Project Information Document (PID)

Concept Stage | Date Prepared/Updated: 27-Nov-2021 | Report No: PIDC32808

BASIC INFORMATION

A. Basic Project Data

Country	Project ID	Parent Project ID (if any)	Project Name
Uzbekistan	P177825		Second Livestock Sector Development Project (P177825)
Region	**Estimated Appraisal Date**	**Estimated Board Date**	**Practice Area (Lead)**
EUROPE AND CENTRAL ASIA	Mar 30, 2022	May 26, 2022	Agriculture and Food
Financing Instrument	**Borrower(s)**	**Implementing Agency**	
Investment Project Financing	Ministry of Finance	State Committee of Veterinary and Livestock Development	

Proposed Development Objective(s)

The proposed Project Development Objective (PDO) is to support the development of a productive, market-oriented and sustainable livestock subsector in Uzbekistan.

PROJECT FINANCING DATA (US$, Millions)

SUMMARY

Total Project Cost	300.00
Total Financing	300.00
of which IBRD/IDA	300.00
Financing Gap	0.00

DETAILS

World Bank Group Financing

International Bank for Reconstruction and Development (IBRD)	150.00
International Development Association (IDA)	150.00
IDA Credit	150.00

Environmental and Social Risk Classification	Concept Review Decision

Substantial	Track II-The review did authorize the preparation to continue

Other Decision (as needed)

B. Introduction and Context

Country Context

1. Uzbekistan is a lower middle-income country aspiring to becoming an upper middle-income country by 2030 while maintaining equitable income distribution and halving poverty by then. The structure of its economy has not changed significantly since its independence in 1991 with agriculture, industry, and services each contributing a third of the gross domestic product (GDP). Uzbekistan's GDP per capita grew by an annual average of about 5 percent between 2010 and 2019, which was well above regional and other lower-middle income country averages. A breakdown of the components[1] of this growth suggests that about two thirds was due to improvements in labor productivity driven by the capital stock increase. Employment growth contributed far less—about six percent of the total increase in GDP per capita between 2010 and 2019. Demographic changes had a negative impact on per capita growth over this time, with high birthrates outpacing the growth of the working age population.

2. The Government of Uzbekistan (GoU) has been implementing a series of reforms (economic and social transition) since 2017. Agriculture, the backbone of the economy, is among the sectors that benefitted from the reform, including from the removal of several price, production and trade targets and controls that have characterized the sector since the soviet time, and diversification away from a cotton and wheat dominated agriculture to high value agriculture, including horticulture and livestock. The outbreak of COVID-19 caused by the 2019 novel coronavirus (SARS-CoV-2) posed a significant threat to the reform process. However, the agriculture sector remained resilient in the face of the pandemic thereby sustaining the economic growth of the country. Uzbekistan was one of only three economies in the Europe and Central Asia (ECA) region that maintained positive economic growth in 2020. The World Bank (WB) forecast the GDP to continue growing above 5 percent, well above the CA's average of 4.5 percent.

3. Uzbekistan is vulnerable to the impacts of climate change, particularly in the sectors of agriculture, energy, and water resource management. Anticipated climate impacts include increases in monthly maximum temperatures, high variability of rainfall, and increased glacier melting with implications for water availability and river flow. For agriculture, climate change is manifested in the form of extreme temperatures, less precipitation hence risk of water availability, and increased incidence of pests, insects, and diseases. Droughts may become more frequent due to decreases in runoffs of Amu and Syr Darya Rivers thereby affecting irrigated agriculture. Climate change is also expected to adversely affect soil fertility and productivity, because of droughts, and exacerbated soil salinity due to water scarcity and other factors. The indirect effects of climate change on livestock are likely to be positive, as climate change is projected to improve grassland and forage productivity.[2] Most of the rural population is set to be

[1] GDP per capita can be broken down into three components: output per worker (labor productivity), the employment rate (employment as a share of the working age population), and the share of the working age population (as a share of the total population). Using the Shapley Decomposition approach, the analysis in this section of the report describes changes in GDP per capita (changes in the per capita value added) through changes in each of the three components.

[2] Sutton, William R., Jitendra P. Srivastava, James E. Neumann, Peter Droogers, and Brent B. Boehlert. 2013. Reducing the Vulnerability of Uzbekistan's Agricultural Systems to Climate Change: Impact Assessment and Adaptation Options. World Bank Study. Washington, DC: World Bank.

disproportionately affected by climate change risks since their livelihoods depend on agriculture and livestock since they have relatively lower ability to adapt and spend a high share of their income on food, on average 50 percent. Climate change impacts could also reverse progress made in poverty reduction, and negatively affect food security and economic growth in vulnerable rural areas, as changes in the seasonal distribution of temperature and precipitation undermine predictable agriculture production.[3]

4. Cognizant of the vulnerability of the country to climate change impacts, the GoU prepared the Strategy for the Transition to a Green Economy 2019-2030[4]. The Strategy with clearly defined goals[5] highlights the need for mainstreaming climate mitigation and adaptation, environmental protection, and sustainable natural resource management as an essential component of any development endeavors. The Strategy identified priority areas, such as improving energy efficiency in the basic sectors of the economy, including in agriculture and livestock; enhancing adaptation to and mitigation of the effects of climate change; increasing the efficiency of natural resources and preservation of natural ecosystems; and developing financial and non-financial support mechanisms for the green economy. The Strategy also underlined the need to promote climate-smart technologies and innovations that help increase productivity, and energy-efficient technologies and innovations that reduce greenhouse gas (GHG) emissions, thus contributing to the overall greening of the economy and the national goal of GHG reduction. Capacity building of citizens so that they become more climate-sensitive in their behavior and attitude as well as actions is an integral part of the Strategy, too. Although the implementation of the Strategy slowed in 2020, as resources were shifted to addressing the socio-economic impacts of COVID-19, the global health crisis emphasized the link between public health, climate, and nature. This renewed emphasis could be harnessed for strengthening the focus on enhancing the implementation of the Strategy and building a green economy as is the case with a global transition to green and circular economy in response to changing climate.

Sectoral and Institutional Context

5. Livestock is one of the key economic subsectors of Uzbekistan constituting 13 percent of the GDP and about 50 percent (livestock value added) of the national agricultural GDP (AgGDP) and this is without accounting for the estimated monetary value of organic matter from livestock (manure). Out of the total livestock value-added, cattle (meat and milk) contribute 76 percent; whereas sheep and goat (meat) contribute 9 percent; poultry (eggs, breed, and meat) 7 percent; and fish (meat) 2 percent. The rest of the livestock value added comes from other livestock activities, including apiculture (bee), rabbit, and camel. The livestock subsector is also an important source of employment and household income. It provides for about 27 percent of the agricultural employment[6], including in primary production and along livestock value chains and the share of farm household income in gross livestock products is 19 percent. Within the subsector, 47 percent of the labor consumption in the total labor force employed in the livestock subsector was spent on milk production and 21 percent on meat production.

[3] WBG. 2019. Uzbekistan Country Economic Update Summer 2019.

[4] The Strategy was approved by the Resolution of the President of the Republic of Uzbekistan (No. PP-4477) dated March 10, 2019. It is aimed at helping the GoU fulfill obligations under the Paris Agreement on climate change (signed by the GoU on April 19, 2017) and help in the implementation of the Action Plan 2017-2021

[5] By 2030, the Strategy should lead to amongst others: reduction of emissions of greenhouse gas per unit of GDP by 10 percent of the 2010 level; a twofold increase of energy efficiency indicators and a decrease in the carbon intensity of GDP; introduce drip irrigation technology into an area up to 1 mln. hectares and increase crops yield cultivated on them by 20-40 percent; achieve a neutral balance in the degradation of land; and increase the average productivity of the production of the main types of agricultural food products by 20-25 percent.

[6] State Committee of the Republic of Uzbekistan on Statistics.

6. Uzbekistan has a generally dry climate with long, warm to hot summers and moderate winters. The country can be broadly divided into two climatic zones: the desert and steppe climate in the western two thirds of the country, and the temperate climate, characterized by dry summers and humid winters in the eastern areas. The climate in the southern areas is characterized as arid and subtropical. There are three major livestock production zones in Uzbekistan that support different livestock species. The spatial distribution and concentration of different species of livestock vary across the different climatic zones. Most of the national livestock, 88% of cattle, 88% of sheep, and 74% of goats are found in the desert and the foothill zones. All the camels are found in the desert zone. The mountainous region supports 11%, 12%, and 26 % of cattle, sheep, and goats, respectively. The intensive dairy, poultry, and beef cattle that are under specialized systems of production are often found in and around the urban and industrial areas. Horses and poultry are distributed in all zones[7].

7. Since the transition in 1992, the livestock number of all species has increased nationally and in all climatic zones and administrative regions. However, substantial increase in cattle was recorded since 2003 following the importation of high yielding exotic breeds to the country and distributed to the rural residents. As of 2019, the total number of cattle was 12484.4 thousand heads that show growth by 237% as compared to 1992. However, recently there is a flattening of the curve as the growth rate of cattle slowed down. Overall, a significant increase was observed in the Republic of Karakalpakstan, Kashkadarya, Navoi, Surkhandarya, Syrdarya, and Tashkent regions.

Table 1: Livestock population by farm structure, number in '000

Species	Number of animals by Farm Structure('000)			Total	Dehkans (in % of Total Farms)
	Commercial Farmers	Dehkans	Agribusinesses		
Cattle	591.2	11,732.7	160.5	12,484.4	94
Cows	199.9	4,223.2	40.7	4,463.8	95
Sheep and Goats	2,458.8	17,836.8	1,239.7	21,535.3	83
Poultry	11,191.8	45,076.2	24,262.2	80,530.2	56

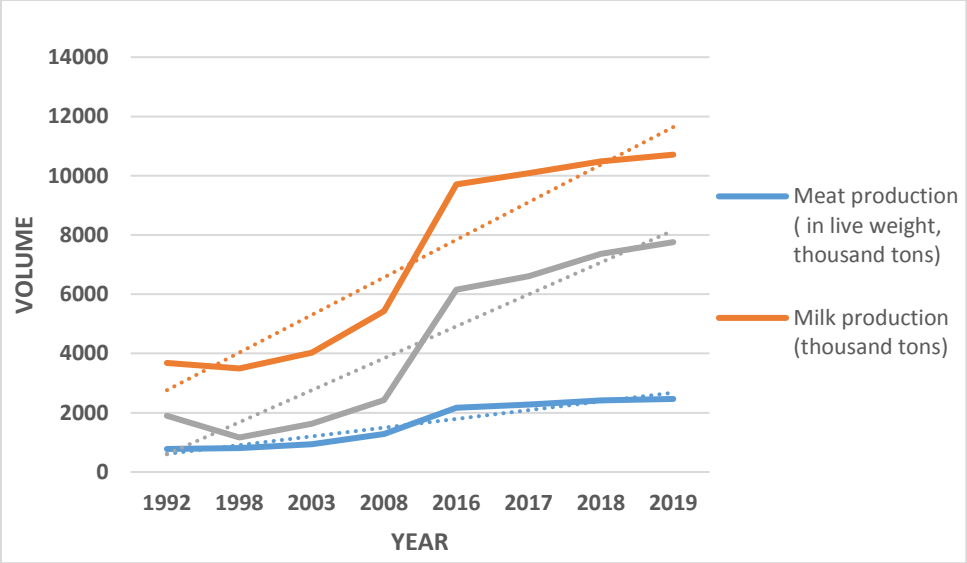
Source: State Committee of the Republic of Uzbekistan on Statistics, 2019

8. Livestock production has also increased after independence, but its growth has slowed since 2016 (Figure 1). The contribution of production types to the overall livestock production has also changed over the last 5 to 7 years, with the rate of growth of livestock production in private family farms (farmers/fermers) outpacing that of dehkans. The growth in livestock production (output) was achieved by an increase in herd size (number of livestock) rather than by productivity gains; overall livestock productivity has remained low. In particular, productivity among dehkans remains substantially lower than for very large enterprises/agribusinesses[8] and private family farms.

[7] Uzbekistan LSA Baseline 2017

[8] Meat productivity measured by average market live weight of cattle in the *dehkan* farms varied between 350-420 kg while it was as high 500kg in commercial farms. Milk productivity, measured by liters of mil per cow per year, lactation period, prolificacy, etc., has also generally remained low. The average parturition rate of dairy cows kept by *dehkans* is 70 percent, average milk yield per cow per day 8 liters, and lactation period 285 days. In private commercial farms, the average parturition rate is 73 percent, milk yield per cow per day 11 liters, and lactation period 295 days. In agribusinesses, the average parturition rate 85 percent, average milk yield per cow per day is 20 liters and lactation period 295 days.

Figure 1: Trends in livestock production (meat, milk, eggs) 1992-2019



Source: Naumov, 2019 and State Committee of Veterinary and Livestock Development, 2020

10. The farm structure in Uzbekistan is highly fragmented, consisting of a large number of small producers (dehkans)[9], a small number of very large enterprises (shrikats)[10], and a small number of private family farms (farmers/fermers)[11]. They differ in the source of labor, land ownership and use of land, and the access to and control over assets. While very large enterprises (shirkats) have historically dominated the farm structure of Uzbekistan, since independence their numbers have decreased significantly i.e., from 2,818 in 1991 to about 113 in 2020. On the contrary during the same period, the number of private family farms (fermers) has increased from about 6,000 in 1991 to 149,000 in 2020, and the number of small producers (dekhkans) has also increased from about 3 million in 1991 to about 5 million in 2020.

Table 2: Farm structure in Uzbekistan

	Shirkat farms	**Farmers**	**Dehkan farms**
Basic definition	Cooperatives, associations of residents for joint farming	A business entity engaged in the production of agricultural products established as a legal entity and operating on leased land	Family subsistence or small-scale farming, carrying out production on a plot of land provided by the head of the family

[9] Family subsistence or small-scale farming carrying out production on a plot of land provided by the head of the family; Labor used: mostly family members with the option of hiring seasonal workers; Land use form: life inherited possession with size of the allocated land plots 0.35 ha for irrigated land and 0.5 ha for non-irrigated land (this area also includes facilities); Production focus: production of any agricultural product, mainly wheat, vegetables, fruits, livestock.

[10] Cooperatives, or associations of residents for joint farming; Labor used: cooperative members; Land use form: long term lease of land; Land ownership: collective; Production focus: previously contracted, mainly producing cotton and wheat but currently they have remained in karakul breeding

[11] A business entity engaged in the production of agricultural products established as a legal entity and operating on leased land; Labor used: family members as well as regular and seasonal employees; Land use form: long-term lease of land (up to 50 years) and the duration of the lease depends on the achievement of the public procurement goal and the size of farms may vary with production specialization; Land use form: only agricultural products specified in the land lease and mostly cotton and wheat.

	Shirkat farms	Farmers	Dehkan farms
Labor used	Cooperative members	Family members as well as regular and seasonal employees	Mostly family members have the option of hiring seasonal workers
Land use form	Long term lease of land	Long-term lease of land (up to 50 years). The duration of the lease depends on the achievement of the public procurement goal. The size of farms may vary with production specialization.	Life inherited possession. The size of the allocated land plots is 0.35 ha for irrigated land and 0.5 ha for non-irrigated land. This area also includes facilities.
Ownership	Collective	Private Any adult with the required/requisite agricultural qualifications	Private Former agricultural workers, rural families from former shirkats
Production Specialization	Previously contracted, mainly cotton and wheat. To date, they have remained in karakul breeding.	Only agricultural products specified in the land lease. Mostly cotton and wheat.	Any agricultural products, mainly wheat, vegetables, fruits, livestock

Source: Federigo Guseppe Santini 2019, Yusupov 2019

11. Dekhans hold and manage a large proportion of the national herd; they keep more than 90 percent of livestock and produce more than 95 percent of the livestock product i.e., milk and meat and about 50 percent of egg (Table 1). However, they have limited holding, do not have formal access to pasture/grazing lands, are less regulated by the government plan of land allocation for using their plot for different products, and are not provided with government subsidies and support. The small size and fragmented nature of these farms has also limited the procurement and application of modern technologies to improve productivity and production. By contrast, enterprises/agribusinesses (shrikats), that keep less than 3 percent of animals, control 45 percent of the pasture/grazing lands and are provided with government subsidies and support (Table 2).

Table 3: Distribution of agricultural land by land users, in '000 hectares

Type of land users	Arable land	Orchards and vineyards	Hayfields and pastures	Total	% of Total
Farms	3,472.9	295.0	2,481.3	6,249.2	23.5
Dehkans	420.2	80.3	-	500.5	1.9
Shirkats	142.2	10.3	19,643.1	19,795.6	74.6
Total	4,035.3	385.6	21,124.4	26,545.3	100

Source: Yusupov, 2019.

12. Dehkans invest little, if any, on use of regular veterinary services to keep the health of their animals, are less motivated to invest in artificial insemination to improve breeds for higher yield, lack the motivation to invest in improved feed resources to increase production, lack the incentive for the supply of milk and dairy products of appropriate quality to long dairy value chain, and even more so for investments to increase milk quality and quantity. They are primarily oriented towards self-sufficiency. Dehkans practice traditional animal husbandry, which is less productive and environmentally unsustainable causing degradation of locally available pastureland.

13. Private family farms (farmers/fermers) also suffer from frequent farm restructurings and the weak land tenure security rights have hindered the interest and willingness of the Private family farms to invest more resources to improve productivities and increase production. Land leasing and subleasing is not permitted, allocation of land for different crops is government regulated so farmlands cannot move freely from less efficient to more efficient producers from production of non-profitable to profitable products. The private sector lacks motivations to purchase, adopt, and implement improved technologies and to enhance vertical integration along the different stages of the livestock value chain that would ensure scale benefits and efficiency and generate profits in a long term. Farmland fragmentation and tenure in-security are thus issues to address to transform the livestock sub-sector.

14. Uzbekistan remains a net importer of livestock products especially for milk and milk products, but also for meat. Over the last three decades, the demand for livestock and livestock products in Uzbekistan has increased sharply due to an increase in the human population, urbanization, and the overall increase in incomes and preference for animal source foods (ASFs). As Uzbekistan aims at becoming an upper-middle-income economy and its human population and urbanization are increasing, the current production of meat, milk, eggs, and other livestock products will remain below demand for ASF and thus the subsector provides a market opportunity for expansion and increased production efficiencies while at the same time assuring the subsector to grow in a sustainable and climate conscious manner. It has been projected that by 2035, under the current investment scenario or business as usual scenario, there will be a 41 percent deficit to meet its citizens' milk consumption requirements.

15. Key challenges that undermine the productivity and efficiency of livestock production include: limited feed availability, inefficient production practices, poor provision of and access to livestock support services, limited resilience, and constraints to market access. In particular, dehkans have limited access to productive assets, including land (for feed production and pastures), improved breeds, animal husbandry and management knowledge, and capital. Further, limitations in accessing government subsidies and services have severely constrained their capacity to invest in technologies that improve the productivity and resilience of their livestock and confined them to largely subsistence (non-commercial) livestock production.

16. While the livestock subsector started showing signs of recovery and income growth, support services have largely remained weak and slow to adapt. The public sector dominates livestock support service delivery, including for veterinary, animal health, breeding, feed and nutrition, and research and extension services. The State Committee of Veterinary and Livestock Development (SCVLD), which was established in 2019, is the Competent Authority (CA) for veterinary, animal health, animal welfare, and some elements of veterinary public health. The organizational structure of SCVLD reflects the administrative division of the country and its organizational structure comprises various departments, including protection of animal health; food safety and diagnostics; coordination of veterinary activities; state veterinary control, certification, and standardization; foreign relations and investments; innovative activity, science, and education; and financial analysis and accounting. However, the management and service delivery capacity of the SCVLD has largely remained weak. The Livestock Subsector Development Strategy (UZ LSSDS) 2020-2030[12] and Five-year Investment Plan 2020-2025[13], as well as the OIE[14] assessments highlighted the urgency to strengthen the capacity and capability of the SCVLD to be able to fully support the sector's potential as well as address

[12] The Strategy, which had benefitted from intensive consultations with all relevant actors, has already been approved by the management of the SCVLD and is awaiting approval by the Government. The resolution/decree that announces the adoption of the strategy had already been r\prepared by the SCVLD and reviewed by all concerned. The Strategy is expected to be adopted soon.
[13] The Strategy is in its draft form and expected to be adopted soon.
[14] The OIE Public Veterinary Services Evaluation Assessment (OIE PVS EA) of 2017, the OIE Public Veterinary Services Gap Analysis (OIE PVS GA) of 2018 and the OIE Public Veterinary Services Sustainable Laboratories (OIE PVS SL) mission of 2018.

food safety, animal and human health and climate resilience aspects. The SCVLD is currently undergoing institutional reforms that are meant to improve service delivery capacity, and that the proposed project will support.

17. The livestock subsector has a low commercial market off-take due to inadequate processing and marketing infrastructure. The main livestock market outlets in Uzbekistan are local and regional markets, wholesale buyers, and processing enterprises. The government is also a market outlet, but its purchases are made from private livestock farms, and are fairly marginal. The level of participation of livestock producers in these markets varies depending on the type of product, objective of the production, forms of management, and geographical coverage. Private farms participate aggressively whereas dehkans produce mainly for their consumption. Livestock markets are few in number and lack the necessary and required facilities. The volume of Uzbekistan's livestock export is small, but livestock imports are significant and dominated by animal products. Imports of live animals are essentially limited to breeding stock.

18. Livestock contributes most of Uzbekistan's agriculture GHG emissions, estimated at 13.1 percent of domestic emissions in 2014. Uzbekistan's Land-Use Change and Forestry (LUCF) sector, including pastureland, was a net carbon sink, absorbing 16.40 MtCO2e more than was emitted from that sector in 2014. Per its Intended Nationally Determined Contribution (INDC), Uzbekistan established a carbon intensity target, pledging to decrease emissions of GHGs per unit of GDP by 10 percent by 2030 from the 2010 levels. The sector is also highly vulnerable to climate change, which is expected to further accentuate the current feed deficit. Limited access to support services, finance, information, and market are bottlenecks to producers' capacity to adapt to the changing climate.

19. The GoU is committed to transforming and modernizing the livestock subsector and doing so in a "climate-sensitive", inclusive, and sustainable way, as per the UZ LSSDS 2020-2030. The vision of the Strategy, which is aligned with the Agri-Food Development Strategy of the Republic of Uzbekistan for 2020-2030, is to develop a competitive, sustainable, resilient, and inclusive livestock subsector that contributes to a prosperous Uzbekistan. The goal of the Strategy is to transform and modernize the livestock sub-sector by increasing production, productivity, and income; improving the access to market and finance of farmers, agribusinesses, and other value chain actors; developing sustainable livestock value chains; and enhancing food and nutrition security. To help achieve the vision and goal, the Strategy identified key priority development areas, including (a) modernizing dehkans to make them competitive and market-oriented; (b) improving animal feed and nutrition; (c) improving public livestock service delivery, including veterinary, animal health, research, education, extension, and advisory services; (d) improving livestock breeding and genetics; (e) improving livestock market infrastructure and facilitating international trade; (f) improving value addition; and (g) digitizing livestock production. The Strategy is aimed at supporting the development of a productive, market oriented and sustainable livestock subsector that ensures sustainable management of pastures and grasslands and forage cultivation; increases soil carbon stock and carbon sequestration; focuses on energy-efficient livestock breeds and species such as poultry, rabbit, and fish. The Strategy also supports the promotion of sustainable and energy-efficient livestock management practices that will reduce GHG, thus contributing to the overall national goal of GHG reduction. Improved coordination and management, gender and nutrition, and jobs are all mainstreamed in each priority development area identified in the Strategy.

20. The proposed project supports the implementation of the government's strategy for livestock growth and transformation as articulated in its Livestock Subsector Development Strategy by adding value to existing investments as well as financing new investments that support the subsector and aid the government in achieving its objective of developing a productive, market oriented and sustainable livestock subsector that contributes to climate resilience objectives.

Relationship to CPF

21. The proposed project is aligned with the World Bank Group's "Saving Lives, Scaling-up Impact and Getting Back on Track" approach paper of June 2020 in response to the COVID-19 crisis. Specifically, the project would support two out of four focal areas of the WBG crisis response support, including: (a) economic response for saving livelihoods, preserving jobs, and ensuring more sustainable business growth and job creation; and (b) focused support for strengthening policies, institutions, and investments for resilient and sustainable recovery. The proposed project is also consistent with the newly adjusted Country Partnership Framework (CPF) for Uzbekistan and falls under the Focus Area 1: Sustainable transformation towards market economy, supporting a more strategic engagement in agriculture; and Focus Area 3: Investments in human capital; and will support the CPF's higher level goals to support the growth of the private sector and citizen engagement. The project will also support the CPF's objective of gender inclusion to achieve Uzbekistan's development objectives and focuses on rural women, recognized as highly vulnerable by the CPF.

22. The proposed project is aligned with priorities identified by the Permanent Mission of the Republic of Uzbekistan to the United Nations[15], including (a) National Livestock Development Priorities, which include increasing domestic production and self-sufficiency, liberalizing the agricultural economy, improving food security, reducing costs of imports and increase exports; introducing animal identification, registration, and movement control system (AI&T); (b) Animal Health Priorities, which include improving dairy cattle health to support increased milk production[16]; minimizing risks and impacts from brucellosis and other transboundary animal diseases; (c) Veterinary Public Health Priorities, which include developing a National Food Safety Strategy jointly with Ministry of Health (MoH) to increase effectiveness and efficiency of the national food safety system, strengthening ante- and post-mortem inspection, developing capacity to control the distribution, sale and use of veterinary medicines; and (d) Management of Veterinary Services Priorities, which include completing/consolidating the reorganization of the SCVLD, computerizing its activities, and increasing its physical and human capacity.

23. The proposed project builds on the gains and lessons learnt from the on-going Livestock Sector Development Project (LSDP) (P153613) which will close in June 2022. The LSDP has improved access to finance of farmers and agribusinesses, increased the productivity of livestock value chains, increased the values of livestock products sold, and contributed to job creation, though predominantly for large commercial farmers and agribusinesses. The LSDP, through its credit line component, financed sub-loans that were used to finance investment costs i.e., procurement of animals (pregnant heifers, cattle, sheep, and goats etc.) and farm machinery etc., and recurrent investment costs. Credit lines contributed to increased productivity and enhanced the competitiveness of livestock value chains. For example, milk productivity increased on average from 2620 to 5078 liters/cow/lactation period (193 percent increase), meat productivity from 2,796.9 to 10,485 tons/year (375 percent increase) and eggs from 1,161,365 to 1,419, 813 thousand pieces of eggs/year (122 percent). Total value of livestock products sold also increased by 142 percent (milk and milk products) and by 412 percent (meat and meat products) and income increased by 209 percent (from US$18,626 to US$38,973 per annum). Credit line beneficiaries have also been able to establish new or expand existing businesses as a result of which they were able to create a total of 7, 093 new jobs out of which 1,710 were women-jobs. The LSDP, through its value chain modernization component, also improved the access to market of stallholder farmers (Dehkans). For example, the LSDP financed a total of 120 value chain development (VCD) sub-projects that smallholders used to procure improved technologies, including (dairy and/or beef) animals; livestock product

[15] The Permanent Mission of the Republic of Uzbekistan to the United Nations (citing a meeting of the Cabinet of Ministers of the Republic of Uzbekistan) https://www.un.int/uzbekistan/news/uzbek-agriculture-progress-and-achievements# accessed 2018-04-29

[16] Feasibility Study of Dairy Value Chains Development. Project with the participation of the IFAD, Ministry of Agriculture and Water Resources of The Republic of Uzbekistan, Rural Restructuring Agency, 2016

processing units; farm machinery, including tractors, bailors etc.; transportation (special purpose vehicles); and storage facilities (coolers and milk tankers). The CVD grants helped smallholders increase production and productivity, improve their market access as well as improve the quality of livestock products produced and sold.

24. The majority of the beneficiaries of the LSDP, though, are mainly large-scale commercial farmers and agribusinesses. The number of smallholder farmers (dehkans) who benefited from LSDP interventions, including from credit line investments as well as VCD subproject is significantly low. For example, out of the 512 credit line beneficiaries, only 5 were dehkans and the rest are private commercial farms and agribusinesses whereas through the VCD subprojects, only 1,200 dehkans were reached (out of the nearly 5 million dehkans). The preliminary assessment of the VCD subprojects shows that as a result of the support, these few dehkans were able to participate successfully in livestock value chains (through establishing Productive Partnerships), gain access to markets (commercialization) demonstrating the potential impact for operations that would target smallholders. Moreover, the LSDP invested little in livestock support services, including veterinary and animal health services; research, extension, and advisory services; and marketing, and value addition infrastructures that are important in transforming the subsector. The proposed project aims to do exactly that: target dehkans, who play a crucial role in livestock production, and invest in livestock public support services, as well as market and value addition infrastructures in a sustainable, inclusive and climate smart way.

25. The proposed project complements three ongoing projects related to agrifood sector development namely the Agriculture Modernization Project (AMP) (P158372), Horticulture Development Project (HDP) Additional Financing (P164226), and Fergana Valley Rural Enterprise Project (FVREP) (P166305) that aim to support productivity supporting public services; strengthen the crisis and climate resilience of the agriculture sector; increase domestic food self-reliance and nutritional security; strengthen a foundation for increasing production and export competitiveness of the growing agricultural sector; and improve public institutions' early warning and crises preparedness and response capacity. It contributes to the development of viable private micro, small and medium enterprises (MSMEs) in rural areas and generation of employment opportunities in regions with few legal alternatives. It also builds on and draws lessons from livestock operations financed by development partners, including the Asian Development Bank (ADB) and French Development Agency (AFD), which highlighted the need for investments in public goods, improving the management and service delivery capacity of public veterinary and animal health and extension and advisory service providing institutions.

C. Proposed Development Objective(s)

26. The proposed Project Development Objective (PDO) is to support the development of a productive, market-oriented and sustainable livestock subsector in Uzbekistan.

27. The proposed project seeks to achieve this objective by strengthening public livestock support services for better and enhanced service delivery, improving the access to market and finance of livestock farmers, agribusinesses, and other value chain actors. This will further contribute to increased productivity and production; and enhancing quality and value addition of livestock value chains. Beneficiaries of the project would include staff of the livestock public institutions, smallholder farmers, commercial farmers, agribusinesses, and other value chain actors (such as service providers etc.). The project will be implemented nationwide in all regions of Uzbekistan, including the Tashkent City.

Key Results (From PCN)

PDO 1: Beneficiaries adopting improved livestock production technologies, including technologies that contribute to reduced GHG emission and enhance resilience to climate change (number) (disaggregated by (i) type of beneficiary (small holder farmers (dehkans), commercial farmers, agribusinesses, livestock value chain actors) and (ii) gender (male, female))

PDO 2: Increase in total value of livestock products sold (disaggregated by (i) type of beneficiary supported by the project (small holder farmers (dehkans), commercial farmers, agribusinesses) and (ii) gender (male, female))

PDO 3: Increase in average productivity of livestock value chains[17] (disaggregated by (i) type of beneficiary supported by the project (small holder farmers (dehkans), commercial farmers, agribusinesses) and (ii) gender (male, female))

PDO 4: Beneficiaries satisfied with the process, participation in and impact of project interventions (percent) ((disaggregated by (i) type of beneficiary (small holder farmers (dehkans), commercial farmers, agribusinesses) and (ii) gender (male, female))

28. PDO 1 reflects achievements under Components 1 and 3 and is associated with the "sustainable" dimension of the PDO. PDO 2 measures progresses achieved under Components 2 and 3 and is associated with the "market-oriented" dimension of the PDO; while PDO 3 measures progresses achieved under Components 1 and 3 and is associated with the "productive" dimension of the PDO and also measures improvements regarding the resilience of the sector.

D. Concept Description

29. The livestock subsector in Uzbekistan has a strong potential for growth and employment. However, it remains challenged by low productivity, limited and/or lack of access to market and finance, limited value addition, and weak and inadequate livestock support services, including veterinary and animal health, research, extension, education, and advisory services. Public programmes and projects are often poorly designed, not climate smart and inadequately targeted, reflecting the low capacity of the SCVLD and other public institutions involved in livestock development. Policies and legislations related to the livestock subsector are inadequate, and even when espousing principles of climate adaptation and mitigation they can be incoherent and have little or no assessment of their likely impacts on productivity and the environment. The proposed project, which will be implemented nationwide in all regions of Uzbekistan, including Tashkent City, aims to support the GoU's effort of transforming and modernizing the livestock subsector by helping the GoU develop a private sector led productive, market oriented, inclusive, resilient, and sustainable livestock subsector. It aims to do so by: (a) strengthening public livestock support services; (b) improving market infrastructure and import control, and (c) improving the access to finance of livestock farmers, agribusiness enterprises and other value chain actors. The proposed project also aims to help the GoU in successfully implementing the Livestock Subsector Development Strategy 2020-2030 and Five-year Investment Plan 2020-2025.

30. The project will foster a transformation of livestock production, while ensuring that the supply response to growing demand is sustainable, inclusive, safe, and environmentally conscious. To this end, the project will improve the ecosystem for value chain development by financing key infrastructures including markets, and access to market, and financial products and services, capacity building for private value chain actors, and public agencies in supportive regulation as well as knowledge. It will establish partnership with participating financial institutions (PFIs) to promote credit for farmers and agro-entrepreneurs. Climate resilient, productive, sustainable and inclusive livestock production systems will be developed through the promotion of appropriate CSA practices addressing feeding strategies, animal health and welfare, animal husbandry and breeding, as well as manure and waste management

[17]The livestock value chains considered are milk, meat, and egg.

(including production of energy), improved storage and processing, and generation of renewable energy from solar and livestock manure sources[18]. Project activities on animal health and food safety will embrace the One Health principles since it will address public health at the human animal interface. The project will systematically ensure that all activities and investments financed include climate-smart and good environmental management practices, and that the technical support and financial incentives provided by the project facilitate the wide adoption of such practices from adaptation and increased productivity (resulting in lower emission intensities) to specific mitigation options such as covered manure storage, biogas and energy saving devices.

31. **Component 1: Strengthen public livestock support services.** The objective of this component is to improve the management and delivery of public livestock support services19. The main areas of support under this component include: (a) strengthen the capacity of the State Committee of Veterinary and Livestock Development (SCVLD), including the national network of laboratories (NNLs) and artificial insemination (AI) centers; (b) strengthen livestock extension and advisory services; and (c) strengthen research and development.

32. **Subcomponent 1.1: Strengthen the State Committee of Veterinary and Livestock Development (SCVLD)**
33. **Subcomponent 1.2: Strengthen public livestock extension and advisory services**
34. **Subcomponent 1.3: Strengthen public livestock research and development**

35. **Component 2: Strengthen market access.** The objective of this component is to improve the market access of livestock farmers and agribusinesses and improve international trade i.e., enhance import control of animals and animal products. The presence of a well-functioning enabling environment is crucial for strengthening marketing i.e., improving farmers' and agribusinesses' access to market and enhancing international trade (import control of animals and animal products). Improving international trade will require the development of a satisfactory level of infrastructure; an animal identification, registration, and traceability (AIR&T) system; qualified personnel; and an appropriate knowledge of international standards. It will also support the development and modernization of the veterinary information system (VIS) for border inspections and controls. The main areas of support of the component include: (a) strengthening of the enabling environment; (b) improving marketing infrastructure; (c) strengthening quarantine and border security, including VIS; and (d) establishing an AIR&T system.

36. **Subcomponent 2.1: Enabling environment**
37. **Subcomponent 2.2: Strengthen livestock market infrastructure**
38. **Subcomponent 2.3: Strengthen border security and quarantine**
39. **Subcomponent 2.4: Animal Identification, Registration, & Traceability (AIR&T)**

40. **Component 3: Improve access to finance for livestock farmers, agribusinesses, and other value chain actors.** The objective of this component is to improve the access to finance of livestock farmers, agri-business enterprises and other actors involved in the livestock value chains. Livestock farmers, agribusinesses and value chain actors operating in Uzbekistan's livestock subsector lack access to longer-term financing and suitable products and services due to the funding structure of financial institutions, limited use of appropriate lending methodologies and higher risks associated with the subsector. The provision of long-term funding for the sector and suitable credit mechanisms can help alleviate these structural constraints. Moreover, financial products that are tailored to livestock production cycles and to the needs of the smallholder farmers are in short supply, highlighting the need to further support financial institutions in developing specific loan products/services for this segment and in building the capacity of financial

[18] The Borrower, in implementing interventions aimed at ensuring the development of a productive, sustainable, market oriented and inclusive livestock subsector will follow Good International Practice (GIIP)
[19] These include veterinary and animal health services; extension and advisory services; and research and development

institutions in new lending methodologies. The main areas of support include: (a) credit line to participating financial institutions (PFIs) for provision of working capital and investment finance to the livestock subsector nationwide, including for farming, marketing, distribution, and processing; and (b) capacity building for PFIs on sector-specific loan product development, loan appraisal, environmental and social standards, and monitoring in the livestock subsector, and (c) establishing livestock complexes.

41. **Subcomponent 3.1: Credit line for livestock farmers, agribusinesses, and other value chain actors**
42. **Subcomponent 3.2: Capacity building of participating financial institutions (PFIs)**
43. **Subcomponent 3.3: Establishing livestock complexes**

44. **Component 4: Project management and coordination.** This component will support project management, coordination, M&E, and implementation of environmental and social standards, and fiduciary aspects of the project. The proposed project would utilize the capacity of the existing PIU for LSDP at SCVLD, that is already well experienced with implementation of World Bank projects.

Legal Operational Policies	Triggered?
Projects on International Waterways OP 7.50	No
Projects in Disputed Areas OP 7.60	No

Summary of Screening of Environmental and Social Risks and Impacts

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