Report Number: ICRR0023339

1. Project Data

Project ID P153613	**Project Name** Livestock Sector Development Project	
Country Uzbekistan	**Practice Area(Lead)** Agriculture and Food	
L/C/TF Number(s) IBRD-87700,IDA-61100,TF-A9766	**Closing Date (Original)** 30-Jun-2022	**Total Project Cost (USD)** 161,405,135.19
Bank Approval Date 23-Jun-2017	**Closing Date (Actual)** 30-Jun-2022	

	IBRD/IDA (USD)	Grants (USD)
Original Commitment	150,000,000.00	10,195,288.06
Revised Commitment	164,273,751.36	9,958,228.06
Actual	161,411,416.03	15,196,465.65

Prepared by	Reviewed by	ICR Review Coordinator	Group
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2. Project Objectives and Components

a. Objectives

The Project Development Objective (PDO) is to improve livestock productivity and access to market in selected regions.

The PDO can be parsed into two inter-connected objectives:

- To improve livestock productivity in selected regions; and

- To improve access to markets in selected regions.

b. Were the project objectives/key associated outcome targets revised during implementation?
No

c. Will a split evaluation be undertaken?
No

d. Components

(i) Component 1: Public Investment Framework and Public Services (Appraisal/Original Allocation: US$7.0 million; Actual Cost: US$ 3.73 million). The objective of the first component was to help State organizations working in the livestock sector to build their institutional capacity for better provision of public services. It consisted of two subcomponents addressing key constraints in public services and public investment framework.

Subcomponent 1.1**:** Strategy, Policy, and Public Investment Framework (Appraisal/Original Allocation: US$2.0 million; Actual Cost: US$ 1.84 million). It planned to finance technical assistance (TA) for (a) the preparation of a 15-year sector modernization strategy and a 5-year investment plan, including required climate change mitigation and adaptation policy incentives and investments; (b) capacity strengthening of MAWR staff for sector analyses, budget and policy formulation, and monitoring and evaluation (M&E); (c) establishment of a platform for public-private policy dialogue; and (d) studies on policy and the regulatory framework, value chain development (VCD), and market analyses.

Subcomponent 1.2: Strengthening Livestock Sector Public Services (Appraisal/Original Allocation: US$5.0 million; Actual Cost: US$ 2.64 million). It planned to finance a range of activities: (a) Veterinary Services Improvement (planned cost, US$2 million), including technical assistance (TA) to improve the legal framework and strategy for development of the veterinary services; training and equipment to selected public veterinary agencies to improve disease surveillance and reporting systems, veterinary diagnostics laboratories and standard operating procedures, vaccine storage and distribution facilities; minor works and equipment for rehabilitation of selected public veterinary facilities; and studies on border control and quarantine and veterinary drug regulation and on animal identification, registration, and movement control; (b) Fodder Seed Improvement (planned cost, US$1 million); and (c) Market-Led Technology Generation and Dissemination (planned cost, US$2 million). Selection and prioritization criteria for subprojects were defined in the Project Operational Manual (POM).

(ii) Component 2: Livestock Value Chain Modernization (Appraisal/Original Allocation: US$153.8 million; Actual Cost: US$ 154.4 million). This component planned to address access to market and finance constraints, including through (a) providing access to finance from Participating Financial Institutions (PFIs) through a credit line and (b) VCD subprojects that build productive partnerships between value chain actors. This component had a strong emphasis on supporting the integration of small producers into value chains and consisted of two subcomponents.

Subcomponent 2.1: Credit Line for Private Investments (Appraisal/Original Allocation: US$142.8 million; Actual Cost: US$ 142.3 million). This subcomponent addressed the lack of long-term financing for the livestock sector by providing funding with a maturity of up to 20 years to the banking sector to be revolved in the PFIs. It financed (a) a credit line to PFIs for provision of working capital and investment finance to the livestock sector nationwide (among others, for farming, marketing, distribution, and processing) and (b) training and TA for PFIs on sector-specific loan product development, loan appraisal, and monitoring in the livestock sector. Lending by the PFIs were expected to be demand-based.

Subcomponent 2.2: Value Chain Development and Smallholder Market Inclusion: (Appraisal/Original Allocation: US$11 million; Actual Cost: US$ 12.1 million)**)** financed (a) TA for facilitating the establishment of productive partnerships between value chain actors (producers, buyers, and service providers); (b) VCD subproject preparation, supervision, M&E; and (c) grants for VCD subproject investments. Subprojects were envisaged to include (a) TA for farmer training and advisory services on all aspects of animal husbandry, fodder crop and pasture management, and marketing—this would include training targeted to the needs of women involved in livestock production; (b) works and collectively used equipment for farm infrastructure including housing, handling and storage, waste management, and biogas facilities; (c) works for construction or improvement of communally utilized storage and distribution infrastructure; and (d) equipment, works, and TA for farms and agro-processors for food safety upgrading or adoption and demonstration of innovative technology.

(iii) Component 3: Project Coordination, Management, and Monitoring and Evaluation (Appraisal/Original Allocation: US$5.2 million; Actual Cost: US$ 2.02 million). This component financed (a) project management, including coordination and supervision of the implementation, financial management (FM), procurement, M&E, and Grievance Redress Mechanism (GRM); (b) impact assessments at midterm review and before project closure; and (c) training of project beneficiaries on safeguards requirements and awareness raising campaigns on labor practices in agriculture.

e. Comments on Project Cost, Financing, Borrower Contribution, and Dates

Project Costs: The total project cost at approval was US$166.0 million (excluding Government contribution of US$33.3 million and Local Beneficiary contribution of US$37.2 million). The actual project cost at closing was US$161.05 million (or about 97% of the project costs at approval). (ICR, Annex 3);

Financing: At approval: IDA Credit (No. 61100) was US$120 million; IBRD Loan (No. 87700) was US$30 million; Trust Fund (A99766) was US$13.8 million, with Government counterpart contribution of US$33.3 million, and Local Beneficiary contribution of US$37.2 million), for a total financing of US$234.3 million. By closing, the total financing was US$161.4 million (IDA: US$116.2 million; IBRD: US$30.0 million; TF: US$15.2 million; Government and beneficiaries: 0).

Borrower Contribution: The Government contributed 0 (according to the ICR). Subsequently, the Bank's Project Team/TTL reported that Government provided in-kind contributions (e.g., staff salaries and operational costs) while noting that the ICR could not generate an estimate.

Dates: The Project was approved on June 23, 2017, became effective on June 11, 2018, with original and actual closing dates being the same --- June 30, 2022.

3. Relevance of Objectives

Rationale

Country and Sector Context: The PDO was highly relevant to addressing key challenges during project design while building on relevant analytical work. At the time of project preparation, there were four macro-related constraints identified to sustain impressive previous growth and poverty reduction. A major conclusion of analytical work, including the Bank's Systematic Country Diagnostic Study (WB, 2016) and dialogue with Government was that the required transformation of the agro-food sector and addressing four core macro-constraints (e.g., jobs, diversification, natural resource efficiency, including land reform and regional inequities), which required diversification of the predominantly wheat and cotton-based agricultural sector into livestock and horticulture production and associated agro-processing enterprises, to be underpinned by a competitiveness and productivity strategy, with an expanded role of the private sector and smallholders. Uzbekistan was still a need importer of eggs, meat and milk, and also suffered from low nutrition indicators for most of the population. The agricultural sector was characterized by a sharp dualism: 75,000 private commercial farms, which utilized 5.8 million has. of state-leased land, with an average size of 75 has.; and large number of smallholder farmers (about 4.7 million), with average plot sizes of about 0.4 has., with low productivity, and contributing about 90% of total livestock production. Moreover, the low productivity of the livestock sector was constrained by a combination of factors, including: poor animal health, animal feeding, genetics and access to long-term finance for the agricultural sector (ICR, paras. 1-5).

Relevance to Government Strategies: The PDO reflected and maintained strong relevance with Government of Uzbekistan's (GoU's) reform and development agenda (e.g., GoU's Uzbekistan Development Strategy for 2017-2021), namely: diversification of the economy; developing competitive value chains on domestic and export markets; stimulating job creation; reaping economic benefits; and developing viable, sustainable, and climate-resilient farming systems. These Government objectives and their supporting sector strategies were in turn well aligned with the Bank's goals of growth, shared prosperity and poverty reduction, while promoting agriculture sustainability and climate change resilience (see below). At the time of the project concept development, the GOU was in the process of promoting diversification, which included shifting away from the state control of wheat and cotton sectors towards horticulture and livestock production, and from large scale commercial farms and agribusinesses to smallholder farmers, which were less controlled. The shift also implied releasing land under wheat and cotton and making it available for horticulture and livestock production, including fodder production.

Relevance to Bank Assistance Strategy: The project's PDO (and design features) was strongly aligned with the Bank's Country Partnership Framework (CPF, 2016-2020), which was underpinned by the Bank's SCD. The CPF emphasized promoting strategies and investments which contribute to the country's inclusive growth, poverty reduction and shared prosperity objectives of the GoU and CPF through: improving incomes and food security of low-income rural households, creating employment opportunities for the bottom 40 percent households by generating on-farm and off-farm jobs, and increasing livelihood opportunities for rural people, including women. Accordingly, the PDO is highly relevant with Government's and WB's strategies as outlined above.

Rating

High

4. Achievement of Objectives (Efficacy)

OBJECTIVE 1

Objective
To improve livestock productivity in selected regions.

Rationale
The PAD did not include a theory of change (ToC) because it was not required when the PAD was written. The ICR reconstructed a ToC for the project, which was consistent with its overall objective, components and implementation strategy (ICR, Figure 1, para. 10).

Theory of Change: The ToC identifies prioritized activities to help achieve the following key outputs and intermediate outcomes, with support from the two core project components, with respect to achieving objective 1: preparation of a livestock modernization strategy and investment plan (with emphasis on increased productivity and addressing other key constraints); to strengthen Government's/Ministry's technical staff capacities; establishing a public private dialogue platform; strengthening public provision of livestock service, especially with respect to veterinary and fodder production; improved provision of finance for livestock producers; improved provision of enhanced technologies and technical services for livestock producers. The corresponding outcomes included: expanded adoption of improved technologies by livestock producers, dominated by smallholders; expanded access to finance by livestock farmers, including smallholders; increased productivity of selected dairy and cattle production systems by beneficiaries, especially smallholders. These outcomes, in turn, would contribute to the longer-term outcomes and objectives of improved livelihood of rural population; and enhanced viable, sustainable, and resilient farming systems.

Overall, the reconstructed ToC is soundly based on realistic assumptions, although omitting assumption about farmer capacity to repay loans, and shows the relevant linkages between the project's activities, outputs, outcomes and impacts.

Outputs (linked to achieving objective 1, based on ICR, Annex 1)

i) Livestock Sector Strategy/Investment Plan Prepared & Submitted for review/approval: Original Target (OT): 1; Actual Achieved (AA): 1; Actual as % of Target: 100%;

ii) No. of Ministry/SCVLD staff, farmers, and agro-processors trained on policy and regulations (country/regions): OT: 200; Actual AA: 200; Actual as % of Target: 100%;

iii) Methodology for AI&T developed: OT: 1; AA: 1; Actual as % of Target: 100%;

iv) No. of collaborative research/extension subprojects implemented/completed: OT: 10; AA: 7; Actual as % of Target: 70%;

v) % of Livestock research/extension projects including climate change mitigation and adaptation technologies: OT: 100; AA: 100; Actual as % of Target: 100%;

vi) Training of 300 beneficiaries of the livestock credit line;

vii) Procurement of specialized equipment for various livestock organizations and laboratories. Original Target (OT): 100; Actual Achieved: 100; Actual as % of Target: 100%;

PDO/Outcomes/Intermediate Outcomes (linked to achieving objective 1). (No targets for items x-xiv):

i) Productivity of selected dairy systems by direct beneficiaries (milk yield per cow per cycle): Baseline: 2623; Original Target (OT): 3000; Actual Achieved (AA): 5228; Actual as % of Target: 174%; Target Exceeded.

ii) Productivity of selected cattle production systems by direct beneficiaries (Tons per year): BL: 2110; OT: 2420; Actual Achieved: 10485; Actual as % of Target: 433%; Target Exceeded.

iii) Percentage of Project Beneficiaries Satisfied with Project Participation Processes: BL: NA; OT: 90; AA: 82; Actual as % of Target: 91%; Target exceeded.

iv) No. of Clients Adopting Improved Agricultural Technology: BL: NA; OT: 5000; AA: 3456; Actual as % of Target: 69%; Target not achieved.

v) No. of Female Clients Adopting Improved Agricultural Technology: BL: NA; OT: 2000; AA: 726; Actual as % of Target: 36%; Target not achieved.

vi) Percentage of Clients Adopting Climate Change Mitigation Technology: BL: NA; OT: 40; AA: 21; Actual as % of Target: 53%; Target not achieved.

vii) Percentage of Clients Adopting Climate Change Adaptation Technology: BL: NA; OT: 40; AA: 51; Actual as % of Target: 128%; Target exceeded.

viii) No. of clients reached with agricultural assets or services: BL: NA; OT: 35000; AA: 26700; Actual as % of Target: 76%; Target not achieved.

ix) No. of female clients reached with agricultural assets or services: BL: NA; OT: 15000; AA: 6800; Actual as % of Target: 45%; Target not achieved.

x) Production of forage crops (tons/year): 453,669 (actual at completion);

xi) Number of sub-projects under the credit line: 520 (actual at completion);

xii) Number of farmers who received agricultural assets or services under the Project: 26,700 (actual at completion);

xiii) Number of farmers adopting improved agricultural technologies: 3,456 (actual at completion).

Overall, progress toward the achievement of Objective 1 is consistent with the ToC, and shows sound linkages between priority activities, outputs and outcomes. It would have been useful for the ToC to have shown explicit activities for improved livestock research and extension services, and their linkages with other key outputs and outcomes.

Rating
Substantial

OBJECTIVE 2

Objective
To improve access to markets in selected regions.

Rationale
The PAD did not include a theory of change (ToC) because it was not required when the PAD was written. The ICR reconstructed a ToC for the project, which was consistent with its overall objective, components and implementation strategy (ICR, Figure 1, para. 10).

Theory of Change: The ToC identifies prioritized activities to help achieve the following key outputs and intermediate outcomes, with support from the two core project components, with respect to achieving objective 2 (some of the same activities/outputs of objective 1, taking an integrated approach): preparation of a livestock modernization strategy and investment plan (including key marketing aspects); to strengthen the Government's/Ministry's technical staff capacities; provision of TA for promoting smallholder market inclusion; establishing a public private dialogue platform; improved provision of finance for livestock value chain modernization; provision of studies on policy and regulatory framework, VCD and market analyses. The corresponding outcomes included: increased livestock productivity, enabling increased marketable surpluses of livestock products, in both volume and value; expanded access to finance by livestock farmers, including smallholders; increased numbers of smallholders/"dehkans" connected to markets; although not specified explicitly in the ICR, an important outcome implied in the ToC was the project's role in contributing to an expanded role of the private sector and a more competitive livestock sector, involving livestock production and marketing. These outcomes, in turn, would contribute to the longer-term outcomes and objectives of improved livelihood of rural population; and enhanced viable, sustainable, and resilient farming systems.

Overall, similar to above, progress toward the achievement of Objective 2 is consistent with the ToC, and shows sound assumptions and linkages between priority activities, outputs and outcomes.

Outputs (linked to achieving objective 2, based on ICR, Annex 1):

i) No. of subfinancings provided under credit line:BL: NA; OT: 400; Actual Achieved: 520; Actual as % of Target: 130%; Target exceeded.

ii) Percentage of Subfinancings including climate change mitigation measures: BL: NA; OT: 50; Actual Achieved: 52; Actual as % of Target: 104%; Target exceeded.

iii) Percentage of Subfinancings including climate change adaptation measures: BL: NA; OT: 50; Actual Achieved: 61; Actual as % of Target: 122%; Target exceeded.

iv) Percentage Change in aggregate portfolio lending to livestock sector by participating financial institutions: BL: NA; OT: 15; Actual Achieved: 98; Actual as % of Target: 653%; Target exceeded.

v) No. of Productive Partnership Established with Project Support: BL: NA; OT: 40; Actual Achieved: 135; Actual as % of Target: 338%; Target exceeded.

vi) % of Productive Partnership Established with Project Support, with women members in groups: BL: NA; OT: 40; Actual Achieved: 62; Actual as % of Target: 155%; Target exceeded.

<u>Outcomes/Intermediate Outcomes </u>(linked to achieving objective 2, based on ICR, Annex 1):

i) Percentage Increase in total value of livestock products sold by beneficiaries: BL: NA; OT: 15; Actual Achieved: 277; Actual as % of Target: 1847%;

ii) Percentage of Project Beneficiaries Satisfied with Project Participation Processes: BL: NA; OT: 90; AA: 82; Actual as % of Target: 91%;

iii) Percentage increase in the total value of dairy products and milk sold by beneficiaries: 122 percent (actual at completion)

iv) Percentage increase in the total value of meat and meat products sold by beneficiaries: 412 percent (actual at completion);

v) Methodology for AI&T developed: achieved at completion;

vi) State Veterinary Committee staff, farmers, agro-industrialists trained in policy and regulation in the country and the Region: 209: actual at completion;

vii) Number of research projects (implemented and ongoing): 7 actual at completion;

viii) Number of sub-projects under the credit line: 520 actual at completion;

ix) Percentage growth of the loan portfolio of the livestock sector of the participating financial institutions:98%; actual at completion);

x) Number of partnerships created with the support of the Project: 135 - actual at completion;

Overall, based on the reconstructed ToC, the project's activities, outputs and outcomes are closely interlinked, and made good progress toward meeting and often exceeding the targets. Accordingly, this performance justifies a Substantial rating.

Rating
Substantial

OVERALL EFFICACY

Rationale

The efficacy of the extent to which the two inter-connected objectives and their corresponding original and revised targets were achieved was Substantial. By project completion, most of the output, outcome/intermediate and PDO targets were met (i.e., 9 shortfalls, 32 meeting targets, and 12 exceeding targets). It is notable that the 3 PDO targets were exceeded substantially: dairy productivity, + by 174% (liters per cow); productivity of cattle production systems/meat (tons/yr.) + by 433%; and percentage increase of the total value of livestock products (dairy products/meat) sold by beneficiary farmers: + by 1846%). Other complementary information provided in the ICR and supporting documents (ICR, text, and Annex 6) and evidence-based studies provide strong justification for this conclusion and rating and the contribution of the project's interventions. At the same time, the ICR recognized some relatively minor shortfalls and provided a candid and balanced assessment of the project's efficacy (e.g., shortfall in the rate of adoption of climate change mitigation technologies; greater inclusivity in the design of the credit line component through a dedicated credit line window for dehkan smallholders; including increased well-focused institutional capacity activities; decreased dependence on external missions).

Overall Efficacy Rating

Substantial

5. Efficiency

Overall, the project performance and results demonstrated an efficiency rating of Substantial, based on numerous and sound evidenced-based analyses, and other supporting information provided in the ICR and supporting documents (ICR, paras. 45-47, Annex 4, and other complementary studies).

The project's ex-post financial and economic analyses demonstrates solid viability: the financial analyses was based on representative farm models and corresponding business plans, showed positive financial returns and increased family incomes to beneficiary farmers; these farm models and business plans, with appropriate adjustments, provided a sound basis for carrying out the economic analyses, which generated an overall Economic Internal Rate of Return (EIRR) of 18.2 %, with an Economic Net Present Value (ENPV) estimated at US$101 million, demonstrating the project's economic viability. The ex-post EIRR is lower than the appraisal EIRR (i.e., 22 %); this difference could be explained by the depreciation of the national currency over the exchange rate in the previous five-year period, increase in inputs prices as well as COVID-19 crisis (ICR, para. 45). The ICR reports that the completion stage ENPV is higher than the appraisal estimate (by the following factors: the average incremental return per US$1 investment at the appraisal was estimated at US$0.37, which is higher than the corresponding ex-post value; this difference could be explained by the depreciation of the national currency over the exchange rate in the previous five-year period, increase in inputs prices as well as COVID-19 crisis (ICR, para. 45). The ICR reports that the completion stage ENPV is higher than the appraisal estimate (by US$42.5 million), which assumed the project would have a "gradual implementation pace". The ICR reports that 64% of the project's total loan allocation was disbursed in the first year of implementation, which enabled accrual of the project's incremental benefit stream earlier than projected at appraisal, hence the higher ENPV.

The ICR carried out a sensitivity analysis, showing the assessment of economic returns against changes in benefits and costs, and for various lags in the accrual of incremental benefits. In relative terms, the ERR is more sensitive to decrease in benefits rather than increase in costs; a decrease of incremental benefits of 30% still generated an ERR of 12%, and a delay of these benefits an ERR of 13%, showing the robustness of the project's economic viability (ICR, Table 2 provides further details).

Also, the ICR presents evidence to support the conclusion that implementation and administrative efficiency were **Substantial**, in support of achieving the PDO (e.g., project disbursement rate of 99% of allocated funds; implementation on schedule, according to the original closing date).

Efficiency Rating

Substantial

a. If available, enter the Economic Rate of Return (ERR) and/or Financial Rate of Return (FRR) at appraisal and the re-estimated value at evaluation:

	Rate Available?	Point value (%)	*Coverage/Scope (%)
Appraisal	✓	22.00	99.00 ☐ Not Applicable
ICR Estimate	✓	18.20	99.00 ☐ Not Applicable

* Refers to percent of total project cost for which ERR/FRR was calculated.

6. Outcome

The outcome rating is based on the performance and results of the project's activities/investments with respect to meeting the project's PDO, and associated targets (for outputs, outcomes/intermediate outcomes and PDO), while taking into account the project's relevance, efficacy and efficiency analyses and evidenced-based results. As stated in section 4, most of the targets were met or exceeded (83%). Based on the project's high relevance, substantial rating for efficacy, substantial efficiency, and relatively minor shortcomings, this ICRR concludes that the project's overall outcome is therefore rated **Satisfactory**.

The summary evidence used for these three core/component ratings for determining the project's overall outcome rating is as follows:

(1) **High rating for relevance** of PDO, based on the project's solid alignment with: the Government's/GoU's national and sectoral development strategies), which placed the project's integrated approach and smallholder-focus on livestock production and marketing model as a core component of its inclusive development strategy; and the Bank's CPF for Uzbekistan (from 2017 onwards), which recognized the vital role of the integrated livestock approach to promote increased livestock productivity, diversification and increased incomes of rural low income families.

(2) **Substantial rating for efficacy**, based on the evidence of the project's results in meeting the majority of the project's output and outcome/intermediate/output targets (43 out of 53 targets, exceeding the 3 PDO targets), based on the provision of key public investments and services, and expanded access to finance, to target beneficiaries. The ICR also provided positive evidence of other positive impacts (e.g., involving gender benefits through training and access to support packages; building institutional capacities of various entities, both public livestock entities and private sector; preparation of various methodologies for use by the institutions and other projects; indirect beneficiaries; enhanced climate resilience of the livestock sector, ICR, paras. 49 – 58). Also, the project developed and is on a solid track to implementing a sound scaling-up and sustainability strategy. This sustainability is supported and guided by the project-supported preparation, Government approval and ongoing implementation of the Livestock Sector Development Strategy (2020 – 2030), to be supported by the ongoing preparation of a Bank-supported Second Livestock Sector Development Project (ICR, para. 85).

(3) **Substantial rating for efficiency,** as reflected in the attractive financial returns/increased farm incomes to beneficiary farmers and economic returns/EIRR from the project's investments, coupled with other efficiency evidence (no cost overruns and timely project completion).

a. Outcome Rating

Satisfactory

7. Risk to Development Outcome

There is a low risk to sustaining the project's development outcomes and impacts.

Government ownership/commitment risk: The risks are linked primarily to factors beyond the control of the Government and project stakeholders. GoU's strong commitment to further support the development of the livestock sector is confirmed by its recent approval of the Livestock Sector Development Strategy (2020-2030). The Government has conveyed its request to continue to benefit from quality technical support from the World Bank and apply/adapt the most relevant international experience and good practices. The ongoing preparation of the follow-on Second Livestock Sector Development Project is at an advanced stage. This Phase 2 is building on the results and lessons (see below) of the LSD project, especially with respect to further strengthening the most relevant public institutions and further strengthening the credit line facility to cover smallholder farmers, as part of an expanded role of the private sector, and to further enhance on-farm resilience to climate change. Consumer demand for livestock products is expected to remain strong, especially to reduce the import bill.

Political risk: Medium and long-term project-related risks are linked to the external factors of the ongoing war in Ukraine, which may limit wheat supply and put further upward pressure on food and fodder prices, and therefore, could reduce the potential for livestock development.

Environmental risk: Ongoing climate change contributes directly to pasture deterioration and overall loss of livestock productivity. Accordingly, the proposed activities to be supported by the proposed follow-on project will promote on-farm resilience and other supported measures; they would help beneficiary (including additional beneficiaries) farming communities adapt to and mitigate expected adverse climate effects.

8. Assessment of Bank Performance

a. Quality-at-Entry

The ICR (paras. 82 – 83) provided solid background information to demonstrate that the project was well designed to achieve the objective of increasing livestock productivity and marketing efficiencies/results, and therefore, Satisfactory. The previous and current CPF and GoU development and livestock strategies confirm that the project's PDO remains relevant. Successful project completion without restructuring or implementation delays strongly suggests the solid quality of the project's design and implementation arrangements. Implementation arrangements were sound, clear and practical; all project stakeholders were engaged constructively in accordance with their roles and capacities while including measures to strengthen them. The PAD was clear and covered all relevant requirements of project design. The Bank team worked closely with the GoU team, and devoted attention to addressing and complying with the relevant environmental & social safeguard requirements, including gender issues and child and forced labor.

At the same time, the ICR was candid in recognizing some specific design shortcomings, including (ICR, para. 83): (i) more attention could have been given to designing the credit line component in a way that ensured greater project inclusivity of broader participation of dehkans and small livestock farmers. This lesson has been taken into account in the follow-on operation as the credit line component of the proposed project contains a dedicated credit line window for dehkan farmers; (ii) greater attention could have been given to strengthen institutional capacity building activities and sharper and measurable indicators (for the results framework), from Component 1; and (iii) decrease dependence on the external actors (i.e., OIE missions).

Quality-at-Entry Rating

Satisfactory

b. Quality of supervision

The quality of supervision support was Satisfactory, based on the evidence provided in the ICR (paras. 84 & 85) and other supporting project documentation, especially Implementation Status and Results Reports (ISRs). The positive aspects during supervision included the following:

(i) Overall, the Bank's project team made a significant effort to help provide timely and constructive implementation support for the project activities;

(ii) The country/field-based location of the Task Team Leader (TTL) and safeguard and fiduciary specialists was very beneficial and enabled responsive, focused, and client demand-driven visits to GoU agencies and project districts, as and when needed, in addition to formal implementation support missions that were conducted regularly on a semi-annual basis. The Project Implementation Unit (PIU) conveyed appreciation for the Bank team's timely, proactive, practical, constructive, and quality technical and fiduciary support, as well as support from the Bank's Country Office;

(iii) The Bank team's Aide Memoires were informative and supportive to PIU problem-solving, decision making, and implementation support;

(iv) Supervision and technical support of environmental and social safeguards issues were strong, as well as regular sound reporting on the project progress and compliance, effectively using project ratings to highlight and address outstanding issues constructively; and

(v) During the COVID-19 outbreak and lockdown, the project's supervision and reporting activities were maintained, contributing to project performance and results.

Quality of Supervision Rating
Satisfactory

Overall Bank Performance Rating
Satisfactory

9. M&E Design, Implementation, & Utilization

a. M&E Design
The project's solid Results Framework and associated M&E design (formulated at appraisal) provided a clear, consistent, and sound framework to design and monitor implementation progress towards meeting the PDO and its targets at various levels. The PDO and key indicators/targets were defined and measurable while recognizing many output indicators were not easily measurable. The ICR recognized the absence of an explicit ToC and somewhat unclear results change, especially to track changes in the "enabling environment." The arrangements for carrying out the M&E activities were sound and clearly defined, to be managed by GoU's Rural Restructuring Agency (RRA) central office, including aggregation of information from participating financial institutions (PFIs) on implementation results and impacts in the field, reporting on findings and ensuring that these results are reflected in the semiannual and annual progress reports; and reporting on the Grievance Redress Mechanism (GRM). Moreover, RRA's M&E specialist was to regularly collect information and data directly from project beneficiaries to monitor progress in the performance of their production, processing, and marketing activities. The ICR notes (para. 71) that some baseline data could not be determined during the project preparation and were intended to be filled in before project effectiveness after conducting a baseline survey.

b. M&E Implementation
The ICR provided a candid assessment of the implementation of the project's M&E system, being overall positive while highlighting various challenges during implementation. Key implementation aspects included:

(i) By project closing, relevant M&E data were collected, analyzed, and presented in a methodologically sound manner;

(ii) Key project results indicators linked to reporting and M&E were fully achieved;

(iii) The PIU prepared timely preparation of progress reports and aggregated/analyzed data from PFIs on important project activities (e.g., credit line and grant sub-projects);

(iv) Some of the challenges included: several restructurings of the implementing agency as well as the high turnover of some staff, particularly an M&E specialist, which made it challenging to maintain M&E activities in-house, particularly continuous engagement with beneficiaries; delays in implementing M&E activities, including a baseline survey, led to downgrade of M&E rating during the initial period of the project implementation. The issue was rectified by outsourcing major M&E activities to a consulting company with relevant experience. This arrangement proved effective, although it reduced the frequency of RF updates and its in-house utilization of feedback received through various instruments.

The ICR also noted that the insufficient in-house capacity was recognized by the management of the Uzbekistan Agroindustry and Food Security Agency (UZAIFSA), and there were stated plans to improve monitoring and impact assessment of all World Bank projects that they managed by establishing an electronic Management Information System (MIS). Notwithstanding the positive role of this initiative, the UZAIFSA has been dissolved, and the proposed initiative has not been revived, while separate units are monitoring activities.

c. M&E Utilization

Overall, the ICR shows that there was generally good utilization of the M&E information generated by the project, as reflected below, while also reflecting various challenges:

(i) The Project's M&E data was relevant to monitor PFIs' activities and issuance of sub-loans to beneficiaries. Capacity issues in some PFIs were rectified on a timely basis through relevant training programs and support from the PIU;

(ii) Project management used the M&E data to assess implementation progress through various documents (e.g., project progress reports, ISRs, and others);

(iii) Project data were also utilized to identify issues and determine/guide correction. In instances where the project started to underperform, that information was used to flag for both the World Bank and GoU to work collaboratively towards an agreed and sound solution;

(iv) Outsourcing the collection of some critical M&E data reduced its potential to provide timely feedback.

(v) It was noted that smallholder farmers were not benefitting from the project's major interventions, despite being identified during project preparation as one of the primary target beneficiaries as there were some difficulties for smallholders to access the credit line directly. Nevertheless, by the time this shortcoming was documented most part of the credit line was already disbursed, but the finding is still used to inform the subsequent operations;

(vi) The Project's monitoring helped to look at gender disaggregation and thus allowed to make the recommendation in the MTR to pay more attention to addressing gender issues.

M&E Quality Rating
Substantial

10. Other Issues

a. Safeguards

The project was classified as Category B as activities that might generate environmental and social impacts typical for agricultural production could be easily mitigated by applying best construction, agro-processing practices, and relevant protective measures. Two safeguards were triggered under the project: Environmental Assessment (OP/BP 4.01) and Pest Management (OP 4.09), although no large-scale, significant, or irreversible negative impacts were likely. Environmental assessment (EA) and the environmental and social management plan (ESMP) were prepared for the project, submitted to a public consultation on March 27, 2017, and disclosed in the country on April 10, 2017. Social risks, including potential involuntary resettlement (OP 4.12) and child and forced labor, were carefully considered during the project preparation, and additional mitigation measures like thorough screening procedures were envisaged and included in ESMP.

The project complied with the Bank and national environmental assessment rules and procedures and existing environmental requirements. No major outstanding cases of non-compliance were reported. However, minor irregularities were observed in some sites with suboptimal conditions related to manure storage and removal and storage of animal drugs. It was noted that PIU staff was conducting screening of credit line beneficiaries and held conversations with employees to check labor conditions, working hours, and sanitary and hygiene conditions. According to the employees' reports, labor conditions were satisfactory. A comprehensive environmental safeguards review was done at MTR that helped fix outstanding issues related to recurring incompleteness of local environmental assessment documentation at the initial stage (lack of EMP, Monitoring Plan, Implementation Arrangements, etc.). Evidence of mitigation measures implementation was recorded in the project documentation and confirmed by the Bank's environmental and social specialists. The Project's GRM was operational. Recommendations were made to pay more attention to citizen engagement, which was implemented later by organizing training and awareness creation events.

b. Fiduciary Compliance

(i) Financial Management (ICR, para. 81): The Project's FM arrangements, including accounting, budgeting, planning, reporting, internal controls, external audits, and funds flow, demonstrated satisfactory performance. The FM capacity at the implementing agencies level, including organization and staffing, was satisfactory. The internal control system was acceptable to the Bank and assessed to be capable of providing timely and reliable information and reporting. As a result of the Bank's FM supervision activity, it recommended the PIU to update the Project Operation Manual to reflect key changes (e.g., change of the implementing agency and updated internal control environment). All recommendations were duly implemented by GoU/PIU. Implementation Financial Reports and audit reports were submitted satisfactorily, although with minor delays, mainly due to the COVID-19-related lockdown. The ICR did not cite any qualified audit opinions.

(ii) Procurement (ICR, para. 80): The procurement performance under the project was generally satisfactory. There were delays in awarding some contracts, which were due to factors beyond the control of the implementing agencies. The project financed sub-loans through credit lines and value chain development sub-projects through the EU grant. Therefore, based on the Bank's Procurement and Consultant Guidelines, the project's procurement plan was not extensive. All planned procurement activities had been completed, and contracts closed smoothly and on time. The final PPR of the project concluded that the procurement systems and processes and contract administration were of "good quality." The Project's procurement performance had been consistent, the procurement rating at closure is confirmed to be "Satisfactory," and the procurement risk at closure is "Moderate."

c. Unintended impacts (Positive or Negative)

The ICR highlighted various other outcomes and impacts, as summarized below:

(i) Gender (ICR, paras. 49-50): The project was cognizant of gender issues and strived to engage women in its activities through the training sessions and participation of women in policy dialogue and support packages. Notwithstanding efforts by the project team, women's participation fell short of expectations (e.g., access to credit line: 13% vs. 20%; receipt of ag. services: 25% vs. 40%.

(ii) Institutional Strengthening (ICR, paras. 51-53): As part of facilitating improvement in livestock productivity, the project financed a number of well-focused activities to strengthen the institutional environment and build capacity of relevant participating organizations, including public livestock entities. The project also supported the preparation of the methodology for Animal Identification, Registration, Movement Control and Traceability (AIR&T)

(iii) Contribution to Poverty Reduction and Shared Prosperity (ICR, paras. 55 – 56): While there was no indicator measuring the impacts of the project on the poor, the project had positive effects on beneficiary (both direct and indirect) job creation, incomes (e.g., 211% and 120% increase, respectively) and overall well-being.

d. Other

The ICR highlighted two other important "other benefits", as follows:

(i) Indirect Beneficiaries (ICR, para. 57): Project effects included benefits to other farming households who had transactions and partnerships with project direct beneficiaries; and

(ii) Contribution to increased climate resilience of the livestock sector (ICR, para. 58).

11. Ratings

Ratings	ICR	IEG	Reason for Disagreements/Comment
Outcome	Satisfactory	Satisfactory	

Bank Performance	Satisfactory	Satisfactory
Quality of M&E	Substantial	Substantial
Quality of ICR	---	Substantial

12. Lessons

The ICR highlights two major lessons. They are sound and supported by the project's implementation experience and presumably, have been taken into account during the recent formulation and approval of Phase 2 Project.

Lesson 1: **If activities targeted explicitly to smallholder farmers are not in place, they might lose out in the competition with larger and more commercial farmers and agribusinesses.** The LSD project, through its value chain modernization component (credit line and matching grants), aimed at improving access to finance and improved technologies of livestock farmers, including dehkans. However, most beneficiaries of the LSD project were large-scale commercial farmers and agribusinesses. The number of dehkans who benefited from LSD project interventions, including from credit line investments and VCD grants, fell short of expectations as larger and medium-sized farmers had an advantage in terms of better access to information and extension services and had a greater ability to mobilize resources and provide collateral. The follow-on project took this lesson into account. It included a separate component and a special credit line window to work exclusively with smallholder farmers by developing criteria and a set of actions to target better and encourage the participation of and direct benefits to smallholders.

Lesson 2: **Public livestock support services, including veterinary and animal health, research, extension, and advisory services, may contribute to the pickup and sustainability of livestock productivity.** Although the LSD project extensively included capacity-building activities into the project design and initial activities in developing the livestock sector strategy and a livestock traceability system were completed, these areas, as well as marketing and value addition infrastructures, remained underinvested. Learning from this project, the follow-on project aims to cover these gaps adequately; the project is applying the lesson of the importance of investing in livestock public support services and market and value addition infrastructure, which are vital support interventions to achieve a real and sustainable transformation of the livestock sector.

13. Assessment Recommended?

No

14. Comments on Quality of ICR

The ICR was well written, consistent with ICR guidelines, analytical (and guided by a generally sound reconstructed theory of change), candid, sound, results-focused, generally supported by adequate evidence to justify the various assessments and proposed ratings, and candid, highlighting various shortfalls in project design and implementation. The main evidence integrated and included in the ICR the results of the data analyses presented in the: Project's independent evaluation report; the Results Framework (Annex 1), with its corresponding components, indicators, and targets (original and revised). The two core lessons are sound and well-articulated, supported by implementation evidence, with application to the proposed Phase 2 and possibly to other countries.

There are no major substantive and presentational shortcomings in the draft ICR. However, there are four strategic aspects where it would have been helpful to get further evidenced-based assessment in the ICR (even following the Bank's Project team's response to the IEG evaluator's questions for this ICR).

First, with respect to the ICR's efficiency analysis (Annex 4), it would have been helpful if Annex 4 included an expanded financial analysis involving the representative farm models, including the main results from the Project's business plans, showing more explicitly (say, summary tables/text) the incremental financial benefits for the main types of the project's direct beneficiaries and corresponding estimated numbers (including smallholders, which were below the project's direct beneficiary targets), and which provided the basis for generating the incremental benefits of the project, for the main types of beneficiaries.

Second, the LSDP was supposed to be private sector led. While the project made significant contributions, the ICR had a limited explicit assessment and evidence-based support of the project's contribution to expanding and strengthening the role of the private sector in livestock development of selected regions of Uzbekistan (e.g., ICR, para. 4, under the subheading, "Mobilizing Private Sector Financing," the ICR only stated: "Not applicable as the project did not have guarantee operations"). In a follow-up email to IEG, the project team provided some additional clarifications, which support the project's valuable contributions to an expanded role of the private sector in promoting a more competitive livestock subsector (e.g., especially through the project's credit lines and private-based marketing activities). It would have been helpful for the ICR to have included a more detailed assessment of the project's contribution to promoting an expanded role of the private sector in the project area's and country's livestock sector development, including relevant additional evidence (say, from the two independent evaluation assessments), and their implications for the design of the proposed Phase 2.

Third, the project's financing plan included substantial counterpart contributions by the Government of Uzbekistan (GoU) and direct/local beneficiaries (i.e., $33.3 M and $37.2 million, respectively). However, the ICR shows zero contributions by these two groups without explicit explanation. Subsequently, the project team clarified that both Government and direct beneficiaries provided in-kind and co-lending cash contributions. It would have been useful for the ICR to have included an assessment of the main reason(s) for and effects/implications of this counterpart shortfall aside from the counterpart contributions, especially for scaling up and financing follow-up livestock investments, including LSDP Phase 2.

Fourth, the ICR identifies only two lessons learned from this Project. It would be helpful if the ICR had included 1 or 2 other strategic lessons which should be identified/articulated, especially to be considered for the ongoing efforts to prepare Phase 2 of LSDP (e.g., strategies/lessons to help limit the share of non-performing loans, especially involving smallholders, while expanding their participation as direct beneficiaries).

a. Quality of ICR Rating

Substantial