

# PROJECT PERFORMANCE ASSESSMENT REPORT

MONGOLIA

## Sustainable Livelihoods Project and Second Sustainable Livelihoods Project

Report No. 169867

MARCH 31, 2022



**IEG**  
INDEPENDENT  
EVALUATION GROUP

**WORLD BANK GROUP**  
World Bank • IFC • MIGA

**WHATWORKS**



© 2022 International Bank for Reconstruction and Development / The World Bank  
1818 H Street NW  
Washington DC 20433  
Telephone: 202-473-1000  
Internet: [www.worldbank.org](http://www.worldbank.org)

**Attribution—Please cite the work as follows:**

World Bank. 2022. Mongolia—Sustainable Livelihoods Project and Second Sustainable Livelihoods Project  
Independent Evaluation Group, Project Performance Assessment Report 169867. Washington, DC: World Bank.

This work is a product of the staff of The World Bank with external contributions. The findings, interpretations, and conclusions expressed in this work do not necessarily reflect the views of The World Bank, its Board of Executive Directors, or the governments they represent.

The World Bank does not guarantee the accuracy of the data included in this work. The boundaries, colors, denominations, and other information shown on any map in this work do not imply any judgment on the part of The World Bank concerning the legal status of any territory or the endorsement or acceptance of such boundaries.

**RIGHTS AND PERMISSIONS**

The material in this work is subject to copyright. Because The World Bank encourages dissemination of its knowledge, this work may be reproduced, in whole or in part, for noncommercial purposes as long as full attribution to this work is given.

Any queries on rights and licenses, including subsidiary rights, should be addressed to  
World Bank Publications, The World Bank

Group, 1818 H Street NW, Washington, DC 20433, USA; fax: 202-522-2625; e-mail: [pubrights@worldbank.org](mailto:pubrights@worldbank.org).



**Report No.: 169867**

**PROJECT PERFORMANCE ASSESSMENT REPORT**

**Mongolia**

**Sustainable Livelihoods Project  
(IDA-36570)**

**Second Sustainable Livelihoods Project  
(IDA-43300, IDA-49530, IDA-H3130, TF-56905, TF-90580, TF-92715)**

**March 31, 2022**

Finance, Private Sector, Infrastructure, and Sustainable Development

*Independent Evaluation Group*

## Abbreviations

AgRe	Agricultural Reinsurance Joint Stock Company
CDD	community-driven development
CIF	Community Initiative Fund
IBL	Integrated Budget Law
IBLI	Index-Based Livestock Insurance
IDA	International Development Association
IEG	Independent Evaluation Group
LDF	Local Development Fund
LEWS	Livestock Early-Warning System
LIF	Local Initiatives Fund
MDF	Microfinance Development Fund
NAMEM	National Agency for Meteorology and Environment Monitoring (Mongolia)
NPAP	National Poverty Alleviation Program
PRM	pastoral risk management
RLF	revolving loan fund
SLP	Sustainable Livelihoods Program

*All dollar amounts are US dollars unless otherwise indicated.*

# Contents

Abbreviations .....	ii
Data.....	v
Summary .....	vii
1. Background, Context, and Design .....	1
Background and Context.....	1
Objective, Design, and Financing .....	3
Objective .....	3
Design .....	4
Financing .....	7
2. What Worked, What Didn't Work, and Why? .....	7
Design and Preparation .....	8
Implementation and Supervision.....	10
Results.....	10
Pastoral Risk Management .....	11
Microfinance Outreach.....	21
Community Initiatives .....	29
3. Lessons.....	31
Glossary .....	37
Bibliography.....	38

## Box

Box 1.1. Adaptive Strategies Herders Use to Prepare for and Respond to Dzud.....	5
--	---

## Figures

Figure 1.1. Total Livestock Population in Sheep Equivalent Units .....	2
Figure 1.2. Theory of Change.....	6
Figure 2.1. Basic Features of Sustainable Livelihoods Program Adaptable Program Loan Approach.....	9
Figure 2.2. Average Yearly Livestock Change in Sheep Units .....	14
Figure 2.3. Access to Loans (2012–18).....	22
Figure 2.4. Loan Ownership and Average Loan Amount (2018) .....	23

Figure 2.5. The Trends of Cashmere Price and Production (2010–18).....	25
Figure 2.6. Percentage of Herder Households Insured and Percentage of Livestock Insured between 2006 and 2020.....	27

## Tables

Table 1.1. Mongolian Poverty Rate over Time (national average, urban, and rural).....	1
Table 1.2. Overview of the Sustainable Livelihoods Program Three-Phase Adaptable Program Loan Objectives.....	3
Table 1.3. Sustainable Livelihoods Program Phases I and II Project Costs by Component.....	7
Table 2.1. Index-Based Livestock Insurance Risk Layers.....	26

## Appendixes

Appendix A. Ratings .....	44
Sustainable Livelihoods Project (P067770) .....	44
Second Sustainable Livelihoods Project (P096439) .....	54
Appendix B. Fiduciary, Environmental, and Social Aspects.....	69
Sustainable Livelihoods Project (P067770) .....	69
Second Sustainable Livelihoods Project (P096439) .....	71
Appendix C. Methods and Evidence .....	74

## IEG Management and PPAR Team

Director-General, Independent Evaluation	Ms. Alison Evans
Director, Finance, Private Sector, Infrastructure, and Sustainable Development	Ms. Carmen Nonay
Manager, Infrastructure and Sustainable Development	Mr. Christopher Nelson
Task Manager	Ms. Joy Kaarina Butscher
This report was prepared by Joy Butscher and Mees van der Werf, with support from Aditya Ashok Balu. The program was assessed in December 2019 by Joy Butscher, Mees van der Werf, Batjav Batbuyan, and Tungalag Ulambayar, under the guidance of Lauren Kelly, adviser. Boloroo Bayasgalan and Otgonbayar Yadmaa provided logistical support. The report was peer reviewed by María E. Fernández-Giménez and panel reviewed by Christopher David Nelson. Vibhuti Narang Khanna and Viktoriya Yevsyeyeva provided administrative support.	

Note: IEG = Independent Evaluation Group; PPAR = Project Performance Assessment Report.

# Data

This is a Project Performance Assessment Report by the Independent Evaluation Group of the World Bank Group on the Mongolia Sustainable Livelihoods Project (P067770) and the Second Sustainable Livelihoods Project (P096439). This instrument and the methodology for this evaluation are discussed in appendix C. Following standard Independent Evaluation Group procedure, copies of the draft Project Performance Assessment Report were shared with relevant government officials for their review and comment; no comments were received.

## Sustainable Livelihoods Project (P067770)

### Basic Data

Country	Mongolia	World Bank IDA financing commitment	US\$18.73 million
Global Practice	Urban, Resilience, and Land	Planned project cost	US\$22.12 million
Project name	Sustainable Livelihoods Project	Revised project total cost	US\$24.87 million
Project ID	P067770	Actual amount disbursed	US\$22.06 million
Financing instrument	Adaptable program loan	Environmental assessment category	B
Financing source	IDA-36570		

### Dates

Event	Original Date	Actual Date
Concept review	12/21/2000	12/21/2000
Negotiations	02/25/2002	02/25/2002
Board approval	06/11/2002	06/11/2002
Effectiveness	09/30/2002	09/30/2002
Closing date	12/31/2006	12/31/2007

### Key Staff Responsible

Management	Appraisal	Completion
Project team leader	Robin Mearns	Andrew D. Goodland
Sector manager	Mark D. Wilson	Rahul Raturi
Country director	Ian C. Porter	David R. Dollar

## Second Sustainable Livelihoods Project (P096439)

### Basic Data

Country	Mongolia	World Bank IDA financing commitment	US\$33.00 million
Global Practice	Urban, Resilience, and Land	Planned project cost	US\$49.40 million
Project name	Second Sustainable Livelihoods Project	Revised project total cost	US\$60.80 million
Project ID	P096439	Actual amount disbursed	US\$43.51 million
Financing instrument	Adaptable program loan	Environmental assessment category	B
Financing source	IDA-43300, IDA-49530, IDA-H3130, TF-56905, TF-90580, TF-92715		

### Dates

Event	Original	Actual
Concept review	02/16/2006	02/16/2006
Negotiations	03/14/2007	03/14/2007
Board approval	06/19/2007	06/19/2007
Effectiveness	04/17/2008	04/17/2008
Closing date	06/30/2012	06/30/2013

### Key Staff Responsible

Management	Appraisal	Completion
Project Team Leader	Nathan M. Belete	Charles Annor-Frempong
Sector Manager	Hoonae Kim	Mark R. Lundell
Country Director	David R. Dollar	Klaus Rohland



# Summary

## Background and Description

Despite strong macroeconomic growth in recent years, Mongolia has struggled to translate this growth into increased household welfare, especially for poor people. The disconnect is largely explained by (i) heavy reliance on the mining sector, which accounts for only a small share of employment; and (ii) low productivity of the livestock sector, which is the biggest employer in Mongolia and is the mainstay of a quarter of the population (IMF 2019). Mongolia is one of the most sparsely populated countries globally, making the provision of essential services (such as health, education, heating, and water supply and sanitation) to rural residents challenging and costly. Livestock-based livelihoods are vulnerable to numerous sectoral weaknesses, along with exogenous shocks and stresses. Value chains are fraught with technical challenges in meeting basic quality, animal health, and sanitation standards and challenges related to market access and price fluctuations. In addition, extreme climatic events, especially *dzud* (severe winter weather disasters), have triggered episodes of catastrophic livestock mortality, while pastoral livelihoods are increasingly threatened by pasture degradation and climate change.

In 2002, after a particularly harsh *dzud* in which almost one-third of the country's livestock perished, the government of Mongolia and the World Bank embarked on the three-phased Sustainable Livelihoods Program (SLP). The program aimed to address the vulnerability of pastoral livelihoods and increase public and private investment in rural communities in Mongolia. This is a Project Performance Assessment Report of the first and second phases of the program.

- The first phase (SLP I, 2002–06) was designed to pilot mechanisms to de-risk and diversify rural livelihoods in eight core *aimags* (provinces; World Bank 2002).<sup>1</sup> SLP I had three main components focusing on pastoral risk management (PRM), microfinance outreach, and community-driven development (CDD). The PRM component supported *soum*- (district-) level pasture management, pastoral livelihoods, and weather risk forecasting. The microfinance outreach component supported a Microfinance Development Fund (MDF), revolving loan funds, and an Index-Based Livestock Insurance program that later became an independent World Bank project (2005–16). Finally, a Local Initiatives Fund supported a community-driven mechanism to identify and implement investments in basic infrastructure and social services in rural and peri-urban areas.
- The second phase (SLP II 2007–13) scaled these mechanisms to the national level, covering all 21 aimags. SLP II continued the PRM component and included

support for a Livestock Early-Warning System (LEWS). Microfinance outreach continued through the MDF, but revolving loan funds were dropped because of unsatisfactory performance. The Local Initiatives Fund was replaced with a Community Initiative Fund (CIF), which similarly provided funds for subprojects selected by communities themselves.

- The ongoing third phase (SLP III 2014–active), albeit not part of this project assessment, was designed to fully embed project mechanisms in government to ensure their sustainability. Its focus has pivoted entirely to the Local Development Fund (LDF; replacing the CIF) and complementary institutional strengthening at the community, *soum*, and national levels.

## What Worked

SLP successfully implemented a CDD approach that fostered community empowerment and expanded rural services, which was relevant in the context of Mongolia's political transition to ensure inclusive rural development. CDD programs have proved particularly useful where government institutions are weak or under stress (Wong and Guggenheim 2018). Thus, a CDD approach was pertinent to supporting community control over planning decisions and investment resources after the end of socialist rule and the establishment of a democratic society during the 1990s. The SLP supported participatory planning for both *soum*-level pasture management and community-based identification and prioritization of LDF investments. A total of 6,795 community subprojects were financed: 1,729 by the Local Initiatives Fund during SLP I and 5,066 by the CIF during SLP II. The SLP II completion report concluded that 53 percent of *bag* (subdistrict) citizens were participating in bag meetings, during which CIF priorities are prioritized; 90 percent of citizens agreed that CIF investment aligned with their priorities; and 87 percent of citizens were satisfied with the mechanisms and outcomes of CIF subprojects. Furthermore, the State Inspection Professional Agency evaluated all public facility improvement subprojects and accepted them as good quality.

Although the drive for fiscal decentralization stalled during SLP I, a major contribution of the project to the government's decentralization agenda was the passage of the Integrated Budget Law in December 2011. The law institutionalizes SLP's CDD approach and includes provisions for community participation in local development, budgetary, procurement, and monitoring processes. The LDF continues to finance rural services such as health and education through its formula-driven mechanism. Eligible expenditures include health, education, and pasture-related investments that aim to enhance risk management and protect local pasture.

SLP's community-based pasture management approach responded to local herders' culture, existing sustainable pasture management practices, and traditional adaptive strategies. In line with cultural norms, the project supported local agreement on livestock mobility and storage-related practices, including seasonal pasture rotation to allow for rest and recovery. It also operates within existing provisions for negotiating access among herding communities during times of drought or dzud. This is important because local herding culture supports strong reciprocity norms during harsh conditions: herders practice *otor*, or seasonal long-distance migration, during which pastures are shared between local and incoming herders. SLP also rightly recognized that enclosing large areas to promote pasture recovery is not an effective tool to reducing herder vulnerability in Mongolia, honoring the notion that fencing is antithetical to herding culture and traditional adaptive strategies.

SLP contributed to several developments in the rural lending landscape in Mongolia through its microfinance interventions. These contributions include (i) the emergence of several well-regarded financial institutions offering microcredit, (ii) enhanced access to rural financial services with reduced collateral requirements, and (iii) a broader range of tailored products offered at lower interest rates because of increased competition. The MDF—through wholesale lending and nonlending services such as financial literacy programs—lent to rural residents, including through the nonbank financial institutions that play a role in reaching nonbankable clients. At the end of SLP II, the microfinance component exceeded its targets by increasing the number of sub-borrowers by 68 percent at the soum level and below (a total of 49,074 sub-borrowers), and the incomes of sub-borrowers reportedly increased by 32 percent. Moreover, 99 percent of the participating financial institutions had nonperforming loans less than or equal to 5 percent. Evidence of success is the legal incorporation of MDF, including its continued support to nonbank financial institutions and contributions to now widespread access to credit in rural areas through commercial banks.

## **What Didn't Work**

SLP I and SLP II were complex in design and had an overambitious theory of change, which led to delays and insufficient integration of some project mechanisms in institutions. The projects' design—which included many sectors, geographical regions, and institutional mechanisms—underestimated the time needed to build local institutional capacity to fully implement and sustain the new systems put in place. This led to project implementation delays and contributed to insufficient institutionalization of specific mechanisms—that is, soum-level pasture management and the LEWS.<sup>2</sup>

The effectiveness and sustainability of SLP's pasture management is questionable, given continued rangeland degradation. Despite SLP support for participatory pasture



planning at the local level, several institutional and regulatory shortcomings continue to challenge sustainable pasture management. The Independent Evaluation Group found that SLP's pasture mapping exercise and planning process was too ambitious and complex to be sufficiently ingrained and to replicate without project resources and technical assistance. Pasture management plans—the final output of the soum-level pasture planning process—are inconsistent and do not include a long-term vision (pasture use agreements are short-term, applying only to the upcoming season). While pasture management plans should allow for local differences and changing conditions to be reflected, the inconsistency and lack of a long-term strategy ultimately casts doubt on the utility of such plans for sustainable pasture management. Local governments also lack the capacity, resources, and central government support needed to enforce sustainable pasture management, despite voicing a willingness to do so. Although the Land Law has sound pasture management provisions, these are not consistently implemented or enforced, nor is there a single government body responsible for pasturelands. As a result, there has been insufficient impetus and resources for pasture management without project financing. Finally, all of this is compounded by insufficient incentives for herders to prioritize livestock quality over quantity. For example, animal health standards are low; markets for livestock products are unpredictable; cultural norms and economic incentives encourage large herds; and, until very recently, there was no direct financial consequence for overgrazing (for example, a grazing fee).<sup>3</sup> The conflation of these factors has resulted in a dramatic increase in livestock over the past two decades, and with that, overgrazing and increased competition over resources.

The SLP financed risk forecasting and early-warning systems as part of its integrated strategy to increase PRM, but efficacy and sustainability of the mechanisms were not achieved. Support initially consisted of disseminating hard-copy long-range weather forecasting bulletins. Alongside technological advances, SLP II appropriately made design changes that aimed to scale up the LEWS, originally financed by the United States Agency for International Development. However, despite protracted support from SLP, the LEWS was not operationalized and institutionalized as intended, despite efforts to do so in the National Agency for Meteorology and Environment Monitoring and the Ministry of Food and Agriculture. Independent Evaluation Group consultations indicated that this was because the LEWS was incompatible with the Moderate Resolution Imaging Spectroradiometer remote-sensing capabilities in the National Agency for Meteorology and Environment Monitoring. The ministry discontinued the LEWS, most likely because of budgetary constraints.

There is limited evidence that microfinance loans enable livelihood diversification and associated livelihood risk reduction, as envisioned by SLP. Credit is used, in most cases, to smooth consumption or to purchase additional livestock and inputs for pastoral

activities. Credit is rarely used for diversification; the only notable exceptions include the use of loans for school fees and engaging in horticulture, although this is often for own consumption rather than income diversification. Because of limited diversification, the increased borrowing supported by the project may be contributing to herders facing increased instead of decreased risks. Given that the collateral for herder loans is typically livestock, and most loans are reinvested in livestock activities, herders are vulnerable to a vicious cycle of borrowing, suffering unexpected shocks and stresses, and overindebtedness. Such risks have materialized in the past because of (i) the recurrent hazard of dzud, during which thousands of animals have historically perished, and (ii) vulnerability to market volatility (for example, the global financial crisis in 2008–09 and the commodity price shock in 2012–15).

The cost-effectiveness of SLP II's community investments cannot be determined because of the insufficient rigor of the ex post economic analysis. SLP II's LDF supported 5,066 subprojects to the benefit of an estimated 1,361,008 people at a total cost of 34.6 billion Mongolian tughriks (\$19.8 million equivalent).<sup>4</sup> However, the subprojects' outcomes cannot be determined because the ex post cost-benefit analysis was conducted for only 16 subprojects. Although the analysis found an average economic rate of return of 33 percent, the sample was too small, and no information was provided on the sampling frame. This makes it impossible to validate the CDD activities' effectiveness beyond the reported governance and satisfaction indicators.

## Lessons

This assessment offers the following lessons.

Sustained engagement in CDD, combined with positive political momentum and internal champions, can lead to legal and regulatory changes that support sustainability of the mechanism. Through its three-phased approach, SLP demonstrated to the client a comprehensive blueprint for fiscal decentralization and increased citizen engagement in rural development. When sufficient domestic demand materialized, this groundwork and consistent cooperation with the client government and reform champions within resulted in SLP having a transformative effect—that is, the passage of the Integrated Budget Law that formalized SLP's CDD model. This illustrates how a strong demonstration effect can lead to positive governance changes, which, if enshrined in national law, can achieve a high sustainability.

In environments where there is an increasing and unsustainable pressure on the natural resource base, the vulnerability of resource users cannot be reduced successfully without comprehensively addressing the drivers of resource degradation. Although SLP's support for community-based pasture management was highly relevant, it was

ultimately ineffective in addressing pasture degradation. The project could have benefited from a better and evolving understanding of the complex vulnerabilities of resource users and the underlying governance, market, and sociocultural factors driving degradation, which changed significantly during the life of the project as Mongolia transitioned into a market economy. SLP's community-based pasture management intervention was not backed with sufficient complementary governance (for example, dialogue, national-level policy, enforcement, and so on) and market support to manage rising livestock numbers and curb overgrazing. Without such measures, the incentive system leading to overstocking remained intact, leaving both degradation and vulnerability reduction results at risk of being nullified by the continued decline of pasture health.

Ensuring social inclusion is key in the implementation of group-based interventions to avoid unintended consequences, such as exacerbating distributional inequities or free-rider problems. SLP's interest-based approach to herder group formation was found, in some cases, to reinforce resource access issues. Socially marginalized individuals lost out on accessing quality productive resources because group-based activities inadvertently reinforced informal power relations and existing disparities. Alternatively, the engagement of poor resource users without the active involvement of wealthier resource users led to free-rider problems when those with the largest herds and impact on pasture degradation did not participate. In the case of group-based activities, vigilance and careful targeting is required to avoid such results, along with sufficient support to foster genuine collective action, which can help address potential exclusionary effects and free-rider problems. Alternative options include using a spatial approach, which endeavors to include all resource users within a geographic area, or smaller socially or kinship-based groups. While there are invariably pros and cons to these alternatives, it is important to assess limitations and determine mitigative measures when designing group-based interventions.

Risk forecasting and early-warning systems may not be sustained if the technology is incompatible with or not embedded in local institutions. The SLP-financed LEWS ultimately became disused and ineffective because it used technologically incompatible systems and was not embedded successfully in local institutions. It lacked the coproduction and institutional strengthening necessary to (i) mitigate technological incompatibilities, (ii) build sufficient capacity to operate and maintain the system, and (iii) foster local ownership. Without adequate attention to such measures, risk forecasting or early-warning systems are unlikely to achieve sustainability.

Increasing the availability of rural finance does not automatically lead to livelihood diversification and may contribute to additional livelihood vulnerability in high-risk sectors. Although SLP was successful in contributing to the market penetration of rural



financial services, the expected livelihood diversification did not occur. The implication is that beneficiary decisions on livelihood activities are guided by a multitude of factors (for example, social, economic, contextual, and so on), of which access to credit is just one. These factors were not addressed sufficiently with appropriate complementary activities to support alternative livelihoods. The lack of livelihood diversification, coupled with increased borrowing for high-risk activities, may have contributed to an increase in herder vulnerability. This further demonstrates the need for a comprehensive understanding of the drivers of vulnerability and the barriers to livelihood diversification.

Efforts to implement index-based insurance programs should thoroughly assess factors that will determine feasibility and sustainability, including the appetite for insurance within the target customer base. Uptake of the Index-Based Livestock Insurance was limited because of several socioeconomic factors. For example, herder households may be opting to rely on existing risk mitigation strategies or they may not perceive the benefit of using sparse resources to purchase insurance. Even though the insurance program's uptake was increased successfully through extensive and costly project-financed marketing efforts, the expected traction and insurance coverage have not been maintained postproject. Rigorous market and anthropological research at the initial stages is needed to understand whether sufficient insurance demand can be cultivated within the existing socioeconomic environment.

A mismatch between project ambition and support can impair the provision of sufficient capacity building needed for desired behavior change and long-term outcomes. SLP I and SLP II were ambitious projects whose financial and human resources were spread very thin after SLP's rapid scale-up to the national level. Except for the CDD component, SLP lacked the required resourcing and institutional support necessary to achieve the desired outcomes, which contributed to many of its shortcomings. Long-term and frequent capacity building is needed for institutions and communities to reinforce key skills and knowledge and to engender ownership and genuine community engagement. Community-based interventions and desired behavior change require a strong local presence with effective support and oversight from the national level. Intensive but one-off training is less efficient, not least because staff turnover can be high at the local level.

Independent Evaluation Group project ratings are described in appendix A. The evaluation methodology and evidence sources are described in appendix C.

Carmen Nonay, Director  
Finance, Private Sector, Infrastructure, and Sustainable Development  
Independent Evaluation Group



# 1. Background, Context, and Design

## Background and Context

1.1 Despite strong macroeconomic growth in recent years, Mongolia has struggled to translate this growth into increased household welfare, especially for poor people. Economic growth has been robust since recovering from the 2016 crisis (averaging between 6 and 7 percent before the coronavirus pandemic [COVID-19]). However, the national poverty rate remains high at 28 percent in 2018 (table 1.1; IMF 2019; NSO and World Bank 2020). A further 14.9 percent of the population lives between the poverty line and 1.25 times the poverty line, making households vulnerable to unexpected shocks and falling into poverty. The disconnect between growth and job creation is likely due to the heavy reliance on the mining sector and the livestock sector's low productivity (IMF 2019). Recent growth has been driven primarily by mining, with the industry accounting for a fifth of total value added. However, the employment share of the mining sector is only 6 percent. Thus, mining-led growth is unlikely to deliver job-rich growth (NSO and World Bank 2020). By contrast, at 22 percent, the livestock sector remains the biggest employer in Mongolia, but it operates as a low-value-added sector and faces several challenges (NSO and World Bank 2020).

**Table 1.1. Mongolian Poverty Rate over Time (national average, urban, and rural) (percent)**

	2003	2008	2009	2010	2011	2012	2014	2016	2018
National average	36	35	39	39	34	27	22	30	28
Urban	30	27	31	33	29	23	19	27	27
Rural	43	47	50	49	43	35	26	35	31

Sources: National Statistics Office of Mongolia database.

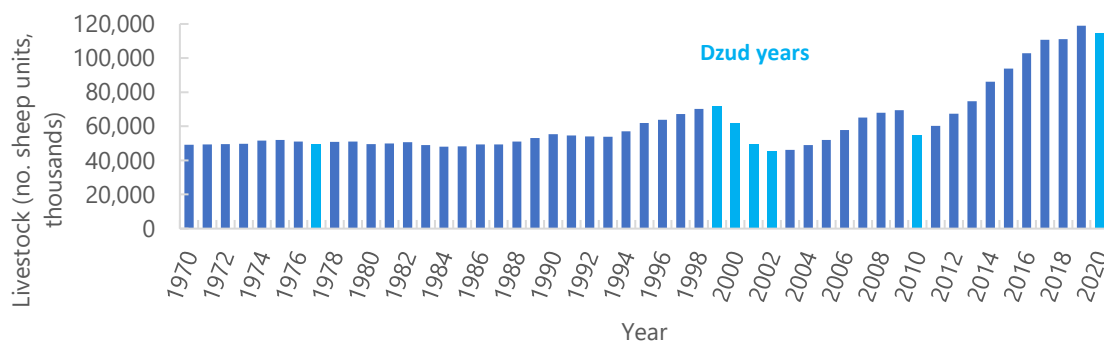
1.2 The rural Mongolian economy is based on livestock rearing by nomadic and seminomadic herders. Agriculture, of which 90 percent is the livestock industry, contributes 12 percent of the country's gross domestic product (IMF 2019). The wider livestock economy provides sustenance, income, and wealth to nearly half of Mongolians (Johnsen et al. 2019). Herders, who constitute about one-quarter of the total population, used to be the nation's poorest demographic, with 58 percent living below the poverty line in 2010 (IMF 2019). Still, increasing demand and prices of livestock products (especially cashmere), better market access, government subsidies, and public transfers have improved herders' welfare (NSO and World Bank 2020).

1.3 Yet rural life in Mongolia presents many development challenges, and livestock-dependent livelihoods are vulnerable to shocks. Mongolia is one of the most sparsely



populated countries globally, making the provision of rural services and infrastructure challenging and costly. The pastoral sector suffers from *dzuds* (that is, severe winter weather disasters that can lead to catastrophic livestock mortality; figure 1.1). Before Mongolia transitioned to a market economy in 1990, during the socialist period, livestock was managed in strictly regulated *negdels* (collectives), pasture rotation was enforced, and livestock numbers were capped. The state provided herders with salaries, veterinary services, and emergency fodder and support during dzuds. Following economic transition and the collapse of this system, the livestock sector has seen (i) a dramatic increase of the national herd size (figure 1.2); (ii) a change in herd composition in favor of goats (for cashmere); (iii) an increasing concentration of livestock in areas close to markets and services; (iv) a decrease in nomadic practices and animal mobility; and (v) increased out-of-season grazing, trespassing on reserved pastures, and an associated rise in local conflict (Fernández-Giménez 2002; Muller and Bold 1996; Upton 2008). These factors have further exacerbated herder vulnerability to dzuds, which are a regular yet unpredictable part of Mongolian life but can have disastrous impacts on the rural economy in which livestock is the primary form of capital.

**Figure 1.1. Total Livestock Population in Sheep Equivalent Units**



Source: Independent Evaluation Group; National Statistics Office of Mongolia database.

Note: Light blue bars signify dzud years. Dzud = severe winter weather disasters.

1.4 Rangeland degradation is further endangering pastoral livelihoods. Rising livestock numbers and reducing livestock mobility have increased rangeland degradation.<sup>5</sup> According to the most recent national rangeland health assessment, 16 percent of rangelands have experienced significant loss of ecosystem services, which would take up to 10 years and significant effort to reverse. An additional 12 percent of rangelands are potentially irreversibly damaged. Most concerning, however, is the trend of increasing degradation between the first national rangeland health assessment in 2015 and the second one in 2018 (Densambuu et al. 2018; NAMEM 2015). Furthermore, a grazing intensity analysis between 2000 and 2014 showed that heavy stocking occurred in more than 32 percent of the country, and 11 percent was consistently overgrazed (Gao

et al. 2015). This trend is likely to have continued, given that livestock numbers keep rising each year.

1.5 Finally, climate change further compounds the threats faced by herders. Mongolia has experienced significant warming across the entire country over the past century, higher than the global average (Batima 2006; Venable et al. 2015). These changes affect livestock production and herder livelihoods, including by increasing unpredictability of forage supplies (for example, changes in forage quantity, quality, timing, and location); changes or reductions in surface and groundwater, essential to livestock production and domestic use; and increasing frequency and duration of extreme events such as drought, dzud, floods, and wildfires (Fernández-Giménez 2020).

1.6 In 2002, after a particularly harsh dzud in which almost one-third of the country's livestock perished, the government of Mongolia and the World Bank embarked on the three-phased Sustainable Livelihoods Program (SLP). The program aimed to address the vulnerability of pastoral livelihoods and increase public and private investment in rural Mongolia. This report is the result of a field-based evaluation that was conducted to identify lessons from the first (SLP I) and second (SLP II) phases of SLP.

## Objective, Design, and Financing

### Objective

1.7 The overall purpose of SLP at inception was “vulnerability reduced and secure and sustainable livelihoods achieved by targeted poor and vulnerable near-poor households and individuals nationwide” (World Bank 2002). Moreover, each phase of SLP had its own specific project development objective (table 1.2).

**Table 1.2. Overview of the Sustainable Livelihoods Program Three-Phase Adaptable Program Loan Objectives**

Phase	Duration	Project Development Objective
SLP I	2002–06	An effective approach to promoting improved, secure, and sustainable livelihood strategies developed, demonstrated, and validated in selected areas, and institutional capacity created so that these strategies can be replicated and scaled up in SLP II
SLP II	2007–13	To enhance livelihood security and sustainability by scaling up institutional mechanisms that reduce the vulnerability of communities throughout Mongolia
SLP III <sup>a</sup>	2014–ongoing	To improve governance and community participation for the planning and delivery of priority investments in rural areas of Mongolia

Sources: World Bank 2002, 2005, 2014.

Note: SLP = Sustainable Livelihoods Program; SLP I = Sustainable Livelihoods Program Phase I; SLP II = Sustainable Livelihoods Program Phase II; SLP III = Sustainable Livelihoods Program Phase III.

a. SLP III is not assessed in this report.

## Design

1.8 SLP employed a three-phased approach to supporting secure and sustainable livelihoods and vulnerability reduction. SLP I piloted mechanisms to de-risk and diversify rural livelihoods in eight core *aimags* (provinces; World Bank 2002). These were scaled up to the national level in SLP II. The SLP Phase III (SLP III) was designed to fully embed these mechanisms in government and institutions to ensure their sustainability.

1.9 SLP I (2002–06) had three main components, which focused on pastoral risk, microfinance outreach, and community-driven development (CDD). The pastoral risk management (PRM) component employed a community-based rangeland management approach to support *soum*- (district-) level pasture management, pastoral livelihoods through herder (self-help) groups, and risk forecasting. The microfinance outreach component developed a Microfinance Development Fund (MDF), revolving loan funds (RLFs), and an Index-Based Livestock Insurance (IBLI), which would become an independent project (2005–16). Finally, its Local Initiatives Fund supported CDD of infrastructure and social services in rural areas. This component also aimed to support fiscal decentralization through training and capacity building at the subnational level.

1.10 SLP II (2007–13) continued the PRM component and scaled it nationally. Risk-forecasting activities were updated to include support to a Livestock Early-Warning System (LEWS). Microfinance outreach continued through the MDF, but RLFs were dropped because of inadequate performance. It established a Community Initiative Fund (CIF), which replaced the Local Initiatives Fund and Local Development Fund (LDF) of SLP I and operated nationwide.

1.11 SLP III (2014–active) is not included in this assessment. However, it was designed to fully institutionalize the mechanisms developed and applied in SLP I and SLP II. It aims to improve local governance and community participation for the planning and delivery of priority investments by strengthening the capacity of *soum* administrations and instituting a Good Governance Performance-Based Support Program.

## Theory of Change

1.12 The Independent Evaluation Group (IEG) constructed a theory of change, informed by relevant literature, to guide the assessment of whether SLP has achieved the intended outcomes of its development objectives (figure 1.2). It draws on Agrawal's (2008) five adaptive strategies of rural poor people—mobility, storage, diversification, communal pooling, and exchange—and literature that expanded on this framework in the Mongolian context to analyze herder adaptive capacity (Fernández-Giménez et al. 2015a; Upton 2012a; box 1.1). The assessment used these adaptive strategies to assess how the

institutional mechanisms employed by SLP I and SLP II have contributed to enhancing secure and sustainable livelihoods in communities throughout Mongolia.

---

**Box 1.1. Adaptive Strategies Herders Use to Prepare for and Respond to Dzud**

---

Adaptation is the set of actions, attitudes, activities, and decisions that enable individuals, groups, or systems to persist in the face of current or future change or shocks (Agrawal 2008). Agrawal (2008) argues that “institutional arrangements structure risks and sensitivity to climate hazards, facilitate or impede individual and collective responses, and shape the outcomes of such responses” (8). The paper develops its argument about the role of institutions by proposing a conceptual framework based on five historically observed adaptation practices through which poor rural households address the riskiness of livelihoods. Many pastoralists in Mongolia use localized forms of these strategies to manage risks to their livelihoods (Fernández-Giménez et al. 2015a).

Mobility includes (i) *otor*, a long-distance movement undertaken to fatten animals in fall or to escape climatic disasters such as drought or *dzud* (severe winter weather disasters); (ii) regular movements within pastures and alternating between different seasonal fields to allow vegetation regrowth; and (iii) migration to *soum* (district) or *aimag* (province) centers or the capital, Ulaanbaatar, during or after dzud.

Storage includes stored hay, homemade fodder, fodder purchased in advance of winter, and reserved pastures. Storage in the form of animal weight gain and fat reserves is also critical. It may also be in the form of cash savings and stockpiled food supplies. Herders whose wealth is in the form of large herds have an advantage over those with fewer animals.

Diversification includes multispecies livestock herds; access to diverse pastoral resources (for example, different pasture types, varied topography, riparian and forested areas, salt licks, and so on); income from multiple sources; diverse social networks; and access to various information sources.

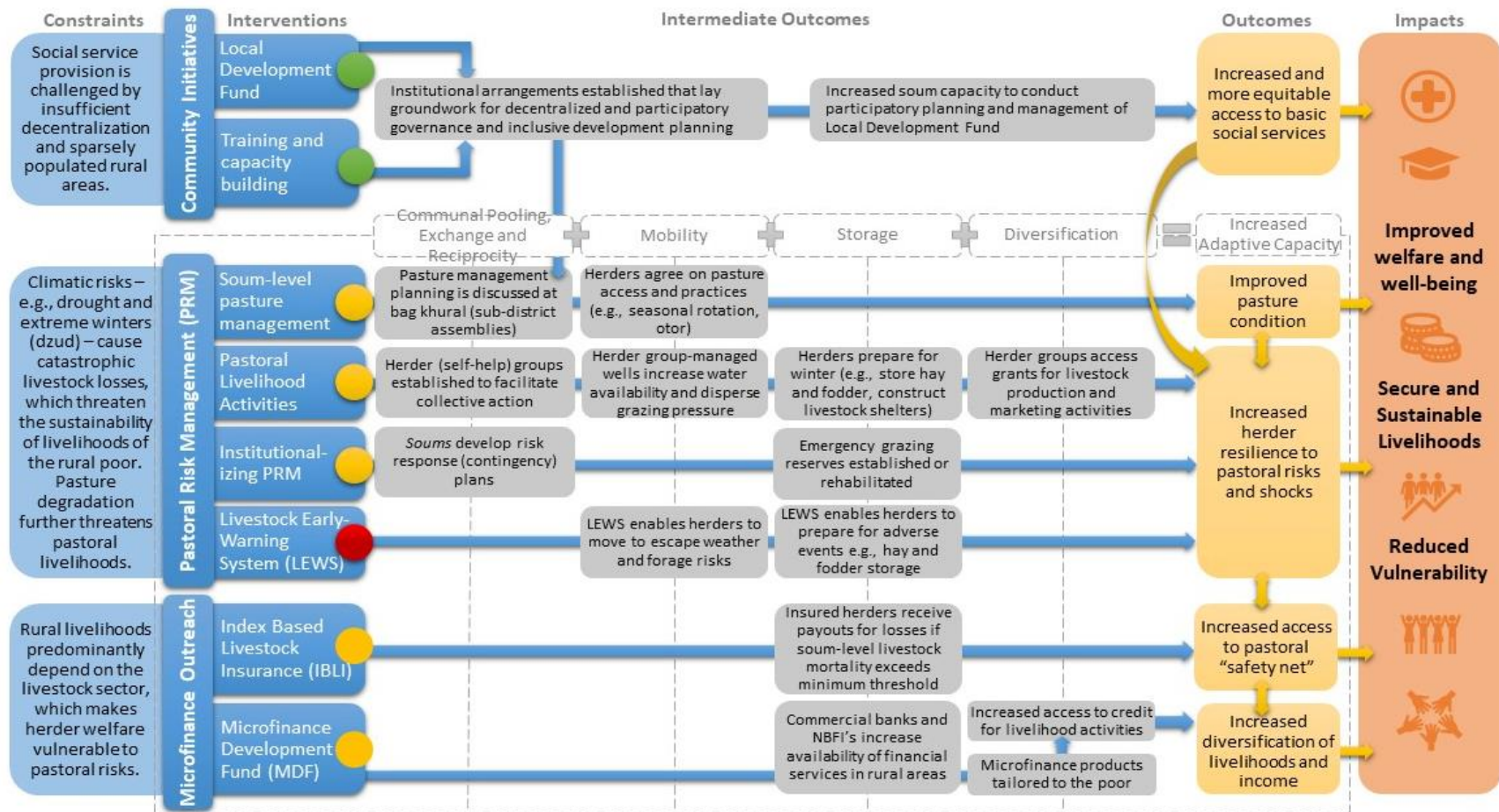
Communal pooling involves sharing resources, labor, or wealth, which distributes risk across households and improves the efficiency of many production activities.

Exchange and reciprocity include mutual assistance among herders such as sharing information, pastures, and campsites with *otor* herders, and herding labor.

*Sources:* Agrawal 2008; Fernández-Giménez et al. 2015a; Upton 2012a.

---

Figure 1.2. Theory of Change



Source: Independent Evaluation Group, with input from Agrawal 2008, Fernández-Giménez et al. 2015a, and Upton 2012a.

Note: Interventions are color coded as follows: ■ Green = intervention was mostly successful; ■ Yellow = intervention had mixed results; ■ Red = intervention was mostly unsuccessful. Findings relating to these interventions are presented in chapter 2. LEWS = Livestock Early-Warning System; NBFI = nonbank financial institution; PRM = pastoral risk management.

## Financing

1.13 SLP I was appraised at \$22.1 million but was extended for a year, ending in 2007 with actual costs at \$24.9 million. The main reason for the higher actual project cost was the special drawing rights' appreciation against the US dollar.

1.14 SLP II was appraised at \$49.3 million, but the actual project cost was \$60.7 million at project close in June 2013. This phase received additional financing worth \$11 million and was also extended for a year until 2013 to complete scaling-up activities. In addition to the International Development Association \$30.3 million credit and \$13.3 million grant, this phase was supported by a Japanese Policy and Human Resources Development grant of \$3.90 million and European Union cofinancing of \$13.3 million.

1.15 SLP III was ongoing at the time of assessment and is excluded from this report. It is financed by an International Development Association credit of \$24.8 million and an \$11.4 million grant from the Swiss Agency for Development and Cooperation (table 1.3).

**Table 1.3. Sustainable Livelihoods Program Phases I and II Project Costs by Component (US\$, millions equivalent)**

Component	SLP I (2002–06)		SLP II (2007–13)		Total (Actual)
	Appraisal	Actual	Appraisal	Actual <sup>a</sup>	
Pastoral risk management	5.38	4.18	15.01	17.27	21.45
Microfinance outreach and development	5.99	5.95	8.00	8.30 <sup>b</sup>	14.25
Local and community initiatives	9.00	12.03	23.16	27.5	39.53
Project management	1.14	2.71	2.36	3.70	6.41
Total	22.12	24.87 <sup>c</sup>	49.29	60.67	81.54

Sources: World Bank 2008, 2013a.

Note: SLP I = Sustainable Livelihoods Program Phase I; SLP II = Sustainable Livelihoods Program Phase II.

a. More than 100 percent of the appraisal figures is because of \$11 million additional financing granted in May 2011.

b. The Microfinance Development Fund component did not benefit from additional financing, but there was an exchange rate gain of \$0.3 million for the subloan category resulting from conversion from special drawing rights to US dollars.

c. There was a significant increase in the dollar value of the credit caused by the appreciation of the special drawing rights during the life of the project. The original amount of the credit, special drawing rights 15.0 million, was equivalent to \$18.73 million at the time of appraisal. At the closing date, the credit was equivalent to \$23.64 million, of which \$1.58 million was undisbursed, and the amount invested in the project was \$22.06 million.

## 2. What Worked, What Didn't Work, and Why?

2.1 The following sections will explore what worked, what did not work, and why in terms of (i) design and preparation, (ii) implementation and supervision, and (iii) results that are organized by the three overarching project intervention mechanisms.

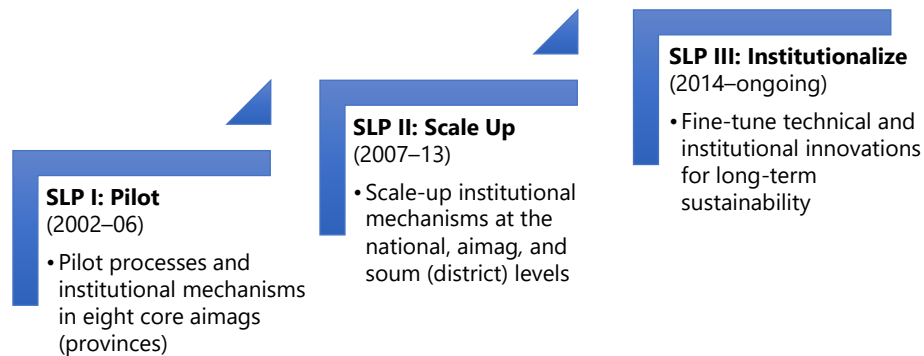


## Design and Preparation

2.2 The design of SLP was and remains highly relevant to the development challenges faced by Mongolia's rural population. At appraisal, the program responded to the government's need to address rural poverty and the vulnerabilities that led to massive livestock losses during the 1999–2002 dzud disasters. Its objectives were well aligned with the Country Assistance Strategy at approval and remained consistent with the 2013–17 Country Partnership Strategy, which included aims to (i) “address vulnerabilities through improved access to services and better service delivery, safety net provision, and improved disaster risk management” and (ii) “build a sustained and diversified basis for economic growth and employment in urban and rural areas” (World Bank 2012). The relevance of SLP's rural focus persists because poverty incidence remains higher in rural areas, despite improvements over time and significant rural-to-urban migration, which has increased poverty concentration in urban areas (NSO and World Bank 2020). Rural push factors (such as environmental disasters and associated herd losses) coupled with urban pull factors (including higher-quality schools, health care, and perceptions of economic opportunity) have contributed to this trend (Fan et al. 2016). Dzuds are a regular feature of Mongolian pastoralism and will continue to be a risk to livelihoods. Moreover, as climate change makes weather patterns more erratic and droughts more frequent, and livestock numbers continue to climb, the case for improved pasture and pastoral management is as strong today as it was almost two decades ago, if not stronger.

2.3 A longer-term adaptable program loan plan was instituted to respond to the complexity of the development challenge. The World Bank appropriately selected a three-phased implementation approach to pilot, scale up, and institutionalize program-supported mechanisms (figure 2.1). At inception in 2002, SLP was the first program to address PRM in Mongolia at scale. The program's complexity and the political buy-in required for its success warranted a protracted engagement. Piloting the different intervention approaches in select provinces during SLP I, before scaling them nationally in SLP II, was conducive to learning, adjusting interventions accordingly (for example, see section on the LEWS), and abandoning unsuccessful mechanisms (for example, see section on RLFs). The SLP III design rightly aimed to roll back project-based interventions by instead focusing on institutionalizing the mechanisms tried and tested during SLP I and SLP II to cement their achievements and ensure sustainability.

**Figure 2.1. Basic Features of Sustainable Livelihoods Program Adaptable Program Loan Approach**



Source: World Bank 2005.

Note: SLP = Sustainable Livelihoods Program; SLP I = Sustainable Livelihoods Program Phase I; SLP II = Sustainable Livelihoods Program Phase II; SLP III = Sustainable Livelihoods Program Phase III.

2.4 Experience and rigorous poverty analyses informed SLP's preparation. The project design incorporated lessons from the post-transition National Poverty Alleviation Program (NPAP), which the World Bank cofinanced. It aimed to facilitate convergence between the existing NPAP interventions and the new approaches under SLP. It also built on findings from the extensive World Bank-supported Participatory Living Standards Assessment conducted in 2000 with the National Statistics Office of Mongolia. Pertinent learning from the NPAP and the Participatory Living Standards Assessment included the following: (i) Poverty and inequality increased between 1995 and 2000; (ii) ambiguous institutional structures resulted in insufficient coordination among government ministries and agencies; (iii) local-level institutional capacity remained low; (iv) weak PRM led to devastating livestock losses in 1999–2001; (v) inadequate participation in decision-making, coupled with insufficient fiscal decentralization, prevented local communities from engaging in local development; and (vi) underdeveloped financial systems, particularly in rural areas, constrained private sector development and growth.

2.5 Community engagement sat at the center of the SLP approach to ensure inclusive rural development in a transitioning democracy. CDD programs have proved particularly useful where government institutions are weak or under stress (Wong and Guggenheim 2018). The CDD implementation modality was thus pertinent to supporting community control over planning decisions and investment resources after the collapse of socialist rule and the establishment of a democratic society. The SLP supported participatory PRM by local herder communities and local authorities at the soum level, including through community-based natural resource management, risk response planning, and various herder self-help initiatives. Furthermore, community-

based identification and prioritization of LDF investments served to meet the rural population's localized infrastructure and service needs.

## Implementation and Supervision

2.6 SLP I and SLP II experienced delays and achieved insufficient institutional change because of their complex design and overambitious theory of change. The projects spanned several sectors and included multiple institutional mechanisms. These mechanisms—including soum-level pasture management, microfinance development, LEWS, IBLI (SLP I), and CDD—each required significant institutional strengthening and entailed numerous project activities. However, the design underestimated the time needed to build sufficient local institutional capacity to fully implement, embed, and sustain the new mechanisms, especially in the case of pasture management and pastoral risk management (that is, LEWS).<sup>6</sup> Furthermore, scaling these multiple project mechanisms nationally during SLP II was an overambitious undertaking (from eight pilot aimags under SLP I to 21 aimags). This made the original timeline unfeasible, contributing to the implementation delays that extended the project.

2.7 Supervision was hindered by overambitious and ill-defined key performance indicators, despite improvements under SLP II. Monitoring and evaluation were inherently challenging because of the complexity of the project and its components. Inconsistency in specifying the project development objectives and poorly articulated key performance indicators, especially in SLP I, compounded this further. For example, expressions such as “functioning institutional framework,” “adequate winter preparations,” “improved management” of pastureland, and “improvement in livelihood security” were not fully defined and left open to interpretation. In some instances, perception-based indicators were used when other options were available. For example, the outcome indicator on improved pasture conditions was based on perception rather than measurement. The indicator on CIF results was based on beneficiary satisfaction rather than on assessing improvements in rural services. Although efforts were made to modify the indicators to better reflect the attribution to the project, as recommended by supervision missions, such changes were only partially addressed. Consequently, it is difficult to isolate the changes in variables that can confidently be attributed to the effects of the project.

## Results

2.8 Although contributing to the same objective, the mechanisms financed by SLP—PRM, microfinance outreach, and community initiatives—are distinctly different from one another. Results, and reflections on what worked well or not and why, are thus

presented in three successive sections. Chapter 3 on lessons draws on findings from each of these sections and provides overarching learning from SLP I and SLP II.

## Pastoral Risk Management

2.9 The multipronged approach to PRM consisted of (i) soum-level pasture management, (ii) institutionalizing PRM, (iii) pastoral livelihood activities, and (iv) risk forecasting. The following subsections discuss these in turn.

### Soum-Level Pasture Management

2.10 The core of SLP's pasture management approach was institutionalizing community-based pasture management planning at the soum level to support the sustainable use of pastoral resources through better management practices. SLP provided technical assistance to facilitate pasture management in soums, which included (i) pasture mapping, (ii) participatory pasture planning with community inputs at the *bag* (subdistrict) level (the smallest administrative unit), and (iii) participatory monitoring of perceived pasture conditions. The soum-level pasture management process occurs as follows: at spring *bag khural* (assemblies), collective decisions are made on (i) pasture access, rotation, and recovery; (ii) where herders can go on *otor* (long-distance migration of herders to fatten livestock for winter); (iii) pasture management measures such as rodent control; and (iv) community development priorities. Bag *khural* decisions are valid if 25 percent of bag households participate in the process. However, participation rates reportedly exceed this, averaging 53 percent (World Bank 2013a, confirmed by IEG interviews). Bag-level proposals are communicated to the soum governor, who reviews and consolidates them into a pasture management plan. These are integrated into soum-level land-use plans, which soum administrations are legally required to undertake.

2.11 SLP's community-based pasture management approach was appropriately grounded in local herders' culture, existing sustainable pasture management practices, and traditional adaptive strategies. In line with cultural norms, the instituted process supports local agreement on mobility- and storage-related practices, including seasonal pasture rotation that allows pastures to rest and recover. It also operates within existing provisions for negotiating access among herding communities during times of drought or dzud. This is important because the herding culture supports strong norms of reciprocity during harsh conditions: herders practice *otor* (seasonal long-distance migration), during which local and incoming herders share pastures.<sup>7</sup> SLP also rightly recognized that closing large areas to grazing to promote pasture recovery is not an effective tool to reducing herder vulnerability in Mongolia, honoring the notion that fencing is antithetical to herding culture and traditional adaptive strategies.

2.12 Pasture planning has been institutionalized as a participatory process at the bag level; however, several shortcomings limit the effectiveness and sustainability of soum-level pasture management plans. First, evidence is lacking on whether pasture mapping is contributing to forage and pasture management purposes, as intended (World Bank 2013b). Soums received intense but short-term and one-off technical assistance. IEG found that SLP-financed pasture maps were being used in few cases as a household inventory or for enforcing herder camp location and pastoral movements. However, it was unclear whether maps were being updated or whether the original maps were still relevant. The maps were likely too complex to replicate without project resources,<sup>8</sup> whereas the rapid scale-up from eight pilot aimags (SLP I) to the entire country (SLP II) challenged the delivery of sufficient capacity building to institutionalize pasture mapping. Second, pasture management plans—the final output of the soum-level pasture planning process—are inconsistent and do not include a long-term vision. Pasture use decisions made at bag khurals are short term, applying to the upcoming season only. While pasture management plans should allow for local differences and changing conditions to be reflected, the inconsistency and lack of a long-term strategy ultimately casts doubt on the utility of such plans for sustainable pasture management. Finally, institutional shortcomings limit the effectiveness of pasture management. Although land-use plans are legally required, pasture management plans are not. The Land Law has sound pasture management provisions, but these are not consistently implemented or enforced, nor is there a single government body responsible for pasturelands. Consequently, there is no local government budget for pasture management plans, and the level of investment is limited when not financed by the project (see the Institutionalizing PRM section).

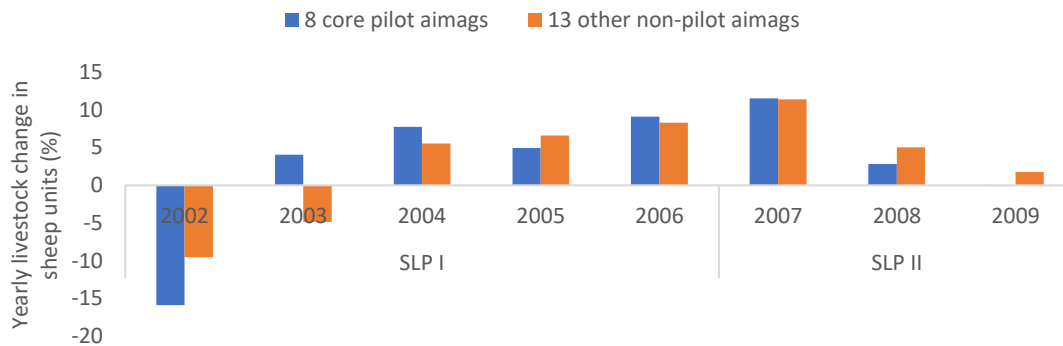
2.13 Although SLP reported on perceived improvements in local pasture conditions, these outcomes are inconsistent with national rangeland health assessment results. Several development organizations have invested in rangeland monitoring. The most successful effort, supported by the Swiss Agency for Development and Cooperation, resulted in a national rangeland health assessment protocol and two national rangeland health assessments published in 2015 and 2018. The assessment protocol has since been institutionalized, with land officers throughout the country carrying out monitoring on an annual basis.<sup>9</sup> Although challenges remain in linking these monitoring processes to decision-making at the local level, the monitoring protocols and data interpretation provide a robust foundation for ongoing and standardized national rangeland assessments (Jamsranjav et al. 2019). The most recent assessment concluded that 35 percent of rangelands are slightly to moderately degraded (with potential for recovery), with an additional 23 percent severely or very severely degraded (potentially irreversibly), and it demonstrated a trend of increasing degradation (Densambuu et al. 2018).<sup>10</sup> This is inconsistent with SLP II results at project close in 2013, which reported

that 87 percent of herders and local officers perceived improved pasture conditions because of project interventions. Although evidence exists that community-based rangeland management can improve localized pasture conditions, at the time of this assessment, such efforts have been insufficient in turning the tide on the national degradation trends.

2.14 Governance issues prevented SLP from having the expected impact on pasture management. Mongolia has the national legislative and policy framework necessary to address pasture degradation and protect pastoral livelihoods (Upton 2012b).<sup>11</sup> However, there has been insufficient political commitment at the national level to address pasture degradation and to enforce existing regulations. SLP I piloted a grazing fee to test the possibilities for creating a nationwide land-use regulatory mechanism. However, the piloted grazing fee was not scaled and institutionalized during SLP II, and it did not lead to a lower-than-average livestock increase in the eight pilot aimags (figure 2.2). SLP's efforts did result in the drafting of a Pastureland Law (World Bank 2013a). Indeed, a parliament working group has been drafting a rangeland law for more than a decade to clarify roles, rights, and responsibilities in pasture management. However, despite the project's efforts and other donor support, and much discussion and several drafts, it has never been introduced to parliament.<sup>12</sup> Limited political will at the national level leaves local governments without sufficient technical capacity, financial resources, and political backing to effectively enforce sustainable pasture management measures. Without national support for stronger enforcement of rangeland management, the burden falls entirely on local and informal institutions, making it challenging to confront degradation drivers. Since July 2021, the government of Mongolia has implemented a tax on livestock ownership, the revenue of which should be directed to rangeland and livestock management activities. Although a noteworthy development, enforcing and successfully implementing this tax will require substantial political will and local governance capacity. At the time of this assessment, it is too early to tell whether it will prove effective in incentivizing smaller herds and facilitating rangeland recovery.



**Figure 2.2. Average Yearly Livestock Change in Sheep Units**



Source: Independent Evaluation Group calculations; National Statistics Office of Mongolia database.

Note: Sustainable Livelihoods Program Phase I piloted a grazing fee in eight core aimags: Bayankhongor, Bayan-Ulgii, Dornod, Dundgovi, Tuv, Umnugovi, Uvs, and Uvurkhangaï.

2.15 SLP was not designed to address the market factors driving pasture degradation. There are limited incentives for Mongolian herders to prioritize livestock quality over quantity, which hampers the long-term success of managing open access rangelands. Even though livestock and housing were privatized after the collapse of socialist rule, land ownership remains highly restricted. The use of rangelands—which constitute the vast majority of Mongolia’s land at 76 percent—is determined by herders’ formal and informal use rights while remaining open access. However, rangeland resources and these traditional arrangements are under increasing pressure from rising livestock numbers.<sup>13</sup> Market and cultural mechanisms drive this by encouraging herders to favor quantity of meat and fiber over quality. First, livestock supply chains are fraught with technical challenges in meeting basic quality, animal health, and sanitation standards that, together with unpredictable trade policies, undermine exports (Brown 2020; Ichinkhorloo and Thrift 2015). Without access to foreign markets, demand is lacking for higher-quality or sustainably produced livestock products that could incentivize smaller herds and better management.<sup>14</sup> Second, a herder’s success and status are traditionally measured by their herd size, which is reinforced by prestigious government prizes awarded to the largest herders. Herders are generally aware that a focus on livestock quantity is not good for pastures, product quality, and, in many cases, their own well-being, considering the labor requirements. Still, they see no alternative, given the status quo. Although SLP did not reference or tackle issues related to stocking rates, two World Bank operations (approved in 2013 and 2019) have since focused on livestock marketing and commercialization.<sup>15</sup> Nevertheless, the compounding challenges of overstocking, overgrazing, and rangeland degradation persist. By not addressing the main drivers of overstocking, SLP had limited potential to reduce pasture degradation.

## Institutionalizing PRM

2.16 SLP I and SLP II supported the implementation and institutionalization of soum-level risk response plans (also known as contingency plans), which are now part of a national risk management framework. Project documents and interviews confirmed that the risk response planning process occurs in most, if not all, soums. Furthermore, this process is nationally mandated with passage of the Disaster Protection Law in 2003 (revised in 2017) and the associated establishment of the National Emergency Management Agency in 2003. It extends beyond pastoral risks. However, regarding PRM, it stipulates how much hay and fodder resources that herders, soums, and aimags must stock in the event of adverse conditions.

2.17 Despite SLP I and SLP II's efforts to support herders' dzud preparedness, it still varies substantially. Both SLP I and SLP II exceeded their targets on strengthening PRM among herders. SLP I reported that the number of herding households making adequate winter preparations, such as stocking hay and fodder and constructing livestock shelters, increased by 54 percent. SLP II reported that 96 percent of herders are taking actions to mitigate pastoral risk. However, the SLP II beneficiary results survey indicated that only 37 percent of herders knew about soum pasture risk management plans, and 17 percent had participated in their development (World Bank 2013a, 44). Furthermore, IEG interviews indicated that herders' level of preparedness to dzud still varies substantially. Rich herders are better prepared and have the liquidity to buy additional fodder, if needed. Herders who do not have the financial capacity or risk awareness to sufficiently prepare for dzud risks remain the most vulnerable. However, research has shown that herders belonging to formal community-based pasture management groups were significantly better prepared than those who did not (Fernández-Giménez et al. 2017).

2.18 SLP I successfully rehabilitated emergency hay and fodder storage facilities, but results were mixed. SLP I restored 34 storage houses in eight aimags and established two inter-aimag otor grazing reserves. As a result, the project more than doubled hay storage and tripled forage capacity in pilot aimags. These facilities were also incorporated into annual contingency plans. However, the SLP I completion report acknowledges that "there is little information on the sustainability and effectiveness of use, especially by more vulnerable households" (World Bank 2008, 32). It also notes that "the establishment of soum hay and fodder reserves has not been popular because of low hay yields and climatic factors." Interviews confirmed that in some cases, these resources spoiled during seasons without adverse weather conditions that would have triggered their use. This fostered skepticism toward storage activities, and no further collective storage activities were financed. Herders do most hay and fodder conservation themselves.

## Pastoral Livelihood Initiatives

2.19 Although SLP I helped form numerous herder groups to support pastoral livelihoods, insufficient technical support and capacity building undermined their sustainability. SLP I established or strengthened more than 500 herder groups (formal and informal) and cooperatives.<sup>16</sup> These were supported with training (for example, in organizational and business skills and effective group behaviors) to facilitate collective action in pasture management; PRM; and livestock production, processing, and marketing. However, IEG interviews indicated that SLP herder groups did not receive the technical support required for long-term success (especially compared with other donor programs that also supported such groups). This is likely because of the large number of groups, which stretched project resources too thin to provide sufficient and sustained capacity-strengthening activities. IEG also learned that herders often organize themselves into multiple groups to receive support from various donors, suggesting that donor organizations should coordinate to avoid duplication and the emergence of parallel structures.

2.20 Lessons from SLP and the literature indicate that insufficient attention to social inclusion in group-based interventions can lead to distributional inequities. It is well documented that group-related activities require careful implementation to ensure the inclusion of socially marginalized individuals and groups such as poor herders (Murphy 2018). SLP created herder groups by mobilizing interested and opportunistic members. IEG interviews indicated that, in some cases, this interest-based approach contributed to different scenarios of unintended consequences, including issues related to resource access, which are also well documented in the literature. When wealthy herders with larger herds do not participate, this undercuts pasture management aims because wealthy herders have the largest herding footprint. By contrast, when wealthy herders do participate, this approach can bolster their informal power, allowing them to gain more access to better pastures and critical infrastructure, such as water points and favorable camp sites. IEG observed cases where wealthier herders had participated in herder group activities to access infrastructure investments of which they were the prime beneficiary. Depending on group dynamics, poorer households can lose out on accessing quality productive resources. Other donor programs tackled these challenges through concerted efforts to foster endogenous collective action (usually socially or kinship-based groups) or by using spatial approaches (territorially based groups that include all herders in a given area, regardless of population characteristics), which aimed to address exclusionary effects and the free-rider problem.<sup>17</sup> While there are invariably pros and cons to these alternatives, it is important that limitations are assessed, and mitigative measures are determined, when designing group-based interventions.

2.21 SLP-financed pastoral subprojects face ownership and maintenance challenges and could contribute to pasture degradation. The SLP financed extensive pastoral investments, many of which focused on water availability and small-scale fencing,<sup>18</sup> which were constructed in cooperation with herder self-help groups to which management was delegated. SLP I established 483 wells, which are critical to herds in areas without surface water (especially in the face of increasing drought). By making more land available for herding, the wells helped distribute grazing pressure. However, they also opened areas to regular grazing that would otherwise have remained as reserves for critical times. Although wells alleviate grazing pressure in the short term, they can augment it in the long term. SLP also financed small-scale fencing to protect water springs from being trampled and to enclose areas of about one hectare to serve as haymaking or grazing reserves. These investments were widely considered successful. However, the ownership of several of these pastoral investments is in doubt, and there is no evidence of a maintenance plan to ensure sustainability (World Bank 2013b), particularly given that SLP herder groups have since dissolved. Indeed, IEG observed that some SLP-financed infrastructure had fallen into disrepair. The pastoral investments therefore did not have the expected long-term impact.

2.22 SLP II switched its focus to demonstrating good practice in pastoral livelihoods; however, the beneficiary survey documented mixed results. Demonstration activities were carried out in 18 soums in different ecological zones, which was slightly below the target of 20 soums (some were not performing as required). Activities included a herders' conference, capacity building for soum staff, a fund to support demonstrations, distributing more than 6,000 barometers to herders, and disseminating various handbooks on pasture management and improved livestock keeping. This resulted in the creation of (i) six income-diversifying businesses in livestock grazing, farming, hide processing, and so on; and (ii) 14 feed production processing and distribution businesses. According to the beneficiary survey, more than 50 percent of herders indicated that they had adopted improved pastoral practices (for example, keeping female animals in small fenced areas, planting fodder, feeding animals improved feed, and so on). However, only 22 percent of herders confirmed that they had acquired these skills through their local governments' involvement in SLP II. IEG could not verify most of these activities.

### **Risk Forecasting**

2.23 The efficacy and sustainability of SLP's risk forecasting were not achieved, primarily because of the failure of the LEWS. SLP aimed to finance risk-forecasting capacities and early-warning systems to increase PRM as part of its integrated strategy. Support initially consisted of disseminating hard-copy long-range weather forecasting bulletins. Alongside technological advances, SLP II appropriately made design changes

that aimed to scale up the LEWS financed initially by the United States Agency for International Development. However, despite protracted support from SLP and an additional technical assistance grant, the LEWS failed to be operationalized and institutionalized as intended. Although evidence indicates that an advanced and relevant risk-forecasting system was developed, it is unclear where the LEWS is now instituted; whether and how it is being used, maintained, and updated; and, most important, whether it is contributing to risk preparedness at the local level.

### Early-Warning Bulletins

2.24 Hard-copy early-warning bulletins initially provided useful information to herders yet had limited impact, and the approach soon became obsolete. Given rural Mongolia's limited access to communication technology when the project started, SLP I developed hard-copy early-warning bulletins for distribution among herders. These long-range weather forecasting bulletins were distributed to herders in eight pilot aimags and soums. According to the SLP I completion report, the biannual bulletins were published seven times, with 45,600 copies disseminated. They provided the second most important source of information for herders after Mongolian public radio. Although the bulletins may have provided useful albeit short-term information to some rural households, the mechanism's temporary nature limited the outreach and impact. As telecommunications penetration increased, the approach soon became obsolete.

### Livestock Early-Warning System

2.25 SLP II made relevant changes to the program's design by aiming to scale up and institutionalize an LEWS that delivers weather and forage predictions throughout Mongolia. Because of high livestock losses during the 1999–2001 dzud, the United States Agency for International Development initiated the Gobi Forage LEWS in 2004 through the Global Livestock Collaborative Research Support Program. LEWS technology, originally developed in East Africa, combines near real-time weather data, simulation modeling, and remote-sensing capabilities to monitor and forecast livestock forage conditions. The resulting bimonthly maps were designed to equip herders and policy makers at local, regional, and national levels with information for timely decision-making in the face of climatic risks and low forage availability (Angerer 2012). Texas A&M University and Mercy Corps tested and implemented LEWS in eight aimags. After the agency funding ended in 2008, SLP II successfully nationalized the LEWS coverage. At the end of SLP II, all 21 aimag and 331 soum governments were reportedly receiving information from LEWS that was regular and reliable, according to the beneficiary survey results (World Bank 2013a, 28).

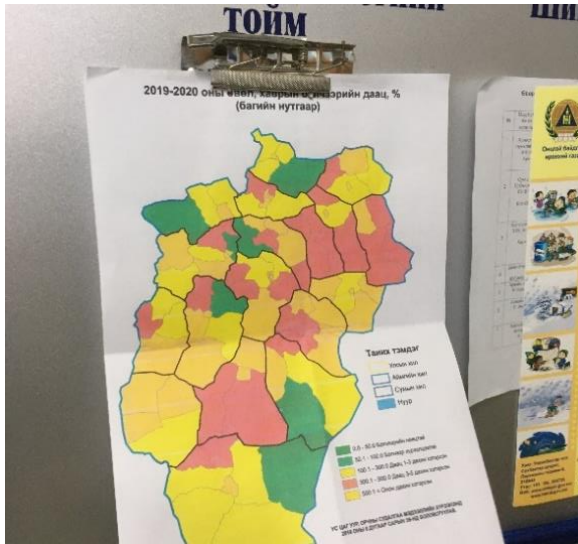
2.26 There is little evidence that the LEWS is currently functional and helping herders and policy makers make decisions. If used effectively, early-warning information can

support various adaptive strategies, including mobility, storage, reciprocity, and communal pooling. However, IEG found no published evaluations on the LEWS's effectiveness, and consultations did not provide evidence of a functioning system. The LEWS-generated forage forecast maps have not been updated since 2018, and the LEWS dissemination website (<http://www.mongolialews.net>) is no longer online.<sup>19</sup> Furthermore, interviews with herders and officials at the aimag and soum levels did not indicate familiarity with or use of LEWS outputs.

2.27 Despite multiple efforts, the LEWS has not been embedded in government. The component first suffered from a two-year delay because of protracted signing of contracts with a nongovernmental organization to support the LEWS development. This shortened the implementation phase, which likely undercut efforts to institutionalize the system. When SLP II closed, the LEWS was reportedly transferred to the National Agency for Meteorology and Environment Monitoring (NAMEM) “to ensure that it has a home through which government budget support could be provided for operations and maintenance” (World Bank 2013a, 12). However, under the subsequent technical assistance grant, Improving Disaster Risk Management in Mongolia, the challenge of institutionalizing LEWS persisted, regardless of further support to NAMEM. IEG consultations indicated that this was because the LEWS was incompatible with the Moderate Resolution Imaging Spectroradiometer remote-sensing capabilities in NAMEM. LEWS was subsequently transferred to the Ministry of Food, Agriculture and Light Industry for use in pasture management. However, the ministry is no longer creating or disseminating the maps. Instead, NAMEM has developed its own forage forecast maps based on strengthened capacity and lessons learned from various donor projects. These maps are distributed to all aimags and soums, and IEG sometimes observed them on display in local government offices (photo 2.1).



Photo 2.1. NAMEM Forage Forecast Map (2019–20)



Source: National Agency for Meteorology and Environment Monitoring (map) as seen on a soum noticeboard.

Note: NAMEM = National Agency for Meteorology and Environment Monitoring.

2.28 IEG consultations with herders indicate that there are other more effective means for acquiring information on weather risks and forage quality. Herders access information predominantly through mobile phone applications, television programs, and their own informal networks. Increased rural electricity access in recent years has made this easier. IEG's 2018 assessment of the World Bank's Renewable Energy for Rural Access Project reported that 88 percent of the herder population is accessing electricity through portable renewable energy systems, allowing them to receive weather reports and alerts and market-related information (World Bank 2018). Malchin TV, or Herder TV, is especially popular among herders—it airs twice a month and provides relevant information derived through both modern and traditional methods of pastoral risk identification. Mercy Corps also has an SMS text messaging service, supported by Texas A&M data, which provides a four-day bag-level weather forecast when herders send a message request with a specific code indicating their location. The SMS service costs 50 Mongolian tugriks per message (at the time of the field assessment), a modest amount intended to sustain the service, but some herders stated that the cost is a barrier to frequent use. Some herders also confirmed the utility of SMS alerts sent by the National Emergency Management Agency in the event of emergencies, including dzud risks. The service is based on NAMEM data, and bag leaders collect mobile phone numbers. However, although almost every household, including poor and rural residents, has at least one mobile phone at home (NSO and World Bank 2020), uneven coverage of mobile networks in rural areas can be problematic. Herders know where network access is available, but they may not be immediately reachable during emergencies.

## **Microfinance Outreach**

2.29 SLP was designed to widen access to sustainable financial services to rural citizens, including poor and vulnerable nonpoor households and individuals. It aimed to enable poor households and individuals to manage risk better, smooth consumption over time, diversify income sources, invest in productive activities, and accumulate livelihood assets (World Bank 2002). This component included both microcredit and insurance, with the IBLI becoming an independent project in 2005.<sup>20</sup>

## **Revolving Loan Funds**

2.30 The SLP I RLF was canceled because of inadequate performance. SLP I aimed to improve the operational efficiency and financial health of microcredit RLFs. These had been created at the soum level under the government of Mongolia NPAP, with United Nations Development Programme support. The program made disbursement to RLFs conditional on performance reviews, which in 2003 identified significant problems. Almost 60 percent of the soums operating RLFs reported recovery rates below 70 percent, with some starting as low as 24 percent. Close to 77 percent of outstanding loans were considered nonperforming. The review deemed that additional support to the RLFs would continue unsustainable microcredit services and could jeopardize the microfinance services provided by commercial banks and nonbank financial institutions. RLFs were therefore canceled from the project, and the \$500,000 initially allocated for the RLFs was reallocated to the MDF.

## **Microfinance Development Fund**

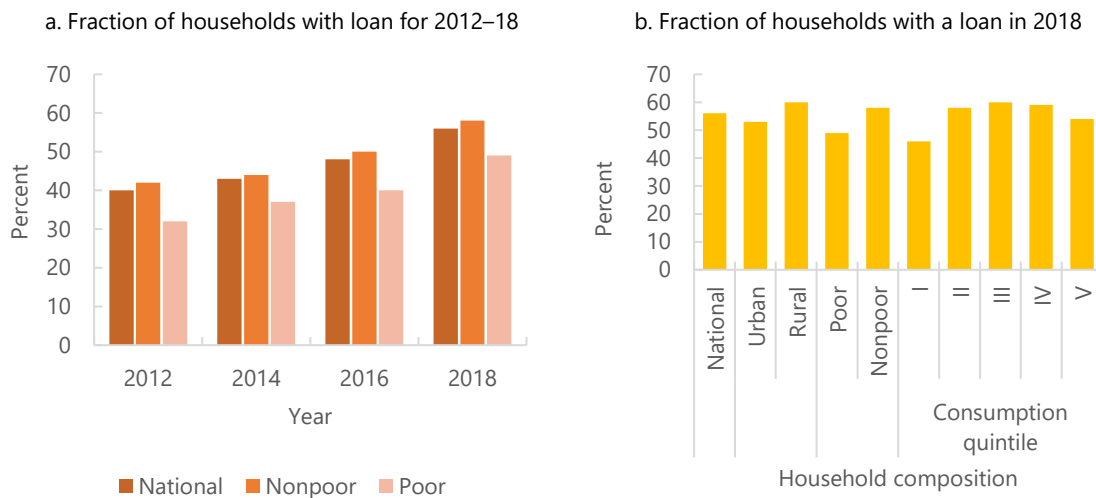
2.31 Through its microfinance interventions, SLP contributed to making loans more accessible to rural Mongolians. SLP contributed to several developments in the rural lending landscape in Mongolia, including (i) the emergence of several well-regarded financial institutions offering microcredit, (ii) enhanced rural access to financial services with reduced collateral requirements, and (iii) a broader range of tailored products offered at lower interest rates because of increased competition. The MDF lent to rural residents through wholesale lending and nonlending services such as financial literacy programs,<sup>21</sup> including through nonbank financial institutions that play a role in reaching nonbankable clients. At the end of SLP II, the microfinance component exceeded its targets by increasing the number of sub-borrowers by 68 percent at the soum level and below (a total of 49,074 sub-borrowers). The incomes of sub-borrowers reportedly increased by 32 percent. Moreover, 99 percent of the participating financial institutions had nonperforming loans less than or equal to 5 percent at the end of the project.

2.32 This investment in lending has led to the MDF becoming an independent legal entity that continues to support and onlend to nonbank financial institutions. The MDF is administered by the Microfinance Development Board, which includes representation

from the Bank of Mongolia, Ministry of Finance, and the Financial Regulatory Commission, among others. It continues to support nonbank financial institutions that have a significant role in the microfinance sector, particularly for beneficiaries with collateral problems. However, their footprint is limited mainly to urban areas because of the high administrative costs of operating in sparsely populated rural areas. This lower engagement in rural lending is contrary to the original aims of SLP. However, the MDF's services remain relevant, given the increased concentration of poverty in urban areas because of significant rural-urban migration.

2.33 SLP contributed to improving financial literacy and inclusion, but poor people still lack access. During SLP I and SLP II, reportedly 53 percent and 48 percent of sub-borrowers, respectively, were classified as poor or low income (World Bank 2008, 2013a). Moreover, according to the Household Socio-Economic Survey,<sup>22</sup> only one in three poor households could access loans in 2012, whereas this figure increased to nearly half of poor people in 2018 (figure 2.3; NSO and World Bank 2020). Pension,<sup>23</sup> salary,<sup>24</sup> and herder loans (see subsection on herder loans) are equally popular across household welfare levels, but mortgage loans are more accessible to the nonpoor (figure 2.4). In 2018, loan size varied from an average of \$1,388 equivalent for the lowest income quintile to up to \$4,256 equivalent for the highest.<sup>25</sup> IEG interviews with rural bank managers found that financial literacy and management had improved over time as rural residents became increasingly familiar with taking and repaying loans.

**Figure 2.3. Access to Loans (2012–18)**



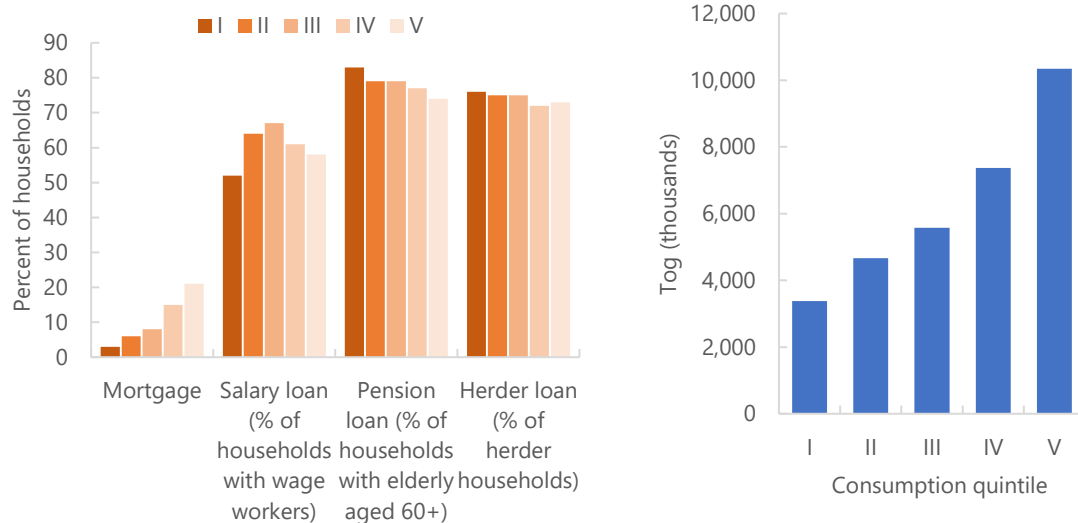
Source: NSO and World Bank 2020, 51.

Note: Consumption quintiles are based on the Household Socio Economic Survey by the National Statistical Office of Mongolia. The consumption aggregate is comprised of five main components: food, non-food, housing, durable goods and energy. I = poorest consumption quintile; V = richest consumption quintile.

2.34 Herder loans—designed by financial institutions to meet pastoralists’ unique needs—have become very popular, but they remain inaccessible to the poorest people (Dyer, Morrow, and Young 2004; NSO and World Bank 2020). Available on terms of up to one year, more than 70 percent of herder households access herder loans (figure 2.4). During socialist times, herders received a state salary throughout the year. Now, herders generate income in two tranches—cashmere sales in spring and summer and meat sales in fall and winter—between which they experience months of cash flow constraints. IEG consultations corroborated the ubiquity of herder loans. However, they also found that poor herder households are unable to access formal loans because they lack sufficient collateral (100 sheep units, at the time of this assessment). Without formal loans—especially in remote areas where nonbank financial institutions are difficult if not impossible to come by—poor households are dependent on support from family, patron-client relationships, costly informal moneylenders, and other traditional livelihood and risk mitigation strategies.<sup>26</sup>

**Figure 2.4. Loan Ownership and Average Loan Amount (2018)**

a. Loan ownership by loan type and consumption quintile, 2018    b. Average loan amount received in the past 12 months, 2018



Source: NSO and World Bank 2020, 51.

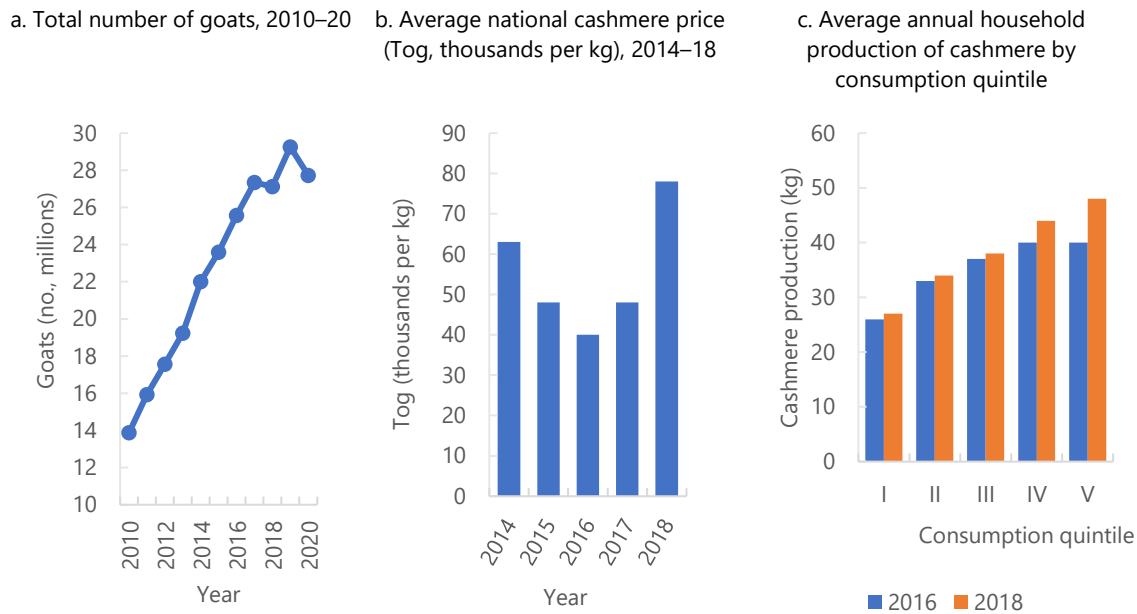
Note: Consumption quintiles are based on the Household Socio Economic Survey by the National Statistical Office of Mongolia. The consumption aggregate is comprised of five main components: food, non-food, housing, durable goods and energy. I = poorest consumption quintile; V = richest consumption quintile. Tog = Mongolian tugrik.

2.35 There is little evidence that SLP-supported loans are enabling livelihood diversification or “exit strategies” from livestock production (World Bank 2002, 12).<sup>27</sup> SLP created the MDF with “the aim of expanding and diversifying livelihood sources and rural incomes” (World Bank 2002, 6). However, credit is used mostly to smooth consumption (for example, for fuelwood, coal, vehicles, medical treatments, weddings,

and lunar new year celebrations) or to purchase pastoral inputs (for example, for additional livestock, wood for animal shelters and fencing, hay, fodder, salt, or going on otor). A notable exception is the use of loans for school fees. Mongolians place a high value on education, which can be viewed as a long-term investment in livelihood diversification, given that students who attain a higher education are less likely to return to herding as their primary pursuit. IEG interviews with local bank managers and herders indicated that most herders were not investing borrowed money in livelihood diversification. While some households did engage in horticulture, this was often for personal consumption and contributed to food security but did not contribute to income diversification. This outcome should be understood within the context of rural Mongolia where limited opportunities for livelihood diversification exist, especially for those who wish to maintain a mobile lifestyle. IEG interviews found that Mongolians who did invest borrowed money in livelihood diversification were those who were already sedentary.

2.36 Limited opportunities for diversification, coupled with increased borrowing, contributes to risk-inducing behaviors among herders. Herder loans, which use livestock as collateral, are primarily reinvested back into livestock activities. This creates a situation where livestock are both the investment and collateral, which leaves herders more vulnerable to unexpected shocks and stresses (including the recurrent risk of dzud, during which hundreds of thousands of animals have historically perished). This is particularly risky when indebted herders have no alternative sources of income. Herders are also vulnerable to market volatility. For example, cashmere has become the most important source of income from livestock, including for poor people. As households have sought to take advantage of lucrative emerging cashmere markets, borrowing likely contributed to the dramatic growth in herding goats (figure 2.5; Maekawa 2013). Indeed, 71 percent of herder income was derived from cashmere in 2018 (NSO and World Bank 2020). However, this increase has resulted in several problematic effects: (i) Herders are moving away from diversified herds, which serve as a form of risk mitigation, and (ii) herders are increasingly exposed to fluctuations in global cashmere prices (Marin 2008). During the 2008 global financial crisis, these risks materialized when cashmere prices collapsed, and a vicious cycle of overindebtedness ensued (Taylor 2016).

**Figure 2.5. The Trends of Cashmere Price and Production (2010–18)**



Source: NSO and World Bank 2020, 47.

Note: Consumption quintiles are based on the Household Socio Economic Survey by the National Statistical Office of Mongolia. The consumption aggregate is comprised of five main components: food, non-food, housing, durable goods and energy. I = poorest consumption quintile; V = richest consumption quintile. Tog = Mongolian tughrig.

## Index-Based Livestock Insurance

2.37 SLP I developed an IBLI program as part of its multipronged strategy to reduce herder vulnerability to dzud, drought, and other weather-related events. During the SLP I Mid-Term Review, it was decided that IBLI would proceed as a self-standing project, which the Board of Executive Directors approved in May 2005. Since the insurance mechanism stemmed from SLP's development objective and intervention logic, and the product was designed under SLP, this assessment includes pertinent results and lessons from IBLI's implementation.

2.38 IBLI was appropriately designed to segment and cover covariant risk in the pastoral economy, and it has helped herders recover faster from dzud. IBLI's design ensured that each risk layer is financed by the most appropriate stakeholder by using a combination of self-insurance, market-based insurance, and a social safety net (table 2.1). It relies on a mortality rate index, by species, at the soum level. Herders cover livestock mortality below the soum-level aggregate of 6 percent, as such smaller losses are not expected to affect their viability. IBLI transfers the risk of losses between 6 percent and 30 percent to a pool of domestic and international private insurance companies (eight companies as of 2016). By securing international reinsurers, IBLI facilitates the transfer of livestock mortality risk out of the country. Catastrophic losses above 30 percent, such



as those that may occur during a major dzud, are borne by the Mongolian state. A rigorous quantitative analysis of the impact of IBLI on herder livelihoods by Bertram-Huemmer and Kraehnert (2018) demonstrated that two years after the 2010 dzud, insured households owned between 22 percent and 27 percent more livestock. The positive effect of indemnity payments remained visible, although less pronounced, three and four years after the disaster. Payouts also helped herders avoid selling and slaughtering animals, thus smoothing their productive asset base and sparing households from going into debt to purchase new livestock.

**Table 2.1. Index-Based Livestock Insurance Risk Layers**

Soum-Level Livestock Losses (%)	Covered by
>30	Government of Mongolia
6–30	Private insurance companies
0–6	Herders

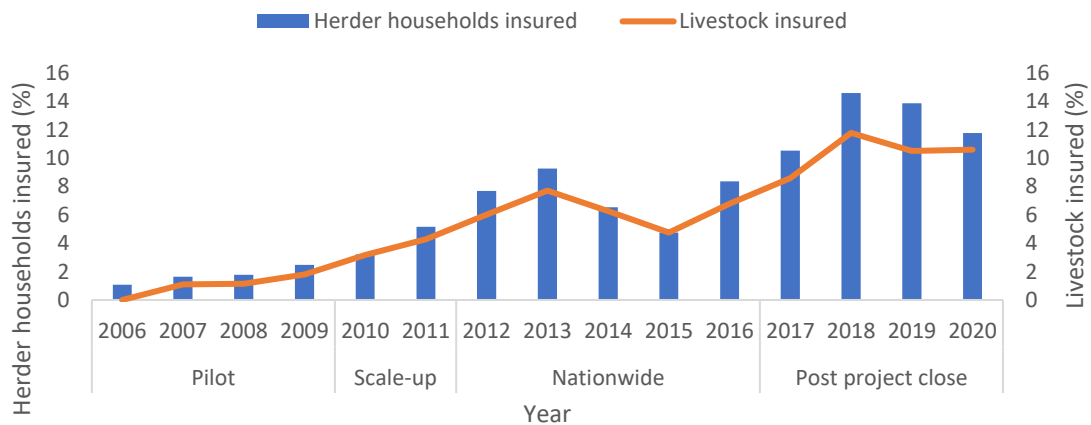
*Source:* Independent Evaluation Group.

2.39 The IBLI project appropriately shifted its focus to developing a legal framework to ensure IBLI continuity while delegating sales to local insurance companies, but this transition remains incomplete. The IBLI law, which was successfully passed by an act of parliament in June 2014, resulted in the establishment of the Agricultural Reinsurance Joint Stock Company (AgRe) to take over IBLI operations. The IBLI law mandates AgRe to be managed as a public-private partnership. However, private sector participation is lacking, and thus AgRe is essentially a publicly owned company regulated as a private company. AgRe presently offers only one livestock insurance product, IBLI, with a fixed set of premiums. Consequently, even though several insurance companies sell IBLI, there is limited efficiency, market innovation, and growth potential. Notwithstanding the legal hurdles, consultations indicate that insurance companies lack the resources and capacity to adjust premiums or diversify products. This may be a missed opportunity, as IEG recorded herder demand for individual products covering production losses and animal disease.

2.40 Although initially successful, limited uptake and coverage undermines IBLI's effectiveness as a national risk reduction tool. The IBLI project effectively increased uptake during project implementation in the aftermath of dzud losses (1999–2001, 2010, and 2015–16) and because of aggressive marketing and linking insurance purchases with reduced interest rates on herder loans. IBLI reached its peak uptake in 2018, with 15 percent of herder households purchasing livestock insurance (figure 2.6). However, incomplete insurance is common, with herders only purchasing insurance for a share of their livestock (Bertram-Huemmer and Kraehnert 2018). Moreover, only 12 percent of Mongolia's livestock was insured at IBLI's highest coverage rate in 2018. This is despite 85 percent of herders reporting awareness of IBLI and 56 percent having received

information from project public awareness teams (World Bank 2016). Indeed, maintaining awareness and uptake levels is challenging because insurance companies lack the resources to continue the level of widespread marketing campaigns made possible by project financing. In reality, most index-based insurances struggle with low uptake (Binswanger-Mkhize 2012; Carter et al. 2014; Miranda and Farrin 2012).

**Figure 2.6. Percentage of Herder Households Insured and Percentage of Livestock Insured between 2006 and 2020**



Sources: National Statistics Office of Mongolia database; Independent Evaluation Group calculations; Ulziibold et al. 2015.

2.41 Low uptake is partly because herders prefer to rely on traditional risk mitigation strategies in the face of affordability constraints and low perceived incentives. Low uptake may be explained in part by the fact that insurance mechanisms are not part of herders' traditional risk mitigation strategies such as seasonal mobility, storage, and reciprocity (discussed in previous sections). In addition, herders might not be able to afford insurance premiums, or they perceive the opportunity cost of spending sparse cash on insurance as too high (most herders receive cash only twice a year during cashmere and meat sales; Mahul and Skees 2007). IEG also learned that some herders believe that purchasing insurance is a bad omen that could lead to bad luck. Some herders also expressed discontent that IBLI only compensates them for losses if the soum-level mortality rate reaches the indexed benchmark. Consultations indicate that dzud effects can differ widely, even within the same soum, leading to low trust in the system by those who purchase insurance but fail to receive a payout despite significant individual losses. Lastly, as major dzud events and associated payouts become more distant memories, perceived incentives to continue paying decrease over time. Both the 2010 and 2015–16 dzud prompted initial increases in uptake, but coverage once again declined after a few years (figure 2.7).

2.42 IBLI may be inadvertently aggravating pastureland degradation and contributing toward existing inequalities among the herding population. An independent impact evaluation carried out in 2014 found that average herd size increased by 24 percent for insured herders and by 19 percent for uninsured herders over the study period (World Bank 2016). This 5 percentage point difference can be seen as a positive outcome of IBLI. However, it also indicates that IBLI does not change and perhaps even exacerbates existing dynamics that encourage herd expansion to unsustainable levels, which is contrary to project assumptions.<sup>28</sup> Furthermore, IBLI claims to incentivize herders to minimize the impacts of weather-related events by basing payouts on local mortality rates instead of individual losses (Mahul and Skees 2007). However, most of the livestock value insured (82 percent) belongs to large herders, who are inherently better positioned to avoid dzud losses. A herder's success in averting dzud losses is not only a consequence of their hard work or entrepreneurial grit but also of their preexisting wealth and social hierarchies. These characteristics can influence (i) adaptive capacities such as buying fodder and going on otor and (ii) access to resources such as pasture, campsites, shelter, wells, and veterinary services (Murphy 2014). Smaller herders often only purchase insurance for a small share of their herd, which limits the effectiveness of their participation (Taylor 2016).

2.43 IBLI has been successful in transferring risk from government to the private sector, but a major dzud could compromise IBLI's financial viability and sustainability. Without livestock insurance, there is a large, implicit contingent liability on the government to respond during a dzud, causing budget volatility, hampering budget planning, and resulting in the reallocation of resources away from other investments. IBLI has been successful in transferring some of this contingent liability from government to the private sector (World Bank 2016). However, a major dzud could undermine IBLI's financial viability. Despite selecting low-risk pilot sites, the program ran losses in 2008/09. The large number of indemnity payments that were triggered by the 2010 dzud, which exceeded insurance fees by 659 percent, exhausted the IBLI fund. Additional support was necessary because the required government funds were lacking, and 84 percent of the losses were financed by the World Bank's contingent credit line (Bertram-Huemmer and Kraehnert 2018; Taylor 2016). As described above in table 2.1, catastrophic losses above 30 percent, common during major dzuds, are covered by the state. Although reforms aimed at reducing the state's liability were introduced, experience to date suggests that another dzud could again put a significant fiscal burden on the Mongolian state. Simultaneously, the implicit contingent liability on the government persists for the approximately 85 percent of herders who remain uninsured.

## Community Initiatives

2.44 SLP successfully implemented a CDD approach to fostering community empowerment in rural service delivery. Through the Local Initiatives Fund, SLP I piloted community participation in the identification and implementation of local development investments. Under SLP II, the renamed CIF was scaled nationally. By 2013, SLP I and SLP II had financed 6,795 subprojects prioritized by local communities.<sup>29</sup> The SLP II completion report concluded that (i) 53 percent of bag citizens were participating in bag meetings where CIF priorities are discussed, (ii) 90 percent of citizens agreed that CIF investments aligned with their priorities, and (iii) 87 percent of citizens were satisfied with the mechanisms and outcomes of CIF subprojects. Furthermore, the State Inspection Professional Agency evaluated all public facility improvement subprojects and accepted them as good quality.

2.45 A major contribution of SLP was the passage of the Integrated Budget Law (IBL) in 2011. Although the drive for fiscal decentralization stalled during SLP I,<sup>30</sup> the IBL institutionalized SLP's approach to community-led development. Amid high economic and public revenue growth from the mining boom (56 percent in 2011), the IBL addresses many shortcomings of previous fiscal decentralization attempts—for example, unclear responsibilities among government levels, low subnational capacity, lacking framework for allocation, and dependence on ad hoc state transfers (World Bank 2015). Through its formula-driven allocation mechanism, the IBL and its LDF significantly enhanced the role of local authorities in social service delivery. It clearly defines the budgeting principles, system, and flows; and the composition, classification, authorities, and responsibilities of the various government levels, awarding more discretion to lower levels that now receive earmarked transfers. Eligible expenditures include rural services such as health and education, and pasture-related investments that aim to enhance risk management and protect pastureland.

2.46 The drafting and adoption of the IBL were achieved through protracted SLP engagement with reform champions in the client government. Through the community initiatives component over two phases of project implementation, SLP demonstrated to the client a comprehensive blueprint for fiscal decentralization and increased citizen engagement in rural development. Although the approach was initially confined to the project, a change in government and increased political demand for community-owned development enabled SLP to work closely with reform champions within the client government to craft the IBL. Thus, SLP achieved high sustainability by having its approach enshrined in national law.

2.47 Legislating community agency in the prioritization of rural investments was an important SLP achievement in postsocialist Mongolia, and remaining gaps in local

government capacity present opportunities for SLP III. The IBL explicitly specifies that LDF allocations must be used per citizen priorities identified through a robust community participation process, which constituted a major step in formalizing citizen empowerment. The IBL also recognizes the need for a formula-driven intergovernmental transfer mechanism—the LDF—because local governments lack significant own revenue bases.<sup>31</sup> However, limitations of the IBL and LDF remain, which present opportunities for SLP III. For example, the IBL does not provide incentives for improved local government performance, nor does it address capacity-building needs. Indeed, there is currently no system for assessing local government performance in Mongolia. In response to these gaps, SLP III is directly linked to the LDF’s institutional mechanism,<sup>32</sup> for which it is developing and institutionalizing a participatory monitoring and evaluation system while building local government implementation capacity. At SLP III approval, the political commitment was strong. However, there are risks that this could waver, as it did in previous decentralization attempts, if the initiatives are deemed unsuccessful or if development objectives shift.

2.48 SLP I underestimated the time and resources needed to foster community participation and trust. The SLP I completion report acknowledged that the resource intensity of implementing CDD was initially underestimated and that promoting community participation requires significant mobilization, training, and learning by doing. SLP I and SLP II beneficiary survey results point to the importance of strong engagement to ensure confidence in the CDD process. For example, the SLP I completion report stated that a 2006 study found that only “37 percent of respondents felt that selection processes were transparent, open and fair” (World Bank 2008). Similarly, the SLP II completion report indicated that some respondents believed that they were insufficiently engaged in the bidding and contractor selection process. These are important lessons for SLP III, which continues to finance the LDF.

2.49 The direct impact of SLP II’s community investments cannot be ascertained because the ex post cost-benefit analysis lacked rigor. Under SLP II’s community initiatives component, 5,066 subprojects were financed to the benefit of an estimated 1,361,008 people at a total cost of 34.6 billion Mongolian tughriks (\$19.8 million equivalent; World Bank 2013).<sup>33</sup> These community subprojects encompassed a wide array of social services such as schools, hospitals, and infrastructure. Although the community initiatives succeeded in increasing soum capacity and strengthening local democracy, the impact of the subprojects is unclear. An ex post cost-benefit analysis was conducted for only 16 projects. The study found an average economic rate of return of 33 percent. However, the sample was very small, and no information was provided on how the sampled projects were selected. Overall, this makes it impossible to ascertain

the true impact of the community initiatives component (beyond its governance and satisfaction indicators).

### 3. Lessons

3.1 Sustained engagement in CDD, combined with positive political momentum and internal champions, can lead to legal and regulatory changes that support sustainability of the mechanism. Through its three-phased approach, SLP demonstrated to the client a comprehensive blueprint for fiscal decentralization and increased citizen engagement in rural development. When sufficient domestic demand materialized, this groundwork and consistent cooperation with the client government and reform champions within resulted in SLP having a transformative effect—that is, the passage of the IBL that formalized SLP’s CDD model. This illustrates how a strong demonstration effect can lead to positive governance changes, which, if enshrined in national law, can achieve a high sustainability.

3.2 In environments where there is an increasing and unsustainable pressure on the natural resource base, the vulnerability of resource users cannot be reduced successfully without comprehensively addressing the drivers of resource degradation. Although SLP’s support for community-based pasture management was highly relevant, it was ultimately ineffective in addressing pasture degradation. The project could have benefited from a better and evolving understanding of the complex vulnerabilities of resource users and the underlying governance, market, and sociocultural factors driving degradation, which changed significantly during the life of the project as Mongolia transitioned into a market economy. SLP’s community-based pasture management intervention was not backed with sufficient complementary governance (for example, dialogue, national-level policy, enforcement, and so on) and market support to manage rising livestock numbers and curb overgrazing. Without such measures, the incentive system leading to overstocking remained intact, leaving both degradation and vulnerability reduction results at risk of being nullified by the continued decline of pasture health.

3.3 Ensuring social inclusion is key in the implementation of group-based interventions to avoid unintended consequences, such as exacerbating distributional inequities or free-rider problems. SLP’s interest-based approach to herder group formation was found, in some cases, to reinforce resource access issues. Socially marginalized individuals lost out on accessing quality productive resources because group-based activities inadvertently reinforced informal power relations and existing disparities. Alternatively, the engagement of poor resource users without the active involvement of wealthier resource users led to free-rider problems when those with the

largest herds and impact on pasture degradation did not participate. In the case of group-based activities, vigilance and careful targeting are required to avoid such results, along with sufficient support to foster genuine collective action, which can help address potential exclusionary effects and free-rider problems. Alternative options include using a spatial approach, which endeavors to include all resource users within a geographic area, or smaller socially or kinship-based groups. While there are invariably pros and cons to these alternatives, it is paramount that limitations are assessed and mitigative measures are determined when designing group-based interventions.

3.4 Risk forecasting and early-warning systems may not be sustained if the technology is incompatible with or not embedded in local institutions. The SLP-financed LEWS ultimately became disused and ineffective because it was not embedded successfully in local institutions and used technologically incompatible systems. It lacked the coproduction and institutional strengthening necessary to (i) mitigate technological incompatibilities, (ii) build sufficient capacity to operate and maintain the system, and (iii) foster local ownership. Without adequate attention to such measures, risk forecasting or early-warning systems are unlikely to achieve sustainability.

3.5 Increasing the availability of rural finance does not automatically lead to livelihood diversification and may contribute to additional livelihood vulnerability in high-risk sectors. Although SLP was successful in contributing to the market penetration of rural financial services, the expected livelihood diversification did not occur. The implication is that beneficiary decisions on livelihood activities are guided by a multitude of factors (for example, social, economic, contextual, and so on), of which access to credit is just one. These factors were not sufficiently addressed with appropriate complementary activities to support alternative livelihoods. Lacking livelihood diversification, coupled with increased borrowing for high-risk activities, may have contributed to an increase in herder vulnerability. This further demonstrates the need for a comprehensive understanding of the drivers of vulnerability and the barriers to livelihood diversification.

3.6 Efforts to implement index-based insurance programs should thoroughly assess factors that will determine feasibility and sustainability, including the appetite for insurance within the target customer base. IBLI uptake was limited because of several socioeconomic factors. For example, herder households may be opting to rely on existing risk mitigation strategies or they may not perceive the benefit of using sparse resources to purchase insurance. Even though IBLI uptake was successfully increased through extensive and costly project-financed marketing efforts, the expected traction and insurance coverage have not been maintained postproject. Rigorous market and anthropological research at the initial stages is needed to understand whether sufficient insurance demand can be cultivated within the existing socioeconomic environment.



3.7 A mismatch between project ambition and support can impair the provision of sufficient capacity building needed for desired behavior change and long-term outcomes. SLP I and SLP II were ambitious projects whose financial and human resources were spread very thin after SLP's rapid scale-up to the national level. Except for the CDD component, SLP lacked the required resourcing and institutional support necessary to achieve the desired outcomes, which contributed to many of its shortcomings. Long-term and frequent capacity building is needed for institutions and communities to reinforce key skills and knowledge and to engender ownership and genuine community engagement. Community-based interventions and desired behavior change require a strong local presence with effective backstopping and oversight from the national level. Intensive but one-off training is less efficient, not least because staff turnover can be high at the local level.

---

<sup>1</sup> "Project design therefore incorporates the strategic choice that support for livestock-based livelihoods be enhanced through initiatives in risk management; while parallel support for 'exit strategies' and livelihood diversification for those who would prefer to make a living by means other than pastoral livestock production also be provided, through micro-finance outreach and associated technical assistance, and support for community-level investments in the infrastructure needed for private-sector led growth" (World Bank 2002, 12).

<sup>2</sup> "The risk forecasting, preparedness and response planning subcomponent suffered from delays for almost two years after effectiveness due to protracted signing of contracts with an NGO [nongovernmental organization] to support the development of the Livestock Early Warning System (LEWS). The implementation of the pasture land management, tenure and use and demonstrating good practice in pastoral livelihood improvement, delayed considerably. This was also related to procurement as the tendering process for major technical assistance (TA) contract to provide support to pastureland planning and demonstration areas prolonged" (World Bank 2013a, 8).

<sup>3</sup> Since July 2021, the government of Mongolia has implemented a tax on livestock ownership, the revenue of which should be directed to rangeland and livestock management activities. Although a noteworthy development, successfully implementing and enforcing this law will require substantial political will and local governance capacity. As of now, it is too early to tell whether it will prove effective in incentivizing smaller herds and facilitating rangeland recovery.

<sup>4</sup> Exchange rate effective November 18, 2013: \$1.00 = 1,748 Mongolian tugriks (Tog; World Bank 2013a).

<sup>5</sup> Rangeland degradation entails changes in plant communities, biodiversity, productivity, and in severe cases, soil structure and fertility away from reference conditions expected for a particular agroecological zone (Jamsranjav et al. 2019).

<sup>6</sup> "The risk forecasting, preparedness and response planning subcomponent suffered from delays for almost two years after effectiveness due to protracted signing of contracts with an NGO

---

[nongovernmental organization] to support the development of the Livestock Early Warning System (LEWS). The implementation of the pastureland management, tenure and use and demonstrating good practice in pastoral livelihood improvement, delayed considerably. This was also related to procurement as the tendering process for major technical assistance (TA) contract to provide support to pastureland planning and demonstration areas prolonged” (World Bank 2013a, 8).

<sup>7</sup> Sharing pastures can facilitate the survival of herders escaping harsh conditions, but it can also increase the exposure and overall vulnerability of communities hosting *otor* (seasonal long-distance migration) herds.

<sup>8</sup> According to the Sustainable Livelihoods Program (SLP) phase I completion report, pasture maps developed included “(i) base map, by winter-spring and summer-autumn seasons (scale 1:100.000); (ii) pasture stocking rate map by 4 seasons and by annual means (5 separate maps differently scaled, depending on the size of *soum* [district] territory); (iii) well mapping with surrounding areas; (iv) seasonal pasture division map; (v) current stocking density map; and (vi) estimated carrying capacity mapping” (World Bank 2008, 30).

<sup>9</sup> As of 2018, there were 1,516 monitoring sites representing all *bags* (subdistricts) in Mongolia. *Soum* officers collect the primary data yearly. *Aimag* (province) staff ensure quality control and enter the monitoring data into the National Rangeland Monitoring Database.

<sup>10</sup> In 2016, according to the classification by degradation level, 42.4 percent of sites were in a nondegraded state, 13.5 percent were slightly degraded, 21.1 percent were moderately degraded, 12.8 percent were heavily degraded, and 10.3 percent were fully degraded. Compared with conditions in 2014, the proportion of sites that were heavily to fully degraded increased by 5.9 and 4.3 percentage points, respectively.

<sup>11</sup> The national legislative and policy framework broadly underscores the importance of pastoral resources and livelihoods, including through (i) constitutional protection of land as public property to be managed by communities as common property and (ii) the Land Law, which allows local governments to set and enforce stocking rates, grazing reserves, and seasonal movements.

<sup>12</sup> The most recent draft was produced in late 2019; however, progress in introducing it to parliament stalled likely because of the June 2020 national elections.

<sup>13</sup> Mongolia’s livestock sector has grown prolifically from 25 million animals at economic liberalization in 1992 to 70 million animals in 2019, albeit at the cost of pastoral mobility and a rise in localized congestion (for example, near *soum* and *aimag* centers), overgrazing, and conflict over pasture (Gao et al. 2015).

<sup>14</sup> In recent years, there have been some initiatives oriented toward sustainability certification for livestock production, such as the Sustainable Fibre Alliance, and initiatives by the Wildlife Conservation Society, Swiss Agency for Development Cooperation, and Agronomes et Vétérinaires Sans Frontières.

---

<sup>15</sup> The Livestock and Agricultural Marketing Project (2013) and Livestock Commercialization Project (2019) have aimed to improve livestock competitiveness, while continuing to support pastoral herder group capacity building regarding sustainable livestock production and associated policy reforms to further incentivize herders to prioritize quality over quantity.

<sup>16</sup> In total, 313 nongovernmental organizations were established and registered, with 6,313 members from 2,532 households; 42 cooperatives and 189 informal herder groups were strengthened (World Bank 2008, 31).

<sup>17</sup> Examples include the Swiss Agency for Development and Cooperation Green Gold Project that used a territorial approach; and the United Nations Development Programme, German Agency for International Cooperation, and United States Agency for International Development groups that were high performers in terms of social outcomes (for example, achieving desired behavior change and fostering genuine and endogenous collective action; Ulambayar and Fernández-Giménez 2019).

<sup>18</sup> Most Mongolians are apprehensive about fencing, which clashes with their values of common land ownership and nomadic mobility.

<sup>19</sup> The climate data were up to date at the time of this assessment but not the forage forecast maps. However, the climate maps are not granular and consequently are of limited use to herders. The climate maps are also courtesy of the International Research Institute for Climate and Society at Columbia University, thus not produced by LEWS.

<sup>20</sup> P088816 and P115119: Index-Based Livestock Insurance Project (2005–16).

<sup>21</sup> By the end of SLP I, approximately \$7.13 million had been allocated to the participating financial institutions as wholesale loans, from which \$17.0 million was onlent to rural residents (World Bank 2008, 15). During the SLP II, the Microfinance Development Fund instrument disbursed Tog 24 billion wholesale loans to participating financial institutions, of which Tog 4.5 billion went to nonbank financial institutions and Tog 19.6 billion went to commercial banks (World Bank 2013a, 33). The US dollar to Tog exchange rate on June 30, 2013 (at project close) was Tog 1437.50; <https://freecurrencyrates.com/en/exchange-rate-history/USD-MNT/2013/yahoo>.

<sup>22</sup> The Household Socio-Economic Survey (HSES) is representative of the nation, region, urban and rural areas, residential location, and *aimags*. It was enumerated in 320 soums and 9 districts of Mongolia. In total 16,488 households were randomly selected for the HSES 2018. The list of all households of Mongolia or the list of households registered in the population and households' database at the National Statistics Office of Mongolia was used for HSES as a sampling frame. The sample size is estimated at 95 percent confidence level; the probability of error is 1.5 percent, key parameter  $p = 0.33$ , and the design effect is  $deff = 3$ , and the sample size was taken proportionally throughout the 12-month period of the survey.

<sup>23</sup> Pension loans allow pensioners to borrow up to six times their monthly pension, which is automatically deducted from future payments. These loans enable pensioners to control their cash flow and serve as an alternative to borrowing from the informal sector (Dyer, Morrow, and Young 2004).

---

<sup>24</sup> Borrowers can borrow up to seven times their monthly salary for a term of up to one year. Loan payments are made directly through a deduction from their regular salary (Dyer, Morrow, and Young 2004).

<sup>25</sup> Average US dollar to Tog exchange rate in 2018: Tog 2431.1129.

Source: <https://www.exchangerates.org.uk/USD-MNT-spot-exchange-rates-history-2018.html>.

<sup>26</sup> Comprehensive data on informal sector borrowing trends and behaviors were not found.

<sup>27</sup> “Project design therefore incorporates the strategic choice that support for livestock-based livelihoods be enhanced through initiatives in risk management; while parallel support for ‘exit strategies’ and livelihood diversification for those who would prefer to make a living by means other than pastoral livestock production also be provided, through micro-finance outreach and associated technical assistance, and support for community-level investments in the infrastructure needed for private-sector led growth” (World Bank 2002, 12).

<sup>28</sup> The economic and financial analysis in the Index-Based Livestock Insurance Project Appraisal Document indicated among its “with-project assumptions” that “herders use IBLI [Index-Based Livestock Insurance] as their main means for risk mitigation instead of an ever-increasing herd size. Thus, it is assumed that the ‘with-project’ herder will start with an initial herd size of 200 animals in 1993, but will limit the herd size to 225 animals in each of the following years” (World Bank 2005, 50).

<sup>29</sup> Under SLP I and SLP II, the fund financed 1,729 and 5,066 subprojects, respectively. In the education sector, the fund rehabilitated and equipped school dormitories, kindergartens, and cultural centers. In the health sector, hospitals and maternal homes were also rehabilitated and equipped, in addition to the provision of ambulances and motorbikes for bag doctors. Other activities undertaken were rehabilitating public bath houses, potable wells, roads, bridges, and small business centers.

<sup>30</sup> The SLP I completion report noted that “one major factor within the government control was a reversal from fiscal decentralization policy. While the Public Sector Financial Management Law of 2002 has streamlined budgeting procedures, limited fiscal resources of the government in fact reversed even the existing degree of decentralization. At midterm, it was decided to modify the sub-component and refocus it to enhance state-citizen engagement in fiscal decision making, transparency and accountability” (World Bank 2008, 9).

<sup>31</sup> Because of low local revenue levels, local governments were heavily dependent on central government transfers (which represented 70 percent of subnational revenue from 1990 to 2002) to finance their education, health, and public service delivery (World Bank 2015).

<sup>32</sup> The community-driven development activities in SLP I and SLP II were project based, whereas the SLP III directly supports the government’s fiscal transfer mechanism (that is, the Local Development Fund) and the associated institutional framework.

<sup>33</sup> Exchange rate effective November 18, 2013: \$1.00 = Tog 1,748 (World Bank 2013a).

## Glossary

Aimag	A province—that is, the first administrative division of Mongolia.
Bag	A subdistrict—that is, the third and lowest administrative and territorial unit in Mongolia (soums are divided into bags).
Dzud	Summer drought followed by a severe winter, generally causing serious loss of livestock; extreme weather events or conditions that can be caused by sudden heavy snowfall, long-lasting or frequent snowfall, extreme cold, or storms that cause often massive livestock deaths from hunger, exhaustion, and cold. Mongolian herders distinguish different types of dzud caused by snow, cold, ice, lack of grass because of drought in previous year, or combinations of these.
Otor	Long-distance migration of Mongolian herders, typically in autumn, to fatten livestock for winter.
Soum	A district—that is, the second administrative and territorial unit in Mongolia (an aimag is divided into soums).

# Bibliography

- Agrawal, A. 2008. *The Role of Local Institutions in Adaptation to Climate Change*. Washington, DC: World Bank. <https://openknowledge.worldbank.org/handle/10986/28274>.
- Angerer, J. P. 2012. "Gobi Forage Livestock Early-Warning System." In *Conducting National Feed Assessments*, edited by Coughenour, M. B., and H. P. S. Makkar, vol. 15, 115–30. Rome, Italy: Food and Agriculture Organization of the United Nations.
- Baival, B., and M. E. Fernández-Giménez. 2012. "Meaningful Learning for Resilience-Building among Mongolian Pastoralists." *Nomadic Peoples* 16 (2): 53–77.
- Bao, G., Z. Qin, Y. Bao, Y. Zhou, W. Li, and A. Sanjjav. 2014. "NDVI-Based Long-Term Vegetation Dynamics and Its Response to Climatic Change in the Mongolian Plateau." *Remote Sensing* 6 (9): 8337–58.
- Batima, P., 2006. "Climate change vulnerability and adaptation in the livestock sector of Mongolia". *International START Secretariat: Washington DC*.  
[https://sedac.ciesin.columbia.edu/aiacc/progress/FinalRept\\_AIACC\\_AS06.pdf](https://sedac.ciesin.columbia.edu/aiacc/progress/FinalRept_AIACC_AS06.pdf)
- Batima, P., B. Bat, and Ts. Tserendorj. 2006. "Evaluation of Adaptation Measures for Livestock Sector in Mongolia." *Assessments of Impacts and Adaptations to Climate Change (AIACC) Working Paper 41*, AIACC, Washington, DC.  
[https://www.betterevaluation.org/sites/default/files/eval\\_adap\\_measures.pdf](https://www.betterevaluation.org/sites/default/files/eval_adap_measures.pdf).
- Bertram-Huemmer, V., and K. Kraehnert. 2018. "Does Index Insurance Help Households Recover from Disaster? Evidence from IBLI Mongolia." *American Journal of Agricultural Economics* 100 (1): 145–71.
- Binswanger-Mkhize, H. P. 2012. "Is There Too Much Hype about Index-based Agricultural Insurance?" *The Journal of Development Studies* 48 (2):187–200.
- Boyer, D., and J. Dyer. 2003. "The Agricultural Bank of Mongolia: From Insolvent State Bank to Thriving Private Bank." Presented at the United States Agency for International Development conference "Paving the Way Forward for Rural Finance: An International Conference on Best Practices," Washington, DC, June 2–4.
- Brown, C. G., ed. 2020. *Common Grasslands in Asia: A Comparative Analysis of Chinese and Mongolian Grasslands*. Cheltenham, UK: Edward Elgar Publishing.
- Carter, M., A. de Janvry, E. Sadoulet, and S. Alexandros. 2014. "Index-Based Weather Insurance for Developing Countries: A Review of Evidence and a Set of Propositions for Up-Scaling." *Development Policies Working Paper 111*, Foundation for Studies and Research on International Development, Clermont-Ferrand, France.

- Densambuu, B., S. Sainnemekh, B. Bestelmeyer, and U. Budbaatar. 2018. *National Report on the Rangeland Health of Mongolia: Second Assessment*. Ulaanbaatar, Mongolia: Green Gold Animal Health Project, Swiss Agency for Development and Cooperation, and Mongolian National Federation of Pasture User Groups.
- Dyer, J., Morrow P., and R. Young. 2004. "The Agricultural Bank of Mongolia." In *Scaling up Poverty Reduction: Case Studies in Microfinance*, 27–45. Washington, DC: Consultative Group to Assist the Poor and World Bank.
- Fan, P., Chen, J. and John, R., 2016. "Urbanization and environmental change during the economic transition on the Mongolian Plateau: Hohhot and Ulaanbaatar". *Environmental research*, 144, pp.96-112.
- Fernández-Giménez, M. E. 2002. "Spatial and Social Boundaries and the Paradox of Pastoral Land Tenure: A Case Study from Postsocialist Mongolia." *Human Ecology* 30 (1): 49–78. <https://doi.org/10.1023/A:1014562913014>.
- Fernández-Giménez, M. E., G. R. Allington, J. Angerer, R. S. Reid, C. Jamsranjav, T. Ulambayar, K. Hondula et al. 2018. "Using an Integrated Social-Ecological Analysis to Detect Effects of Household Herding Practices on Indicators of Rangeland Resilience in Mongolia." *Environmental Research Letters* 13 (7): 075010.
- Fernández-Giménez, M. E., B. Batjav, and B. Baival. 2012. *Lessons from the Dzud: Adaptation and Resilience in Mongolian Pastoral Social-Ecological Systems*. Washington, DC: World Bank.
- Fernández-Giménez, M. E., B. Batkhishig, B. Batbuyan, and T. Ulambayar. 2015a. "Lessons from the Dzud: Community-Based Rangeland Management Increases the Adaptive Capacity of Mongolian Herders to Winter Disasters." *World Development* 68 (April): 48–65.
- Fernández-Giménez M. E., S. R. Fassnacht, B. Baival, and D. Wilson, eds. 2015b. *Proceedings of Building Resilience of Mongolian Rangelands: A Trans-Disciplinary Research Conference*, Ulaanbaatar, Mongolia.
- Fernández-Giménez, M. E., N. H. Venable, J. Angerer, S. R. Fassnacht, R. S. Reid, and J. Khishigbayar. 2017. "Exploring Linked Ecological and Cultural Tipping Points in Mongolia." *Anthropocene* 17 (March): 46–69.
- Fernández-Giménez, M. E. 2020. "Key Issues Affecting Rangeland Health, Herder Livelihoods and Well-Being in Rural Mongolia and Evidence of Successful Development Interventions." Briefing Paper, Independent Evaluation Group, World Bank, Washington, DC.
- Gao, W., J. P. Angerer, M. E. Fernández-Giménez, and R. S. Reid. 2015. "Is Overgrazing a Pervasive Problem across Mongolia? An Examination of Livestock Forage Demand and Forage Availability from 2000 to 2014." In *Proceedings of Building Resilience of Mongolian Rangelands: A Trans-Disciplinary Research Conference*, edited by M. E. Fernández-Giménez, S. R. Fassnacht, B. Baival, and D. Wilson, 35–41. Ulaanbaatar, Mongolia: Nutag Action and Research Institute.



- Hessl, A. E., K. J. Anchukaitis, C. Jelsema, B. Cook, O. Byambasuren, C. Leland, B. Nachin et al. 2018. "Past and Future Drought in Mongolia." *Science Advances* 4 (3).
- Himmelsbach, R. 2012. "Collaborative Pasture Management: A Solution for Grassland Degradation in Mongolia?" In *Change in Democratic Mongolia: Social Relations, Health, Mobile Pastoralism, and Mining*, edited by J. Dierkes, 165–93. Leiden, The Netherlands: Brill.
- Ichinkhorloo, B., and E. D. Thrift. 2015. "Who Eats Quality Meat? Consumers and the National Meat Reserves Program in Mongolia." *Health Environment* 1: 1–15.
- IMF (International Monetary Fund). 2019. "Article IV Consultation: Mongolia." IMF Country Report 19/297, International Monetary Fund, Washington, DC.
- Johnsen, K. I., M. Niamir-Fuller, A. Bensada, and A. Waters-Bayer. 2019. *A Case of Benign Neglect: Knowledge Gaps about Sustainability in Pastoralism and Rangelands*. Nairobi and Arendal, Norway: United Nations Environment Programme and GRID-Arendal.
- Johnson, D. A., D. P. Sheehy, D. Miller, and D. Damiran. 2006. "Mongolian Rangelands in Transition." *Science et Changements Planétaires/Sécheresse* 17 (1): 133–41.
- Maekawa, A. 2013. "The Cash in Cashmere: Herders' Incentives and Strategies to Increase the Goat Population in Post-Socialist Mongolia." In *The Mongolian Ecosystem Network*, edited by N. Yamamura, N. Fujita, and A. Maekawa, 233–45. Tokyo: Springer Japan.
- Mahul, O., and J. Skees. 2007. "Managing Agricultural Risk at the Country Level: The Case of Index-Based Livestock Insurance in Mongolia." Policy Research Working Paper 4325, World Bank, Washington, DC.
- Marin, A. 2008. "Between Cash Cows and Golden Calves: Adaptations of Mongolian Pastoralism in the 'Age of the Market.'" *Nomadic Peoples* 12 (2): 75–101.
- Mearns, R. 2004. "Decentralization, Rural Livelihoods, and Pasture-Land Management in Post-Socialist Mongolia." *The European Journal of Development Research* 16 (1): 133–52.
- Miranda, M. J., and K. Farrin. 2012. "Index Insurance for Developing Countries." *Applied Economic Perspectives and Policy* 34 (3): 391–427.
- Muller, F. V., and B. O. Bold. 1996. "On the Necessity of New Regulations for Pastoral Land Use in Mongolia." *Biodiversity Briefings from Northern Eurasia* 2 (1): 19–21.
- Murphy, D. J. 2014. "Booms and Busts: Asset Dynamics, Disaster, and the Politics of Wealth in Rural Mongolia." *Economic Anthropology* 1 (1): 104–23.
- Murphy, D. J. 2018. "'We're Living from Loan-to-Loan': Pastoral Vulnerability and the Cashmere-Debt Cycle in Mongolia." In *Individual and Social Adaptations to Human Vulnerability, Volume 38*, edited by Donald C. Wood, 7–30. Bingley, UK: Emerald Publishing Limited.

- NAMEM (National Agency for Meteorology and Environment Monitoring). 2015. *National Report on the Rangeland Health on Mongolia*. Ulaanbaatar, Mongolia: National Agency for Meteorology and Environment Monitoring.
- National Statistics Office of Mongolia (NSO) and World Bank. 2020. *Mongolia Poverty Update 2018: Main Report of Household Socioeconomic Survey 2018*. Washington, DC: World Bank.
- Neupert, R., B. Tsogtsaikhan, E. Byambaa, G. Tumur, N. Tumertolgoi, T. Chimedtseren, and G. Hayes. 2012. "The Implications of Demographic Trends for Socioeconomic Development and Public Policy in Mongolia." United Nations Population Fund, Ulaanbaatar, Mongolia.
- Rossabi, M. 2005. *Modern Mongolia: From Khans to Commissars to Capitalists*. Berkeley, CA: Regents of the University of California.
- Sheehy, D., C. Sheehy, D. Johnson, D. Damiran, and M. Fiamengo. 2010. *Mongolia: Livestock and Wildlife in the Southern Gobi Region, with Special Attention to Wild Ass*. Washington, DC: World Bank.
- Stuth, J., J. Angerer, R. Kaitho, A. Jama, and R. Marambii. 2005. "Livestock Early-Warning System for Africa Rangelands." In *Monitoring and Predicting Agricultural Drought: A Global Study*, edited by Vijendra K. Boken, Arthur P. Cracknell, and Ronald L. Heathcote, 283–96. New York: Oxford University Press.
- Tao, S., J. Fang, X. Zhao, S. Zhao, H. Shen, H. Hu, Z. Tang, Z. Wang, and Q. Guo. 2015. "Rapid Loss of Lakes on the Mongolian Plateau." *Proceedings of the National Academy of Sciences* 112 (7): 2281–86.
- Taylor, M. 2016. "Risky Ventures: Financial Inclusion, Risk Management, and the Uncertain Rise of Index-Based Insurance." In *Risking Capitalism (Research in Political Economy, Volume 31)*, edited by Paul Zarembka and Susanne Soederberg, 237–66. Bingley, UK: Emerald Publishing Limited.
- Ulaambayar, T., and M. E. Fernández-Giménez. 2019. "How Community-Based Rangeland Management Achieves Positive Social Outcomes in Mongolia: A Moderated Mediation Analysis." *Land Use Policy* 82 (March): 93–104.
- Upton, C. 2008. "Social Capital, Collective Action, and Group Formation: Developmental Trajectories in Post-Socialist Mongolia." *Human Ecology* 36 (2): 175–88.
- Upton, C. 2012a. "Adaptive Capacity and Institutional Evolution in Contemporary Pastoral Societies." *Applied Geography* 33 (April): 135–41.
- Upton, C. 2012b. "Managing Mongolia's Commons: Land Reforms, Social Contexts, and Institutional Change." *Society and Natural Resources* 25 (2): 156–75.

- Ulziibold, Ya., D.Munkhtur, Kh.Munkhnaran, B.Bat-Ireedui, and D.Mendbat. 2015. "Index-Based Livestock Insurance Project Implementation Report 2005-2015." <https://www.shareweb.ch/site/EI/Documents/FSD/Topics/Micro-Insurance/Index%20Based%20Livestock%20Insurance%20in%20Mongolia%20-%20Report%202005-2015.pdf>
- Venable, N.B., Fassnacht, S.R. and Hendricks, A.D., 2015. "Spatial changes in climate across Mongolia". In *A Trans-Disciplinary Research Conference. Building Resilience of Mongolian Rangelands. Colorado State University and Nutag Action Research Institute, Ulaanbaatar, Mongolia* (pp. 73-77). [https://www.researchgate.net/profile/David-Wilson-119/publication/282003704\\_Building\\_resilience\\_in\\_Mongolian\\_rangelands/links/560112e008aec948c4fa99b3/Building-resilience-in-Mongolian-rangelands.pdf#page=71](https://www.researchgate.net/profile/David-Wilson-119/publication/282003704_Building_resilience_in_Mongolian_rangelands/links/560112e008aec948c4fa99b3/Building-resilience-in-Mongolian-rangelands.pdf#page=71)
- Wong, S., and S. Guggenheim. 2018. "Community-Driven Development: Myths and Realities." Policy Research Working Paper 8435, World Bank, Washington, DC. <https://openknowledge.worldbank.org/handle/10986/29841>.
- World Bank. 2002. "Mongolia—Sustainable Livelihoods Project." Project Appraisal Document 24155-MOG, World Bank, Washington, DC.
- World Bank. 2005. "Mongolia—Index-Based Livestock Insurance Project." Project Appraisal Document 32220-MN, World Bank, Washington, DC.
- World Bank. 2007. "Mongolia—Second Sustainable Livelihoods Project." Project Appraisal Document 38353-MN, World Bank, Washington, DC.
- World Bank. 2008. "Mongolia—Sustainable Livelihoods Project." Implementation Completion and Results Report ICR665, World Bank, Washington, DC.
- World Bank. 2012. *Mongolia—Country Partnership Strategy, FY13–17*. Washington, DC: World Bank. <http://documents.worldbank.org/curated/en/687471468053969480/Mongolia-Country-partnership-strategy-for-the-period-FY2013-2017>.
- World Bank. 2013a. "Mongolia—Second Sustainable Livelihoods Project." Implementation Completion and Results Report ICR2989, World Bank, Washington, DC.
- World Bank. 2013b. "Mongolia—Sustainable Livelihoods II." Implementation Status Results Report ISR9011, World Bank, Washington, DC.
- World Bank. 2014a. "Mongolia—Sustainable Livelihoods II." Implementation Completion and Results Report Review ICRR14469, World Bank, Washington, DC.
- World Bank. 2014b. "Mongolia—Third Sustainable Livelihoods Project." Project Appraisal Document PAD385, World Bank, Washington, DC.
- World Bank. 2015. *Understanding and Monitoring Service Delivery in a Decentralizing Environment in Mongolia: The Case of Education and Health*. Washington, DC: World Bank.

- World Bank. 2016. "Mongolia—Index-Based Livestock Insurance Project." Implementation Completion and Results Report ICR2949, World Bank, Washington, DC.
- World Bank. 2018. "Mongolia—Renewable Energy for Rural Access Project." Project Performance Assessment Report 127225, Independent Evaluation Group, World Bank, Washington, DC.  
[https://ieg.worldbankgroup.org/sites/default/files/Data/reports/ppar\\_mongoliareap.pdf](https://ieg.worldbankgroup.org/sites/default/files/Data/reports/ppar_mongoliareap.pdf).
- World Bank. 2020. "Mongolia Economic Update: Macroeconomic Stability and Credit Growth." World Bank, Washington, DC.

# Appendix A. Ratings

## Sustainable Livelihoods Project (P067770)

Table A.1. ICR, ICR Review, and PPAR Ratings

Indicator	ICR	ICRR	PPAR
Outcome	Satisfactory	Satisfactory	Satisfactory
Overall efficacy	Not rated	Substantial	Substantial
Bank performance	Satisfactory	Satisfactory	Satisfactory
Quality of M&E	Not rated	Modest	Modest

Sources: Independent Evaluation Group; World Bank 2008, 2013.

Note: The Implementation Completion and Results Report (ICR) is a self-evaluation by the responsible Global Practice. The ICR Review (ICRR) is an intermediate Independent Evaluation Group product that seeks to independently validate the findings of the ICR. M&E = monitoring and evaluation; PPAR = Project Performance Assessment Report.

## 1. Relevance of the Objectives

### Summary of Objectives

This project was the first phase of a three-phase adaptable program loan supporting the Sustainable Livelihoods Program (table A.1). The overall program purpose was “vulnerability reduced, and secure and sustainable livelihoods achieved by targeted poor and vulnerable near-poor households and individuals nationwide” (World Bank 2002, 3).

The project development objective of the Sustainable Livelihoods Program Phase I was formulated differently in the Project Appraisal Document and the Development Credit Agreement.

**Project Appraisal Document:** “The development objective of the project—referring to the first four-year phase of the overall program—is: an effective approach to promoting improved, secure, and sustainable livelihood strategies developed, demonstrated, and validated in selected areas, and institutional capacity created so that these strategies can be replicated and scaled up in Phase II of the Program.”

**Development Credit Agreement:** “To assist the Borrower to reduce the incidence of poverty among poor and extremely poor households and to prevent nonpoor households from falling below the poverty line, by (i) developing and implementing, on a pilot basis, secure and sustainable livelihood strategies, and (ii) building the institutional capacity for large-scale implementation of such strategies.”

**Table A.2. Relevance of the Objectives**

ICR	ICRR	PPAR
According to the ICR, the project design and implementation maintained their relevance. The project was consistent with the 2004 CAS and the 2005 CAS update, a main pillar of which was reducing household vulnerability by improving access of rural and urban poor people to social services and the sustainable management of natural resources. The fiscal years 2009–12 Country Partnership Strategy, then under discussion, was built on three platforms, including “improving rural livelihoods and environment.” The project objectives thus remained consistent with current priorities, as demonstrated by continued support for the Sustainable Livelihoods Program through Phase II.	The ICRR rated the relevance of objectives as <b>substantial</b> . It cited that the project responded to the severe distress caused by <i>dzuds</i> —that is, weather shocks in Mongolia (the phenomenon of harsh winters, frequently after summer drought, leading to loss of pasture and high livestock mortality). Reducing household vulnerability to such shocks and improving access to social services were key themes in the CAS. Project objectives were also informed by the findings from a Participatory Living Standards Assessment.	The PPAR concurs with the ICR and ICRR’s <b>substantial</b> rating for relevance on the basis that the program design was and remains relevant to the challenges faced by rural Mongolians, including climatic shocks and associated livestock mortality, pasture degradation, insufficient quality social services (health, education, and so on), lacking income diversification, and poverty. The objectives remained relevant to the World Bank’s country strategies for Mongolia throughout implementation, including the most recent Country Partnership Framework.

Sources: Independent Evaluation Group; World Bank 2008, 2013.

Note: CAS = Country Assistance Strategy; ICR = Implementation Completion and Results Report; ICRR = Implementation Completion and Results Report Review; PPAR = Project Performance Assessment Report.

## 2. Efficacy

**Table A.3. Efficacy**

ICR	ICRR	PPAR
The ICR reported that the project achieved its objectives to develop, demonstrate, and validate an effective approach to promote improved, secure, and sustainable livelihood strategies and to create institutional capacity. PRM component: rated <b>satisfactory</b> . According to the ICR, the project substantially achieved the PRM component outputs, even if indicators for measuring the expected outcomes were ambiguous. The outcomes were largely achieved in terms of the adoption of an integrated PRM strategy, including (i) establishing a National Coordinating Council on Pastoral Risk Management, (ii) producing pastoral land resources and social maps to serve as inputs	The ICRR rated efficacy as <b>substantial</b> on the basis that the overarching poverty-related objectives were not likely to be achieved by project closing, but that the achievement of the subsidiary objectives (on which poverty reduction was predicated) suggested that poverty would ultimately be reduced. According to the ICRR, the ICR provided little evidence on the achievement of the projects’ overarching objectives—that is, (i) to reduce the incidence of poverty among poor and extremely poor households and (ii) to prevent nonpoor households from falling below the poverty line. The ICRR highlighted that the only indicator related to these objectives was the	The PPAR concurs with the ICRR’s assessment and <b>substantial</b> rating of efficacy.

ICR	ICRR	PPAR
<p>for <i>soum</i>- (district-) level management plans, (iii) establishing 313 formal herder groups, (iv) rehabilitating 477 wells being managed by herder groups, (v) testing and developing PRM strategies in 20 demonstration areas in different agroecological zones, and (vi) rehabilitating 34 hay and fodder reserves for emergency use. Microfinance outreach component: rated <b>satisfactory</b>. According to the ICR, the main achievement was the establishment and operation of the MDF, a wholesale revolving credit facility, which outperformed its original targets. The wider institutional development in rural financial services during the project was also significant: the majority of soums were now served by at least two financial institutions. Although this was difficult to attribute to the MDF, the ICR noted that it was reasonable to conclude the MDF contributed.</p> <p>LIF component: rated <b>satisfactory</b>. According to the ICR, the mechanisms designed during project preparation worked well to identify, select, and implement local social infrastructure projects. Awareness and capacity were strengthened at the <i>aimag</i> (province) and <i>soum</i> level (including governors, a range of local staff, and nongovernmental organizations) for implementing the LIF community works in all 143 soums in the eight pilot aimags, achieving considerable efficiency and outreach, and satisfactory results in terms of improved services. A total of 1,729 subprojects in health (26%), education (57%), and infrastructure development (17%) were implemented in all the pilot soums, with high levels of community satisfaction (86%).</p>	<p>targeting of microfinance to poor households. According to the ICR, 53% of sub-borrowers were classified as poor, and 90% of borrowers reported an income increase, but no information was provided about reduced poverty incidence. Although it could be inferred that the subproject investments under the LIF component helped realize these objectives, the ICR presented no evidence.</p> <p>However, the ICRR noted that the ICR provided plentiful evidence that secure livelihoods were developed and implemented (for example, increased number of herding households making adequate preparation for winter, decreased livestock mortality in pilot areas, and improved land management plans prepared). Furthermore, 1,729 investments were financed by the LIF component (57% education, 26% health, and 17% infrastructure). However, the ICRR noted that the ICR did not provide information indicating whether the sustainability of subproject investments had been assessed by project close.</p> <p>The ICRR also highlighted that several institutions were strengthened by the project, including the following:</p> <ul style="list-style-type: none"> <li>• An MDF was established and operational since 2003.</li> <li>• The National Coordinating Council on Pastoral Risk Management was established in December 2005, and local PRM councils were established and functioning in all project areas since 2004.</li> </ul>	

Source: Independent Evaluation Group.

Note: ICR = Implementation Completion and Results Report; ICRR = Implementation Completion and Results Report Review; LIF = Local Initiatives Fund; MDF = Microfinance Development Fund; PPAR = Project Performance Assessment Report; PRM = pastoral risk management.

### 3. Efficiency

Table A.4. Efficiency

ICR	ICRR	PPAR
<p>The ICR stated that the level of efficiency was <b>high</b> and that project costs were justified, as benefits outweighed the costs. PRM component: According to the ICR, the analysis in the Project Appraisal Document focused on the potential impact of PRM on livestock losses and assumed that the nationwide adoption of the PRM strategy would reduce losses in <i>dzud</i> (severe winter weather disasters) years. Anticipated benefits included the reduction of dzud-based livestock losses; however, there was no major dzud during the project's lifetime. Although livestock mortality reduced by nearly 46% in pilot <i>aimags</i> (provinces), it was difficult to attribute this to the project. LIF component: According to the ICR, ex post economic analysis was carried out for the LIF component because (i) almost 50% of project costs went to this component, and (ii) efficiency of the LIF activities was one of the declared objectives. The analysis covered a sample of 100 subprojects. The analysis found that most subprojects had a good cost-benefit ratio and estimated rate of return, ranging from 6% (dormitory heating system) to 30% (ambulance for a <i>soum</i> [district] hospital), with an average of 20%. Only one investment—public bath houses—had a negative ERR, mostly because of the combination of low user rates and high running costs. The analysis suggested that the delivery of services through subprojects supported by the component were cost-effective. This was corroborated by the ICR's observation that, compared with similar government civil works, the time between project submission and completion was relatively shorter for SLP I subprojects.</p>	<p>The ICRR rated efficiency as <b>substantial</b>. Since the project employed a community-driven development approach, the nature of subproject investments could not be known at design. Therefore, ex ante economic analysis was not feasible. According to the ICR, the post-ERR of subprojects ranged from 6% (dormitory heating system) to 30% (ambulances). Only one investment had a negative ERR (public bath houses) because of low use rates and high running costs. The lag between subproject submission and completion was lower than that for similar government civil works projects. The ICRR also indicated that a key achievement of the program was to persuade the government to replace the RLFs that it had previously supported (which lacked transparency and had low loan recovery rates) with the MDF. In 2008, the government finally transferred all the RLF allocation to the MDF. In the ICRR meeting, the project team said that the creation of the MDF had boosted competition among financial intermediaries, helping to push down interest rates.</p>	<p>The PPAR concurs with the ICRR's <b>substantial</b> rating of efficiency. The LIF mostly had a good cost-benefit ratio and ERR of 20% on average. It is also notable that the ICR presented an ex post economic analysis for the LIF that included an analysis of 100 subprojects, compared with SLP II, which conducted only an ex post cost-benefit analysis of 16 projects (see SLP II efficiency section). Since no major dzud occurred during SLP I implementation, the efficiency of PRM activities was difficult to ascertain, and the observed reduction in livestock mortality could not be attributed to the projects' PRM interventions. The ICR could have provided evidence on the efficiency of MDF activities because none was provided.</p>

Sources: Independent Evaluation Group; World Bank 2008, 2013.

Note: ERR = economic rate of return; ICR = Implementation Completion and Results Report; ICRR = Implementation Completion and Results Report Review; LIF = Local Initiatives Fund; MDF = Microfinance Development Fund; PPAR = Project Performance Assessment Report; PRM = pastoral risk management; RLF = revolving loan fund; SLP I = Sustainable Livelihoods Program Phase I; SLP II = Sustainable Livelihoods Program Phase II.



## 4. Outcome

Table A.5. Outcome

ICR	ICRR	PPAR
Based on substantial relevance, efficacy, and efficiency, the ICR's outcome rating was <b>satisfactory</b> .	Based on substantial relevance, efficacy, and efficiency, the ICRR's outcome rating was <b>satisfactory</b> .	The PPAR concurs with the ICR and ICRR's <b>satisfactory</b> outcome rating based on substantial relevance, efficacy, and efficiency.

Sources: Independent Evaluation Group; World Bank 2008, 2013.

Note: ICR = Implementation Completion and Results Report; ICRR = Implementation Completion and Results Report Review; PPAR = Project Performance Assessment Report.

## 5. Risk to Development Outcome

Table A.6. Risk to Development Outcome

ICR	ICRR	PPAR
<p>The ICR rated risk to development outcome as <b>moderate</b>, noting two main risks to sustainability and development outcome:</p> <ul style="list-style-type: none"> <li>• Lack of adequate funding for organizations responsible for PRM</li> <li>• The implementation of a regionalization policy might cause restructuring of budgetary entities and planning processes in <i>aimags</i> (provinces) and <i>soums</i> (districts).</li> </ul> <p>In addition, the ICR provided two secondary risks:</p> <ul style="list-style-type: none"> <li>• Political pressure might force the participating financial institutions to reduce the lending rates for special target groups, for example, herders. This would cause declining profits and lead to lower engagement in rural lending.</li> <li>• A large-scale <i>dzud</i> (severe winter weather disaster) could potentially overwhelm capacity and affect the still nascent institutional framework. Although no major <i>dzud</i> occurred during the life of SLP I, climatic variability in Mongolia is very high, thus the likelihood of <i>dzud</i>.</li> </ul>	<p>The ICRR rated the risk to development outcome as <b>moderate</b>. The ICRR concurred with the ICR on the two main sources of risk. The ICRR also noted that the substitution of support for MDF in place of the RLF suggests that government is committed to the project approach, reducing the risk to development outcome.</p> <p>At the ICRR meeting, the project team told the Independent Evaluation Group that although there had been some earlier retreat by the government, fiscal decentralization was back on the agenda and would provide the enabling environment needed to sustain the positive results of SLP I (and SLP II). In SLP II, the LIF, which finances subprojects, would be run through the local governor's office, thus avoiding the parallelism that characterized the administrative apparatus of SLP I (which centered on district councils that were separate from local government). Communities were also preparing 10-year development plans, which would encourage addressing the long-term maintenance of subproject investments made under SLP I.</p>	<p>The PPAR rates the overall risk to development outcome as <b>substantial</b>. Some potential risk to development outcomes identified at SLP I project end did not materialize, while some risks did, and others were missed:</p> <ul style="list-style-type: none"> <li>• The decentralization agenda was maintained, and the LIF (now Local Development Fund) is operational and successfully institutionalized in the IBL.</li> <li>• Financial institutions developed products catering to the specific needs of herders, and these remain financially viable for commercial banks. However, access to finance has not led to livelihood diversification away from livestock, as envisioned. This risk was not sufficiently identified by the project.</li> <li>• A large-scale <i>dzud</i> did occur in 2009–10 after the completion of SLP I in 2007, with devastating effects: 8 million livestock died. Given continued trends of pasture degradation, the vulnerability of rural livelihoods to weather-related risks remains high (see the main report Soum-Level Pasture Management section).</li> </ul>

ICR	ICRR	PPAR
		<ul style="list-style-type: none"> <li>The effectiveness and sustainability of project-supported community-based pasture management was (and remains) at risk, given the absence of sufficient policy and regulatory support to address governance and market factors driving pasture degradation (see the main report Soum-Level Pasture Management section). This risk was not sufficiently identified by the project.</li> </ul>

Sources: Independent Evaluation Group; World Bank 2008, 2013.

Note: IBL = Integrated Budget Law; ICR = Implementation Completion and Results Report; ICRR = Implementation Completion and Results Report Review; LIF = Local Initiatives Fund; MDF = Microfinance Development Fund; PPAR = Project Performance Assessment Report; PRM = pastoral risk management; RLF = revolving loan fund; SLP I = Sustainable Livelihoods Program Phase I; SLP II = Sustainable Livelihoods Program Phase II.

## 6. Bank Performance

Table A.7. Overall Bank Performance

ICR	ICRR	PPAR
The ICR rated the overall Bank performance as <b>satisfactory</b> . It noted that despite some minor weaknesses at entry, the World Bank actively worked with all counterpart agencies and stakeholders to ensure satisfactory outcomes of the project.	The ICRR rated the overall Bank performance as <b>satisfactory</b> . Except for some design flaws, quality at entry was sound, and during supervision, the intervention of the World Bank team was timely and effective.	The PPAR concurs with the ICR and ICRR's assessment and <b>satisfactory</b> rating of overall Bank performance.

Sources: Independent Evaluation Group; World Bank 2008, 2013.

Note: ICR = Implementation Completion and Results Report; ICRR = Implementation Completion and Results Report Review; PPAR = Project Performance Assessment Report.

Table A.8. Quality at Entry

ICR	ICRR	PPAR
<p>The ICR rated quality at entry as <b>satisfactory</b>. The ICR stated that the World Bank's performance in project identification, preparation, and appraisal were satisfactory, despite minor design shortcomings:</p> <ul style="list-style-type: none"> <li>Overoptimistic expectations concerning decentralization policy and setting ambitious targets for fiscal decentralization, while recognizing the high risks of this agenda;</li> </ul>	<p>The ICRR rated quality at entry as <b>satisfactory</b>, noting that this was a complex project spanning several sectors and regions. Some of the approaches and activities were innovative, particularly the livestock insurance and microfinance fund. Project preparation included discussions with government about poorly performing village-level rotating funds and made support for these conditional on them becoming commercially viable. The project sought to work through existing</p>	<p>The PPAR concurs with the ICR and ICRR's assessment and <b>satisfactory</b> rating of quality at entry (see also the main report Design and Preparation section).</p>

ICR	ICRR	PPAR
<ul style="list-style-type: none"> <li>Failure to fully anticipate the level of technical assistance that would be required to develop the capacity of local communities; and</li> <li>Complicated design of key performance indicators that were often difficult to use while measuring the progress toward or achievement of project objectives.</li> </ul>	<p>government entities rather than create project-specific institutions parallel to government that were not likely to be sustainable. However, the ICRR indicated three design flaws: (i) the substantial technical assistance needed to help communities adopt the new approaches piloted by the project was underestimated, (ii) institutional change objectives were too ambitious, and (iii) the project development objective was poorly specified, and insufficient thought was given to the selection of appropriate performance indicators.</p>	

Sources: Independent Evaluation Group; World Bank 2008, 2013.

Note: ICR = Implementation Completion and Results Report; ICRR = Implementation Completion and Results Report Review; PPAR = Project Performance Assessment Report.

**Table A.9. Quality of Supervision**

ICR	ICRR	PPAR
<p>The ICR rated quality of supervision as <b>satisfactory</b>, noting that the World Bank team provided timely responses, actions, and clearances and met internal reporting deadlines. Continuity of the task team was noted as a particular supervision strength: although the project had three TTLs, they were all long-standing members of the task team; thus, transitions were smooth. The technical skills mix was also adequate and continuous except for M&amp;E that was reviewed by several people. Supervision missions included regular site visits, updates, and agreements on follow-up steps. The TTL being based in Beijing for most of the project was helpful, given their availability to visit Mongolia on demand, especially during critical situations. The continuous presence of fiduciary staff in the project team was also a strength: detailed procurement and financial management reviews identified and addressed many issues that would have otherwise hampered implementation.</p>	<p>The ICRR rated quality of supervision as <b>satisfactory</b>. During supervision, the intervention of the World Bank team was timely and effective.</p>	<p>The PPAR concurs with the ICR and ICRR's assessment and <b>satisfactory</b> rating of quality of supervision (see also the main report Implementation and Supervision section).</p>

ICR	ICRR	PPAR
<p>The ICR also stated that the World Bank team was flexible and proactive in addressing issues that could have had serious impacts on project performance, including the following:</p> <ul style="list-style-type: none"> <li>• Canceling support for nonperforming and unsustainable RLF;</li> <li>• Helping the counterpart to access resources for implementing the M&amp;E system and capacity-building activities (through a JSDF grant); and</li> <li>• Exploring alternative avenues to address fiscal decentralization issues considering policy changes.</li> </ul>		

Sources: Independent Evaluation Group; World Bank 2008, 2013.

Note: ICR = Implementation Completion and Results Report; ICRR = Implementation Completion and Results Report Review; JSDF = Japan Social Development Fund; M&E = monitoring and evaluation; PPAR = Project Performance Assessment Report; RLF = revolving loan fund; TTL = task team leader.

## 7. Quality of Monitoring and Evaluation

Table A.10. Overall M&E Quality

ICR	ICRR	PPAR
The ICR did not provide an overall M&E quality rating.	The ICRR rated overall M&E quality as <b>modest</b> .	The PPAR concurs with the ICRR's <b>modest</b> rating for M&E quality.

Sources: Independent Evaluation Group; World Bank 2008, 2013.

Note: ICR = Implementation Completion and Results Report; ICRR = Implementation Completion and Results Report Review; M&E = monitoring and evaluation; PPAR = Project Performance Assessment Report.

Table A.11. M&E Design

ICR	ICRR	PPAR
According to the ICR, monitoring the implementation and impact of the project was challenging, given the scale of the activities and the multifaceted components. The key performance indicators and triggers were poorly articulated at project design, and it was difficult to isolate the changes in variables that can be attributed to the project. In some cases, they were not specific; for example, expressions such as "functioning institutional framework," "adequate winter preparations," "improved	The ICRR stated that inconsistency in specifying the project development objectives hampered monitoring. The ICRR concurred with the ICR's assessment that "the key performance indicators (KPIs) and triggers were poorly articulated at project design, and it is difficult to isolate the changes in variables that can be attributed to the project" (World Bank 2008, 9).	The PPAR concurs with the ICR's forthright assessment of M&E design.

ICR	ICRR	PPAR
management" of grazing land area, and "improvement in livelihood security" were not fully defined and left open to interpretation.		

Sources: Independent Evaluation Group; World Bank 2008, 2013.

Note: ICR = Implementation Completion and Results Report; ICRR = Implementation Completion and Results Report Review; M&E = monitoring and evaluation; PPAR = Project Performance Assessment Report.

**Table A.12. M&E Implementation**

ICR	ICRR	PPAR
<p>According to the ICR, the baseline survey was carried out in 2004, two years after implementation began. The baseline survey also attempted to assess the conditions existing in the previous year. Although rich in data, the baseline survey produced little relevance to monitoring the KPIs. Efforts were made to modify the indicators to better reflect their attribution to the project (as recommended by supervision missions); however, these changes were only partially addressed.</p> <p>A JSDF grant was mobilized in 2004 to (i) support the development of a participatory monitoring and evaluation system and (ii) facilitate its effective implementation at the local and community levels for improved transparency, inclusion, and participation. It was initially piloted in 16 <i>soums</i> (districts) and eventually was scaled up to all 143 <i>soums</i> of 8 pilot <i>aimags</i> (provinces). According to the ICR, this improved the M&amp;E system by (i) developing participatory data collection methodology and toolkits; (ii) redefining indicators; (iii) streamlining reporting procedures, information flows, and institutional responsibilities to avoid duplication; and (iv) strengthening capacity and empowering communities to achieve transparency and accountability in project and grant implementation.</p> <p>Before the project's scheduled closing date in 2006, impact assessments were conducted for the three main project components.</p>	<p>The ICRR noted that the baseline survey was carried out two years after implementation began. As acknowledged by the ICR, the survey "produced very little data relevant to the monitoring of KPIs." The indicators were modified to better assess the differences made by the project. In late 2006, separate impact assessments were conducted for the three main project components.</p>	<p>The PPAR concurs with the ICR's forthright assessment of M&amp;E implementation.</p>

ICR	ICRR	PPAR
Local consultants measured and evaluated progress on the KPIs, although these were often not clearly articulated, and the information from these studies was incomplete. Nevertheless, the ICR noted that all studies were used to a certain extent for project evaluation purposes.		

Source: Independent Evaluation Group.

Note: ICR = Implementation Completion and Results Report; ICRR = Implementation Completion and Results Report Review; JSDF = Japan Social Development Fund; KPI = key performance indicator; M&E = monitoring and evaluation; PPAR = Project Performance Assessment Report.

**Table A.13. M&E Use**

ICR	ICRR	PPAR
<p>According to the ICR, the M&amp;E system's flaws included (i) the delay in conducting the baseline study, (ii) the "retrospective" approach taken to reconstructing data for the base year (2003) in 2004, and (iii) the fact that it did not cover most of the KPIs. Consequently, the baseline survey was used marginally for evaluating project outcomes.</p> <p>By the end of the project, the M&amp;E system had (i) compiled a detailed database of the project's outcomes for the period 2003–07, (ii) synthesized the key findings of the pilot project on participatory M&amp;E in eight pilot <i>aimags</i> (provinces), and (iii) prepared for the integrated and outcome-based M&amp;E system for SLP II to support the program's second phase.</p>	<p>According to the ICRR, the delay in the baseline survey and the weak link to KPIs reduced the scope for using the baseline survey to help evaluate project outcomes. However, by project end, an M&amp;E system had been created that would permit the outcome-oriented assessment of the follow-on project.</p>	<p>The PPAR concurs with the ICR's forthright assessment of M&amp;E use.</p>

Sources: Independent Evaluation Group; World Bank 2008, 2013.

Note: ICR = Implementation Completion and Results Report; ICRR = Implementation Completion and Results Report Review; KPI = key performance indicator; M&E = monitoring and evaluation; PPAR = Project Performance Assessment Report; SLP II = Sustainable Livelihoods Program Phase II.

## Second Sustainable Livelihoods Project (P096439)

**Table A.14. ICR, ICR Review, and PPAR Ratings**

Indicator	ICR	ICRR	PPAR
Outcome	Highly satisfactory	Moderately satisfactory	Moderately satisfactory
Overall efficacy	High	Substantial	Substantial
Bank performance	Satisfactory	Moderately satisfactory	Moderately satisfactory
Quality of M&E	Satisfactory	Modest	Modest

Sources: Independent Evaluation Group; World Bank 203, 2014.

Note: The Implementation Completion and Results Report (ICR) is a self-evaluation by the responsible Global Practice. The ICR Review (ICRR) is an intermediate Independent Evaluation Group product that seeks to independently validate the findings of the ICR. M&E = monitoring and evaluation; PPAR = Project Performance Assessment Report.

### 1. Relevance of the Objectives

#### Summary of Objectives

This project was the second phase of a three-phase adaptable program loan supporting the Sustainable Livelihoods Program. The overall development objective of the program was to enhance secure and sustainable livelihoods in communities throughout Mongolia (World Bank 2007).

The development financing agreement stated that the objective of the project was to “assist the Recipient in enhancing the livelihood security of communities throughout Mongolia by implementing the second phase of the Sustainable Livelihoods Program” (World Bank 2014a).

According to the Project Appraisal Document, the project development objective was “to enhance livelihood security and sustainability by scaling up institutional mechanisms that reduce the vulnerability of communities throughout Mongolia” (World Bank 2007).

On June 9, 2011, the Board of Executive Directors approved additional financing in the amount of special drawing rights 6.8 million (approximately \$11 million) to finance the cost of scaling up project activities. The project development objective was not changed.

**Table A.15. Relevance of the Objectives**

ICR	ICRR	PPAR
According to the ICR, the project objectives were <b>highly relevant</b> to the strategic objectives of the government of Mongolia as spelled out in the Economic Growth Support and Poverty Reduction Strategy and the World Bank’s 2004 and 2012 CPS	The ICRR rated the relevance of objectives as <b>substantial</b> . The project development objective was substantially relevant to country priorities and sector strategies, although it was ambiguous. Despite the significant reduction in the	The design of the Sustainable Livelihoods Program was and remains <b>highly relevant</b> to the development challenges faced by Mongolia’s rural population. At appraisal, the program responded to the government’s need to address

ICR	ICRR	PPAR
pillars. This is because the objectives helped implement policies and systems for a more robust, equitable, and transparent management of public revenues and expenditures through the IBL; diversified and created employment in the rural economy and addressed vulnerabilities; and improved access to services and better service delivery, safety net provision, and improved disaster risk management. The project development objective statement was designed to respond to the government of Mongolia's policy of meeting the needs of pastoralists who had to contend with persistent risks in livestock management because of harsh climatic conditions. The project development objective also aimed to meet the huge deficit in the provision of social services to rural communities. Above all, it aimed to improve livelihoods in rural communities while reducing rural-urban migration.	<p>overall poverty level in Mongolia (from 39.2% in 2010 to 29.8% in 2011 [World Bank 2012]), the incidence of poverty was higher in rural areas (33.3% in 2011) than in urban areas (26.6% in 2011), with half of all herders living below the national income poverty line. Poor people, particularly rural, have limited access to education, health, credit, and water supply services. The World Bank's CPS for Mongolia (fiscal years 2013–17), particularly Pillar II (Build a sustained and diversified basis for economic growth and employment in rural and urban areas) included the specific outcome: "Create more opportunities in the rural economy for enhanced livelihoods" through greater outreach and innovation in microfinance products. In addition, Pillar III of the strategy (Address vulnerabilities through improved access to services and better service delivery, safety net provision and improved disaster risk management) aimed to establish more responsive and accountable local service delivery through the strengthening of participatory processes and setting up a comprehensive approach to risk management in the livestock sector.</p> <p>The objective was also relevant to the government of Mongolia's Economic Growth and Poverty Reduction Strategy, which aimed to reduce rural poverty by increasing and protecting the assets of poor people and diversifying their production base. In this regard, the project appropriately targeted herders with more poverty incidence than other groups.</p>	<p>rural poverty and the vulnerabilities that led to massive livestock losses during the 1999–2002 <i>dzud</i> (severe winter weather) disasters. Its objectives were well aligned with the CAS at the time and remain consistent with the most recent CAS (fiscal years 2013–17), which includes aims to (i) "address vulnerabilities through improved access to services and better service delivery, safety net provision, and improved disaster risk management"; and (ii) "build a sustained and diversified basis for economic growth and employment in urban and rural areas." The relevance of the Sustainable Livelihoods Program's rural focus persists since poverty incidence remains higher in rural areas, despite improvements over time and significant rural-to-urban migration, which has increased poverty concentration in urban areas. Rural push factors (such as environmental disasters and associated herd losses) coupled with urban pull factors (including higher-quality schools, health care, and perceptions of economic opportunity) have contributed to this trend. Dzuds are a regular feature of Mongolian pastoralism and will continue to be a risk to livelihoods. Moreover, as climate change makes weather patterns more erratic and droughts more frequent, and livestock numbers continue to climb, the case for improved pasture and pastoral management is as strong today as it was almost two decades ago, if not stronger.</p>

Sources: Independent Evaluation Group; World Bank 2008, 2013.

Note: CAS = Country Assistance Strategy; CPS = Country Partnership Strategy; IBL = Integrated Budget Law; ICR = Implementation Completion and Results Report; ICRR = Implementation Completion and Results Report Review; PPAR = Project Performance Assessment Report.



## 2. Efficacy

Table A.16. Efficacy

ICR	ICRR	PPAR
<p>The ICR rated project efficacy as <b>high</b>, given that all PDO and intermediate outcome targets were met or exceeded. The project supported the country's short- and medium-term priorities and contributed to short- and medium-term poverty reduction interventions, which directly benefited an estimated 1,361,008 people (approximately half of Mongolia's population of 2.8 million) living in <i>soum</i> (district) and <i>bag</i> (subdistrict) areas. The complementarity of PRM and community empowerment activities, coupled with the provision of microloans, enhanced the livelihood security of rural communities while reducing their vulnerability to inclement climatic conditions.</p> <p>PRM: The demonstration of good practices and PRM training created awareness of the dangers of <i>dzud</i> (severe winter weather disasters) and options available for mitigation. At project close, all 330 soums were preparing, financing, and implementing annual pasture management plans to improve pasture conditions. These activities contributed to an increased percentage of herders and soum governments taking actions to mitigate pastoral risk from a baseline of 14.8% to 95.6%, exceeding the 85% project target. The target for the percentage of herders and local officers (85%) who perceived improved pasture conditions attributable to the project was also exceeded. The LEWS also provided information enabling soums and communities to respond to early warning and mitigate risk from very low forage and extreme drought conditions.</p> <p>CI: Doing by learning and mainstreaming project approaches through national and local</p>	<p>According to the ICRR, the degree of achievement of the project objective—to assist the recipient in enhancing the livelihood security of communities throughout Mongolia—was rated <b>substantial</b>. Although the ICRR raised questions about the quality of outcome indicators and the impact survey methodologies used (the ICR contained no information on these), there was evidence that the project contributed to livelihood security in rural areas through several means:</p> <ul style="list-style-type: none"> <li>• The project directly benefited an estimated 1,361,008 people in soum and bag areas, representing approximately half the country's total population of 2.8 million.</li> <li>• The livelihood security of rural communities was enhanced and their vulnerability to inclement climatic conditions reduced through an increased percentage of herders and soum governments taking actions to mitigate pastoral risk from a baseline of 14.8% to 95.6%, exceeding the target of 85%. Key actions taken include preparation of fodder and hay making, preservation of winter pasture, and livestock vaccination.</li> <li>• According to the three beneficiary impact surveys, 85% of herders and local officers perceived improvement in pasture conditions attributable to the project, exceeding the target of 80%. Herders and officials also claimed a significant improvement in their preparedness for harsh weather conditions. Project interventions cited as contributing to these results included fencing, protection of watering points</li> </ul>	<p>The PPAR rates project efficacy as <b>substantial</b>.</p> <p>The project successfully implemented a CDD approach that fostered community empowerment and expanded rural services, which was relevant in the context of Mongolia's political transition to ensure inclusive rural development. The project further provided a major contribution to the government's decentralization agenda through the passage of the IBL (see the main report IBL and Community Initiatives sections).</p> <p>Community-based pasture planning and management has been institutionalized at the local level; however, its effectiveness and sustainability are questionable, given insufficient national-level policy support and continued rangeland degradation. Financed pastoral subprojects also face ownership and maintenance challenges. The project switched its focus to demonstrating good practice in pastoral livelihoods; however, the beneficiary survey documented mixed results and limited project contributions (see the main report PRM, Soum-Level Pasture Management, Institutionalizing PRM, and Pastoral Livelihood Initiatives sections).</p> <p>Efficacy and sustainability of the project's risk forecasting and early-warning system, the LEWS, was not achieved (see the main report LEWS section).</p> <p>The project contributed to several developments in the rural lending landscape in Mongolia through its microfinance interventions. However, there is limited evidence that increasing lending enabled livelihood diversification and associated livelihood risk reduction, as envisioned by SLP (see the following main report sections:</p>

ICR	ICRR	PPAR
<p>institutional structures contributed to the livelihood security of beneficiaries. This was achieved through the CI component, which sought to (i) empower local citizens to participate in identifying, implementing, monitoring, and evaluating community projects; (ii) build the capacity of soums to take over the subproject planning, procurement, and financial management; and (iii) provide the legal framework for the sustenance of the approaches. At project close, 53% of bag citizens were participating in bag meetings against a target of 45% from a baseline of 24%. Through these meetings, beneficiaries were able to influence the choice of services and facilities provided through the project. Ninety percent of citizens agreed that the investments aligned with their priorities against a target of 52.5%. More than 5,053 subprojects improved public facilities in education, health, water and sanitation, bridges, and rural roads. The percentage of citizens satisfied with project outcomes was 87%, exceeding the target of 80%. The approaches adopted by the project also became institutionalized through the IBL. Service delivery was decentralized, with budgetary allocations being made through the LDF to sustain and enhance the project achievements.</p> <p>MDF: The microfinance program enhanced livelihood security and reduced vulnerabilities through the provision of microloans for rural income diversification. The number of participating financial institutions operating at the soum level and below increased from 18 at project start to 30 at project end, surpassing the target of 23. The number of loan products that became accessible to poor rural citizens amounted to 25, an increase of 47% over the baseline of 17 products. At project end, the number of sub-borrowers at the soum level and below increased by</p>	<p>and springs, the provision of improved bulls for breeding, and improved husbandry and animal health practices. More than 790 subprojects were implemented by the herders themselves to prepare against bad weather conditions.</p> <ul style="list-style-type: none"> <li>• The increased number of sub-borrowers from the MDF was as a result of flexible and attractive loan terms that characterized the wholesale loan facility, which led to increased lending to sub-borrowers at soum levels through the participating financial institutions, the number of which had also increased. Many beneficiaries received loans at reasonable rates of 2% per month compared with the standard rate of 2.5% per month charged by commercial banks. However, the ICRR noted that it was not clear or specified: (i) why interest rates for the project subloans could be lower, (ii) what eligibility criteria were used to include microfinance providers in the project, and (iii) whether there was a need for policy reforms to enable efficient and effective operation of microfinance providers.</li> <li>• According to the end-of-project impact assessment, average monthly incomes of household members who benefited from MDF loans increased by 32.1%. Enhanced access to loans and facilities were estimated to have boosted livestock production (no figures provided) and hence increased the income of 30% of the beneficiaries. Eighty-five percent of MDF beneficiaries said they had increased their household incomes through operating their own businesses, and 88.3% of borrowers reported that “they have seen tremendous improvements in their lives as a result of the MDF</li> </ul>	<p>Pastoral Livelihood Initiatives, Risk Forecasting, Early-Warning Bulletins, LEWS, Microfinance Outreach, RLFs, and MDF sections).</p>

ICR	ICRR	PPAR
68.4% to 49,074 from a baseline value of 29,133 sub-borrowers (target of 39,230 surpassed). Many beneficiaries received loans at reasonable rates of 2% per month compared with the standard rate of 2.5% per month. The loan facilities were made for two main purposes: income-generating activities and consumption. More than 91.2% of the loan facilities were for income-generating activities, whereas only 8.8% went to consumption loans. According to the end-of-project impact assessment, the monthly income of households that benefited directly from MDF loans rose by 32.1%.	<p>loans they obtained" (World Bank 2013, 20).</p> <ul style="list-style-type: none"> <li>According to the impact surveys, the increase in beneficiaries' incomes led to many households acquiring movable and immovable properties, such as real estate, livestock, household electric equipment, furniture, computers, mobile phones, solar panels, electric motors, and so on. However, the ICR did not provide any information on the size of asset increase and did not contain an analysis of a control group that did not benefit directly from the project.</li> <li>As a result of project support for social services, case studies of individual schools suggested that enrollment had increased and child nutrition improved (World Bank 2013, 31). However, the ICR did not provide any figures on school enrollment or childhood nutrition levels before and after the project.</li> </ul>	

Sources: Independent Evaluation Group; World Bank 2008, 2013.

Note: CDD = community-driven development; CI = community initiative; IBL = Integrated Budget Law; IBLI = Index-Based Livestock Insurance; ICR = Implementation Completion and Results Report; ICRR = Implementation Completion and Results Report Review; LDF = Local Development Fund; LEWS = Livestock Early-Warning System; MDF = Microfinance Development Fund; PDO = Project Development Objective; PPAR = Project Performance Assessment Report; PRM = pastoral risk management; RLF = revolving loan fund; SLP = Sustainable Livelihoods Program.

### 3. Efficiency

Table A.17. Efficiency

ICR	ICRR	PPAR
The ICR rated efficiency of the project as <b>high</b> . An end-of-project cost-benefit analysis conducted for 16 selected SLP II component 2 interventions revealed significant benefits from basic social services (such as schools, hospitals, infrastructure, street lighting, and so on) to project beneficiaries estimated at approximately 1,361,008 people. The analysis showed an overall average ERR of 33% for the evaluated subprojects,	<p>The ICRR rated efficiency as <b>modest</b>—a downgrade from the ICR's <b>high</b> rating.</p> <p>Ex ante analysis: According to the ICRR, the PAD analysis for the CI component drew on a sample of 100 subprojects financed by SLP I. ERRs ranged from 6% (dormitory heating) to 30% (ambulance car for soum hospital) with an average of 20%. However, according to World Bank (2007), it was difficult to quantify the interactive effects and benefits of</p>	<p>The PPAR rates efficiency as <b>modest</b>.</p> <p>The direct impact of SLP II's community investments cannot be ascertained because the ex post cost-benefit analysis lacked rigor. Under SLP II's CI component, 5,066 subprojects were financed to the benefit of an estimated 1,361,008 people at a total cost of Tog 34.6 billion (\$19.8 million equivalent; World Bank 2013). These community subprojects encompassed a wide</p>

ICR	ICRR	PPAR
<p>and NPV of Tog 10,656,281. This compares favorably with the appraisal average estimate of ERR 20% and NPV of Tog 1,317,966. Three separate analyses of project cost per direct beneficiary were conducted for the different project components:</p> <p>PRM component: A total of 394,751 beneficiaries benefited directly, and the analysis showed that the interventions were cost-efficient with total costs per beneficiary of Tog 38,182 (\$22.69).</p> <p>CI component: A total of 1,614,450 beneficiaries benefited, and the analysis showed that total cost per beneficiary amounted to Tog 18,573 (\$12.75).</p> <p>MDF component: A total of 49,523 sub-borrowers (beneficiaries) in 284 <i>soums</i> (districts) benefited, and the analysis showed that the MDF interventions were cost-efficient with cost per beneficiary ranging from Tog 968 (\$0.58) in Khovsgol <i>aimag</i> (province) to Tog 3,388 (\$2.25) in the city of Ulaanbaatar.</p> <p>According to the ICR, the total cost per beneficiary (\$29.15) for the three components together compared favorably with total cost per beneficiary (\$43.21) of the predecessor project, SLP I, which reached 575,552 beneficiaries with a total project cost of \$24.87 million.</p>	<p>several subprojects within a local government. The benefits of institutionalizing a mechanism for citizen participation in the selection of local investments was also not quantifiable, although very valuable. The PAD's economic analysis of the MDF component (undertaken in 2007) showed high returns on the investment (sample included approximately 70 subloans and exclusively income-generating activities). Returns on investments from loans varied between approximately 20% for trading and approximately 50% for services, manufacturing, and animal husbandry.</p> <p>Ex post analysis: According to the ICRR, the ICR's ex post cost-benefit analysis was insufficiently conducted for only 16 selected CI interventions (out of 5,053 subprojects, for example, schools, hospitals, infrastructure, street lighting, and so on). The ICR also failed to provide information on the project selection process, making it unclear whether projects were randomly selected or whether the sample favored profitable projects. The assumptions for benefit and cost streams were also not provided. These shortcomings undermined the validity of the ERRs. The analysis showed an overall average ERR of 33% for the subprojects and NPV of Tog 10,656,281. Although the ICR stated that this compared favorably with the appraisal average ERR estimate of 20% and NPV estimate of Tog 1,317,966, it was unclear if the same methodology and assumptions were used and therefore if the results were comparable. The ICR did not provide an ERR calculation for the MDF component, although it could have made use of the beneficiary survey data. The ICR provided cost per beneficiary calculations but did not provide comparisons from other similar projects. The cost per beneficiary—in total for the three</p>	<p>array of social services, such as schools, hospitals, and infrastructure. An ex post cost-benefit analysis was conducted for only 16 projects. The study found an average ERR of 33%. However, the sample was very small, and no information was provided on how the sampled projects were selected. Overall, this makes it impossible to ascertain the true impact of the CI (beyond its governance and satisfaction indicators).</p>

ICR	ICRR	PPAR
	<p>components—improved (declined) since the first phase project (from \$43.21 to \$29.15); however, no analysis was included as to why and how this happened. A priori, this could be expected since the first project probably spent more on establishing systems and structures.</p> <p>There were no significant administrative or operational inefficiencies. The one-year project closing date extension was to enable completion of the scaled-up activities funded under the additional financing.</p>	

Sources: Independent Evaluation Group; World Bank 2008, 2013.

Note: CI = community initiative; ERR = economic rate of return; ICR = Implementation Completion and Results Report; ICRR = Implementation Completion and Results Report Review; MDF = Microfinance Development Fund; NPV = net present value; PAD = Project Appraisal Document; PPAR = Project Performance Assessment Report; PRM = pastoral risk management; SLP I = Sustainable Livelihoods Program Phase I; SLP II = Sustainable Livelihoods Program Phase II; Tog = Mongolian tughrig.

## 4. Outcome

Table A.18. Outcome

ICR	ICRR	PPAR
<p>Taking into consideration the project's high relevance, full achievement of the PDO, high level of efficacy, and its high efficiency, the ICR rated the overall project outcome as <b>highly satisfactory</b>. According to the ICR, the project remained consistent with the government of Mongolia's sector priorities and the World Bank's 2012 CPS at the time of the ICR. It contributed significantly to addressing poverty issues and strengthening government institutions at <i>aimag</i> (province), <i>soum</i> (district), and <i>bag</i> (subdistrict) levels through a participatory development approach. It also contributed to deepening and strengthening the government of Mongolia's democratic and decentralization agenda. This culminated in the adoption and passage of the IBL and its attendant establishment of the LDF, which provides resources for local governments.</p>	<p>The ICRR rated outcomes as <b>moderately satisfactory</b>—a downgrade from the ICR's highly satisfactory rating. The relevance of objectives and design were rated as substantial, although there was an issue concerning the lack of specificity and measurability of the development objective. The achievement of the objective—enhancing the livelihood security of communities throughout Mongolia—was rated substantial because sufficient evidence was presented that the project improved the livelihoods of a significant share of the population. Efficiency was rated modest in view of questions concerning the methodology used for the ERR calculations.</p>	<p>The PPAR rates the outcome as <b>moderately satisfactory</b> on account of its high relevance of objectives, substantial efficacy, and modest efficiency. Efficiency was rated modest in view of questions concerning the methodology used for the ERR calculations.</p>

Sources: Independent Evaluation Group; World Bank 2008, 2013.

Note: CPS = Country Partnership Strategy; ERR = economic rate of return; IBL = Integrated Budget Law; ICR = Implementation Completion and Results Report; ICRR = Implementation Completion and Results Report Review; LDF = Local Development Fund; PDO = Project Development Objective; PPAR = Project Performance Assessment Report.

## 5. Risk to Development Outcome

Table A.19. Risk to Development Outcome

ICR	ICRR	PPAR
<p>The ICR rated risk to development outcome as <b>moderate</b>, given the commitment level of the government of Mongolia to support local development through the LDF and the capacity of local communities to maintain facilities. Institutional risks were low, given the level of commitment of the government of Mongolia and <i>soum</i> (district) governments. The strengthening of <i>soum</i> councils, which are integral to the decision-making body at the local government level, would help sustain development outcomes at the <i>soum</i> level.</p> <p>Financial risks were moderate. The project built significant infrastructure for social and basic services, but sustaining development outcomes would depend on continued allocation of (i) operation and maintenance budget by the <i>soum</i> governments and (ii) central government's allocation of discretionary budget as spelled out in the IBL. The government of Mongolia's creation of the LDF and allocation of funds to all <i>soums</i> in the 2013 budget would surely help <i>soums</i> maintain this infrastructure and most likely sustain development outcomes. Sustained application of the IBL's participatory approach (adopted from implementation of the CI component) at the <i>soum</i> level would depend on the retention of trained staff at <i>soums</i> to implement and manage the LDF.</p> <p>Infrastructural risks were moderate. The construction, rehabilitation, and renovation of basic infrastructure (schools, hospitals, cultural centers, kindergartens, street lighting, and so on) improved basic services at the local levels. With the adoption, approval, and implementation of the IBL, the development outcomes</p>	<p>The ICRR rated risk to development outcome as <b>moderate</b>.</p> <p>Institutional risk: <b>moderate</b>. The project strengthened the capacity of (i) local governments in terms of budget preparation, execution, accounting and reporting, auditing, and internal and external control; and (ii) civil society to participate in public decision-making (for example, in <i>soum</i> councils). The ICR (World Bank 2013, 18) stated that the Microfinance Management Office was capable of managing and running the microfinance program at the national level, but its institutionalization was still being discussed by the government at the time of ICR completion. Moreover, it was not clear what additional policy measures may be needed to enable the microfinance sector to continue providing financial services to its rural clientele in a sustainable manner.</p> <p>Financial risk: <b>moderate</b>. It was expected that the government would provide the necessary funds to sustain the development outcomes. Although the ICR did not provide specific information on the magnitudes of the budgets allocated to <i>soums</i>, the implementation of the IBL should help sustain continued budget support from the government.</p> <p>Weather risk: <b>moderate</b>. Although the ICR did not specifically analyze the risk of recurrence of severe weather conditions such as the one that occurred in 2009–10, this risk appears moderate. The LEWS and disaster response system would now inform the government, rural residents, and livestock herders of impending drought and severe winter, thereby strengthening the capacity to mitigate the impacts of adverse weather conditions.</p>	<p>The PPAR rates the overall risk to development outcome as <b>substantial</b>.</p> <p>The PPAR concurs with the ICR and ICRR that institutional and financial risks regarding the LDF are low to moderate, given that SLP III continued to support the decentralized CDD approach, which was institutionalized through the IBL. At SLP III approval, political commitment was strong, although this could waver (as it did during previous decentralization attempts) if the initiatives are deemed unsuccessful or if development objectives shift.</p> <p>However, SLP II did not sufficiently address the social, economic, and political drivers of rangeland degradation, and therefore pastoral risks remain a substantial threat to rural livelihoods. Mongolia's rural citizens remain dependent on herding (because of limited livelihood diversification), and they remain vulnerable to weather risks, especially as pasture degradation continues and quality pastoral resources become scarce. Many project achievements and rural vulnerability are at risk from the continuing degradation trends (see the main report <i>Soum-Level Pasture Management</i> section).</p>

ICR	ICRR	PPAR
<p>were likely to be maintained as soum governments would be able to carry out regular maintenance of the facilities from their respective LDF allocations.</p>		

Sources: Independent Evaluation Group; World Bank 2008, 2013.

Note: CDD = community-driven development; CI = community initiative; IBL = Integrated Budget Law; ICR = Implementation Completion and Results Report; ICRR = Implementation Completion and Results Report Review; LDF = Local Development Fund; LEWS = Livestock Early-Warning System; PPAR = Project Performance Assessment Report; SLP II = Sustainable Livelihoods Program Phase II; SLP III = Sustainable Livelihoods Program Phase III.

## 6. Bank Performance

Table A.20. Overall Bank Performance

ICR	ICRR	PPAR
The ICR rated overall Bank performance as <b>satisfactory</b> .	The ICRR rated overall Bank performance as <b>moderately satisfactory</b> .	The PPAR rates overall Bank performance as <b>moderately satisfactory</b> .

Sources: Independent Evaluation Group; World Bank 2008, 2013.

Note: ICR = Implementation Completion and Results Report; ICRR = Implementation Completion and Results Report Review; PPAR = Project Performance Assessment Report.

Table A.21. Quality at Entry

ICR	ICRR	PPAR
<p>According to the ICR, Bank performance with respect to project identification, preparation, and appraisal was <b>satisfactory</b>. The project was well conceived, with emphasis on capacity building and the requisite institutional support to the government of Mongolia's poverty reduction agenda. The design and objectives were kept simple with achievable targets. A participatory approach to project preparation with a strong team of technical specialists from the World Bank, key government agencies, and development partners was adopted to create an acceptable design, which also considered comments from peer reviewers and lessons learned from the implementation of phase I. The World Bank team coordinated effectively with key donors that resulted in funding from the Japanese PHRD and the European Union. PHRD funds were used to finance initial sector studies that</p>	<p>The ICRR rated quality at entry as <b>moderately satisfactory</b>. The design of the project benefited from lessons learned during implementation of phase I. The key lessons included (i) ensuring investment financing for public action to support PRM, (ii) developing a wider range of competitive loan products as opposed to subsidized loans, (iii) strengthening the organizational capacity of informal herder or user groups to enable pastureland and risk management planning, and (iv) empowering communities to ensure transparency and increase citizen engagement as opposed to supporting initiatives that benefit local leaders. There was also the need to broaden the CI to include activities such as animal health, security, information and communication, and training and capacity-building interventions at a local level.</p>	<p>The PPAR concurs with the ICRR assessment and rates the quality at entry as <b>moderately satisfactory</b>. The PPAR concurs with the ICR and ICRR that appropriate changes were made based on lessons from the first phase. However, SLP II further suffered from a mismatch between ambition and support, which impaired the provision of sufficient capacity building needed for desired behavior change and long-term outcomes. This was an ambitious project whose financial and human resources were spread very thin, especially after its rapid scale-up to the national level. The project components were of sufficient ambition and complexity to be stand-alone projects. The project lacked the required resourcing and institutional support necessary to achieve the desired impact, contributing to many of its shortcomings. Long-term and frequent capacity building is needed for local government and</p>

ICR	ICRR	PPAR
<p>yielded significant recommendations for the design, including the identification of risks and mitigation measures, whereas the European Union provided additional resources for component 2. The World Bank collaborated effectively with the government of Mongolia to ensure smooth project preparation.</p>	<p>Risks that could potentially inhibit project implementation were, in general, identified and mitigated. For example, the risk for insufficient government funds for PRM was mitigated by considering alternative options for sustainable financing; the risk of herders not adopting risk management practices on livestock and livelihoods in general was mitigated by incorporating capacity-building interventions for herders into the design.</p> <p>One moderate shortcoming was the overgeneralized articulation of the development objective. Although the key associated outcome targets helped in lending greater specificity, the M&amp;E framework could have been stronger. For example, the outcome indicator on pastureland condition improvement was based on perceptions rather than actual measurement of results such as pastureland yields, whereas the indicator on CI results was based on perceptions as to whether the beneficiaries were satisfied by the results, rather than actually assessing improvements on rural services such as health, education, and transportation. The outcome indicator on percentage of herders and local governments taking actions for pastoral risk mitigation was not specific enough in terms of the type of actions that herders or local governments would be expected to take.</p> <p>Although the M&amp;E design included impact evaluations to measure outcomes, the ICR did not provide any information on the methodology of these surveys, such as sample sizes, control groups, interview methods, and so on.</p>	<p>communities to reinforce key skills and knowledge and to engender genuine community engagement through CDD. Intensive but one-off training is less efficient, not least because staff turnover can be high at the local level.</p> <p>The PPAR also concurs with the M&amp;E shortcoming highlighted by the ICRR—that is, the overreliance on perceptions-based indicators rather than results-based indicators for key outcomes (for example, pastureland condition and quality of financed community infrastructure).</p>

Sources: Independent Evaluation Group; World Bank 2008, 2013.

Note: CDD = community-driven development; CI = community initiative; ICR = Implementation Completion and Results Report; ICRR = Implementation Completion and Results Report Review; M&E = monitoring and evaluation; PHRD = Policy and Human Resources Development; PPAR = Project Performance Assessment Report; PRM = pastoral risk management; SLP II = Sustainable Livelihoods Program Phase II.



**Table A.22. Quality of Supervision**

ICR	ICRR	PPAR
<p>According to the ICR, Bank performance during project supervision was <b>satisfactory</b>. The World Bank organized two missions per year, including a Mid-Term Review to provide implementation support to the government in its efforts to implement the project. The missions fielded technical specialists who provided on-the-spot solutions to emerging challenges and, in the process, transferred knowledge to their government counterparts. The World Bank maintained congenial and good working relations with the project team and government of Mongolia officials throughout project implementation. With its key financial management and procurement staff based at country level, the World Bank worked collaboratively with project management (SLPO) to address key financial and procurement issues in a timely way and worked to build the capacity of SLPO staff in these areas. The team systematically documented the status of implementation and recommendations for improvement in aide-mémoire, back-to-office reports, and ISRs and kept management informed and provided the foundation for the analysis of the ICR. Regular and timely supervision contributed significantly to the success achieved by the project. For example, at midterm, it became evident that additional financing would be required for the impact of the project to be achieved, and an extension of the closing date was also required to ensure that the institutional framework was fully developed for the IBL. The team responded quickly and prepared additional financing and an extension, which was subsequently approved by the Board of Executive Directors in June 2011. Again, during supervision, the team had to restructure the project to reallocate funds to complete the capacity-</p>	<p>The ICRR rated quality of supervision as <b>satisfactory</b>. The World Bank provided adequate and continuous guidance to the government in its efforts to implement the project, via supervision missions and aide-mémoire that included project progress and recommendations. On average, two missions per year were organized, plus a Mid-Term Review, which involved technical specialists to provide on-the-spot solutions to emerging challenges. The key financial management and procurement staff (based at the country level) worked with the government's project management team to build capacity and address key financial and procurement issues in a timely way. The team quickly acted on the need for additional financing and closing date extension after the Mid-Term Review to ensure that the institutional framework would be fully developed for the IBL. In addition, the two restructurings to reallocate funds to complete the capacity-building activities initiated under the IBL were timely.</p>	<p>The PPAR concurs with the assessment made by the ICR and ICRR.</p> <p>The project encountered delays in the implementation of some tasks, which likely contributed to lacking institutionalization and sustainability of project interventions, including the following:</p> <ul style="list-style-type: none"> <li>• The risk forecasting, preparedness, and response planning subcomponent suffered from delays for almost two years after project effectiveness because of protracted signing of contracts with an NGO to support the development of the LEWS. This is likely to have contributed to the LEWS lacking institutionalization and sustainability (see the main report LEWS section).</li> <li>• Implementation of the pastureland management, tenure, and use, and demonstrating good practices in pastoral livelihoods component, was delayed considerably. This was also related to procurement as the tendering process for the major technical assistance contract to provide support to pastureland planning and demonstration areas prolonged. Again, this compressed the timeline of capacity-strengthening activities and undermined the institutionalization of the pasture management component (see the main report Soum-Level Pasture Management section).</li> </ul>

ICR	ICRR	PPAR
building activities initiated under the IBL.		

Sources: Independent Evaluation Group; World Bank 2008, 2013.

Note: IBL = Integrated Budget Law; ICR = Implementation Completion and Results Report; ICRR = Implementation Completion and Results Report Review; ISR = Implementation Status and Results Report; LEWS = Livestock Early-Warning System; NGO = nongovernmental organization; PPAR = Project Performance Assessment Report; SLPO = Sustainable Livelihoods Program Office.

## 7. Quality of Monitoring and Evaluation

**Table A.23. Overall Quality of M&E**

ICR	ICRR	PPAR
The ICR did not provide an overall M&E quality rating.	The ICRR rated M&E quality as <b>modest</b> .	The PPAR rates M&E quality as <b>modest</b> .

Sources: Independent Evaluation Group; World Bank 2008, 2013.

Note: ICR = Implementation Completion and Results Report; ICRR = Implementation Completion and Results Report Review; M&E = monitoring and evaluation; PPAR = Project Performance Assessment Report.

**Table A.24. M&E Design**

ICR	ICRR	PPAR
According to the ICR, the project's M&E system design was strong. It was underpinned by an implementation manual that spelled out key guidelines for data collection, collation, analysis, reporting, dissemination, and use. A key feature of the M&E design was impact evaluations, which were designed to systematically track project outcomes and impacts at the local and herder household levels. The PDO was well stated, and there was no disconnect between the PDO statement and the related PDO-level results indicators and thereby the intermediate-level results indicators. The alignment of the PDO and KPIs facilitated effective operationalization of the results framework. The annual project plans and budget aligned the KPIs with the activities, which facilitated systematic monitoring and reporting on a quarterly, semiannual, and annual basis. An important aspect of the M&E system design was the establishment of the MIS, which aided systematic tracking and reporting of project results at all levels. However, the design of the	According to the ICRR, M&E design was underpinned by an implementation manual that spelled out key guidelines for data collection, collation, analysis, reporting, dissemination, and use. The design included impact evaluations to track project outcomes and impacts at the local government and household levels. However, the ICR did not explain for which components the impact evaluations were designed and the specific impact evaluation strategies to be adopted (that is, the approach or methodology to be taken, the data to be collected, and the types of analysis to be carried out). The quality of the M&E framework was undermined by weaknesses in the design of outcome indicators and by incomplete design of the MIS at the initial stages of project implementation. The ICR reported that these weaknesses were corrected subsequently but did not clarify what the weaknesses were or how they were corrected, nor was it stated which institution was to be	The PPAR concurs with the ICRR's assessment of M&E design. M&E design would have benefited from the use of more results-based indicators, rather than perceptions-based indicators. For example, one of the indicators was "percentage of herders and local officers perceiving improvement in pastureland conditions attributable to project interventions." The ICR reported a result of 87%, which exceeded the target. However, this does not align with the trend of increasing degradation observed by the high-quality national rangeland health assessments of 2015 and 2018.

ICR	ICRR	PPAR
MIS was found to be incomplete at the initial stages of project implementation. The situation improved after corrective measures were implemented.	responsible for managing and coordinating M&E activities.	

Sources: Independent Evaluation Group; World Bank 2008, 2013.

Note: ICR = Implementation Completion and Results Report; ICRR = Implementation Completion and Results Report Review; KPI = key performance indicator; M&E = monitoring and evaluation; MIS = management information system; PDO = project development objective; PPAR = Project Performance Assessment Report.

**Table A.25. M&E Implementation**

ICR	ICRR	PPAR
<p>According to the ICR, M&amp;E implementation was initially unsatisfactory. The baseline survey was weak and did not meet most of the baseline requirements. A joint World Bank supervision mission in June 2009 recommended hiring an international consultant to better develop the baseline. Thereafter, M&amp;E implementation improved significantly and was rated satisfactory in subsequent supervision missions. An assessment of this implementation revealed the following:</p> <p>M&amp;E principle, implementation arrangements, and capacity: The project operationalized the M&amp;E framework with an emphasis on systematic tracking and reporting on the PDO-level results indicators and the intermediate-level results indicators. Periodic reports were prepared from the tracking data, and the findings were used to adjust project activities and mechanisms.</p> <p>Participatory M&amp;E: There was emphasis on bottom-up community participation in project monitoring at the <i>aimag</i> (province), <i>soum</i> (district), and <i>bag</i> (subdistrict) levels through community assessments, rapid assessments, focus group discussions, and citizen surveys.</p> <p>In-depth evaluations: In addition to the routine monitoring of activities and indicators, consultants were commissioned to carry out in-depth evaluations of the three project components. The findings from these impact assessments provided</p>	<p>According to the ICRR, the ICR acknowledged that M&amp;E implementation was initially deemed to be unsatisfactory partly because of problems with the baselines surveys that did not meet requirements. However, few details were provided. It would have been useful to clarify the requirements, specify the weaknesses, and provide information on how these weaknesses were addressed to strengthen the implementation of the M&amp;E system.</p>	<p>The PPAR concurs with the ICRR's assessment of M&amp;E implementation.</p>

ICR	ICRR	PPAR
evidence on how project interventions had improved services and livelihoods for the targeted beneficiaries. M&E indicators and data analysis: Data compiled showed trends in achievements from the baseline, the annual targets, and the end-of-project targets. This method of data gathering and reporting made it possible to determine the achievement of project results. There was, however, weak capacity in qualitative data assessment, which could have shed more light on the perceptions and feelings of the beneficiaries.		

*Sources:* Independent Evaluation Group; World Bank 2008, 2013.

*Note:* ICR = Implementation Completion and Results Report; ICRR = Implementation Completion and Results Report Review; M&E = monitoring and evaluation; PDO = project development objective; PPAR = Project Performance Assessment Report.

**Table A.26. M&E Use**

ICR	ICRR	PPAR
According to the ICR, the information from routine monitoring was widely disseminated and used to (i) solve project management issues and (ii) prepare annual plans and budgets and procurement plans for goods and services.	The routine monitoring information was disseminated and used to prepare annual plans and budget, solve project management issues, and prepare plans for procurement of goods and services.	The PPAR concurs with the ICR and ICRR, although more evidence of M&E use (for example, including concrete examples) could have been provided in the ICR.

*Sources:* Independent Evaluation Group; World Bank 2008, 2013.

*Note:* ICR = Implementation Completion and Results Report; ICRR = Implementation Completion and Results Report Review; M&E = monitoring and evaluation; PPAR = Project Performance Assessment Report.

## References

- World Bank. 2002. "Mongolia—Sustainable Livelihoods Project." Project Appraisal Document 24155-MOG, World Bank, Washington, DC.
- World Bank. 2005. "Mongolia—Index-Based Livestock Insurance Project." Project Appraisal Document 32220-MN, World Bank, Washington, DC.
- World Bank. 2007. "Mongolia—Second Sustainable Livelihoods Project." Project Appraisal Document 38353-MN, World Bank, Washington, DC.
- World Bank. 2008. "Mongolia—Sustainable Livelihoods Project." Implementation Completion and Results Report ICR665, World Bank, Washington, DC.

- World Bank. 2012. *Mongolia—Country Partnership Strategy, FY13–17*. Washington, DC: World Bank. <http://documents.worldbank.org/curated/en/687471468053969480/Mongolia-Country-partnership-strategy-for-the-period-FY2013-2017>.
- World Bank. 2013a. “Mongolia—Second Sustainable Livelihoods Project.” Implementation Completion and Results Report ICR2989, World Bank, Washington, DC.
- World Bank. 2013b. “Mongolia—Sustainable Livelihoods II.” Implementation Status and Results Report ISR9011, World Bank, Washington, DC.
- World Bank. 2014. “Mongolia—Third Sustainable Livelihoods Project.” Project Appraisal Document PAD385, World Bank, Washington, DC.
- World Bank. 2014b. “Mongolia—Sustainable Livelihoods II.” Implementation Completion and Results Report Review ICRR14469, Independent Evaluation Group, World Bank, Washington, DC.

# Appendix B. Fiduciary, Environmental, and Social Aspects

## Sustainable Livelihoods Project (P067770)

### 1. Financial Management

High staff turnover complicated the financial management of the project, prompting changes in recruitment and training procedures to strengthen fiduciary oversight of the follow-on project (Sustainable Livelihoods Program [SLP] phase II [SLP II]). This was a continuous challenge for the project, at times leading to mistakes in disbursement-related work, such as incorrectly prepared applications or duplicate payments, which in turn led to low overall efficiency of financial management in some instances. The areas identified for improvement included:

- Improved financial planning and budgeting and reflection of the variance analysis in the quarterly financial monitoring reports;
- Provision of evidence and documentation in support of incurred expenditures;
- Proper cost categorization, as improper classification of expenditures among cost categories was resulting in inconsistencies with legal agreements; and
- Systemic preparation of monthly bank reconciliations.

At the *soum* (district) level, the main problems were as follows:

- Failure to properly enter and record local contributions in the management information system;
- Inaccurate filing of financial documents; and
- Initial permanent deposit (in some cases, up to 30,000 Mongolian tugriks) and bank charges for transfers were not originally considered as potential costs, and thus no budget allocation for that was made under operational costs.

Based on these experiences, provisions and adequate safeguards for proper financial management of SLP II were developed. Adequate financial management capacity at different levels was a prerequisite for SLP II effectiveness (financial management manual and staff at the Sustainable Livelihoods Program Office) and disbursement (recruitment and training of *aimag* [province] accountants).

## 2. Procurement

There were no major procurement issues during initial project implementation. However, toward the end-of-project implementation, steps were taken to address procurement irregularities and problems occurring mostly at the aimag level and below through supplementary training. Some examples of the procurement issues were as follows:

- Selection criteria were interpreted liberally. For example, the lowest bids were sometimes rejected when the supplier had no prior experience of supplying goods to that specific aimag, even though this was not a selection criterion. This was an indication of inadequate procurement capacity, and the World Bank rightly recommended that the Household Livelihoods Support Program Office (HLSPO; the agency responsible for project implementation) conduct close monitoring of procurement in the field, followed up by an additional training provided to aimag and soum secretaries.
- Procurement of goods in some soums was occasionally organized with community participation. There was confusion over the eligibility of this procurement method because of different interpretations of the English and Mongolian versions of the procurement manual, which was later clarified.
- Failure to check technical specifications laid out in quotations against technical specifications of successfully delivered goods sometimes resulted in acceptance of suboptimal quality goods. Where such goods were provided, the World Bank team urged soum governors to enforce the warranty clause of the contracts to ensure that they were replaced.
- There was a lack of packaging contracts for providing the same goods to a number of different soums at the aimag level. The World Bank supervision team noted several times that the efficiency of the aimag tender committee could have been improved if it had grouped similar items into single contracts for invitations to quote.

An intensive up-front procurement capacity-building program was envisioned for SLP II, building on the experience from the SLP I.

## 3. Environmental and Social Safeguards

**Environment:** The project triggered three environmental safeguards policies: Environmental Assessment, Natural Habitats, and Pest Management. Problems with environmental screening and assessment mechanisms were identified early in project

implementation, which were then rectified quickly. Regional reviews of environmental assessment implementation were organized by the HLSPO during implementation, and environmental capacity building was provided to soum secretaries and agricultural, land and environmental officers. One issue identified during World Bank supervision was that well rehabilitation was potentially and inadvertently threatening the *khulan* or Asiatic wild ass, *Equus hemionus*, classified as vulnerable by the International Union for Conservation of Nature. As a result, special measures were taken to ease habitat access for the Asiatic wild ass. A study was undertaken in conjunction with the Netherlands-Mongolia Trust Fund for Environmental Reform, which confirmed that the development of additional livestock watering facilities can reduce khulan access to habitat and increase livestock-khulan conflict. Corresponding mitigation measures were proposed, which were further monitored during implementation of the pastoral risk management component.

**Indigenous peoples:** An Ethnic Minorities Participation Framework was prepared to help ensure adequate participation of ethnic minorities in the project. On average, the Kazakh ethnic minorities constituted about 85 percent to 86 percent of project beneficiaries in Bayan-Ulgii, the Buriat ethnic minority comprised 85 percent to 88 percent of beneficiaries in Dornod, and the Bayad and Dorved ethnic minorities constituted between 83 percent and 90 percent of beneficiaries in Uvs. These results were in line with the percentage of minority ethnic group representation in the population of the three aimags where significant ethnic minorities are present. As the Kazakh-speaking ethnic minority is not fully literate in the Khalkh Mongolian language, the Sustainable Livelihoods Program Project Implementation Manuals and the monitoring and evaluation forms were translated into Kazakh and distributed to the minority population of Bayan-Olgii.

**Involuntary resettlement:** A Resettlement Policy Framework was developed to protect those who might be affected because of possible community demand for land for small-scale infrastructure development. However, its application never materialized. Only 12 percent of subprojects were new facilities or an expansion. None involved land acquisition.

## **Second Sustainable Livelihoods Project (P096439)**

### **Financial Management**

The Implementation Completion and Results Report (ICR) reported that financial management was initially rated moderately satisfactory in supervision reports but subsequently improved and was rated satisfactory at the time of the ICR mission (World Bank 2013, 11). The ICR also stated that the project operated a sound financial



management system and complied with all financial management policies. However, disbursement was slower than expected during the initial stages of the project, with a 10-month lag mainly because of (i) delayed project effectiveness and (ii) the impact of the global financial crisis on the Mongolian financial sector, which affected the Microfinance Development Fund component. As a result, various financial management supervision missions rated financial management performance **moderately satisfactory**. Financial management performance subsequently improved, and at the time of ICR, the financial management team had rated financial management performance as **satisfactory**. The ICR reported that all Interim Financial Reports (IFRs) were submitted on time with no significant exceptions, and previous year's audit reports had been received and issued with unqualified audit opinion (World Bank 2013, 11).

However, at midterm, it was noted that the project team could not submit IFRs on time mainly because of the turnover of project staff and low capacity at the aimag and soum levels. To resolve this issue, a decision was made to extend the submission period of quarterly IFRs to the World Bank by 60 days for each reporting period. This action significantly improved reporting and submission of IFRs afterward. There was a technical issue concerning the lack of variance analysis of actual versus planned expenditures, which persisted throughout implementation. The World Bank financial management supervision mission teams repeatedly recommended that the project team conduct such an analysis, but the ICR team could not find any concrete action that was taken to resolve this issue.

## Procurement

The project adopted a participatory procurement approach at the local level. The program office provided training in developing technical specifications for goods and works and conducting bid evaluations. This helped significantly improve local capacity in procurement and contract management. The program office also developed clear guidelines for contract management for use by aimags, districts, and soums personnel. However, procurement was initially slow, which affected implementation of some important activities. It was subsequently rated satisfactory by various World Bank supervision missions. According to the ICR, postprocurement reviews found procurement to be satisfactory, particularly at the soum level. The ICR reported that the project complied with all procurement policies and that there was no evidence of misprocurement (World Bank 2013, 12, 23).

## Environmental and Social Safeguards

The project was classified as category B for purposes of Environmental Assessment, and three safeguards policies were triggered: Environmental Assessment (OP 4.01), Natural

Habitats (OP 4.04), and Indigenous Peoples (OP 4.10). The triggered safeguards policies were appropriate, given the broader geographical scope and risks of impacts on environmentally sensitive areas, water resources, and vulnerable groups of people. The category B rating was also sound because the identified impacts were minor, and adequate measures were put in place to generate environmental benefits and minimize negative impacts.

The ICR reported that “a comprehensive EMP [environmental management plan], which was prepared under [the first project in the adaptable program loan series] was updated to reflect the realities of this second phase operation since activities under the two projects were essentially the same but scaled up” (World Bank 2013, 11). Almost all investments, particularly those classified under the Community Initiative Fund (small improvements of existing facilities) required environmental and safeguards screening on land acquisition. The ICR reported that the environmental management plan was implemented and that subsequent environmental audits found no significant negative impacts resulting from the implementation of subprojects. According to the environmental audit reports, overall project beneficiaries and stakeholders were satisfied with project implementation and confirmed that the project had positive impacts on the environment.

An Indigenous Peoples’ Plan—prepared and disclosed to the public on February 28, 2007—outlined several special measures to ensure that the Kazakh and Tsaatan peoples obtained significant benefits from the project. The ICR reported that these measures were carried out in a timely manner and were acceptable to these ethnic minority groups as they were implemented in their own languages and gave them equitable opportunities to participate in project activities (World Bank 2013, 11).

The ICR did not report on implementation of the Natural Habitats safeguard.

## Reference

World Bank. 2013. “Mongolia—Second Sustainable Livelihoods Project.” Implementation Completion and Results Report ICR2989, World Bank, Washington, DC.

# Appendix C. Methods and Evidence

## Overview

This assessment used a layered approach and was conducted in three parts. Part I consisted of a literature and project document review, key informant interviews held in Washington, DC, and a stakeholder mapping exercise. A team of the Independent Evaluation Group (IEG) staff and consultants subsequently conducted Part II, which involved key informant interviews with various relevant stakeholders in Ulaanbaatar in December 2019. Part III consisted of field assessments to further explore emerging themes and implementation issues raised by the desk review and initial interviews. Field protocols were developed to qualitatively assess intervention mechanisms and implementation results and collect triangulated perceptions of project benefits across a range of project-affected persons.

This report is a Project Performance Assessment Report. This instrument and its methodology are described at <https://ieg.worldbankgroup.org/methodology/PPAR>.

## Part I: Desk Review and Key Informant Interviews in Washington, DC

The first part included the following:

- A desk review of relevant literature, analytical work, and project documentation (Project Appraisal Documents, Implementation Status and Results Reports, Implementation Completion and Results Reports [ICRs], and Implementation Completion and Results Report Reviews).
- The production of an Evidence Gap Map based on the Sustainable Livelihoods Program (SLP) phase I (SLP I) and phase II (SLP II) results frameworks and ICRs.
- Key informant interviews with relevant World Bank staff and subject matter experts (see appendix D for persons consulted).
- A stakeholder mapping exercise based on project documentation, literature review, and interviews.

## Part II: Key Informant Interviews in Ulaanbaatar

IEG carried out key informant interviews in Ulaanbaatar, Mongolia, between December 2 and 6, 2019. This included interviews with former SLP I and SLP II staff, relevant government ministries and agencies, financial institutions, insurance representatives,

and other donor and nongovernmental organizations working on rural development and pastoral issues (see appendix D for persons consulted).

### **Part III: Field Assessments in Uvurkhangai, Bayankhongor, Zavkhan, and Arkhangai Aimags**

#### **Site Selection Methodology**

Since SLP was scaled to the national level in phase II, all *soums* (districts) in Mongolia were targeted, which allowed the site selection methodology to consider various characteristics. The following contributed to the design of the field itinerary: (i) historic *dzud* (severe winter weather disasters) impact, (ii) duration of World Bank support (pilot versus scale-up), (iii) agroecological zones, and (iv) distance to main roads and *aimag* (province) centers.

Site selection aimed to achieve a combination of soums with differing degrees of past *dzud* impact (map C.1 and table C.1). IEG mapped historic *dzud* vulnerability using soum-level livestock mortality data recorded during the major 1999–2001 and 2010 *dzuds*. This was a key input for determining the itinerary, which aimed to include (i) soums that were severely affected during both *dzud* events and (ii) soums that were heavily affected during the first *dzud* but less affected during the second, indicating a potential reduction in vulnerability.

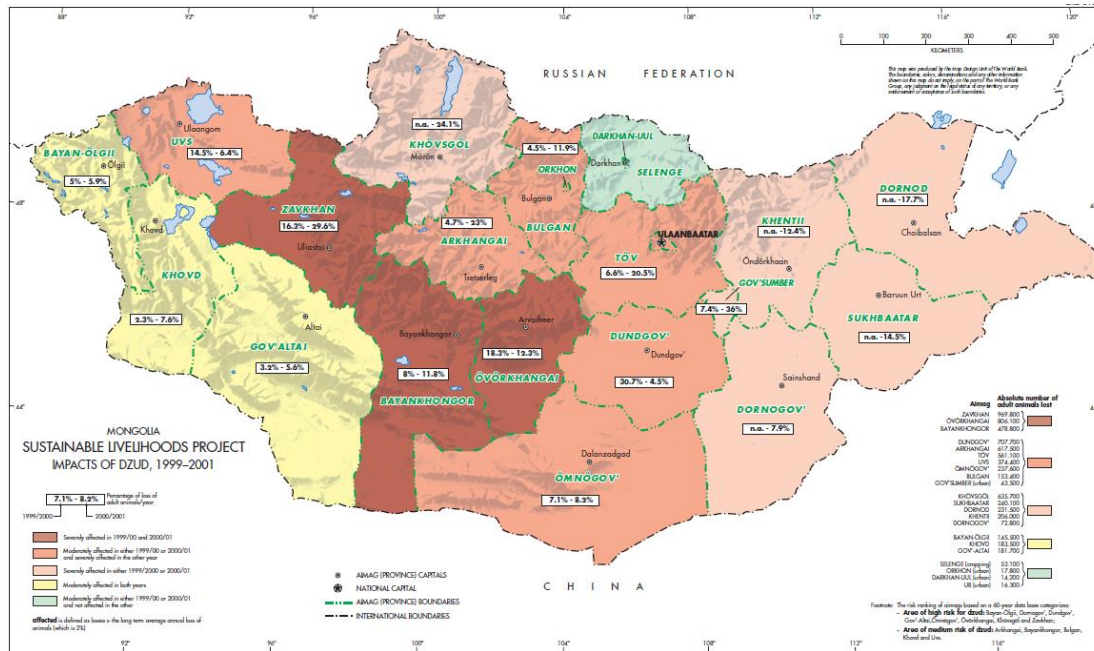
IEG also aimed to visit soums that had been among the SLP I and Index-Based Livestock Insurance Project pilot soums and aimags (map C.2 and map C.3, respectively). Given the protracted World Bank engagement in these areas, the team intended to qualitatively assess if and how this may have influenced intervention results.

The selected itinerary also enabled IEG to visit soums with differing agroecological conditions and associated characteristics and challenges. By traveling from south to north around the Khangai mountains, the assessment sampled soums across the mountain forest steppe, the steppe, and the desert steppe. In these remote areas in central and western Mongolia, overstocking has been high in recent years, and poverty rates are higher, in general, compared with the desert steppe or steppe areas closer to the capital (map C.4).

A final consideration was given to achieving a mix of soums at a varying distance to the national and aimag capitals while also visiting aimag capitals for consultations with aimag government officials. Soums farther from urban centers and paved roads face greater supply chain challenges and service gaps.

Limitations of the site selection methodology include the lack of coverage of the eastern steppe. Because of winter road conditions and time constraints, these areas could not be included in the assessment.

Map C.1. Impacts of Dzud, 1999–2001



Source: World Bank 2008.

Note: Dark red = severely affected in the 1999/2000 and 2000/01 dzuds; orange = moderately affected in either the 1999/2000 or 2000/01 dzuds and severely affected in the other year; light orange = severely affected in either the 1999/2000 dzud or 2000/01 dzud; yellow = moderately affected in both dzuds; green = moderately affected in either the 1999/2000 dzud or 2000/01 dzud and not affected in the other.

[illegible]

*Note:* Dark red = pilot soums (rural districts) selected for the first year of project; pink = core aimags (province).

[illegible]

*Note:* Orange = pilot phase aimags (2006–10); yellow = upscaling phase aimags (2011–16).

Map of Mongolia showing the percentage of the population aged 65 and over by province in 2008. The map uses a color scale from light orange to dark red to represent increasing percentages. The highest percentages are in Dornod (42.5%) and Govisumber (51.9%). The lowest is in Umnugovi (11.8%).

Province	Percentage (%)
Bayan-Ulgii	24.3
Uvs	29.6
Khuvsgul	25.3
Selenge	34
Darkhan-Uul	32.8
Bulgan	36.8
Zavkhan	25.7
Arkhangai	38.2
Ulaanbaatar	25.9
Khentii	38
Khovd	40.9
Tuv	20.5
Govi-Altai	45.1
Bayankhongor	29.6
Uvurkhangai	34.1
Dundgovi	21.7
Govisumber	51.9
Sukhbaatar	30.2
Dornod	42.5
Dornogovi	23.4
Umnugovi	11.8

Legend:

- 11.8 - 24.3
- 24.4 - 29.6
- 29.7 - 34.0
- 34.1 - 38.2
- 38.3 - 51.9

78

Note: Arkhangai = 38.2 percent; Uvurkhangai = 34.1 percent; Bayankhongor = 29.6 percent; Zavkhan = 25.7 percent. The poverty line was derived using the cost of basic needs approach. "In this approach, poverty line is the cost of a bundle of goods deemed to be sufficient for basic needs and has two components: food and non-food. ...The food poverty line is set at the cost of acquiring a required food consumption bundle that provides 2,100 calories per person per day and the non-food component takes into account the necessary non-food expenditures" (76).

## Field Assessment Itinerary

IEG carried out field assessments in central and western Mongolia (map C.5) between December 9 and 18, 2019, in seven sites located in four aimags. The sample included five soums and two aimag capitals (table C.1.) across three agroecological zones (map C.6).

**Table C.1. Local Dzud Impact  
(percentage change in livestock numbers)**

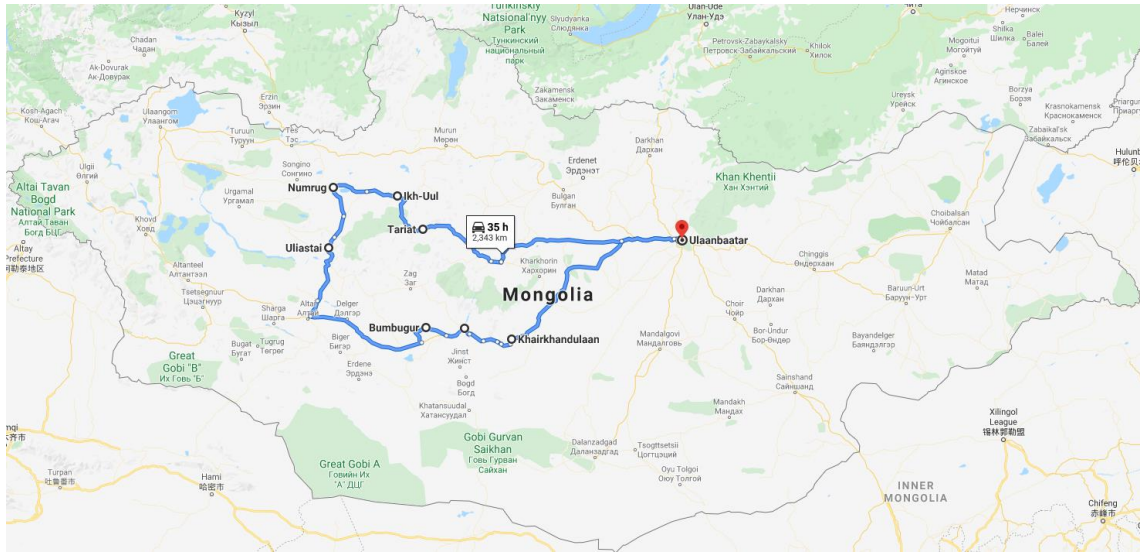
Field Assessment Location	Dzud Impact				
	1999	2000	2001	2002	2010
Khairkhandulaan soum, Uvurkhangai aimag (SLP I pilot soum)	+1.85	-24.35	-28.33	-13.27	-35.07
Bayankhongor, capital of Bayankhongor aimag (IBLI pilot aimag)	+23.80	-5.90	-44.55	-34.48	-14.68
Bumbugur soum, Bayankhongor aimag (SLP I pilot soum; IBLI pilot aimag)	-3.68	+7.02	-47.89	-62.55	-7.17
Uliastai, capital of Zavkhan aimag	-12.03	-6.91	-25.28	-4.60	-51.32
Numrug soum, Zavkhan aimag	-10.85	-31.16	-53.01	+3.22	-47.28
Ikh-Uul soum, Zavkhan aimag	+10.03	-7.45	+4.82	+10.92	-8.12
Tariat soum, Arkhangai aimag	+6.57	-10.26	-36.58	+4.30	-11.21

Source: Independent Evaluation Group; National Statistics Office of Mongolia.

Note: aimag = province; IBLI = Index-Based Livestock Insurance; SLP I = Sustainable Livelihoods Program Phase I; soum = district.

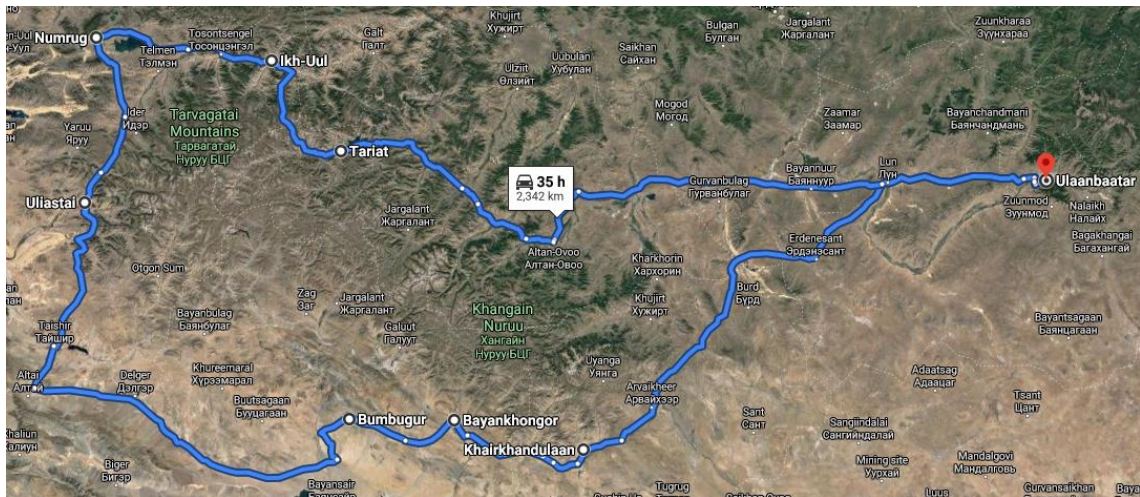


**Map C.5. Field Assessment Itinerary in Central and Western Mongolia**



Source: Google Maps.

**Map C.6. Satellite Image of Field Itinerary Indicating Different Agroecological Zones**



Source: Google Maps.

Note: The southern part of the route includes coverage of the steppe and desert steppe agroecological zones, while the northern part of the route is characterized as mountain forest steppe.

## Field Assessment Methodology

IEG consulted several stakeholder groups in each field assessment location (box C.1 and appendix D). Focus group discussions were held with various local government officials at the soum and aimag levels and with rural residents with diverse demographic and socioeconomic characteristics. Semistructured interviews were also conducted with soum bank managers, insurance brokers, and actors in the livestock value chain.

---

### Box C.1. Stakeholders Consulted at Field Assessment Sites

---

Government officials: *soum* governor and vice governor; *bag* governor(s); head of administration; agriculture officer; land officer; environment officer, ranger, inspector; social welfare officer; small business investment officer; finance officer; NEMA officer; NSO officer; citizen Khural chair or representative(s)

Rural residents: female herders, male herders, young herders, elderly herders, herders with larger herds, herders with smaller herds, pasture user group leaders, artisanal miners

Private sector: bank managers, insurance brokers, salespersons, traders, processors

Source: Independent Evaluation Group field assessment in 2019.

Note: NEMA = National Emergency Management Agency; NSO = National Statistics Office of Mongolia.

---

The field protocols qualitatively assessed the intervention mechanisms and implementation results in line with the assessment's theory of change and Agrawal's (2008) five adaptive strategies of rural poor people—mobility, storage, diversification, communal pooling, and exchange—which Upton (2012) and Fernández-Giménez et al. (2015) adapted to the Mongolian context.

## References

- Agrawal, A. 2008. *The Role of Local Institutions in Adaptation to Climate Change*. Washington, DC: World Bank. <https://openknowledge.worldbank.org/handle/10986/28274>.
- Fernández-Giménez, M. E., B. Batkhishig, B. Batbuyan, and T. Ulambayar. 2015. "Lessons from the Dzud: Community-Based Rangeland Management Increases the Adaptive Capacity of Mongolian Herders to Winter Disasters." *World Development* 68: 48–65.
- Johnson, D. A., D. P. Sheehy, D. Miller, and D. Damiran. 2006. "Mongolian Rangelands in Transition." *Science et Changements Planétaires/Sécheresse* 17 (1): 133–41.
- National Statistics Office of Mongolia (NSO) and World Bank. 2020. *Mongolia Poverty Update 2018: Main Report of Household Socioeconomic Survey 2018*. Washington, DC: World Bank.
- Upton, C. 2012. "Adaptive Capacity and Institutional Evolution in Contemporary Pastoral Societies." *Applied Geography* 33 (April): 135–41.
- World Bank. 2008. "Mongolia—Sustainable Livelihoods Project." Implementation Completion and Results Report ICR665, World Bank, Washington, DC.
- World Bank. 2016. "Mongolia—Index-Based Livestock Insurance Project." Implementation Completion and Results Report ICR2949, World Bank, Washington, DC.