



Report and Recommendation of the President to the Board of Directors

INTERNAL

Project Number: 49430-005
March 2023

Proposed Multitranche Financing Facility Mongolia: Aimags and Soums Green Regional Development Investment Program

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Asian Development Bank

CURRENCY EQUIVALENTS

(as of 28 February 2023)

Currency unit	–	togrog (MNT)
MNT1.00	=	\$0.00028
\$1.00	=	MNT3,517.00

ABBREVIATIONS

ADB	–	Asian Development Bank
ADF	–	Asian Development Fund
AMC	–	Development Bank of Mongolia Asset Management SC LLC
COVID-19	–	coronavirus disease
ESMS	–	environmental and social management system
FAM	–	facility administration manual
FFA	–	framework financing agreement
FIL	–	financial intermediation loan
GCF	–	Green Climate Fund
GIRAF	–	green and inclusive regional agribusiness fund
LARP	–	land acquisition and resettlement plan
LCADP	–	low-carbon and climate-resilient agribusiness development plan
LCLVC	–	low-carbon and climate-resilient livestock and agrobusiness value chain
MCUD	–	Ministry of Construction and Urban Development
MED	–	Ministry of Economy and Development
MFF	–	multitranches financing facility
MOFALI	–	Ministry of Food, Agriculture and Light Industry
NMLP	–	National Mongolian Livestock Program
NSO	–	National Statistics Office
O&M	–	operation and maintenance
PIHMP	–	participatory and inclusive herd management plan
PIU	–	project implementation unit
PUG	–	pasture user group
RUA	–	rangeland use agreement
SMEs	–	small and medium-sized enterprises
tCO ₂ e	–	ton of carbon dioxide equivalent

GLOSSARY

<i>aimag</i>	–	province
<i>dzud</i>	–	succession of droughts and severe winters
<i>ger</i>	–	yurt or traditional dwelling
<i>soum</i>	–	subunit of an <i>aimag</i>

NOTE

In this report, “\$” refers to United States dollars.

Vice-President	Ahmed M. Saeed, Operations 2
Director General	M. Teresa Kho, East Asia Department (EARD)
Director	Asif Cheema, Urban and Social Sectors Division (EASS), EARD
Team leaders	Arnaud Heckmann, Principal Portfolio Management Specialist, Nepal Resident Mission, South Asia Department
Team members	Jie Bai, Urban Development Specialist, EASS, EARD
	Tuul Badarch, Senior Project Officer (Infrastructure), Mongolia Resident Mission (MNRM), EARD
	Ruth Benigno; Project Analyst; Public Management, Financial Sector, and Regional Cooperation Division; EARD
	Mark R. Bezuijen; Principal Environment Specialist; Environment, Natural Resources and Agriculture Division (EAER); EARD
	Jinqiang Chen, Urban Development Specialist (Climate Change), EASS, EARD
	Maria Lorena Cleto, Social Development Specialist (Resettlement), EASS
	Jubie Leah Mae Coles, Associate Financial Management Officer, Office of the Director General (EAOD), EARD
	Christian Ellermann, Senior Climate Change Specialist, Climate Change and Disaster Risk Management Division, Sustainable Development and Climate Change Department (SDCC)
	Enerelt Enkhbold, Senior Investment Officer, MNRM, EARD
	Abigail Garrovillas, Senior Operations Officer, EAOD, EARD
	Jan Hinrichs, Senior Natural Resources Economist, EAER, EARD
	Shinsuke Kawazu, Principal Counsel, Office of the General Counsel
	Noellé Dianne Laspiñas, Project Analyst, EASS, EARD
	Rosemary Ong, Senior Public–Private Partnership Specialist, Advisory Division 2, Office of Public–Private Partnership
	Viswanathan Ramasubramanian, Senior Safeguards Specialist (Resettlement), EASS, EARD
	Mark Allister Robis, Senior Financial Management Officer, EAOD, EARD
	Shotaro Sasaki, Senior Environment Specialist, EASS, EARD
	Gohar Tadevosyan, Senior Social Development Specialist, EASS, EARD
	Hiet T.H. Tran; Senior Procurement Specialist; Procurement Division 2; Procurement, Portfolio, and Financial Management Department ^a
	Rochelle Villanueva, Associate Project Analyst, EASS, EARD
Peer reviewers	Lara Arjan; Urban Development Specialist; Urban Sector Group, Office of the Cluster Head; SDCC
	Takeshi Ueda; Principal Natural Resources and Agriculture Economist; Environment, Natural Resources and Agriculture Division; Southeast Asia Department

^a Outposted to the Mongolia Resident Mission.

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INVESTMENT PROGRAM AT A GLANCE

1. Basic Data		Project Number: 49430-005	
Project Name	Aimags and Soums Green Regional Development Investment Program	Department/Division	EARD/EASS
Country	Mongolia	Executing Agency	Ministry of Economy and Development
Borrower	Mongolia		
Country Economic Indicators	https://www.adb.org/Documents/LinkedDocs/?id=49430-005-CEI		
Portfolio at a Glance	https://www.adb.org/Documents/LinkedDocs/?id=49430-005-PortAtaGlance		
2. Sector	Subsector(s)	ADB Financing (\$ million)	
✓ Water and other urban infrastructure and services	Other urban services		50.000
	Urban housing		44.600
	Urban policy, institutional and capacity development		25.000
	Urban slum development		20.000
	Urban solid waste management		6.000
Agriculture, natural resources and rural development	Agricultural policy, institutional and capacity development		18.400
	Irrigation		12.000
	Land-based natural resources management		16.000
	Livestock		16.000
Energy	Electricity transmission and distribution		14.000
	Energy efficiency and conservation		13.000
	Energy utility services		30.000
Finance	Finance sector development		3.000
Transport	Urban roads and traffic management		5.000
		Total	273.000
3. Operational Priorities		Climate Change Information	
✓ OP1: Addressing remaining poverty and reducing inequalities		GHG reductions (tons per annum)	3,035,665
✓ OP2: Accelerating progress in gender equality		Climate Change impact on the Project	High
✓ OP3: Tackling climate change, building climate and disaster resilience, and enhancing environmental sustainability			
✓ OP4: Making cities more livable		ADB Financing	
✓ OP5: Promoting rural development and food security		Adaptation (\$ million)	24.000
✓ OP6: Strengthening governance and institutional capacity		Mitigation (\$ million)	29.000
✓ OP7: Fostering regional cooperation and integration			
		Cofinancing	
		Adaptation (\$ million)	89.800
		Mitigation (\$ million)	85.200
Sustainable Development Goals		Gender Equity and Mainstreaming	
SDG 2.4		Effective gender mainstreaming (EGM)	✓
SDG 6.a			
SDG 7.2, 7.3, 7.a		Poverty Targeting	
SDG 8.10		Geographic Targeting	✓
SDG 9.1, 9.3			
SDG 11.1, 11.3, 11.6, 11.7			
SDG 12.2			
SDG 13.a			
SDG 15.1, 15.3			
4. Risk Categorization:	Complex		
5. Safeguards Categorization [Tranche 1]	Environment: B Involuntary Resettlement: B Indigenous Peoples: C		
6. Financing			

INVESTMENT PROGRAM AT A GLANCE

Modality and Sources	Indicative Tranches (\$million)			Amount (\$million)
	I	II	III	
ADB				273.000
Sovereign MFF-Tranche (Grant): Asian Development Fund	3.000	0.000	0.000	3.000
Sovereign MFF-Tranche (Concessional Loan): Ordinary capital resources	45.000	52.200	37.800	135.000
Sovereign MFF-Tranche (Regular Loan): Ordinary capital resources	45.000	50.000	40.000	135.000
Cofinancing				355.000
European Investment Bank - MFF-Tranche (Loan) (Not ADB Administered)	52.900	59.400	37.700	150.000
European Investment Bank - MFF-Tranche (Grant) (Not ADB Administered)	10.500	11.400	8.100	30.000
Green Climate Fund - MFF-Tranche (Loan) (Full ADB Administration)	50.200	48.000	31.800	130.000
Green Climate Fund - MFF-Tranche (Grant) (Full ADB Administration)	25.000	12.000	8.000	45.000
Counterpart				107.000
Beneficiaries - Loan	3.400	2.000	1.300	6.700
Government - Loan	20.700	33.500	21.100	75.300
Others - Loan	14.300	7.500	3.200	25.000
Total	270.000	276.000	189.000	735.000

Currency of ADB Financings: US Dollar

INVESTMENT PROGRAM AT A GLANCE

7. Country Partnership Strategy

CPS

<https://www.adb.org/documents/mongolia-country-partnership-strategy-2021-2024>

8. Investment Program Summary

The program represents a fundamental paradigm shift in applying a transformative model to promote green territorial development and urban-rural linkages, whereby livable human settlements-aimag (province) and soum (subunit of an aimag) centers-become anchors of green agribusinesses that promote sustainable, resilient, and high-carbon sequestration rangeland management. Initially focusing on Mongolia's western aimags, the program will promote climate finance and private sector investment mechanisms that can be replicated countrywide.

Impact: Green development, regional development sustainability, quality of life, and human development achieved

Outcome: Green and inclusive agro-territorial development advanced

Outputs: (i)Climate-resilient, low-carbon, and attractive aimag and soum centers developed, (ii)Climate-resilient, high-carbon sequestration, and sustainable rangeland and agricultural management implemented, (iii)Accessible financing for low-carbon and climate-resilient livestock and agrobusiness value chains created (financial intermediation loan component), and (iv)Institutional capacity and policies for low-carbon and climate-resilient agro-territorial development strengthened

Implementation Arrangements: Ministry of Economy and Development will be the executing agency.

Project Readiness: Facility preparatory activities are being undertaken under an ongoing transaction technical assistance.

9. Indicative Tranche Approval Plan

Modality	Estimated Approval	Estimated Completion ^a
Tranche I	22 March 2023	22 March 2029
Tranche II	30 December 2025	30 December 2032
Tranche III	3 January 2028	22 March 2033

10. Project Data Sheet (PDS)

PDS^b

<http://www.adb.org/projects/49430-005/main>

^a For tranches, this refers to the tranche closing date.

^b Safeguard documents can be viewed by clicking the Document's hyperlink in the Project Data Sheet (PDS) page.

**MONGOLIA
AIMAGS AND SOUMS
GREEN REGIONAL DEVELOPMENT
INVESTMENT PROGRAM (TRANCHE 1)**



I. THE PROPOSAL

1. I submit for your approval the following report and recommendation on a proposed multitranche financing facility (MFF) to Mongolia for the Aimags and Soums Green Regional Development Investment Program. The report also describes the proposed tranche 1, and if the Board approves the proposed MFF, I, acting under the authority delegated to me by the Board, approve tranche 1. The program represents a fundamental paradigm shift in applying a transformative model to promote green territorial development and urban–rural linkages, whereby livable human settlements—*aimag* (province) and *soum* (subunit of an *aimag*) centers—become anchors of green agribusinesses that promote sustainable, resilient, and high-carbon sequestration rangeland management. Initially focusing on Mongolia’s western *aimags*, the program will promote climate finance and private sector investment mechanisms that can be replicated countrywide.

II. RATIONALE

2. In 1990, upon disengaging from the Soviet Union, Mongolia entered a transitional period. *Aimag* and *soum* centers were unable to play their role as anchors of rural economy.¹ Herders started to migrate to urban areas in response to (i) the low value of livestock; (ii) higher exposure of their animals to disease because of poor livestock breeding, feed supply, and veterinary services; and (iii) the impact of climate change, especially the increase of extreme weather such as *dzud* (succession of droughts and severe winters) causing massive losses of livestock, particularly during 2000–2001 and in 2010. The loss of large quantities of livestock during the past *dzud* illustrates the vulnerability of herders and the severe impact of extreme climate events on national livestock assets. During the *dzud* of 2000–2001, 25% of Mongolia’s livestock perished. From 1999 to 2003, about 180,000 people migrated to Ulaanbaatar having lost their livelihoods to the severe winters, and started to settle on the outskirts of Ulaanbaatar and in *aimag* centers overwhelming the capacity of cities to absorb them; and formed vast substandard settlements, known as *ger* areas, which account for about 60% of Ulaanbaatar’s population and more than 70% of the population of *aimag* centers.² In 2021, the urbanization ratio in Mongolia represented about 69.4% of the country’s 3.4 million population. This caused urban systems, already exceeding their planned service life, to further deteriorate and become undersized to meet existing and future needs for Mongolia’s growing urban population.³ With 1.6 million population, Ulaanbaatar accounts for 69% of the urban population, and 63% of gross domestic product. The demographic and economic weight of the capital city illustrates the country’s drastic territorial imbalance.

3. The combination of herders expanding herd size to compensate for anticipated livestock losses (especially from *dzud*), open access to pasture, unbalanced herd composition (with a high proportion of goats which are particularly destructive to rangelands but can generate good income

¹ *Aimag* center refers to the *aimag* capital. Except for Darkhan and Erdenet (each with about 80,000 people), the population of most *aimag* centers ranges from 15,000 to 40,000. *Soum* center refers to the main town in a *soum*. Inter-*soum* centers refer to *soum* centers of strategic and economic importance within an *aimag*, with populations ranging from 2,000 to 10,000.

² *Ger* areas are settlements characterized by loosely aligned plots, irregular and unpaved pathways, and poor access to basic infrastructure. Poorly insulated detached solid houses and *ger* tents use inefficient coal stoves that produce heavy carbon dioxide emissions and air pollution, especially during winter.

³ In *aimag* and *soum* centers, gaps between supply and demand for urban services are mainly caused by (i) underperforming urban systems with limited operation and maintenance (O&M) resources; (ii) lack of drainage and flood protection infrastructure; (iii) a stagnating economic situation that constricts infrastructure investment; (iv) overcrowded public buildings in poor condition (e.g., for education, government, and health services), especially in *soum* centers; and (v) lack of provision for affordable housing.

from cashmere), and poor rangeland management practices has put Mongolia's rangelands, which covers 82% of the country, under severe threat. In addition, climate change has reduced the productivity of rangelands, affected glacier-fed water regimes, and increased exposure of herders and the animal husbandry sector to climate-related natural hazards.⁴ Overgrazing is on average 22.6% above the rangeland carrying capacity, and as a result, about 70% of pastoral land has been degraded.⁵ The situation has impacted livestock productivity and made herds more vulnerable to climate events and disease, resulting in deteriorating quality of meat, wool, and other livestock products and lower incomes for herders who compensate by further increasing herd sizes.⁶ This vicious cycle has led to uncontrolled and exponential increases of livestock heads. While livestock numbers ranged from 20 million to 25 million heads during 1970–1990, it has reached 66.5 million in 2018 and 71.1 million in 2022.⁷ Ongoing rangeland degradation is also associated with considerable reduction of above- and below-ground biomass, and lessening the carbon storage capacity of soil. Improving rangeland management thus offers huge climate change mitigation prospects. It is estimated that Mongolia can avoid emissions of more than 440 million tons of carbon dioxide equivalent (tCO₂e) over the next 20-year period from soil carbon sequestration.⁸

4. During the last decade, the Government of Mongolia has set policies and objectives to reverse overgrazing trends and reduce overall livestock numbers to sustainable levels. However, those attempts failed to reverse the exponential increase of animals and overcome complex and interrelated barriers inherent to the livestock industry.⁹ The Swiss Agency for Development and Cooperation through the Green Gold project has established pasture user groups (PUGs) and rangeland use agreements (RUAs) to strengthen traditional user groups of herders for inclusive and improved grazing management of common seasonal rangelands.¹⁰ Green Gold project activities were gradually handed over to the National Federation of Pasture User Groups and the *Aimag* Federation of Pasture User Groups. Yet, few RUAs have been officially registered and even fewer stocking adjustment rates have been formulated.¹¹ PUGs lack incentives and marketing opportunities to sell animals and reduce herd sizes. The lack of well-functioning cooperatives, certification systems, and linkage with agriculture value chain led to a dearth of quality livestock raw materials and failure to establish sustainable mechanisms to reduce herds and ensure sustainable rangeland management.

⁴ Based on Mongolia's updated National Determined Contribution, November 2019, the frequency of extreme weather phenomena has doubled in the last 2 decades. This is expected to increase by 23%–60% by the middle of the century as compared to present conditions.

⁵ Data from the 2017 National Mongolian Livestock Program (NMLP), the National Statistical Office (NSO) of Mongolia, and *soum*-level datasets of the Ministry of Food, Agriculture and Light Industry (MOFALI).

⁶ NSO indicates that two-in-five herder families live in poverty. If the situation continues, more herder families will be pushed into poverty, eroding national food security and contributing to turning rangelands into deserts.

⁷ Livestock data from NSO. [Mongolian Statistical Information Service](#) (accessed January 2022).

⁸ Carbon sequestration is the process of capturing and storing carbon dioxide. It reduces the amount of carbon dioxide in the atmosphere, contributing to the mitigation of global climate change.

⁹ The rapid growth of animal husbandry since 2010 has caused numbers to exceed the NMLP targets. The NMLP target for sheep heads unit for 2021 is 79.7 million while the actual number for 2021 was 117.6 million, exceeding the target by 48%. Sheep head unit is commonly used to convert the grazing impact of animals to a sheep equivalent.

¹⁰ Swiss Agency for Development and Cooperation. 2021. [Sustainably Managed Pastures and Healthy Animals: Mongolia's 'Green Gold'](#). RUA is a collective and voluntary agreement between a group of herders and the *soum* government that is (i) legally recognized and registered by the Agency for Land Management and Administration, Geodesy and Cartography and the Ministry of Justice and Home Affairs; and (ii) socially and politically accepted by all parties. To be legally registered and binding, it must include five annexes with information such as herd size, composition, pasture use, state of rangeland, and carrying capacity.

¹¹ Stocking adjustment rate is the number of animal units set at or below the carrying capacity of a certain land area.

5. **Weak small and medium-sized enterprise development.** Development of small and medium-sized enterprises (SMEs) in Mongolia is constrained by unaffordable interest rates and short-term loans; high and rigid collateral requirements, especially for immovable assets; overly complicated administrative procedures; and low financial literacy of SME borrowers.¹² In remote *aimags*, SMEs lack access to appropriate urban and economic services. Local agricultural enterprises and value chains suffer from weak finance ecosystems; dominance of large agribusiness companies based in Ulaanbaatar; low entrepreneurial skills; and lack of start-up capital and support to access available financing, affordable financing products, and supportive national program and policies. These challenges impede agribusiness investments at the point-of-need, preventing job creation and local development, which are required to promote economic diversification, counterbalance Mongolian's overdependence on mining, and reverse the flow of migration to Ulaanbaatar.

6. The weak agribusiness SMEs development and the lack of quality and sustainably certified agricultural product both prevent capturing the (i) growing domestic demand in higher-quality and greener meat product mainly in urban areas and especially in Ulaanbaatar; (ii) large export potential for green and sustainably certified agricultural products coming from sizable markets demand such as the People's Republic of China, the Russian Federation, Central Asia countries, Japan, Iran, and Viet Nam; and (iii) growing demand from developed country markets for sustainably certified cashmere and wool products.

7. **Western *aimags*.** The three western *aimags* of Bayan-Ulgii, Khovd, and Uvs have fragile ecosystems and rely heavily on mountain pastureland, high mountain water flow, and oases. The population and environment of these three *aimags* are particularly vulnerable to climate change. Melting permafrost and glaciers, rising temperatures, and changing precipitation patterns are severely affecting the composition and distribution of water resources. The overgrazing rate in the western *aimags*, estimated at 27.4% more than the carrying capacity, is five percentage points higher than the national average. The lack of investment in the three western *aimags* has left them isolated and underequipped, despite (i) being a strategically important trade and western development link along Central Asia Regional Economic Cooperation corridor 4a, (ii) the importance of the area in balancing Mongolia's territorial development and boosting regional trade, and (iii) the prominence of animal husbandry in employment (it accounts for about 38%–51% of total employment).

8. **Government road map.** The government is fully aware of the severity of the situation and has formulated Vision 2050, a two-stage framework supported by the Asian Development Bank (ADB), to guide long-term development and promote human development, quality of life, green development, and sustainable regional development.¹³ The New Recovery Policy of the government aims to create the conditions to reach the objectives of the first implementation stage (2021–2030) of Vision 2050.¹⁴ It promotes Recovery of Operations of Border Ports, Energy Recovery, Industrial Recovery (especially through supporting agrobusiness industry development and increased value-added of local agro-processing industry for domestic and export markets), Urban Rural Recovery (especially through supporting the development of regional clusters, reversing migration to Ulaanbaatar, and decreasing the Capital City congestion); and Recovery

¹² As of December 2022, the average interest rate for SME business loans was 17.3%—much higher than the Bank of Mongolia's policy rate of 13.0%. Banks require collateral to guarantee a loan in 99.7% of cases, and collateral value required is about 200.0% of the loan's value on average.

¹³ State Great Khural. 2020. *Vision 2050: Long-Term Development Policy of Mongolia*. Ulaanbaatar. The plan was formed with the support of ADB. [Mongolia: Human Settlements Development Program](#); and the Japan International Cooperation Agency's Regional Development Policy.

¹⁴ Enacted by the Act of Parliament No.106 dated 30 December 2021.

through Green Development (especially through sustainable rangeland management and green urban development), and Recovery of Public Productivity. Finally, following the food security and promoting food supply resolution of the Parliament,¹⁵ the government, through the Ministry of Economy and Development (MED), has developed a national food safety and sustainable food supply strategy based on Mongolia's specific climatic, geographical, and local resources conditions using an integrated planning approach aiming to upgrade agricultural production, supply, and logistic clusters in selected *soums*.¹⁶ Ministries have developed sector plans and policies to support and guide the implementation of the road map. The Ministry of Construction and Urban Development (MCUD) and the MED are implementing territorial and regional development studies that formulate key strategic directions for *aimag* development and priority public and private investments. The Ministry of Food, Agriculture and Light Industry (MOFALI) formulated the State Policy on the Food and Agriculture Sector (2016–2025), 2015; the Mongolian Herders National Program, 2020; and the Mongolia Livestock II Program (2022–2024).¹⁷ Finally, Mongolia's Third National Communication drives the national climate action plan.¹⁸ The program is included in the public investments plan of Mongolia's Five-Year Development Guidelines (2021–2025).¹⁹

9. **Program priorities and approach.** Implementing the comprehensive government road map in *aimags* and *soums* will help arrest the vicious cycle of interrelated and mutually reinforcing sector bottlenecks (para. 3), further aggravated by the coronavirus disease (COVID-19) crisis and the Russian invasion of Ukraine, which generated exogenous shocks that adversely impact Mongolian economy. In this context, a piecemeal, short-term, or single sector-oriented approach would be unsustainable and insufficient. For example, investing solely in infrastructure in a stagnating economic context would be inefficient and would not promote a functional and dynamic urban development process. Providing financial support for agriculture and livestock husbandry while failing to address lagging infrastructure, complicated SME administrative services and the problem of poor animal value would not be enough. Supporting better management of natural resources would be unsustainable and less effective without parallel provision of services for herders and support for market links to promote inclusive and green value chains. Finally, promoting agricultural trade and ensuring sustainable food supply implies improving livestock health and promoting transboundary sanitary and phytosanitary measures, such as veterinary regulated quarantine zones. Through its comprehensive and multisector long-term approach, the MFF program of ADB will ensure that real transformation takes place within rural communities, motivated and sustained by low-carbon and climate-resilient livestock and agrobusiness value chains (LCLVCs), with livable *aimag* and *soum* centers acting as anchors for private sector investment.²⁰ The MFF program will incorporate this approach into a regional development

¹⁵ On 17 June 2022, the parliament ratified a resolution on ensuring food security and promoting food supply, which includes the following key measures: (i) promote export-oriented food production and increase food production to reduce dependency on imported food; (ii) improve standards, quality controls, innovation, and M&E mechanism in food production, storage, transportation, and trade; (iii) increase domestic supply of fodder and forage; (iv) promote irrigated agriculture production; (v) develop agro-industrial parks for establishing cluster-based agriculture value chains; (vi) improve livestock sanitary condition and improve pastureland management; and (vii) support domestic food processing.

¹⁶ This includes 10 *soums* located in the western region.

¹⁷ MOFALI Minister Order No. A/177, June 2022, following the Mongolian National Livestock Program.

¹⁸ Ministry of Environment and Tourism. 2018. *Mongolia Third National Communication under the United Nations Framework Convention on Climate Change*. Ulaanbaatar.

¹⁹ State Great Khural. 2020. *Public Investment Program 2021–2025 (Attachment 2)*. Ulaanbaatar.

²⁰ LCLVC means that the full range of herders, herder groups, agrobusinesses, cooperatives, and firms and their successive coordinated value-adding activities that transform, sell, and dispose after use agricultural raw material, especially livestock derived materials in a manner that is profitable throughout the value chains, promotes rangeland regenerative practices, is water efficient, reduces GHG emissions, and increases soil carbon sequestration.

strategy and develop a green agro-territorial²¹ model supported by policy reforms and institutional strengthening at both the local and national levels and building on agricultural production, supply, and logistic clusters model formulated by MED.

10. **Policy framework.** Aligning with the long-term strategic development objectives of the road map, the program will follow integrated and synergetic guiding principles for its policy framework,²² capacity development, and investment outputs: (i) inclusive and green urban–rural transformation, through improved living conditions and performance of priority urban settlements as anchors for local economic development, to attract LCLVC investments at the point-of-need and reconnect urban and rural economies; (ii) sustainable, climate-resilient, and low-carbon rangeland management, driven by incentives to encourage better rangeland management practices, grassroots organization, and transitional support for herders; improve animal feed, breeding, and health to support more productive and quality animals; reverse ecosystem degradation and increase its capacity for carbon sequestration; enhance rangeland and herder communities’ resilience to climate change; and, by improving resource efficiency and food production, improve food security despite the adverse impacts of climate change; (iii) well-functioning and inclusive LCLVCs (that provides stakeholders with services to sustain their activities while minimizing their carbon footprint, supporting sustainable management of natural capital, and promoting climate adaptation), hinged on accessible and responsive financial and nonfinancial support for herders, SMEs, and other stakeholders involved in the agriculture sector operating in the *aimag* and inter-*soum* centers; and (iv) improved planning, capacity, knowledge, and institutions, especially for all the stakeholders of the agriculture sector, to support transformational low-carbon, climate-resilient, and inclusive territorial development plans and policies.

11. **Strategic context.** The strategic context and long-term support of the road map (i) is consistent with ADB’s country partnership strategy for Mongolia, 2021–2024,²³ especially with its post–COVID-19 recovery action plan, and will contribute to overcoming economic contraction and exacerbated inequalities to promote sustainable economic growth, diversification, and inclusiveness; (ii) is aligned with the seven operational priority plans of ADB’s Strategy 2030;²⁴ and (iii) supports Central Asia Regional Economic Cooperation 2030 and its Common Agenda for Modernization of Sanitary and Phytosanitary Measures for Trade by contributing to agricultural trade and regional public goods, mitigating desertification and climate change, and containing transboundary animal health problems.²⁵

²¹ A territorial approach aims to realize the potential of a territory through strategic management of the relationship between economic development, social inclusion, and environmental sustainability. The goal of agro-territorial development is to link smaller cities and towns with their rural “catchment areas” and improve access to food and income opportunities for the urban and rural poor. Food and Agriculture Organization of the United Nations. 2017. [Development Economics Policy Brief: Strong Rural–Urban Linkages are Essential for Poverty Reduction](#). Rome.

²² The policy framework is outlined in the Framework Financing Agreement (FFA) (accessible from the list of linked documents in Appendix 2), and details are in Appendix 8 of the Facility Administration Manual (FAM) (accessible from the list of linked documents in Appendix 2).

²³ ADB. 2021. [Country Partnership Strategy: Mongolia, 2021–2024—Laying Resilient Foundations for Inclusive and Sustainable Growth](#). Manila.

²⁴ ADB. 2018. [Strategy 2030: Achieving a Prosperous, Inclusive, Resilient, and Sustainable Asia and the Pacific](#). Manila.

²⁵ ADB. 2017. [CAREC 2030: Connecting the Region for Shared and Sustainable Development](#). Manila.

III. THE INVESTMENT PROGRAM

A. Impact and Outcome

12. The investment program is aligned with the following impact: green development, regional development sustainability, quality of life, and human development achieved (footnote 13). The investment program will have the following outcome: green and inclusive agro-territorial development advanced.²⁶

B. Outputs

13. **Output 1: Climate-resilient, low-carbon, and attractive *aimag* and *soum* centers developed.** This output will target development of priority infrastructure and services to support the transition of targeted *aimag* and inter-*soum* centers into anchors for LCLVC investments. It will address *aimags* and *soums* infrastructure gaps to support green agri-business development and the agriculture sector based on the locations for agricultural logistics and supply centers, industries, and clusters identified by MED. It will employ a comprehensive and integrated approach to address urban service deficiencies (such as district heating, drainage and flood protection, power, roads, social facilities, waste collection and treatment, wastewater treatment, and water supply) and improve the living conditions in *aimag* and inter-*soum* centers. The output will promote low-carbon solutions through the use of renewable energy and energy efficient urban services and buildings. In each targeted *aimag* and *soum* center, an agro-industrial park dedicated to LCLVCs will be developed, including utilities to attract processing activities and an incubator center.²⁷ Finally, a smart land management center will improve land and urban management; and monitor rangeland health (rangeland health refers to the set of environmental conditions that sustain rangeland productivity and biodiversity), water availability, and soil carbon sequestration.

14. **Output 2: Climate-resilient, high-carbon sequestration, and sustainable rangeland and agricultural management implemented.** This output will support climate vulnerable herder groups and empower them with sustainable livestock and agricultural management practices (e.g., improved grazing practices, balanced herd composition, reduced herd size, and improved animal breeding) to reverse rangeland degradation while producing high-value agricultural products. It will (i) support the implementation of community-based investment projects for participating herder groups belonging to PUGs that have signed RUAs and are included in the participatory and inclusive herd management plan (PIHMP); (ii) provide financial support to cooperatives of participating PUGs; (iii) establish a certification system and process; and (iv) provide incentives to reduce herd sizes, improve livestock commercialization, create an adequate herd structure, improve livestock breeding, and increase fodder production.²⁸ Primary works for irrigated perimeters and water conservancy solutions will enable the expansion of fodder production and increase herders' capacity to cope with water shortages induced by climate change. Animal health and veterinary services will be strengthened at each level of the agribusiness value chain to develop a reliable animal health control and traceability system. This includes supporting the construction of veterinary laboratories in the location identified by MED to

²⁶ The design and monitoring framework is in Appendix 1.

²⁷ Agro-industrial parks will boost food exports and local economies by bringing processing facilities to the point-of-need (thereby shortening processing circuits, decreasing the carbon footprint of livestock value chains, and tightening geographic and economic integration between herders, rangeland management, and the food industry). Agricultural production, supply, and logistic clusters identified by MED will be prioritized.

²⁸ The PIHMP identifies and prioritizes short- to medium-term investments and activities to improve rangeland management, herd quality, and the livelihoods of PUG members. The RUA is one of its components.

support agricultural production, supply, and logistic clusters.²⁹ Critically, the certification system and improved animal quality and health will attract LCLVC investments; link certified herders, cooperatives, and PUGs; and herders' livelihoods will be improved on a sustainable basis through share of profits from processing activities which will compensate them for maintaining lower herd size.

15. Output 3: Accessible financing for low-carbon and climate-resilient livestock and agrobusiness value chains created (financial intermediation loan component). This output will establish a green and inclusive regional agribusiness fund (GIRAF) to provide climate-smart financial mechanisms and institutions to overcome the financial bottlenecks of agribusiness SMEs in the targeted areas, especially in the agricultural production, supply, and logistic clusters defined by MED³⁰ by (i) loans with affordable interest rates, longer grace periods and tenors, and a customized repayment plan that take into account the production cycle and its seasonality to help SMEs overcome the financial barriers described in para. 5;³¹ (ii) credit guarantees that could be used as a substitute for collateral in lending and will reduce the risks of financiers, thereby contributing to more affordable interest rates and facilitating access to the GIRAF loans; and (iii) reimbursable innovation grants to stimulate pioneering agribusiness enterprises to advance innovative green products, processes, and business models such as (a) precision livestock farming that uses biosensors; (b) smartphone applications that synchronize with farm management software; (c) green and intelligent packaging; (d) digital systems in livestock marketing and distribution; or (e) renewable energy solutions. The GIRAF will support investments that demonstrate clear supply linkages and/or profit-sharing mechanisms with herders, PUGs, and cooperatives that are certified in sustainable rangeland management, and preferably located in agro-industrial parks that support local development and exports.

16. Output 4: Institutional capacity and policies for low-carbon and climate-resilient agro-territorial development strengthened. The output will focus on building the government and main stakeholders' capacity (including professional associations of the agriculture sector, academics, herders, farmers, the private sector, and SMEs), especially in the priority locations identified by MED, to ensure efficient program management and implementation. Output 4 will (i) establish soft tools and plans necessary for the implementation of other program outputs such as the PIHMP, the low-carbon and climate-resilient agribusiness development plan (LCADP)—based on a participatory and consensus-building process with all local stakeholders the LCADP

²⁹ The program will (i) appoint a community-based animal health worker in each PUG to provide preliminary veterinary services and raise herders' awareness on animal health; (ii) establish a unified database for livestock breeding services and registration and supply equipment for veterinary services and a traceability system; (iii) construct laboratories in the *aimag* and *inter-soum* centers, including one regional research development center; and (iv) construct disease-free establishments to facilitate animal health control.

³⁰ The GIRAF will be established following the Law of Mongolia and the eligibility criteria for financial intermediation loans (FILs) as per ADB. 2003. Financial Intermediation Loans. *Operations Manual*. OM D6/BP. Manila. GIRAF will be managed by a "GIRAF Manager" which (i) satisfies the eligibility criteria set forth in para. 37 of Schedule 4 of the Loan Agreement, (ii) manages GIRAF and is responsible for implementing output 3 of the project, and (iii) may be the Development Bank of Mongolia Asset Management SC LLC (AMC) or any other party agreed upon between the Borrower and ADB and acceptable to GCF.

³¹ The GIRAF will have three lending windows. Window 1 will provide three categories of loans to support SMEs engaged in livestock processing, commercial and logistic investments for retail and exports, and other forms of economic diversification. To be eligible, subprojects should be implemented by SMEs in partnership and profit-sharing agreements with certified herders' cooperatives and should be included in the LCADP. Window 2 will provide loans to qualified medium and large enterprises involved in livestock production, processing, distribution and marketing, and international trade. The proposed agribusinesses should demonstrate congruence and consistency with the LCADP. Window 3 will be piloted for potential expansion for microfinance that will be channeled through savings and credit cooperatives to certified herders engaged in microenterprises. Details of financing terms and conditions are in Boxes 4, 5, and 6 and Appendix 3 of the FAM (accessible from the list of linked documents in Appendix 2).

will prioritize investments and activities necessary to develop LCLVCs—or the green urban development and certification, and traceability systems; (ii) support the design, installation, and operationalization of the program’s measurement, reporting, verification, and monitoring and evaluation systems; and (iii) explore public–private partnership arrangements especially related to agro-industrial park management. It will implement the program policy framework to strengthen the government’s capacity to formulate, implement, and enforce policies and plans that are conducive to integrated green agro-territorial development, as well as climate-smart livestock husbandry, rangeland management, and urban development. The output will conduct policy dialogues and advocacy for the program’s green agro-territorial model replication inside and outside of Mongolia, and explore a partnership for low-carbon and climate-resilient rangeland management in Central Asia.³²

17. The multitranche financing facility. The program will be implemented using an MFF modality with a financial intermediation loan (FIL) component, over a 10-year period with three tranches. Lessons from similar ADB sector interventions indicate that a comprehensive urban–rural development program requires close coordination among multiple government agencies and strong government capacity to carry out policy reforms, sustain the program outcome, and replicate outputs to other regions of the country.³³ This is built into the program’s detailed policy framework, its capacity development component, and the stakeholder engagement plan, which are linked to the outputs and tranche structure of the MFF. The MFF structure will enhance ADB’s value addition in carrying out the necessary transformations, remove barriers and implement replicable mechanisms over its successive tranches, and drive the paradigm shift promoted by the program and its road map. Subsequent tranche investments will fall within the framework of the overall MFF and its output structure, conditional upon the MFF undertakings, subproject readiness, selection criteria, and decision filters.³⁴ The FIL component will be implemented in close coordination with the Private Sector Operations Department of ADB for lending window 2 of the GIRAF that will provide entry points and opportunities for the Private Sector Operations Department’s parallel investment support to qualified medium- and large-scale enterprises.

18. Modality advantage. Compared with other modalities, only an MFF could generate the critical mass, continuity, predictability, and replicable mechanisms to support communities, the government, and the private sector to transform the status quo of the animal husbandry industry and the urban economy in a sustainable manner.³⁵ The MFF’s well-defined and phased shifts will allow the government to upscale, mainstream, and maintain the green agro-territorial model, focusing in priority locations for agricultural production, supply, and logistic clusters identified by MED, to achieve the objectives of the road map. Specifically, the MFF will (i) allow effective implementation of processes and plans (para. 16) that require sustained long-term engagement and phasing; (ii) pilot innovations in project 1 (para. 20) and phase their upscaling and replication without losing momentum, capacity, and knowledge; (iii) deploy in a timely manner lessons from earlier tranches to subsequent tranches, and ensure necessary adjustments to accommodate the local context; (iv) build cross-agency institutional coordination and cooperation mechanisms through a large upfront capacity-building component, sustained over the subsequent tranches; (v) provide stakeholders and development partners with multiple entry points for policy dialogue and apply lessons from tranche-to-tranche; and (vi) replicate the green agro-territorial

³² Box 8 of the FAM (accessible from the list of linked documents in Appendix 2).

³³ Lessons in urban development, rangeland and livestock management, and financial intermediation and support for SMEs and agribusinesses are in Sector Assessment (Summary): Water and Other Urban Infrastructure and Services; and Agriculture, Natural Resources, and Rural Development; and in Development Coordination (accessible from the list of linked documents in Appendix 2).

³⁴ Schedule 4 of the FFA (accessible from the list of linked documents in Appendix 2).

³⁵ Comparison of Financing Modality (accessible from the list of linked documents in Appendix 2).

development model by capturing achievements from complementary sector-focused initiatives using a set of well-defined readiness and selection criteria, and focusing in priority locations for agricultural production, supply, and logistic clusters identified by MED.

19. **Eligibility of financial intermediary.**³⁶ An apex financial institution will be established to channel the funds to participating banks. Selection of financial intermediaries is based on eligibility and selection criteria that include the following: (i) duly registered bank in Mongolia under the applicable laws of Mongolia; (ii) adequate capacity to conduct retail banking for agriculture and agribusiness in the targeted *aimags* and *soums*; (iii) meet ADB's reporting, governance, safeguard, and financial due diligence policies and standards; (iv) have no past-due obligations with the Bank of Mongolia or adverse audit findings; and (v) have agriculture sector and multisector financing experience in the targeted *aimags*.

20. **Scope of projects 1–3 under tranches 1–3.** The program will cover up to 17 *aimags*, for targeted investments from outputs 1 and 2.³⁷ Outputs 3 and 4 will cover the above mentioned *aimags*, but can also be implemented over the entire country based on selection criteria and beneficiaries' conditions and requirements as provided in Boxes 4, 5, and 6 of the Facility Administration Manual (FAM).³⁸ Tranche 1 (Project 1) will focus on up to 11 *aimags*. This includes Bayan-Ulgii *aimag*, Khovd *aimag*, and Uvs *aimag* for targeted investments; plus up to eight other additional *aimags* for outputs 1 and 2 initial activities and project preparation, to be identified during tranche 1 based on selection criteria in Schedule 4 of the FFA and agricultural cluster location identified by the MED. Output 2 will cover all affiliated *soums* that are under the area of influence of the targeted *aimag* or inter-*soum* centers under output 1.³⁹ Tranche 2 (Project 2) will cover project 1 locations to complement project 1 activities and will cover additional *aimags* based on selection criteria in Schedule 4 of the FFA and based on priority locations for agricultural development identified by MED (footnote 37). Project 2 will build on ongoing ADB, United Nations Development Programme, or other initiatives wherein some of the program outputs are already in place and are compatible with the program's green agro-territorial model.⁴⁰ Similarly, tranche 3 (Project 3) will assess local achievement in other *aimags* and provide complementary investments to replicate the program's green agro-territorial model, using its resources more strategically to cover a wider geographical scope based on the 17 *aimags* identified for priority implementation (footnote 37).

C. Summary Cost Estimates and Financing Plan

21. The program is estimated to cost \$735.0 million. The investment component of the program, comprising outputs 1, 2, and 4, will cost \$617.4 million (Table 1). Output 3, which will be delivered through the FIL component, will require an estimated \$117.6 million. Detailed cost

³⁶ The detailed eligibility and selection criteria are discussed in FAM (accessible from the list of linked documents in Appendix 2).

³⁷ Based on priority locations for agricultural production, supply and logistic clusters identified by MED, and other criteria such as socioeconomic development level, urban hierarchy and urban development, rangeland degradation and overgrazing, vulnerability to climate change, livestock agribusiness development potential criteria, up to 17 *aimags* have been identified for priority implementation: Khovd, Uvs, Bayan Ulgii, Arkhangai, Dornod, Tuv, Khentii, Bulgan, Selenge, Dundgovi, Darkhan-Uul, Khuvsgul, Ovorkhangai, Bayankhongor, Zavkhan, Dornogovi, and Govi-Altai.

³⁸ FAM (accessible from the list of linked documents in Appendix 2).

³⁹ Output 1 activities will focus on (i) Ulgii *aimag* center and Deluun inter-*soum* center in Bayan-Ulgii, (ii) Khovd *aimag* center, and (iii) Ulaangom *aimag* center and Umnogovi inter-*soum* center.

⁴⁰ In southern Khovd *aimag* or in other *aimags*, United Nations Development Programme Mongolia. 2021. [Improving Adaptive Capacity and Risk Management of Rural Communities in Mongolia](#). Ulaanbaatar; ADB. [Mongolia: Climate-Resilient and Sustainable Livestock Development Project](#); and ADB. [Mongolia: Vegetable Production and Irrigated Agriculture Project](#).

estimates by expenditure accounts and by financiers are included in the FAM. The investment component will cover civil works, equipment, support to PUGs and cooperatives, design and construction supervision, project implementation and management support, safeguards and due diligence, and consulting services.

Table 1: Summary Cost Estimates (\$ million)

Item	Amount ^a
A. Base Costs^b	
1. Output 1: Climate-resilient, low-carbon, and attractive <i>aimag</i> and <i>soum</i> centers developed	395.7
2. Output 2: Climate-resilient, high-carbon sequestration, and sustainable rangeland and agricultural management implemented	99.2
3. Output 4: Institutional capacity and policies for low-carbon and climate-resilient agro-territorial development strengthened	38.5
Subtotal (A)	533.4
B. Contingencies^c	59.3
C. Financial Charges During Implementation^d	24.7
Total (A+B+C)	617.4

^a Includes taxes and duties estimated at \$48.0 million for the investment program and \$16.2 million for tranche 1. Such amount does not represent an excessive share of the investment program cost. The government will finance taxes and duties through tax exemptions.

^b In 2023 prices as of 17 January 2023.

^c Physical and price contingencies, and a provision for exchange rate fluctuation are included.

^d Includes service fees, interest, commitment, and other charges on all sources of financing.

Source: Asian Development Bank estimates.

22. Financing plan. The government has requested an MFF in an amount of up to \$448 million from a blend of regular loans (\$135 million) and concessional loans (\$135 million) from ADB's ordinary capital resources, a grant (\$3 million) from ADB's Special Funds resources (Asian Development Fund [ADF]), and cofinanced loan (\$130 million) and grant (\$45 million) from the Green Climate Fund (GCF) to be administered by ADB, to help finance a part of the investment program. The European Investment Bank will provide cofinancing (non-ADB-administered) comprising a loan of up to \$150 million equivalent and a grant of up to \$30 million equivalent from the Asia Investment Facility of the European Union (administered by the European Investment Bank). The government will finance \$75.3 million, including taxes and duties, resettlement, civil works, equipment, consulting services, project management, and other miscellaneous costs. The investment project component comprises outputs 1, 2, and 4 and will cost \$617.4 million. Output 3 will be delivered through an FIL component for which the government will invest \$87.6 million of the GCF loan proceeds into the GIRAF. In addition, the \$5.0 million GCF grant will be passed on to the government's green innovation grants facility as reimbursable grants to qualified investors to promote innovations in green and inclusive agribusiness. The GIRAF will serve as the apex financial institution for the program funds to be channeled through financial intermediaries based on eligibility and selection criteria.⁴¹ The GCF loan proceeds will leverage financial contributions from private entrepreneurs, and other participating commercial banks estimated at \$25.0 million. The contribution from beneficiary households is estimated at \$6.7 million. The MFF will consist of three tranches, subject to the government's submission of related periodic financing requests, execution of the related loan and project agreements for each tranche, and fulfillment of terms and conditions and undertakings set forth in the framework financing agreement.

⁴¹ Apex mechanisms usually involve financial institutions through which development partner-funded FILs are channeled to a second layer of financial intermediaries, which in turn onlend such loan proceeds to subborrowers.

Table 2: Summary Financing Plan (\$ million)

Source	Tranche (estimated year of PFR submission)			Amount	Share of Total (%)
	1 (2023)	2 (2025)	3 (2028)		
A. Investment Project Component					
1. Asian Development Bank					
(i) OCR (regular loan)	45.0	50.0	40.0	135.0	18.4
(ii) OCR (concessional loan)	45.0	52.2	37.8	135.0	18.4
(iii) Special Funds resources (ADF grant)	3.0	0.0	0.0	3.0	0.4
2. Green Climate Fund (loan) ^a	11.8	18.4	12.2	42.4	5.8
3. Green Climate Fund (grant) ^a	22.0	10.8	7.2	40.0	5.4
4. European Investment Bank (loan) ^b	52.9	59.4	37.7	150.0	20.4
5. European Investment Bank (grant) ^b	10.5	11.4	8.1	30.0	4.1
6. Government of Mongolia	20.7	33.5	21.1	75.3	10.2
7. Beneficiaries	3.4	2.0	1.3	6.7	0.9
Subtotal (A)	214.3	237.7	165.4	617.4	84.0
B. Financial Intermediation Loan Component					
1. Green Climate Fund (loan) ^a	38.4	29.6	19.6	87.6	11.9
2. Green Climate Fund (grant) ^a	3.0	1.2	0.8	5.0	0.7
3. Commercial banks/Private sector ^c	14.3	7.5	3.2	25.0	3.4
Subtotal (B)	55.7	38.3	23.6	117.6	16.0
Total (A+B)	270.0	276.0	189.0	735.0	100.0

ADF = Asian Development Fund, OCR = ordinary capital resources, PFR = periodic financing request.

^a Administered by the Asian Development Bank.

^b Parallel cofinancing, not administered by the Asian Development Bank.

^c Equity from private sector investors and agribusiness small and medium-sized enterprises.

Source: Asian Development Bank estimates.

23. Climate mitigation is estimated to cost \$114.2 million and climate adaptation is estimated to cost \$113.8 million under the MFF from ADB and ADB-administered funds. Based on the comprehensive program climate risk assessment, the extra grant from the ADF 13 thematic pool will be used to strengthen capacity, raise awareness, improve the regulatory and institutional framework, build resilience focusing on vulnerable populations and ecosystems, and design innovative solutions such as green agro-territorial models or ecosystem-based solutions. Details are in the FAM (footnote 38).

D. Implementation Arrangements

24. Implementation arrangements of the investment program are summarized in Table 3 and described in detail, including specific arrangements for project 1, in the FAM (footnote 38).

Table 3: Implementation Arrangements

Aspects	Arrangements
MFF availability period	22 March 2023–22 March 2033
Estimated completion date	MFF: 22 September 2032; Project 1: 22 September 2028
Estimated closing date	MFF: 22 March 2033; Project 1: 22 March 2029
Management	
(i) Oversight bodies	The projects steering committee is comprised of representatives from the MED (chair), MCUD (vice-chair), MOFALI (vice-chair), Ministry of Finance, Ministry of Environment and Tourism, targeted <i>aimag</i> governments, and the European Union.
(ii) Executing agency	MED
(iii) Key implementing agencies	MCUD, MOF, and MOFALI
(iv) Implementation unit	Under MED, an integrated PIU that will closely coordinate and be guided by MCUD, MOFALI, and MOF and includes <i>aimag</i> -level PIUs that will coordinate with their respective <i>aimag</i> and <i>soum</i> government offices will be established. The GIRAF manager will manage the financial intermediation loan component.
Procurement (Project 1)	For the financial intermediation loan component, developers will undertake procurement of goods and civil works in accordance with commercial practices acceptable to ADB.

Aspects	Arrangements		
	OCB international advertisement	Works (1 contract)	\$2.2 million
	OCB national advertisement	Works (22 contracts) Goods (3 contracts)	\$40.9 million \$2.5 million
	Request for quotations	Works (multiple contracts) Goods (multiple contracts)	\$0.4 million \$1.2 million
	Community participation in procurement	Multiple contracts	\$12.6 million
Consulting services (Project 1)	Quality- and cost-based selection	4,124 person-months International: 817 person-months National: 3,307 person-months	\$30.1 million
	Quality-based selection	National: 63 person-months	\$0.3 million
Advance contracting	For project 1, advance procurement will apply to recruit consultants and PIU staff.		
Disbursement	Disbursement of ADB and Green Climate Fund loan and grant proceeds will follow ADB's <i>Loan Disbursement Handbook</i> (2022, as amended from time to time) and detailed arrangements agreed between the government and ADB.		

ADB = Asian Development Bank; GIRAF = green and inclusive regional agribusiness fund; MCUD = Ministry of Construction and Urban Development; MED = Ministry of Economy and Development; MFF = multitranchise financing facility; MOFALI = Ministry of Food, Agriculture and Light Industry; OCB = open competitive bidding; PIU = project implementation unit.

Source: ADB.

IV. DUE DILIGENCE

A. Technical

25. Technical due diligence has been carried out on each proposed component for the first tranche of the program. Infrastructure designs are in line with Mongolian norms and standards and are compatible with existing urban systems. Operation and maintenance (O&M) cost and training for the new systems will be provided under the program to ensure sufficient capacity at the *aimag* and *soum* levels for sustainable asset management. Solutions to improve rangeland management are compatible with local ecological, economic, and sociocultural context.

B. Economic and Financial

26. The economic and financial analysis focused on project 1.⁴² The base case results confirmed the economic viability of the project, with economic internal rates of return of 10.57% to 28.81%, exceeding ADB's minimum prescribed discount rate of 9.0%. A sensitivity analysis, undertaken to further test the economic viability of project 1, determined that the project will remain economically robust under several scenarios, including (i) a 10% increase in capital cost; (ii) a 10% increase in O&M costs; (iii) a 10% decline in benefits; (iv) a combination of scenarios (i), (ii), and (iii); and (v) a 1-year delay in anticipated benefits. For the sustainable rangeland management component (output 2) and access to green and inclusive agribusiness finance (output 3), both of which will be financed by the GCF, the estimated economic internal rate of return reached 28.81%, reflecting sizable global warming damages avoided through an estimated net reduction in greenhouse gas emissions. In addition to the quantified economic benefits, the project will generate cross-border spillovers, mainly in the form of increased trade in Mongolia's western region LCLVCs.

⁴² ADB. 2017. [Guidelines for the Economic Analysis of Projects](#). Manila; ADB. 1994. [Framework for the Economic and Financial Appraisal of Urban Development Sector Projects](#). Manila; and ADB. 2002. [Handbook for Integrating Risk Analysis in the Economic Analysis of Projects](#). Manila.

27. The financial analysis confirmed the viability of the revenue-generating components of the project, particularly the water, wastewater, and heating components. The resulting base case financial internal rates of return ranged from 2.07% to 8.04%, above the estimated weighted average cost of capital of 0.38%. A sensitivity analysis undertaken to further test the financial viability of project 1 under varying scenarios showed that the financial internal rates of return were highly vulnerable to increases in capital costs, decreases in tariff revenues, or a combination of both. The assumed tariffs were found to be affordable. They were within the target households' willingness to pay in the participating *aimags*, except for wastewater treatment and heating in Khovd and Uvs, where there is a need to better communicate the benefits of the improved services to the communities involved. The financial sustainability analysis concluded that utility operators could meet the project's debt servicing and O&M requirements through tariff adjustments and continuous subsidy provision.

C. Governance

28. For project 1, financial management assessments were conducted on the executing and implementing agencies following relevant ADB guidelines.⁴³ The overall pre-mitigation financial management risk rating for the program is *substantial*. Although the risk rating for MCUD, MOF, and MOFALI is *moderate*, the risk rating for MED and the Development Bank of Mongolia Asset Management SC LLC (AMC), which has been identified as executing and implementing agencies for the FIL component of the program, is *substantial* because of their relatively weak financial management capacity and limited experience with ADB's loan and grant disbursement procedures and policies. However, their risk rating is expected to become *moderate* as their staff acquire sufficient training and experience under an ongoing ADB-funded project.⁴⁴ Financial management risks identified will be mitigated with support from financial management consultants and appropriate capacity development, as outlined in the action plan for the executing and implementing agencies. A project procurement risk assessment was carried out for the project in Q4 2019 and updated in Q2 2021 and Q1 2023 using a four-level risk scale: extreme, high, medium, and low. Procurement risk was considered *high* because of the (i) complexities of the financing arrangements and project activities; (ii) large number of stakeholders involved in the implementation of the project; (iii) large number of contracts to be procured; (iv) wide geographic spread of project sites; (v) limited experience of MED as executing agency; and (vi) unknown capacity of the project implementation unit (PIU), which has yet to be established. To mitigate these risks, (i) a full-time procurement specialist will be recruited for the PIU; (ii) the project implementation management support consulting firm will provide capacity-building support in procurement and project implementation to the executing and implementing agencies and the PIU; (iii) ADB will provide procurement training to the executing and implementing agencies and the PIU at the start of the project and on a regular basis; and (iv) manuals will be developed to guide the implementation of community-based investment projects and the FIL component. ADB's Anticorruption Policy (1998, as amended to date) was explained to and discussed with the government, MED, MOF, AMC, MCUD, MOFALI, and National Federation of Pasture User Groups. The specific policy requirements and supplementary measures are described in the FAM (footnote 38).

⁴³ ADB. 2019. [Financial Analysis and Evaluation: Technical Guidance Note](#). Manila; and ADB. 2018. [Financial Due Diligence for Financial Intermediaries: Technical Guidance Note](#). Manila.

⁴⁴ ADB. [Mongolia: Ulaanbaatar Green Affordable Housing and Resilient Urban Renewal Sector Project](#).

D. Poverty, Social, and Gender

29. **Social impacts.** For project 1, the *ger* area redevelopment component under output 1 will improve the quality of life and health of about 30% of the total *ger* area population in the *aimag* centers of Bayan-Ulgii, Khovd, and Uvs—or 8,500 of the 17,000 herder households suffering from the lack of public services and amenities, and access to affordable housing. Urban interventions in the inter-*soum* centers will produce additional positive social impacts, including (i) improved dormitory environment and learning conditions for all children, leading to improved enrollment of herders' children and prevention of family separation during the school year; and (ii) development of sports and other social activities. Outputs 2 and 3 will (i) reduce land disputes and social conflicts through improved rangeland management and signing of long-term RUAs; (ii) improve herders' participation in local governance;⁴⁵ (iii) provide herder households access to basic community needs and improve their resilience to extreme events by financing facilities and equipment to support their engagement in sustainable rangeland management; (iv) improve herders' livelihoods through support to herder cooperatives, and improve product quality and marketing so their products fetch higher prices;⁴⁶ and (v) create job opportunities in agro-industrial parks and irrigated perimeters, and support SME development. Outputs 2 and 3 will benefit 17,600 herder households of Bayan-Ulgii, Khovd, and Uvs; two-thirds of which earn incomes that are below the subsistence level.⁴⁷ The program will support the creation of 11,400 green jobs, which in turn will create more than 155,000 indirect jobs, addressing the high unemployment in the targeted areas.

30. **Gender.** Project 1 is classified as *effective gender mainstreaming*. The project will have significant benefits for women by enhancing women's access to basic rural and urban infrastructure and services, affordable housing, and economic and financial resources; and enhancing women's voices and rights through their participation in PUGs and savings and credit cooperatives. Women strongly support the project as it will improve women's quality of life and create an affordable, eco-friendly, and healthy living environment; safe and improved public infrastructure for education and work; and business, employment, and income opportunities for them and for their family members. A combined social and gender action plan has been developed and includes among others, the following gender targets: (i) equal gender participation in street development council management; (ii) 50% of State Housing Corporation's housing units with female ownership; (iii) public buildings in inter-*soum* centers are equipped with gender-sensitive water, sanitation, and hygiene facilities; (iv) 100% of signed RUAs under the project include an annex that both spouses sign; (v) 20% female leadership in PUGs and 40% female participation in cooperatives; and (vi) GIRAF participating enterprises' proposals include gender elements.

E. Safeguards

31. In compliance with ADB's Safeguard Policy Statement (2009), the safeguard categories of project 1 are as follows.⁴⁸

32. **Environment (category B).** The initial environmental examination and environmental management plans for project 1 were prepared along with the domestic general environmental

⁴⁵ The Green Gold project (footnote 10) showed that the PUG system serves as an institutional platform that enables herders to influence local governments' decision-making, resulting in improved herders' representation in the citizens' assembly, improved access to local and *soum* development funds, and land access for rangeland management.

⁴⁶ Increased value of agricultural products will compensate for the loss of revenue from reduced herd size.

⁴⁷ NSO. 2018. *Mongolian Statistical Yearbook 2017*. Ulaanbaatar.

⁴⁸ ADB. Safeguard Categories. <https://www.adb.org/site/safeguards/safeguard-categories>. Safeguards documents mentioned in this section have been disclosed on the ADB website.

impact assessment pursuant to the Safeguard Policy Statement and the Mongolian Law on Environmental Impact Assessment (2012). An environmental assessment and review framework was prepared for the program that will guide the screening and categorization, environmental assessment, and preparation and implementation of environmental safeguards for projects 2 and 3, pursuant to the Safeguard Policy Statement and the Mongolian Law on Environmental Impact Assessment. The initial environmental examination and comprehensive *aimag* environmental management plans were prepared based on the feasibility design of project 1 and will be updated as required during detailed design. A detailed hydrological assessment will be undertaken during project 1 under the detailed design to confirm that extraction and use of surface and groundwater resources are carried out sustainably. Potential environmental impacts will be site-specific. Short-term disturbances that will arise from the construction of project subcomponents are insignificant and reversible. Construction-related disturbances such as noise, dust, soil erosion, surface water sedimentation, solid and liquid waste pollution, worker camp disturbances, reduced local access, traffic safety issues, and worker and public safety issues can be managed with standard construction practices and guidelines. To ensure effective environmental safeguards implementation, a capacity-building program for government implementing agencies, the PIU, and *aimag*-level PIUs, will be implemented.

33. The program will contribute to the government's adaptation and mitigation agenda by (i) achieving a 121.4 million tCO₂e reduction in total greenhouse gas emissions⁴⁹ (including 94.0 million tCO₂e from carbon sequestered in the soil, the rest will come from reduced methane and nitrous oxide from livestock, and carbon dioxide emissions in urban areas); (ii) improving the climate resilience of 550,000 people, including 54,000 vulnerable herder households; and (iii) restoring an estimated 28.8 million hectares of rangeland ecosystem.

34. **Involuntary resettlement (category B).** A resettlement framework was prepared for the program to guide screening and categorization, assessment of impacts, and preparation and implementation of land acquisition and resettlement plans (LARPs) pursuant to the Safeguard Policy Statement and Mongolia's national requirements on land acquisition and resettlement. A LARP for project 1 was prepared based on the feasibility designs and in line with the resettlement framework. The LARP will be updated upon completion of the detailed design of the project. Project 1 will impact 26 residential households and three business entities. The total affected land area is 2,181 square meters in 21 land parcels, of which 20 would be partially affected and 1 fully affected. The institutional arrangements and grievance redress mechanism for resettlement implementation established under project 1 will remain effective for the subsequent projects. Consultants will support the PIU and *aimag*-level PIUs in preparing and implementing the LARPs.

35. **Framework for voluntary participation in ger area development.** Project 1 will provide access to urban services and better neighborhood living conditions through improved household connections to urban infrastructure and street development. Importantly, participation of beneficiary households in *ger* area development will be purely voluntary, without forced participation. A framework for voluntary participation has been prepared consistent with the Safeguard Policy Statement requirements on negotiated land acquisition and national requirements. Voluntary participation plans will be prepared and implemented for each of the street development subprojects to be taken up in the *aimag* centers.

36. **Indigenous peoples (category C).** The analysis of ethnic minority issues, focusing on the cases of Kazakh, Khoton, Tuva, and other ethnic groups, found that no differentiated impact

⁴⁹ Total emission reduction over the program lifetime, excluding emission leakages (such as emissions during construction) estimated at about 4 million tCO₂e.

is expected on ethnic groups under project 1. An indigenous peoples planning framework was prepared for the MFF to guide the preparation of projects 2 and 3.

37. **Financial intermediaries (category B).** An environmental and social management system (ESMS) compliant with the Safeguard Policy Statement and the national requirements of Mongolia will be adopted, prior to loan disbursement, by each participating bank.⁵⁰ The ESMS arrangement, prepared based on due diligence of the financial intermediaries, outlines (i) procedures to screen, assess, and address environment and social impacts from the FIL component, including provisions for adherence to core labor standards; (ii) institutional capacities required for implementing ESMS provisions; (iii) capacity-building and training requirements; and (iv) monitoring and reporting requirements to ensure effective implementation of the ESMS. The participating financial intermediaries will ensure that the FIL component will exclude any subproject classified as category A for environment safeguards, and any subproject classified as category A or B for involuntary resettlement and indigenous peoples safeguards.

F. Summary of Risk Assessment and Risk Management Plan

38. Significant risks and mitigating measures are summarized in Table 4 and described in detail in the risk assessment and risk management plan.⁵¹

Table 4: Summary of Risks and Mitigating Measures

Risks	Mitigation Measures
Lack of coordination among government agencies, especially between MOFALI and land departments of selected <i>aimags</i> and <i>soums</i>	To facilitate coordination between government agencies, an integrated PIU including <i>aimag</i> -level PIUs will be set up directly under MED and the projects steering committee, comprised of representatives from <i>aimag</i> governments, the European Union, MCUD, MED, Ministry of Environment and Tourism, Ministry of Finance, and MOFALI.
Financial sustainability adversely affected by lack of service providers' financial management skills and insufficient utility tariff adjustments	Consultants will be engaged to provide capacity development and training on sustainable O&M of the new facilities, tariff setting, and financial management. Tariffs will be adjusted to cover O&M costs, and the government will cover any funding gap if revenues from tariffs are insufficient to maintain compliance with the utilities' covenanted financial ratios.
Insufficient financial management capacity of executing and implementing agencies	The PICS hired will work with MED, MCUD, MOFALI, and GIRAF manager to develop and fully operationalize an efficient financial management system for the program.
Insufficient capacity (and lack of technical capacity) of the private sector (agri-cooperatives and SMEs) to develop agribusinesses, diversify livestock products, and create economic opportunities	Training programs (business planning, marketing, strategy, and technology) will be delivered to targeted agribusinesses to strengthen their capacities. The investment program will include construction of a business incubator in the agro-industrial park of each <i>aimag</i> and inter- <i>soum</i> center to build the capacity of the private sector. The Mongolian National Chamber of Commerce and Industry will be actively involved in the management of the incubator and the preparation of LCADPs.

GIRAF = green and inclusive regional agribusiness fund; LCADP = low-carbon and climate-resilient agribusiness development plan; MCUD = Ministry of Construction and Urban Development; MED = Ministry of Economy and Development; MOFALI = Ministry of Food, Agriculture and Light Industry; O&M = operation and maintenance; PICS = program implementation support consulting services; PIU = project implementation unit.

Source: Asian Development Bank.

⁵⁰ ESMS arrangement was prepared based on due diligence of XacBank and Khan Bank, which are both ADB clients. It was found that they have adequate institutional capacity to implement the Safeguard Policy Statement's procedural and substantive requirements contained in the ESMS.

⁵¹ Risk Assessment and Risk Management Plan (accessible from the list of linked documents in Appendix 2).

V. ASSURANCES AND CONDITIONS

39. The government and MED have assured ADB that implementation of the investment program shall conform to all applicable ADB policies, including those concerning anticorruption measures, safeguards, gender, procurement, consulting services, and disbursement as described in detail in the FAM and loan documents. The government and MED have given certain undertakings for the MFF, which are set forth in the framework financing agreement. Specific covenants agreed by the government and MED with respect to individual tranches under the MFF are set forth in the loan, grant, and project agreements for the respective tranches.

VI. RECOMMENDATION

40. I am satisfied that the proposed multitranche financing facility would comply with the Articles of Agreement of the Asian Development Bank (ADB) and recommend that the Board approve the multitranche financing facility to Mongolia for the Aimags and Soums Green Regional Development Investment Program in an aggregate principal amount not exceeding the equivalent of \$448,000,000, which comprises (i) the provision of loans from ADB's ordinary capital resources, in regular terms, with interest and other terms to be determined in accordance with ADB's Flexible Loan Product; (ii) the provision of loans from ADB's ordinary capital resources, in concessional terms, with interest and other terms to be determined in accordance with ADB's applicable policies relating to ordinary capital resources; (iii) the provision of grant from ADB's Special Funds resources (Asian Development Fund); and (iv) the administration by ADB of the loan and grant to be provided by the Green Climate Fund; and is subject to such other terms and conditions as are substantially in accordance with those set forth in the framework financing agreement presented to the Board.

Masatsugu Asakawa
President

1 March 2023

DESIGN AND MONITORING FRAMEWORK FOR THE INVESTMENT PROGRAM

Impact the Investment Program is Aligned with Green development, regional development sustainability, quality of life, and human development achieved (Vision 2050: Long-Term Development Policy of Mongolia) ^a			
Results Chain	Performance Indicators	Data Sources and Reporting Mechanisms	Risks and Critical Assumptions
Outcome Green and inclusive agro-territorial development advanced	By 2034 a. 3.036 million tons of carbon dioxide equivalent per annum avoided through soil carbon sequestration and methane, nitrous oxide, and carbon dioxide emissions reduced (2021 baseline: 0) (OP 3.1) b. 28.8 million ha of rangeland restored and more sustainably managed (2021 baseline: 0) (OP 3.3.3) c. Climate and disaster resilience of 550,000 people strengthened (2021 baseline: 0) (OP 3.2, 3.3, 4.1) d. 500 SMEs or cooperatives and 1,000 microenterprises established under the GIRAF (2021 baseline: 0) (OP 1.2, 2.1, 5.2.3) e. 11,400 direct green jobs created, of which 40% are filled by women (2021 baseline: 0) (OP 1.2, 2.1) f. Number of livestock heads in targeted areas decreased by 2.5% per annum (2021 baseline: 2.5% per annum growth) g. Wastewater treatment efficiency in targeted <i>aimag</i> and <i>soum</i> centers improved to 90% (2021 baseline: 50% in targeted <i>aimag</i> centers and 0% in targeted <i>soum</i> centers) (OP 4.3)	a–b. ALAMGAC and National Agency for Meteorology and Environmental Monitoring externally verified MRV report, and MOFALI annual report on livestock and land use c. ALAMGAC local land officer and <i>soum</i> government report d–e. Audited financial and operational reports from beneficiary enterprise or qualified commercial bank, and oversight reports from FRC f. National Statistics Office annual data on livestock g. <i>Aimag</i> water and wastewater operating companies' measurement of biological oxygen demand removal in the effluent discharge in compliance with Mongolian standards MNS 4943:2011	R: Changed government priorities shift resources away from supporting <i>aimag</i> development A: EIB inputs and outputs timely delivered
Outputs 1. Climate-resilient, low-carbon, and attractive <i>aimag</i> and <i>soum</i> centers developed	By 2033 1a. 35 km of urban roads built and 215.9 km of connection roads improved; water supply capacity increased by 3,000 cubic meters per hour; 25 km of water supply pipes laid; 35 km of sewerage network laid; 16 km of district heating pipes laid; 135 km of power lines built; 20 km of drainage built; 173.5 km of optical cable laid; 10.2 megawatts from solar panels installed; 10 km flood protection infrastructure built; and 1,230 ha of solid waste dump site cleared (2021 baseline: 0) ^b (OP 4.1.2) 1b. Existing open dump site cleaned and closed, and municipal as well as agrobusiness solid waste segregated and safely disposed of at new landfills (that includes recycling facilities for livestock and agricultural waste) in 12 <i>aimag</i> and <i>soum</i> centers (2021 baseline: 0) (OP 4.1.1) 1c. Pilot for <i>ger</i> area streets upgrading implemented and replicated (2021 baseline: 0) (OP 3.1.3, 4.1.2) 1d. 150 ha of agro-industrial parks ^c developed and	1a–h. Mongolia state special inspection monitoring report, and <i>aimag</i> and <i>soum</i> governments' report on urban construction	R: Reduced cooperation and coordination among the project key stakeholders R: Rising world prices of energy and construction materials significantly increase the project's investment and operation and maintenance costs A: Significant interest from herders' cooperatives and private sector to

Results Chain	Performance Indicators	Data Sources and Reporting Mechanisms	Risks and Critical Assumptions
	<p>12 agribusiness incubators operating in targeted locations, with at least 40% of workspaces allocated to women-led and/or owned businesses (2021 baseline: 0) (OP 5.2.3)</p> <p>1e. 12 domestic WWTPs with a total capacity of 30,000 m³/d meet Mongolian standards; and 12 agro-industrial park WWTPs with a total capacity of 12,500 m³/d constructed and/or upgraded (2021 baseline: 0) (OP 4.1.2, 4.3.1)</p> <p>1f. Heat metering and associated consumption-based tariffs implemented in targeted <i>aimag</i> and <i>soum</i> centers (2021 baseline: 0) (OP 4.1.1, 6.2)</p> <p>1g. Smart land management and climate-responsive digital center built (2021 baseline: 0) (OP 3.3.3, 4.2)</p> <p>1h. At least 6 education facilities improved with gender-sensitive^d WASH facilities^e (2021 baseline: 0) (OP 2.4.1, 4.1.2)</p> <p>1i. 300,000 person-months of employment opportunities during project construction created, of which 20.0% are filled by women (2021 baseline: 17.2% of women in the construction sector) (OP 1.2, 2.1)</p>	<p>1i. Contractors' annual employment records</p>	<p>participate in project activities</p> <p>A: Compliance with the program road map</p> <p>A: Timely delivery of EIB inputs and outputs</p>
2. Climate-resilient, high-carbon sequestration, and sustainable rangeland and agricultural management implemented	<p>By 2033</p> <p>2a. At least 180 PUGs and herder groups signed (by both spouses) the updated RUA and sustainable and inclusive pasture management plan and benefited from CPP activities, with 45% female participation (2021 baseline: 0) (OP 5.1, 6.2.4)</p> <p>2b. 60 PUG-based cooperatives established, with at least 30% led by women;^f and 12 <i>aimag</i> and inter-<i>soum</i> centers, 6 <i>aimags</i>, and 1 regional cooperative organized (2021 baseline: 23%) (OP 2.3, 5.1)</p> <p>2c. 10 disease-free establishments and 12 <i>aimag</i>-, and inter-<i>soum</i>-level veterinary laboratories built (2021 baseline: 0) (OP 5.2.4)</p> <p>2d. Primary works for the irrigated perimeter of at least 2,500-ha fodder and crop farms built, including ecosystem-based water harvesting and conservancy solutions (2021 baseline: 0) (OP 3.3.2, 3.3.5, 5.1.1)</p> <p>2e. 45,000 person-months of employment opportunities during project construction created, of which 20% are filled by women (2021 baseline: 0) (OP 1.2)</p>	<p>2a. <i>Aimag</i> and <i>soum</i> governments' monitoring data on land management, and ALAMGAC RUA registration data system</p> <p>2b. <i>Aimag</i> and <i>soum</i> governments' reports, and MOFALI annual reports on cooperatives</p> <p>2c–d. <i>Aimag</i> and <i>soum</i> governments' reports on livestock and rural development, and Mongolia State Special Inspection monitoring reports</p> <p>2e. Contractors' annual employment records</p>	

Results Chain	Performance Indicators	Data Sources and Reporting Mechanisms	Risks and Critical Assumptions
3. Accessible financing for low-carbon and climate-resilient livestock and agrobusiness value chains created (financial intermediation loan component)	<p>By 2033</p> <p>3a. Under window 1, loans, subloans, or loans plus credit risk guarantees of at least \$50 million provided for SME investments, of which at least 30% led by women, in targeted <i>aimag</i> and inter-<i>soum</i> centers, through PUGs and herder groups (2021 baseline: 0)^g (OP 1.3.2, 5.2.3)^h</p> <p>3b. Under window 2, loans, subloans, or loans plus credit risk guarantee of at least \$60 million provided for medium and large investments in targeted <i>aimag</i> and inter-<i>soum</i> centers, through PUGs and herder groups (2021 baseline: 0) (OP 1.3.2, 5.2.3)ⁱ</p> <p>3c. Under window 3, 1,000 micro green loans approved (2021 baseline: 0) (OP 1.3.2)</p> <p>3d. 100 partnership agreements signed with SMEs, of which at least 30% led by women, investing in pre-processing facilities (2021 baseline: 0) (OP 2.1.3, 5.2.3)</p> <p>3e. At least \$5 million reimbursable grants from Green Innovation Grant Facility provided to qualified investors to promote green and inclusive innovations in agribusiness (2021 baseline: 0) (OP 5.2.3)</p>	3a–e. Audited financial and operational reports from beneficiary enterprises or qualified commercial banks, and oversight reports from FRC	
4. Institutional capacity and policies for low-carbon and climate-resilient agro-territorial development strengthened	<p>By 2032</p> <p>4a. By 2032, at least 180 (PUG-level) PIHMPs and at least 60 (<i>soum</i>-level) low-carbon and climate-resilient agribusiness development plans developed and consolidated into at least 10 <i>aimag level</i> and 3 regional-level agro-territorial development plans (2021 baseline: 0) (OP 6.1.2)</p> <p>4b. By 2025, traceability and certification systems at herder-, PUG-, and cooperative-levels operational, with 40% of targeted herder groups and PUGs certified (2021 baseline: 0) (OP 5.2.4)</p> <p>4c. By 2032, at least 180 community-based animal health workers trained, of which 95% report improved knowledge and skills on veterinary services and 50% are women (2021 baseline: 0) (OP 5.3.1)</p> <p>4d. By 2032, 6 national policies for rangeland and agricultural management and green territorial development prepared and implemented, and 2 policy recommendations included in the Mongolian Livestock 2 program (2021 baseline: 0) (OP 3.3.2, 6.1.2)^j</p> <p>4e. By 2025, business plan and technical specification template for investments supported by GIRAF developed; and training programs for agribusiness development held, of which 40% are women (2021 baseline: 0) (OP 2.1.1)</p>	<p>4a–d. MOFALI policy department reports, and local governments' reports on urban construction and economic development</p> <p>4e. FRC and project implementation reports</p>	

Key Activities with Milestones

1. Climate-resilient, low-carbon, and attractive *aimag* and *soum* centers developed

- 1.1 Complete infrastructure and detailed architectural design (2024–2030)
- 1.2 Pilot the *ger* area street development voluntary participation (2024–2026)
- 1.3 Procure goods and works (2024–2031)
- 1.4 Construct, supervise, and commission infrastructure, and socioeconomic facilities (2026–2033)

2. Climate-resilient, high-carbon sequestration, and sustainable rangeland and agricultural management implemented

- 2.1 Engage and consult with herders, PUG, and herder groups to ensure their participation (2024–2032)
- 2.2 Complete detailed design for irrigated perimeters and storage facilities (2024–2030)
- 2.3 Prepare and sign PUG and herder groups' RUA including PIHMP (2024–2032)
- 2.4 Establish or upgrade cooperatives (2025–2033)
- 2.5 Procure goods and works (2025–2031)
- 2.6 Procure and implement CPP (2025–2033)
- 2.7 Construct, supervise, and commission infrastructure (2026–2033)

3. Accessible financing for low-carbon and climate-resilient livestock and agrobusiness value chains created (financial intermediation loan component)

- 3.1 Establish the GIRAF (2024–2025)
- 3.2 Finalize the green and inclusive agri-value chain development plan (2024–2030)
- 3.3 Reach out to local businesses and receive bidding proposals for financing (2025–2032)
- 3.4 Short-list commercial banks (2025–2031)
- 3.5 Establish and implement environmental and social management system for each commercial bank (2025–2032)
- 3.6 Select proposals for financing (2025–2032)
- 3.7 Construct production and logistic facilities or establish businesses (2025–2032)

4. Institutional capacity and policies for low-carbon and climate-resilient agro-territorial development strengthened

4.1 Capacity building and policy reforms

- 4.1a Train and increase capacity of PIU staff, targeted institutions, and all related stakeholder in the agriculture sector on project implementation safeguards and due diligence (2024–2031)
- 4.1b Implement policy and sector reforms (2024–2032)

4.2 Detailed design and supervision

- 4.2a Hire detailed design and supervision consulting services (2023–2028)
- 4.2b Prepare feasibility study for tranches 2 and 3 (2026–2029)
- 4.2c Complete detailed design of all civil works under project 1 and update safeguard documents, including the initial environmental examination, land acquisition and resettlement plans, and voluntary participation plans (2025–2030)
- 4.2d Supervise civil works construction and monitor implementation of safeguard provisions (2025–2033)
- 4.2e Implement policy and sector reforms (2025–2032)

4.3 Rangeland management

- 4.3a Hire consulting services (2023–2028)
- 4.3b Engage with herders, herder groups, and PUGs (2024–2032)
- 4.3c Complete detailed design of irrigated perimeters and disease-free facilities (2023–2029)
- 4.3d Train PUGs and herder groups and implement CPP activities (2023–2031)
- 4.3e Train cooperatives (2025–2032)
- 4.3f Implement policy and sector reforms (2025–2032)

4.4. Green agribusiness finance

- 4.4a Hire consulting services (2023–2029)
- 4.4b Develop standards, guidelines, and regulations for GIRAF (2024–2025)
- 4.4c Implement policy and sector reforms (2025–2032)

Investment Program Management Activities

Establish and fully staff the PIU.

Hire project implementation and management support consulting services.

Fully train PIU staff on ADB safeguards, due diligence, procurement, and financial management.

Perform day-to-day management and supervision during program implementation.

Coordinate with government agencies, *aimag* governments, and other involved parties for program implementation.

Manage consulting services, monitor deadlines for procurement packages, and implement key procurement activities.

Monitor civil works and infrastructure implementation.

Meet targets in the design and monitoring framework, social and gender action plan, consultation and participation plan, stakeholder communication strategy, and facility administration manual.

Complete and operate sex-disaggregated project performance management system and comprehensive MRV system.

Prepare and submit ADB, EIB, and Green Climate Fund relevant progress, safeguards, and financial audit reports.

Conduct inception, annual, midterm, and final review missions.

Prepare tranches 2 and 3, including due diligence (tranche 2 by 2025 and tranche 3 by 2027).

Inputs

ADB ordinary capital resources: \$135.0 million (regular loan)
 ADB ordinary capital resources: \$135.0 million (concessional loan)
 ADB Special Funds resources (Asian Development Fund): \$3.0 million (grant)
 Green Climate Fund: \$130.0 million (loan)
 Green Climate Fund: \$45.0 million (grant)
 European Investment Bank: \$150.0 million (loan)
 European Investment Bank: \$30.0 million (grant)
 Government of Mongolia: \$75.3 million
 Commercial banks/Private sector: \$25.0 million
 Beneficiaries: \$6.7 million

A = assumption; ADB = Asian Development Bank, ALAMGAC = Agency for Land Management and Administration, Geodesy and Cartography; CPP = community participation in procurement; EIB = European Investment Bank; FRC = Financial Regulatory Commission; GIRAF = green and inclusive regional agribusiness fund; ha = hectare; km = kilometer; m² = square meter; m³/d = cubic meter per day; MOFALI = Ministry of Food, Agriculture and Light Industry; MRV = measurement, reporting, and verification; OP = operational priority; PIHMP = participatory and inclusive herd management plan; PIU = project implementation unit; PUG = pasture user group; R = risk; RUA = rangeland use agreement; SMEs = small and medium-sized enterprises; WASH = water, sanitation, and hygiene; WWTP = wastewater treatment plant.

^a State Great Khural. 2020. *Vision 2050: Long-Term Development Policy of Mongolia*. Ulaanbaatar.

^b Excludes agro-industrial park infrastructure.

^c Agro-industrial park is a comprehensive complex with full provision of engineering infrastructure for transportation, logistics, trading, processing, and manufacturing services to support the transformation and the trade of green livestock and agricultural raw materials, and promote green food manufacturing and food safety.

^d A gender-sensitive public space refers to urban designs where women feel comfortable using the public space and is adapted to the needs and demands of both women and men.

^e Gender-sensitive WASH facilities have at least the following characteristics: separate male and female toilets with separate washbasins and bins, adequate lighting and privacy, and facilities adapted to young women/girls, including those with disabilities.

^f Cooperatives "led by women" must have (i) at least 51% female representation on the board, or (ii) a female executive director or board president and at least 30% female representation on the board. Swiss Agency for Development and Cooperation. 2021. [Sustainably Managed Pastures and Healthy Animals: Mongolia's 'Green Gold'](#).

^g SMEs led by women refer to those owned and managed by women. Proxy baseline was from the results of 2019 World Bank Mongolia Enterprise Surveys: (i) 43.7% of firms have female participation in ownership, of which 45.9% are small, 40.0% are medium, and 32.4% are large firms; and (ii) 38.9% of firms have a female top manager, of which 44.4% are small, 26.9% are medium, and 24.4% are large firms. Men are predominant in large-scale business operations while women lead small businesses. Women are predominant in service-oriented industries and retailing and less involved in livestock agribusiness operations targeted by the program. Survey results by sector are not available.

^h Window 1 will support SMEs processing livestock products, commercial and logistic investments for retail and exports, and other forms of economic diversification.

ⁱ Window 2 will support qualified medium- and large-scale enterprises involved in livestock production, processing, distribution, and marketing, and engaged in international trade.

^j MOFALI Minister Order No. A/177, June 2022, following the Mongolian National Livestock Program.

Contribution to Strategy 2030 Operational Priorities

The expected values and methodological details for all OP indicators to which this operation will contribute results are detailed in Contribution to Strategy 2030 Operational Priorities (accessible from the list of linked documents in Appendix 2). In addition to the OP indicators tagged in the design and monitoring framework, this operation will contribute results for:

OP 1.3 Poor and vulnerable people with improved standards of living (number)

OP 7.3.1 Measures to improve shared capacity of developing member countries to mitigate or adapt to climate change supported in implementation (number)

OP 7.3.3 Measures to improve regional public health and education services supported in implementation (number)

Source: ADB.

LIST OF LINKED DOCUMENTS

<http://www.adb.org/Documents/RRPs/?id=49430-005-3>

1. Loan Agreement: Ordinary Operations
 2. Loan Agreement: Ordinary Operations (Concessional)
 3. Grant Agreement: Special Operations
 4. Grant Agreement: Externally Financed
 5. Loan Agreement: ADB Green Climate Fund
 6. Framework Financing Agreement
 7. Periodic Financing Request for Project 1
 8. Sector Assessment (Summary): Water and Other Urban Infrastructure and Services; and Agriculture, Natural Resources, and Rural Development
 9. Comparison of Financing Modality
 10. Facility Administration Manual
 11. Contribution to Strategy 2030 Operational Priorities
 12. Development Coordination
 13. Financial Analysis
 14. Economic Analysis
 15. Country Economic Indicators
 16. Summary Poverty Reduction and Social Strategy
 17. Draft Environmental Assessment and Review Framework
 18. Draft Resettlement Framework
 19. Draft Indigenous Peoples Planning Framework
 20. Risk Assessment and Risk Management Plan
 21. Climate Change Assessment
 22. Social and Gender Action Plan for Project 1
 23. Draft Initial Environmental Examination
 24. Draft Resettlement Plan
 25. Draft Resettlement Framework: Framework for Voluntary Participation in Ger Area Development—Providing Access to Urban Services through Household Connections and Development of Streets in Ger Areas
 26. Environmental and Social Management System Arrangement
- Supplementary Document**
27. Detailed Economic Analysis