	51.1
	Government	15.780	36.6
	Other multi- /bi-laterals	0	0
	Private sector	0	0
	NGOs/CSOs	4.0	13.2
Total GEF funding		0	0
Total Co-financing		77.180	100.9
Total project funding (GEF grant(s) + co-financing)		77.180	100.9
Terminal evaluation/review information			
TE completion date		July 2016	
Author of TE		Team: T. Nasirov, F. Insavalieva, S. Khan, and M. Khudayberdiyeva	

TER completion date	2/8/2018
TER prepared by	Spandana Battula
TER peer review by (if GEF IEO review)	Molly Watts

2. Summary of Project Ratings

Criteria	Final PIR	IA Terminal Evaluation	IA Evaluation Office Review	GEF IEO Review
Project Outcomes	MS	S	S	MS
Sustainability of Outcomes		L	L	ML
M&E Design		-	-	S
M&E Implementation		-	-	S
Quality of Implementation		S	S	S
Quality of Execution		S	S	S
Quality of the Terminal Evaluation Report		-	Less than satisfactory	MS

3. Project Objectives

3.1 Global Environmental Objectives of the project:

The Global Environmental Objective of the project is "to arrest and reverse land degradation and improve the livelihood of farmer households through the adoption of sustainable land management practices on a significant scale and in a manner that makes it possible for Project benefits to accrue beyond the immediate Project area" (Project Executive Summary (PES), pg 3)

3.2 Development Objectives of the project:

The project's Development Objectives are to have "(1) a lasting improvement of land productivity on some 162,300 ha in Bukhara, Navoi and Kashkadarya provinces, and (2) restoration of normal ecological functioning of these lands resulting in local and wider environmental benefits" (Project Executive Summary, pg 3). The project aims to achieve this objective through the following components (PES, pg 3):

1) enhanced incentives for farmers through policy reforms at project and sector levels;
2) improvements in land-, water- and agricultural management practices;
3) rehabilitation of land management infrastructure and improved operation and maintenance of I&D systems; and
4) strengthened land and water management institutions.

3.3 Were there any **changes** in the Global Environmental Objectives, Development Objectives, or other activities during implementation?

There were no changes to the project's objectives.

4. GEF IEO assessment of Outcomes and Sustainability

Please refer to the GEF Terminal Evaluation Review Guidelines for detail on the criteria for ratings.

Relevance can receive either a Satisfactory or Unsatisfactory rating. For Effectiveness and Cost efficiency, a six point rating scale is used (Highly Satisfactory to Highly Unsatisfactory), or Unable to Assess. Sustainability ratings are assessed on a four-point scale: Likely=no or negligible risk; Moderately Likely=low risk; Moderately Unlikely=substantial risks; Unlikely=high risk. In assessing a Sustainability rating please note if, and to what degree, sustainability of project outcomes is threatened by financial, sociopolitical, institutional/governance, or environmental factors.

Please justify ratings in the space below each box.

4.1 **Relevance**	Rating: Satisfactory

The project was relevant to GEF's Land Degradation focal area Operational Program 15 on Sustainable Land Management. It was also aligned to the GEF-4 Land Degradation Strategic Objectives SLM-1 – to Foster system-wide change through removal of policy institutional, technical capacity and financial barriers at the country level; SLM-2: Demonstration and up-scaling successful SLM practices for the control and prevention of desertification and deforestation; and SLM-3 - Generating and disseminating knowledge to address current and emerging issues in SLM" (Project Executive summary, pg 6).

The project was also consistent with Uzbekistan's National Action Plan which prioritized actions to address issues on land degradation. In addition, the project was in line with the government's Land Reclamation Fund as it helped in "improved land management infrastructure through replication of drainage rehabilitation works at the national level" (TE pg 2).

4.2 **Effectiveness**	Rating: Moderately Satisfactory

The TE rated the project as Highly Effective as it exceeded all its targets. The project was successful in achieving all its four components of implementing policy reforms, improving management practices that included integrated land reclamation and water practices, increasing institutional capacity of government and nongovernment institutions, and rehabilitating land and water infrastructure. However, the TER finds that the targets were only partially met and thus, gives a Moderately Satisfactory rating to the project's effectiveness. Achievements as per components are listed below:

<u>Component 1: Implementation of policy reforms:</u>

The project aimed to enhance incentives by reducing procurement quotas for cotton and wheat, and increasing procurement prices aligned with international prices. To achieve this purpose, the government issued a Decree to reduce the procurement quotas for cotton and wheat to 25% each, but this failed as the local government continued to apply the original procurement quotas based on the soil quality. The government also amended the Farms Law to improve the land tenure, water consumption, registration, government support, and management of farms. "As a result of the policy reforms, the procurement prices for cotton increased by 62% (from $835.7/ton (t) in 2007 to $1,354.1/t in 2014); and

for wheat by 92.4% (from $93.4/t in 2007 to $179.7/t in 2014). The gap between the state procurement price and the international price reduced by 9% for cotton and 22% for wheat against the target of 10% for both" (TE pg 3). Thus the project fully met the target for wheat prices, and nearly met its target for cotton. In addition, the project prepared a sustainable land management (SLM) manual with recommendations for strengthening incentive structure for environmental benefits (TE pg 4).

Component 2: Improved management practices:

The project aimed to improve management practices that included adopting integrated land reclamation, water and land management practices. For this the project hired Uzbekistan Scientific Research Institute of Mechanization and Electrification (UZMEI) and the Central Asian Scientific Irrigation Research Institute to design pilot farms to demonstrate integrated land reclamation, water, and land management practices and to disseminate information to other farmers. Demonstration farm areas were established in three provinces and demonstration activities such as deep rigging, land leveling, soil leaching, cleaning and reshaping works were carried out. The results from these activities were shared with neighboring farmers through field training schools and other methods. The TE states that "due to the significant upgrading of on-farm infrastructure, the irrigation efficiency within the DFAs increased from 30%–38% to the target of 55–60%. The improved on-farm water management and agronomic practices introduced through the demonstration farms were applied to the entire project area. The area under alternate crops increased to 211,601 ha against the project target of 15,030 ha" (TE pg 4). It also improved on-farm management practices in an area over 160,000 ha compared to the target of 60,785 ha. However, the project was able to introduce conservation agriculture practices in 245 ha only, compared to the targeted 1,000 ha. Thus, under this component, the project met two of its three targets, while only partly achieving its third target.

Component 3: Increased institutional capacity of government and non-government water management institutions:

To increase institutional capacity, the project conducted capacity building activities such as conducting trainings, registering user associations as water consumer associations, distributing equipment's like printers, computers, portable salinometers, automatic weather stations and data loggers, automatic water-level recorders, flow meters, and GPS units to associations and government authorities. The project also developed a website on implementation of model demonstration plots and agro-interventions. "To facilitate the knowledge of conservation agriculture and draw the attention of public authorities and farmers to environmental problems, six documentary films in Uzbek language, each of 20 minutes, and one documentary film in English were produced and disseminated. In addition, a wide range of training activities was conducted in the project areas. In all, 27 training activities were completed for about 400 trainees, including 121 women. The training activities were intended for the direct beneficiaries of the project, such as farmers, specialists of the regional Agriculture and Water Administrations, WCA members, specialists of the HGMEs, members of farmers' associations, and members of women committees" (TE pg 5). The project also conducted two study tours to USA to foster capacity building in sound technical and management approaches in SLM, and specifically included a female farmer as a participant to encourage gender equality of rural women (TE pgs 5-6).

Component 4: Rehabilitated land and water infrastructure:

The Validation Report notes that the project had mixed results in meeting targets under this component. The project managed to rehabilitate main drainage collectors, on-farm canals and drains for improved land and water management. The project also helped in equitable delivery of irrigation water to individual private farms. It also carried out rehabilitation work in 9 primary and inter-farm drainage systems, and constructed 492 drainage structures. However, "difficulties were encountered in the implementation of on-farm irrigation and drainage works. As the farmers were to share the cost of on-farm irrigation facilities, designs were to be prepared in close consultation with and agreement of the farmers. This consumed considerable time and still the farmers were reluctant to agree because of their poor capacity and lack of will to pay" (TE pg 6). As the cost of rehabilitation turned out to be higher, the government used its own resources to undertake rehabilitation works. Hence, "targets for irrigation efficiency were met, assumed to be 55%—60% compared to the target of 57%. Areas with poor drainage were substantially reduced at 49% compared to the target of 52%. Areas with medium salinity were only partially met with 21% achievement compared to the target of 69%" (Validation Report pg 6).

4.3 **Efficiency**	Rating: Satisfactory

The TER gives a Satisfactory rating to the project's efficiency as it tried to keep implementation delays to a minimum through regular monitoring of progress, and efficient use of financial resources. The project experienced a two-year delay because of initial delays in approval of loan effectiveness and procurement issues. Considering the delays, the executing agency and the government regularly monitored the progress and responded to project requests with prompt action. Audits and project reports were submitted on time and a performance monitoring system was established including environmental monitoring. The government covered the increased project costs caused by these delays using its own resources, and no additional ADB financing was required. "The project also exceeded the target for net income from private farms by 8%; at completion, net income from private farms was estimated at $428/ha compared to the appraisal estimate at completion of $316/ha" (TE pg 12, Validation Report pg 6).

4.4 **Sustainability**	Rating: Moderately Likely

The TE found the project to be "likely sustainable", and this TER rated sustainability as moderately likely. Although there are moderate risks involved in financial and environmental sustainability, the institutional capacity to sustain benefits seems strong. As there is no information provided for sociopolitical risks in project documents, the TER is unable to the assessment sustainability of this criteria. Below is a breakdown of assessment of risks to sustainability:

Financial resources: the project had sufficient financing as it was funded by government agencies as well as private sector. The TE states that "during 2011–2015, for the three project districts, $2.4 million was

spent by ISAs for canal cleaning, $35.5 million by ODSPs17 for reconstruction of irrigation systems and damage control (repair works), and $50.7 million by LRF for reconstruction of drainage systems" (TE pg 13). In fact, the government plans to continue with these arrangements, thus, securing the financial sustainability of the project. However, it is to be noted that there is a reluctance by farmers to contribute finances for on-farm improvement, thereby limiting financial diversification (validation Report pg 7).

Sociopolitical: The TER is not able to assess the sociopolitical sustainability due to lack of information in the TE.

Institutional framework and governance: the project managed to build capacity of government agencies and beneficiaries, and also develop documents and disseminate results of demonstration sites and agronomic interventions. The capacity of government agencies was enhanced by project activities and "the GEF grant contributed to enhanced institutional capacity on environmental monitoring, and several government decrees put in place during the project implementation period further contribute to enhanced sustainability" (Validation Report pg 7).

Environmental: The TE notes that the expected completion of the ADB-financed Amu-Bukhara Irrigation System Rehabilitation Project would help in improving the irrigation water supplies to the project area in Bukhara and a part of the project area in Navoi, which will enhance the sustainability of the project (TE pg 13). However, the Validation Report observes that "much of the longer-term viability and environmental sustainability will depend on the behavior of farmers going forward as new techniques and practices (e.g., crop rotation) are required" (Validation Report pg 7).

5. Processes and factors affecting attainment of project outcomes

5.1 Co-financing. To what extent was the reported co-financing essential to the achievement of GEF objectives? If there was a difference in the level of expected co-financing and actual co-financing, then what were the reasons for it? Did the extent of materialization of co-financing affect project's outcomes and/or sustainability? If so, in what ways and through what causal linkages?

The actual co-financing of $100,900,000 was higher than the expected amount of $77,180,000. The actual project costs increased due to higher civil works, and the TE states that it was "caused by (i) price escalation in the costs of fuel, construction materials, and labor since 2006; and (ii) a substantial increase in the cost of on-farm works" (TE pg 8). To cover the costs, the government increased the financing from its own resources.

5.2 Project extensions and/or delays. If there were delays in project implementation and completion, then what were the reasons for it? Did the delay affect the project's outcomes and/or sustainability? If so, in what ways and through what causal linkages?

There was an initial delay of 14 months because of reasons such as late loan effectiveness, and the need to rebid three major civil works contracts. This delay also led to late completion of project activities and extension of the project to 24-months from the original closing date (TE pg 2).

5.3 Country ownership. Assess the extent to which country ownership has affected project outcomes and sustainability? Describe the ways in which it affected outcomes and sustainability, highlighting the causal links:

The TE does not evaluate on country ownership, but it mentions that when the project funds were no longer sufficient to cover the civil works because of escalating prices, the government took the responsibility to disburse finances from its own resources to fund additional costs and implement the on-farm improvement works (TE pg 2).

6. Assessment of project's Monitoring and Evaluation system

Ratings are assessed on a six point scale: Highly Satisfactory=no shortcomings in this M&E component; Satisfactory=minor shortcomings in this M&E component; Moderately Satisfactory=moderate shortcomings in this M&E component; Moderately Unsatisfactory=significant shortcomings in this M&E component; Unsatisfactory=major shortcomings in this M&E component; Highly Unsatisfactory=there were no project M&E systems.

Please justify ratings in the space below each box.

6.1 **M&E Design at entry**	Rating: Satisfactory

The TE does not provide a rating for M&E design at entry, however, the TER gives a Satisfactory rating. The project document provided for a baseline, and M&E framework with provisions for annual project implementation reports. It mandates that the government and ADB should "review implementation of the Project at least once a year. After 3 years of implementation, the Government and ADB will jointly carry out a midterm review of the Project, to identify any problems or constraints encountered and assess the need for modification of project scope, implementation and financing arrangements" (PES, pg 9). The monitoring framework also provides for quantified targets and performance indicators, and as per the TE the "indicators were well elaborated and generally appropriate to measure against a project's success" (Validation Report pg 5). Additionally, to monitor project components at multi-country level, a mechanism has been created to evaluate all GEF-co-financed components and, also to evaluate the effectiveness of CACILM program (PES pg 10).

6.2 **M&E Implementation**	Rating: Satisfactory

The TE does not provide information on M&E implementation but the Validation Report states that "a monitoring unit was established and quarterly progress reports were provided throughout implementation" (Validation Report pg 9). The Report also mentions that the Gender Action Plan "was monitored by a gender specialist engaged by the PMO, and the environmental monitoring plan was regularly monitored and environmental impact assessment reports submitted. The additional technical and financial support from GEF was instrumental in monitoring environmental impact" (Validation

Report pg 9). The project also submitted audits regularly, and overall, there was adequate reporting and reliable evaluation. Thus, the TER gives a Satisfactory rating to the project's M&E implementation.

7. Assessment of project implementation and execution

Quality of Implementation includes the quality of project design, as well as the quality of supervision and assistance provided by implementing agency(s) to execution agencies throughout project implementation. Quality of Execution covers the effectiveness of the executing agency(s) in performing its roles and responsibilities. In both instances, the focus is upon factors that are largely within the control of the respective implementing and executing agency(s). A six point rating scale is used (Highly Satisfactory to Highly Unsatisfactory), or Unable to Assess.

Please justify ratings in the space below each box.

7.1 **Quality of Project Implementation**	Rating: Satisfactory

The TE rated ADB's implementation of the project as Satisfactory as it had "facilitated efficient implementation with minimum delays" in collaboration with borrower, executing agency and beneficiaries (TE pg 12). It also monitored the implementation progress, facilitated resolution of emerging issues, ensured prompt approval of financial disbursements and arrangements, and arranged seminars on procurement, safeguards and anti-corruption integrity (TE pg 12). The Validation Report also mentions that "ADB was responsive to government requests, providing prompt feedback and approvals as needed" (Validation Report pg 8).

7.2 **Quality of Project Execution**	Rating: Satisfactory

The TE gave a Satisfactory rating to the project's execution. It says that although the project faced delays due to late approval of revised feasibility studies and unfavorable weather, the executing agency implemented the project efficiently and responded to requests with quick action (TE pg 11). "The borrower's timely decision to finance and implement the on-farm component from its resources ensured the realization of full benefits of the project and prevented further implementation delays" (TE pg 11). The Validation Report further adds that the executing agency had "overall adequate capacity to manage and monitor the project. Reports and audits were submitted regularly and no issues on borrower performance were raised in the regular ADB review missions" (Validation Report pg 7).

8. Assessment of Project Impacts

Note - In instances where information on any impact related topic is not provided in the terminal evaluations, the reviewer should indicate in the relevant sections below that this is indeed the case and identify the information gaps. When providing information on topics related to impact, please cite the page number of the terminal evaluation from where the information is sourced.

8.1 Environmental Change. Describe the changes in environmental stress and environmental status that occurred by the end of the project. Include both quantitative and qualitative changes documented, sources of information for these changes, and how project activities contributed to or hindered these changes. Also include how contextual factors have contributed to or hindered these changes.

The TE mentions that the project helped in reducing land degradation by decreasing soil salinity in 37,807 ha of land against the target of 31,400 ha. It also caused no adverse environmental impact. (TE pg 12).

8.2 Socioeconomic change. Describe any changes in human well-being (income, education, health, community relationships, etc.) that occurred by the end of the project. Include both quantitative and qualitative changes documented, sources of information for these changes, and how project activities contributed to or hindered these changes. Also include how contextual factors have contributed to or hindered these changes.

The project helped in increasing the annual net income of private farms from the target of $396/ha to $428/ha within 3 years of project completion. Even the average per capita income of households increased by 25% within 5 years of completion of the project (TE pg 13).

8.3 Capacity and governance changes. Describe notable changes in capacities and governance that can lead to large-scale action (both mass and legislative) bringing about positive environmental change. “Capacities” include awareness, knowledge, skills, infrastructure, and environmental monitoring systems, among others. “Governance” refers to decision-making processes, structures and systems, including access to and use of information, and thus would include laws, administrative bodies, trust-building and conflict resolution processes, information-sharing systems, etc. Indicate how project activities contributed to/ hindered these changes, as well as how contextual factors have influenced these changes.

a) Capacities: The TE does not mention any changes to capacities.

b) Governance: The Project was able to build institutional capacity by providing formal training to various government agencies such as basin irrigation system authorities, hydro-geological melioration expeditions (HGMEs), and project implementation units. It also provided equipment such as computers, portable salinometers, automatic weather stations and data loggers, automatic water-level recorders, flow meters, and global positioning system (GPS) units. It also conducted study tours for specialists in government agencies to USA for knowledge exchange.

8.4 Unintended impacts. Describe any impacts not targeted by the project, whether positive or negative, affecting either ecological or social aspects. Indicate the factors that contributed to these unintended impacts occurring.

The TE does not mention any unintended impacts.

8.5 Adoption of GEF initiatives at scale. Identify any initiatives (e.g. technologies, approaches, financing instruments, implementing bodies, legal frameworks, information systems) that have been

mainstreamed, replicated and/or scaled up by government and other stakeholders by project end. Include the extent to which this broader adoption has taken place, e.g. if plans and resources have been established but no actual adoption has taken place, or if market change and large-scale environmental benefits have begun to occur. Indicate how project activities and other contextual factors contributed to these taking place. If broader adoption has not taken place as expected, indicate which factors (both project-related and contextual) have hindered this from happening.

The impact of GEF initiatives were limited to the project areas.

9. Lessons and recommendations

9.1 Briefly describe the key lessons, good practices, or approaches mentioned in the terminal evaluation report that could have application for other GEF projects.

The TE lists some key lessons (TE pgs 14-15):

1) A thorough review should be conducted at the midterm to identify any issues and prepare remedial measures to address the issues;
2) On-farm works should be planned carefully in terms of their design, schedule, resource allocation, and implementation arrangements as consultations with beneficiaries require considerable time, efforts, and resources;
3) Financing provided by GEF is useful for agricultural projects with environment sensitive issues like water and soil salinity, and water logging; and
4) The government's and beneficiaries' in-kind contributions included in the project cost estimates should be quantifiable to ensure the proper monitoring and audit of the project's financial statements.

9.2 Briefly describe the recommendations given in the terminal evaluation.

The TE provided following recommendations on future monitoring, follow-up action, and additional assistance (TE pg 15):

1) The use of drainage water mixed with fresh water for irrigation needs careful monitoring of the soil and water quality to derive a suitable mix ratio;
2) Timely completion of rehabilitation of on-farm irrigation and drainage infrastructure by the government through LRF;
3) The government should monitor the program of periodic rehabilitation of drains to ensure sustained benefit to the agriculture sector;
4) HGMEs need to regularly monitor the quality of irrigation and drainage water, soils, and depth to groundwater in the entire project area;
5) Continued assistance is required to ensure that WUAs are able to perform all the assigned functions adequately and efficiently;

6) Regarding the use of drainage water mixed with fresh water for irrigation (para. 21), the of HGMEs capacity in soil and water quality monitoring shall be enhanced by staff training and providing them with laboratories with suitable equipment and adequate reagents;
7) The WUAs, which were still in their infancy at project, have been reorganized into WCAs and trained. However, they need continued capacity development as well as logistic support for some more years in order to successfully fulfill their critical role under the new institutional setup;
8) Proposals for policy reforms should be formulated with due consideration to history, long-term government policies, and ground realities;
9) In order to benefit from the institutional capacity that RRA has built over more than 15 years, RRA should be used as the executing agency for future water resources/agriculture sector projects;
10) To minimize initial implementation delays, government feasibility studies should be carried out in parallel with the ADB-financed studies; and
11) Implementation and contract schedules should be prepared with due regard to periods of harsh weather and operational constraints.

10. Quality of the Terminal Evaluation Report

A six point rating scale is used for each sub-criteria and overall rating of the terminal evaluation report (Highly Satisfactory to Highly Unsatisfactory)

Criteria	**GEF IEO comments**	Rating
To what extent does the report contain an assessment of relevant outcomes and impacts of the project and the achievement of the objectives?	The report contains detailed assessment of outcomes, but does not provide a breakdown of impacts. Even though some targets in outcomes were partly achieved, the TE gave an inflated rating for the overall effectiveness criteria.	**MS**
To what extent is the report internally consistent, the evidence presented complete and convincing, and ratings well substantiated?	The TE has minor inconsistencies in terms of rating and does not provide information on the M&E design and implementation.	**MS**
To what extent does the report properly assess project sustainability and/or project exit strategy?	The report gave relevant details on sustainability criteria except for socioeconomic risks, however, it does not provide any exit strategy.	**MS**
To what extent are the lessons learned supported by the evidence presented and are they comprehensive?	The lessons learnt are too broad and information is not sufficient.	**MU**
Does the report include the actual project costs (total and per activity) and actual co-financing used?	The report provided co-financing amounts and costs per component.	**S**
Assess the quality of the report's evaluation of project M&E systems:	There is not assessment of M&E systems in the report.	**U**
Overall TE Rating		**MS**

11. Note any additional sources of information used in the preparation of the terminal evaluation report (excluding PIRs, TEs, and PADs).

The TER used the Validation Report along with TE and Project Executive Summary.