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Report No: PAD3228

INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED CREDIT

IN THE AMOUNT OF SDR 125.2 MILLION
(US\$175.0 MILLION EQUIVALENT)

AND A

PROPOSED GRANT

IN THE AMOUNT OF SDR 125.2 MILLION
(US\$175.0 MILLION EQUIVALENT)

TO

THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA

FOR THE

LOWLANDS LIVELIHOOD RESILIENCE PROJECT

May 2, 2019

Agriculture Global Practice
Africa Region

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CURRENCY EQUIVALENTS

(Exchange Rate Effective February 28, 2019)

Currency Unit = Ethiopian Birr (ETB)

US\$1.0 = ETB 28.35

US\$1.0 = SDR 0.71531782

FISCAL YEAR

January 1–December 31

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ABBREVIATIONS AND ACRONYMS

AGP	Agricultural Growth Project
AWPB	Annual Work Plan and Budget
CAHW	Community Animal Health Worker
CDD	Community-driven Development
CDP	Commune Development Program
CIF	Community Investment Fund
CIG	Common Interest Group
CPF	Country Partnership Framework
CSO	Civil Society Organization
DA	Designated Account
DRDIP	Development Response to Displacement Impacts Project
DRSLP	Drought Resilience and Sustainable Livelihoods Program
EIAR	Ethiopian Institute of Agriculture Research
EIRR	Economic Internal Rate of Return
ESMF	Environmental and Social Management Framework
ETB	Ethiopian Birr
EX-ACT	Ex-Ante Carbon-balance Tool
FAO	Food and Agriculture Organization of the United Nations
FCA	Federal Cooperatives Agency
FIRR	Financial Internal Rate of Return
FM	Financial Management
F-PCU	Federal Project Coordination Unit
FSC	Federal Steering Committee
FTC	Farmers Training Center
GBV	Gender-based Violence
GHG	Greenhouse Gas
GIS	Geographic Information System
GIZ	German Corporation for International Cooperation
GoE	Government of Ethiopia
GRM	Grievance Redress Mechanism
GRS	Grievance Redress Service
ICT	Information and Communication Technology
IDA	International Development Association
IDDRSI	IGAD Drought Disaster Resilience Sustainable Initiative
IFAD	International Fund for Agricultural Development
IFC	International Finance Corporation
IFMIS	Integrated Financial Management Information System
IFR	Interim Financial Report
IGAD	Intergovernmental Authority on Development
ILRI	International Livestock Research Institute
IPF	Investment Project Financing
KDC	Kebele Development Committee
KfW	<i>Kreditanstalt für Wiederaufbau</i> (German Reconstruction Credit Institute)
LAND	Land Administration to Nurture Development
LLRP	Lowlands Livelihood Resilience Project
LSIPT	Livestock Sector Investment Policy Toolkit
M&E	Monitoring and Evaluation
MFI	Microfinance Institution

MIS	Management Information System
MoA	Ministry of Agriculture
MoF	Ministry of Finance
MoFPDA	Ministry of Federal and Pastoral Development Affairs
MoP	Ministry of Peace
MoU	Memorandum of Understanding
MoWIE	Ministry of Water, Irrigation, and Electricity
NGO	Non-governmental Organization
NPV	Net Present Value
OFAG	Office of the Federal Auditor General
PAD	Project Appraisal Document
PAP	Pastoral and Agro-pastoral
PCDP	Pastoral Community Development Project
PCU	Project Coordination Unit
PDO	Project Development Objective
PEFA	Public Expenditure and Financial Accountability
PFM	Public Financial Management
PIM	Project Implementation Manual
PPP	Public-private Partnership
PPPAA	Federal Public Procurement and Property Administration Agency
PPSD	Project Procurement Strategy for Development
PRIME	Pastoralist Areas Resilience Improvement and Market Expansion
PSNP	Productive Safety Net Program
PTC	Pastoral Training Center
RCST	Rangeland Cluster Support Team
RMC	Rangeland Management Committee
RMIP	Rangeland Management and Investment Plan
R-PCU	Regional Bureau of the Project Coordination and Implementation Unit
RPF	Resettlement Policy Framework
RPLRP	Regional Pastoral Livelihoods Resilience Project
RSC	Regional Steering Committee
RUSACCO	Rural Savings and Credit Cooperative
SA	Social Assessment
SCF	Standard Conversion Factor
SDR	Special Drawing Right
SEA	Sexual Exploitation and Abuse
SI	Strategic Investment
SLMP	Sustainable Land Management Program
SNNPR	Southern Nations, Nationalities, and Peoples Region
SPD	Standard Procurement Document
STEP	Systematic Tracking of Exchanges in Procurement
ToR	Terms of Reference
TTL	Task Team Leader
TVET	Technical and Vocational Education and Training
UN	United Nations
UNDP	United Nations Development Programme
USAID	United States Agency for International Development
WDC	Woreda Development Committee
WOFED	Woreda Office for Finance and Economic Development
WOPD	Woreda Office for Pastoral Development



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DATASHEET

BASIC INFORMATION

Country(ies)	Project Name	
Ethiopia	Lowlands Livelihood Resilience Project	
Project ID	Financing Instrument	Environmental Assessment Category
P164336	Investment Project Financing	B-Partial Assessment

Financing & Implementation Modalities

<input type="checkbox"/> Multiphase Programmatic Approach (MPA)	<input type="checkbox"/> Contingent Emergency Response Component (CERC)
<input type="checkbox"/> Series of Projects (SOP)	<input type="checkbox"/> Fragile State(s)
<input type="checkbox"/> Disbursement-linked Indicators (DLIs)	<input type="checkbox"/> Small State(s)
<input type="checkbox"/> Financial Intermediaries (FI)	<input type="checkbox"/> Fragile within a non-fragile Country
<input type="checkbox"/> Project-Based Guarantee	<input type="checkbox"/> Conflict
<input type="checkbox"/> Deferred Drawdown	<input type="checkbox"/> Responding to Natural or Man-made Disaster
<input type="checkbox"/> Alternate Procurement Arrangements (APA)	

Expected Approval Date	Expected Closing Date
23-May-2019	10-Oct-2025

Bank/IFC Collaboration

No

Proposed Development Objective(s)

To Improve Livelihood Resilience of Pastoral and Agro-Pastoral Communities in Ethiopia

Components

Component Name	Cost (US\$, millions)
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Integrated Rangeland Development and Management	223.40
Livelihood Improvement and Diversification	109.77
Improving Basic Services and Capacity Building	75.73
Project Management, Monitoring and Evaluation	42.10

Organizations

Borrower: Federal Democratic Republic of Ethiopia (FDRE)
 Implementing Agency: Ministry of Peace

PROJECT FINANCING DATA (US\$, Millions)

SUMMARY

Total Project Cost	451.00
Total Financing	451.00
of which IBRD/IDA	350.00
Financing Gap	0.00

DETAILS

World Bank Group Financing

International Development Association (IDA)	350.00
IDA Credit	175.00
IDA Grant	175.00

Non-World Bank Group Financing

Counterpart Funding	11.00
Local Beneficiaries	11.00
Other Sources	90.00
International Fund for Agriculture Development	90.00



IDA Resources (in US\$, Millions)

	Credit Amount	Grant Amount	Guarantee Amount	Total Amount
National PBA	175.00	175.00	0.00	350.00
Total	175.00	175.00	0.00	350.00

Expected Disbursements (in US\$, Millions)

WB Fiscal Year	2019	2020	2021	2022	2023	2024	2025	2026
Annual	0.84	24.23	42.18	64.08	74.19	72.62	54.95	10.25
Cumulative	0.84	25.07	67.25	131.32	205.51	278.12	333.08	343.32

INSTITUTIONAL DATA

Practice Area (Lead)

Agriculture

Contributing Practice Areas

Environment & Natural Resources, Social Protection & Labor, Water

Climate Change and Disaster Screening

This operation has been screened for short and long-term climate change and disaster risks

Gender Tag

Does the project plan to undertake any of the following?

a. Analysis to identify Project-relevant gaps between males and females, especially in light of country gaps identified through SCD and CPF	Yes
b. Specific action(s) to address the gender gaps identified in (a) and/or to improve women or men's empowerment	Yes
c. Include Indicators in results framework to monitor outcomes from actions identified in (b)	Yes

SYSTEMATIC OPERATIONS RISK-RATING TOOL (SORT)

Risk Category

Rating

1. Political and Governance

● High



2. Macroeconomic	● Substantial
3. Sector Strategies and Policies	● Substantial
4. Technical Design of Project or Program	● Substantial
5. Institutional Capacity for Implementation and Sustainability	● Substantial
6. Fiduciary	● Substantial
7. Environment and Social	● Substantial
8. Stakeholders	● Substantial
9. Other	● Substantial
10. Overall	● Substantial

COMPLIANCE

Policy

Does the project depart from the CPF in content or in other significant respects?

Yes No

Does the project require any waivers of Bank policies?

Yes No

Safeguard Policies Triggered by the Project	Yes	No
Environmental Assessment OP/BP 4.01	✓	
Performance Standards for Private Sector Activities OP/BP 4.03		✓
Natural Habitats OP/BP 4.04	✓	
Forests OP/BP 4.36	✓	
Pest Management OP 4.09	✓	
Physical Cultural Resources OP/BP 4.11	✓	
Indigenous Peoples OP/BP 4.10	✓	
Involuntary Resettlement OP/BP 4.12	✓	
Safety of Dams OP/BP 4.37	✓	



Projects on International Waterways OP/BP 7.50	✓
Projects in Disputed Areas OP/BP 7.60	✓

Legal Covenants

Sections and Description

Within six (6) months from the Effective Date, the Recipient shall establish, or cause to be established, the following organizations with the following responsibilities:

- (a) Federal Steering Committee (“FSC”), responsible for providing Project oversight and strategic coordination of the Project at the federal level.
- (b) With respect to each selected Region, a Regional Steering Committee (“RSC”), responsible for providing Project oversight and strategic coordination at the regional level.
- (c) With respect to each selected Region, a Regional Technical Working Group to provide technical guidance to the RSC on prioritization of activities and review of proposed strategic investments under the Project.

Sections and Description

The Recipient shall establish, or cause to be established, the following organizations with the following responsibilities and by the following dates:

- (i) Within three (3) months from the Effective Date, establish a Regional Bureau Project Coordination Unit (“R-PCU”) within the pastoral bureau (or equivalent) in each selected Project Region to be responsible for day-to-day Project implementation at the regional level.
- (ii) Within four (4) months from the establishment of the RPCU of each selected Project region, establish a Rangeland Cluster Support Team (“RCST”) in said region to be responsible to support, encourage, and foster cross-rangeland unit (and cross-woreda) and holistic planning of development investments.

Sections and Description

Within four (4) months from its establishment, the relevant RPCU shall hire and assign one finance officer and one procurement officer under the Woreda Office for Finance and Economic Development in each of the targeted woredas, based on the terms of reference acceptable to the Association.

Sections and Description

The Recipient shall within twelve (12) months from the Effective Date, establish and thereafter, maintain throughout Project implementation, and publicize the availability of a grievance redress mechanism, in form and substance satisfactory to the Association, to hear and determine fairly and in good faith all complaints raised in relation to the Project, and take all measures necessary to implement the determinations made by such mechanism in a manner satisfactory to the Association.

Sections and Description

The Recipient shall ensure that Memoranda of Understanding, in form and substance satisfactory to the Association, for the management of the Project are duly executed not later than sixty (60) days after the Effective



Date between MoP and line ministries and other federal-level implementing agencies setting out expected deliverables and AWPB development

Sections and Description

The Recipient shall ensure that Memoranda of Understanding, in form and substance satisfactory to the Association, for the management of the Project are duly executed not later than sixty (60) days after the Effective Date Regional Bureau/Commission of Pastoral Development or Bureau of Agriculture and Livestock (per Regional arrangements) and relevant bureaus regarding their specific role in Project implementation and any funds flow required, according to Regional specificities, priorities, and Project activities.

Conditions

Type	Description
Effectiveness	The Project Implementation Manual, prepared in accordance with the provisions in Section I.C.1 of Schedule 2 of the project Financing Agreement, has been adopted by the Ministry of Peace.
Effectiveness	The Procurement Manual, prepared in accordance with the provisions in Section I.C.5 of Schedule 2 of the project Financing Agreement, has been adopted by the Ministry of Peace.
Effectiveness	The F-PCU has been established in accordance with the provisions in Section I.A.4(a) of Schedule 2 of the project Financing Agreement.



I. STRATEGIC CONTEXT

A. Country Context

1. **With a predicted growth rate for 2018 of 8.5 percent, Ethiopia is one of the world's fastest-growing economies.** Ethiopia, with an estimated population of 102.4 million (2016), is Africa's second most populous country and the third-largest economy in Eastern and Southern Africa. National per capita income rose from US\$350 in 2010 to US\$993 in 2017, and extreme poverty fell from 55 percent in 2000 to 34 percent in 2011 and then to 24 percent in 2016.¹ Under the new government led by Prime Minister Dr. Abiy Ahmed, appointed in April 2018, the country has embarked on macroeconomic reforms. There are signs that the economy is opening, and private sector integration is growing.

2. **These impressive gains coincide with imposing challenges.** Ethiopia remains one of the world's poorest countries and ranks 174 of 186 on the Human Development Index.² Average annual growth in gross domestic product over 2010-16, at 10.1 percent,³ has not generated the 1.7 million jobs required each year by new workforce entrants,⁴ and more jobs will be needed, because 70 percent of the population is under 30.⁵ The lack of economic opportunity and political representation has caused civil unrest since 2016, placing jobs and political justice at the top of the agenda for the new cabinet.

3. **Throughout Ethiopia, climate change—particularly in the form of more frequent and severe droughts and floods—is a serious concern and it is quite literally shifting the landscape for the already vulnerable and rapidly growing Lowlands population.** Ethiopia has seen 8 major droughts in the past 15 years, with significant adverse consequences for the economy and livelihoods. The three years in which growth dipped below 10 percent (2009, 2012, and 2016) were all associated with severe droughts. Long-term climate change predictions are mixed, but the overall consensus is that drought will continue to be a major stress factor over the next few decades.

4. **Ethiopia's arid and semi-arid Lowlands present some of the most exacting challenges.** Vulnerability is high in the Lowlands, where the high-risk environment exposes livelihoods to multiple shocks. Whereas Highlands areas—with 40 percent of the land area and over 85 percent of the population—have been the epicenter of economic growth and political power for centuries, the arid and semiarid Lowlands stand at the margins of political and economic engagement. With 60 percent of the land area and 12–14 percent of the population—mostly pastoral and agro-pastoral (PAP) communities—the Lowlands lag the rest of Ethiopia in terms of most social and economic indicators. Literacy rates, access to formal education, and access to water and sanitation are all well below national averages in the six Lowlands areas of Ethiopia: Afar Regional State, the Benishangul-Gumuz Region, parts of Oromia Region, Somali Regional State, Gambella Region, and the Southern Nations, Nationalities, and Peoples Region (SNNPR). Pastoral Lowlands areas have the lowest maternal and child health indicators and highest fertility rates (7.2 births per woman in Somali Regional State and 5.5 in Afar Regional State). Except for SNNPR, the average population growth rate in pastoral areas of the five other Lowlands regions surpasses 2.5 percent. The Multidimensional Poverty Index in the Lowlands is quite high—for instance, it is 80.1 in Somali Regional State

¹ Growth rate for 2018 from IMF World Economic Outlook (April 2018); all other data cited here from World Development Indicators, World Bank.

² UNDP (2017), Human Development Report.

³ World Development Indicators, World Bank.

⁴ National Planning Commission, GoE.

⁵ Central Statistical Agency, GoE.



compared to 56.5 in Tigray Region. Perhaps more important, the share of the Lowlands population that is vulnerable is more than twice the share of the population that is poor.

B. Sectoral and Institutional Context

5. **The great majority of the population in Ethiopia’s arid and semiarid Lowlands has relied on pastoralism and agro-pastoralism, based on the seasonal movement of livestock and traditional rangeland management, as the most suitable way to use the scarce resources in these areas.** Rangelands are defined as areas of shrubs and/or grasses receiving less than about 750 millimeters of rainfall each year, and the movement of livestock between wet-season and dry-season grazing areas is vital to PAP livelihoods. Among pastoralists, extensive herding is the dominant economic activity; agro-pastoralists engage in mixed farming and livestock rearing.⁶ Within these broad parameters, PAP production and marketing systems can vary widely. For example, Afar and Somali Regional States are dry areas, whereas Gambella Region and SNNPR are humid. Somali Regional State has a more diversified economy and market-integration; in contrast, Gambella Region is poorly connected to markets, and has a less diversified economy.

6. **Important trends are reshaping livelihood systems throughout the arid and semiarid Lowlands.** More severe and frequent droughts are leading to more animal death and sickness, rendering PAP systems more fragile. Herd size continues its long-term decline, while herd composition continues to shift away from cattle in favor of browsers, such as goats and camels. Invasive plant species such as *Prosopis juliflora* are rapidly degrading rangelands by displacing native plants used for grazing and forage; *Prosopis juliflora* now covers about 1.2 million hectares (12.33 percent) in Afar Region. Private enclosures of pastures, the spread of small- and large-scale commercial agriculture and urbanization, and the development of mega-projects such as sugarcane plantations, are fragmenting rangelands, reducing the accessibility and availability of pasture land, and limiting livestock mobility.

7. **Rangeland is one of the most contested assets in Ethiopian Lowlands and access to pastures and water in rangeland are often a source of conflict.** A volatile geopolitical environment, insecurity in some regions, and local conflicts add to the challenge of sustaining PAP livelihoods.

8. **Conflicts have adversely affected pastoral areas for centuries, but they have increased in recent years, variously attributed to rising pressure on resources, reduced resource availability, a proliferation of arms, and the decline of traditional conflict management mechanisms.** Conflict disproportionately affects women and children and places additional limits on animal mobility. Projects and programs taking a participative and community-driven approach to improve access to resources (pastures, water, cattle routes etc.) can help address some of the drivers of conflict. Nonetheless, there is still a residual risk that access to some of these resources might create conflict within and between communities. The design of programs to improve PAP livelihoods must take into account the high-risk environment and accordingly put a strong emphasis on conflict management.

9. **The traditional social systems and economic arrangements that supported PAP communities are in transition.** A cash-based market economy and livestock marketing are growing in importance to meet rising domestic and export demand for live animals and livestock products. Some large-scale herd owners have successfully moved into commercial livestock production. Other herders have been pushed out of pastoralism by

⁶ A small minority of producers depend almost entirely on sedentary farming along river-banks, near water points, and in peri-urban areas.



successive droughts and other stresses, or they have been pulled toward alternative market opportunities. Some have moved into agro-pastoral systems, generally where water is available to produce animal feed and other crops.

10. **In this dynamic context, significant economic opportunities are emerging.** Major drivers of growth in these areas include:

- Demand for animal protein is expected to double by 2030, creating commercial opportunities for PAP production systems.⁷ Upward trends in prices for animal products and livestock indicate incentives to invest in the livestock sector.⁸ Ethiopia's geographical location offers substantial prospects to export live animals and animal products (especially red meat) to Arabian Gulf countries and within Africa. These prospects could be enhanced by introducing a practical, affordable animal identification and traceability system.
- Opportunities exist to expand rainfed, water conservation, and irrigated agriculture in the Lowlands to meet market demand. Managed well, they can be leveraged without interfering with the mobility of PAP communities.
- Other opportunities to create local employment include off-grid energy (including solar, wind, and bio digesters), mining, tourism, trade, manufacturing, and other services.
- As improvements in physical connectivity (roads, railways) and digital connectivity (mobile phones) spread, producers gain options to reach markets and commercialize crop and livestock production.

11. **Although investments in past decades tended to emphasize humanitarian assistance, food aid, and cash-for-work in pastoral areas, more recent investments have emphasized community and livelihood development.** In particular, over the last 15 years, the World Bank and International Fund for Agricultural Development (IFAD) have invested US\$452 million in three phases of the Pastoral Community Development Project (PCDP). Through a community-driven development (CDD) approach, this foundational project strengthened the capacity of community institutions to devise inclusive community development plans and deliver basic social services at the kebele, woreda, and regional levels. Other recent investments have focused on livelihoods with positive results, including the Regional Pastoral Livelihood Resilience Project (RPLRP) (World Bank), Drought Resilience and Sustainable Livelihoods Program (DRSLP) (African Development Bank), the Pastoralist Areas Resilience Improvement through Market Expansion (PRIME) project (United States Agency for International Development – USAID), and the Afar Soil Rehabilitation Project in Afar (German Corporation for International Cooperation, GIZ). These projects all had a relatively limited geographical scope, however, and their successful approaches merit scaling up.

12. **The design of the current project relies on two studies for a better understanding of past and future dynamics in the Ethiopian Lowlands.** These studies (one conducted by the World Bank with IFAD and the other by the World Bank and the United Kingdom's Department for International Development)⁹ identify four major binding constraints to livelihoods in the Lowlands:

⁷ Whether this emerging demand can be met sustainably is another concern. Ethiopia's agricultural sector accounts for more than 60 percent of Ethiopia's GHG emissions. The National Adaptation Plan and Climate Resilient Green Economy strategy strongly emphasizes that climate-smart agriculture is an essential strategy for meeting climate change mitigation and adaptation goals.

⁸ ILRI (2017), "Ethiopia Livestock Sector Analysis," https://cgspace.cgiar.org/bitstream/handle/10568/92057/LSA_Ethiopia.pdf?sequence=3&isAllowed=y.

⁹ A World Bank and IFAD (2018), "Pastoral Development in Ethiopia: Trends and the Way Forward," assesses four decades of pastoral development experience. World Bank and the Department for International Development of the United Kingdom (2019), "Vulnerability



- a) **Low productivity and limited market links.** The current productivity of livestock (for meat and dairy) raised by pastoral communities and of dryland agriculture as practiced by agro-pastoral communities is very low compared with national and regional standards. At the same time, poor public infrastructure in the Lowlands—for example, roads, market facilities, and cell phone and internet connectivity—makes it difficult for producers to connect to lucrative national, regional, and international markets. To meet emerging market demand and increase household incomes, productivity and commercialization must be enhanced.
- b) **High vulnerability of prevailing livelihoods.** The prevailing PAP livelihoods are highly vulnerable to climatic shocks, primarily droughts, conflict and insecurity, as well as livestock pests and diseases. In addition, the deterioration of rangelands, encroachment of pastures by invasive species and human action, increasing human and livestock populations and mobility limitations, are making the entire PAP systems highly fragile and vulnerable and there is an urgent need to build resilience of the production systems and livelihoods. The very high rates of child malnutrition are indicative of the harmful effects of the current situation on the population living in these areas.
- c) **Limited capacity to benefit from opportunities to diversify livelihoods.** While a large share of the PAP population wants to engage in another form of livelihood, the limited skill base, minimal market opportunities, and poor access to assets and financing severely limit options for diversifying livelihoods. Low population density, limited infrastructure, and geographical remoteness from services and markets imply that economic diversification should center upon PAP value chains and emerging market opportunities as the key to develop a critical mass for diversification to occur.
- d) **Limited delivery of social and economic services.** PAP communities have the lowest socioeconomic indicators in Ethiopia which has serious implications for livelihoods and overall human development and well-being. The PCDP greatly enhanced the delivery of social and economic services over the course of 15 years, yet it reached only 60 percent of kebeles, and resource limitations prevented priority demands from being met in some kebeles. Many PAP areas still have no access to basic social and economic services.

13. **In a strong push for development in PAP areas, the Government of Ethiopia (GoE) is in the process of finalizing a new policy for pastoral development, which is being reviewed by the prime minister's office and it is expected that the new policy will be approved by December 2019.** The policy recognizes pastoralism as a viable economic activity that is suitable and adapted to vast rangelands, and it emphasizes that pastoral mobility is a key mechanism for ensuring the sustainability of PAP livelihoods. These views and goals are aligned with the strategy of the Intergovernmental Authority on Development (IGAD) Drought Disaster Resilience Sustainable Initiative (IDDRSI).¹⁰ The Government designated the Ministry of Peace (MoP)—formerly the Ministry of Federal and Pastoral Development Affairs (MoFPDA)—to lead the design and implementation of this project aimed at building more resilient livelihoods in the PAP areas of Ethiopia. MoP successfully implemented all three phases of the PCDP.

14. **In sum, an integrated intervention and investments at scale are required to achieve drought-resilient, transformed, and sustainable PAP livelihoods, ecosystems, and institutions.** The proposed Lowlands Livelihood Resilience Project recognizes that an integrated, comprehensive approach is essential to address multiple livelihood challenges in a complex, fragile, and conflict-prone environment. To that end, any intervention should

and Resilience in the Ethiopian Lowlands of Ethiopia: Building a More Developmental Approach to Responding to Shocks," "Challenges and Future Prospects" identifies future directions for building resilience in the Ethiopian Lowlands.

¹⁰ IGAD is the Intergovernmental Authority on Development.



reflect six strategic pillars identified in the World Bank–IFAD study: (1) livelihood support; (2) integrated rangeland and water development and secure access to key resources; (3) transformation and commercialization of the livestock industry in PAP areas; (4) enhanced access to and use of basic social and economic services; (5) enhanced social protection and disaster risk management; and (6) institutional capacity building and other cross-cutting issues.

C. Relevance to Higher Level Objectives

15. The proposed project features in the World Bank Country Partnership Framework (CPF)¹¹ approved in 2017 for the period FY18–FY22 under the “Building Resilience and Inclusiveness” pillar, and it strongly contributes to the “Promoting Structural and Economic Transformation through Increased Productivity” pillar. The project will directly address the World Bank Group’s twin goals of alleviating poverty and boosting shared prosperity, and it will contribute to several CPF results framework targets: enhanced resilience and inclusiveness, increase in agricultural yield, job creation, natural resource management, and climate co-benefits. The project is aligned with the Livestock Master Plan and Growth and Transformation Plan (GTP-II) of the GoE for the period 2016-2020. This project will meet the goals of the World Bank’s Africa Climate Business Plan, Ethiopia’s Nationally Determined Contribution, and Ethiopia’s Climate Resilient Green Economy strategy. As for IFAD, this operation will be financed within the IFAD 11 financing cycle and is fully in line with IFAD’s Country Strategic Opportunities Programme, contributing to (1) enhanced resilience and productivity of ecosystems and livelihoods through improved management of natural resources, particularly water; and (2) enhanced links with the private sector to ensure increased and sustained access to markets, finance, and agricultural technology.

16. The project will help to improve the livelihoods of people living in PAP areas, contributing to Sustainable Development Goals 1 (no poverty), 2 (zero hunger), 3 (good health and well-being), 5 (gender equality), 6 (clean water and sanitation), 8 (decent work and economic growth), 13 (climate action), and 15 (life on land).

II. PROJECT DESCRIPTION

A. Project Development Objective

17. The Project Development Objective (PDO) is to improve livelihood resilience of pastoral and agro-pastoral communities in Ethiopia.

PDO Indicators

18. The PDO indicators include:

1. Increased land area under sustainable landscape management practices (in hectares).
2. Increase in yield of targeted commodities (livestock and crop (percentage)).
3. People with improved access to economic and social services (of which 50 percent female and 20 percent youth) (number).

¹¹ Report No: 115135. World Bank. 2017. *Ethiopia - Country partnership framework for the period FY18 - FY22 (English)*. Washington, D.C. : World Bank Group.



4. Farmers¹² reached with agricultural assets or services (of which female).

19. Building the resilience of livelihood systems is a central consideration of the proposed project. In general, “resilience” refers to a heightened system capacity to anticipate, respond to, and recover from hazards. Resilience building, as described by the World Bank, involves strengthening three specific capacities:

1. **Absorptive capacity.** The ability of people, assets, and systems to prepare for, mitigate, or prevent negative impacts of hazards to preserve and restore essential basic structures and functions, for example through protection, robustness, preparedness, and/or recovery.
2. **Adaptive capacity.** The ability of people, assets, and systems to adjust, modify, or change characteristics and actions to moderate potential future impacts from hazards to continue to function without major qualitative changes, for example through diversity, redundancy, integration, connectedness, and/or flexibility.
3. **Transformative capacity.** The ability to create a fundamentally new system to avoid negative impacts from hazards.

20. In a number of ways, the proposed project anticipates strengthening:

- **Absorptive capacity**, through rangeland and natural resource management interventions, strategic investments (SIs), and improved basic social service delivery, which will help communities and PAP systems to absorb drought shocks and reduce asset losses.
- **Adaptive capacity**, through livelihood improvement, by helping beneficiaries adopt climate-smart agriculture, and by investing in research systems that will contribute to better adaptation to a changing climate.
- **Transformative capacity**, through market links, small-scale irrigation, and livelihood diversification, which together can provide a basis for more fundamental socioeconomic changes and help beneficiaries reduce their dependence on rainfed agricultural systems.

21. Table 1 summarizes how the project interventions will build these capacities and how they will be measured through the results framework. Baseline value in the result framework will be provided after completion of the baseline survey by December 2019.

Table 1: Measuring resilience in the Lowlands Livestock Resilience Project

Resilience attribute	Intervention area	Measurement indicators in results framework
Absorptive capacity	Rangeland and natural resource management interventions, SIs, and improved basic social service delivery	PDO Indicator: Land area under sustainable landscape management practices (hectares) PDO Indicator: People with improved access to economic and social services (of which 50% female and 20% youth) (Number) Intermediate Results Indicator: Project beneficiaries with improved access to key natural resources (of which 50% female and 20% youth) (Percentage) Intermediate Result Indicator: Project area with increased NDVI/Biomass Index Corrected for weather variability (Percentage)

¹² “Farmers” are defined here as people engaged in agricultural activities or members of an agriculture-related business which includes crops, livestock, capture fisheries, agroforestry, and so on. Based on that definition, pastoralists and agro-pastoralists are a subset of farmers.



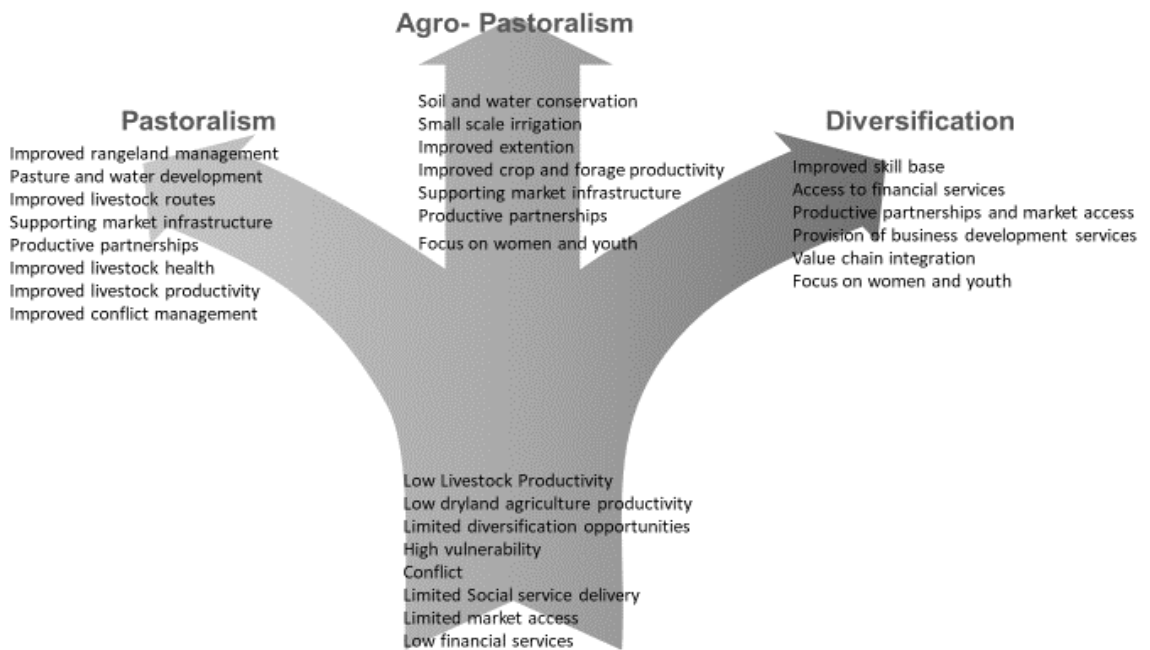
		Intermediate Indicator: Community sub-projects operational (Percentage)
Adaptive capacity	Livelihood improvement	PDO Indicator: Farmers reached with agricultural assets or services (CRI, Number) PDO Indicator: Increase in yield of targeted commodities (livestock and crop) (Percentage) Intermediate Results Indicator: Farmers adopting improved agricultural technologies (CRI, Number) Intermediate Result Indicator: Number of strategic economic infrastructure investments operational (Number)
Transformative capacity	Market linkages and livelihood diversification	Intermediate Results Indicator: Beneficiaries participating in additional or alternative diversified incomes generating activities (of which 50% female and 20% youth) (Number) Intermediate Results Indicator: Project beneficiaries with access to rural financial services (of which 60% female and 20% youth) (Number) Intermediate Results Indicator: Increased volume of marketed commodities, in targeted value chains by project beneficiaries (Percentage) Intermediate Result Indicator: Rural Savings and Credit Cooperative (RUSACCOs) and Unions supported by the project (Number)

22. The geographical coverage of the proposed project includes PAP areas in six regions: Afar Regional State, Benishangul-Gumuz Region, Gambella Region, Oromia Region, SNNPR, and Somali Regional State. Within these six regions, the project will intervene in approximately 100 woredas. It will adopt a woreda-clustering approach to spatially cover the rangelands.

23. The introduction of a fundamentally new, coherent, and participatory approach to rangeland management lies at the heart of this project to mobilize the resources of the Ethiopian Lowlands for more resilient livelihoods. In other words, unlike earlier approaches to pastoral development, the proposed project will actively engage with the dynamic nature of the Lowlands, recognizing that many livelihoods are in transition, that mobility is a key feature of that transition, and that these trends will continue. This is a relatively new approach in the Ethiopian context driven by the assumption that the development of rangelands is a better mechanism to efficient natural resource allocation in Ethiopian Lowlands compared to alternate usages. Furthermore, the project is focused on private sector engagement for proving more sustainable and longer-term solutions for delivery of goods and services with an assumption that there is appetite from the private sector for engagement in this geography. These are relatively newer approaches in a high-risk environment which warrants a more adaptive, flexible and learning approach for course correction during the project implementation. Figure 1 depicts the pathways of livelihood change that will contribute to increased resilience under the proposed project.



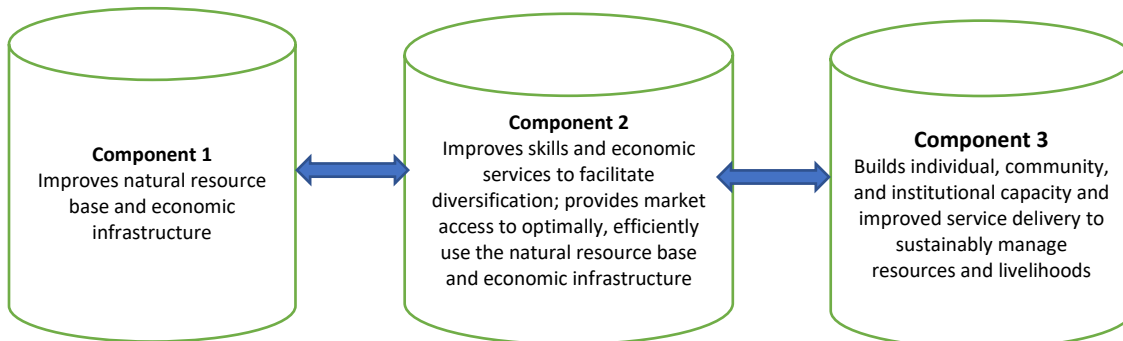
Figure 1: Pathways of livelihood change to increase resilience



B. Project Components

24. To achieve the PDO, the proposed project will combine three complementary layers of investment (Figure 2) under three project components. Investments in Component 1 will focus on improving the natural resource endowment and on financing SIs in economic infrastructure. Investments under Component 2 will improve public service delivery and the skill base, and support market access to optimize the use of investments made in Component 1 and support diversification to reduce pressure on natural resources. Investments under Component 3 will build capacity in the institutional environment and support the delivery of basic social services to ensure the long-term sustainability of PAP livelihoods.

Figure 2. Linked investments enable project components to reinforce one another



25. The project design is built on key assumptions, such as the timely preparation of the Rangeland Management and Investment Plans (RMIPs), availability of the specialized service providers, functioning of the



cluster and local level project implementing structures etc. The project is implementing new approaches, in a fragile environment with low capacity and therefore the project management will follow a learning and adaptive approach to ensure course correction and revision of activities as deemed necessary building upon the lessons learnt in the course of project implementation.

26. Private sector solutions are a central feature of the proposed project, and a guiding principle is that public sector spending will not occur when a private sector alternative is available. The project will finance only public goods and will focus on crowding-in private sector investment through productive partnerships. The International Finance Corporation (IFC) was consulted extensively during the project design phase, and as the project is implemented, the task team will continue proactively engaging with the IFC to (1) work with existing or prospective IFC clients to establish productive alliances in the project areas; (2) develop a potential pipeline of IFC investment and advisory services through engagement with the project; and (3) help address investment bottlenecks (through public investment, analytical work, or policy engagement) to bring about greater private sector participation in the project areas.

27. The sections that follow briefly describe each component; for a detailed description, see Annex 2.

Component 1: Integrated Rangeland Development and Management (Total: US\$223.40 million equivalent of which US\$173.24 million from IDA, US\$46.76 million from IFAD and US\$3.40 million beneficiary's contribution)

28. Pastoralism is an efficient and sustainable use of key rangeland resources in the arid and semiarid Lowlands that are not well suited to other forms of practices such as farming. Thus, component one will support the overall management of rangelands where PAP production systems operate. It will ensure that pastoralists have secure access to and use of key natural resources in several ways, including through conflict management. Efforts will encompass all rangeland resources, such as dry-season and wet-season grazing, grazing land intended to act as drought reserves; cattle corridors; wetlands; forests and woodlands; water sources for livestock, crops, and humans; settlements; and areas reserved for crop and fodder production. Component 1 has three subcomponents.

29. **Subcomponent 1.1: Integrated Rangeland Management Planning (Total: US\$16.79 million of which US\$13.46 million from IDA and US\$3.33 million from IFAD).** This subcomponent will finance five sets of activities: (1) conducting regional assessments of rangelands and associated PAP communities, institutions, and governance structures; (2) developing an inventory of existing investment and strategic plans (such as disaster preparedness SI plans and woreda-level investment plans) to ensure that any subsequent work undertaken by the project is aligned with and does not duplicate those efforts; (3) formulating participatory RMIPs; (4) setting up a rangeland monitoring system; and (5) building stakeholders' capacity to plan and implement RMIPs.

30. The RMIPs will identify five areas which may require investments: (1) natural resource and pasture development; (2) water resource development; (3) small-scale irrigation scheme development; (4) market infrastructure development; and (5) development of other economic infrastructure. The planning process will employ both a gender and a conflict lens to ensure that the RMIPs adequately address these two concerns. The project will provide the support required for technical assistance, capacity building, and facilitation.

31. **Subcomponent 1.2: Supporting Strategic Investments (Total: US\$202.59 million of which US\$156.77 million from IDA, US\$42.42 million from IFAD, and US\$3.40 million beneficiaries' contribution).** Guided by the



RMIPs, this subcomponent will finance investments with strategic relevance for sustainable management of rangelands, improved productivity of PAP systems and for enhancing livelihoods resilience. More specifically the sub component will finance two types of SIs identified and prioritized in the RMIPs. The first type of investment will consist of initiatives in **rangeland management and pasture improvement**. These initiatives have more of a natural resource management objective, such as pasture development, water resources development, and soil and water conservation. They will be implemented through a participatory community approach that incorporates elements of the CDD approach that has been used under the PCDP. The second type of investments consists of **public economic infrastructure**—larger strategic infrastructure spanning several communities, which the private sector cannot finance. An indicative list of eligible investments includes livestock water provision along livestock routes and in a wider rangeland area; spot improvements to public infrastructure, such as bridges and tertiary roads; secondary and primary livestock markets; investments aimed at facilitating public-private-producer partnerships; the establishment or upgrading of small-scale irrigation schemes; rehabilitation and equipping of veterinary facilities such as laboratories; and water harvesting and conservation schemes, which aim either to support household food security or to diversify and commercialize cash crop and forage/fodder production.

32. Planning and preparation for SIs will entail consultation with all social actors (50 percent women), and 30 percent of the representatives on decision-making committees will be female. The rangeland improvement or public infrastructure investments selected for financing will demonstrate direct relevance for productive PAP activities in which women are engaged.

33. **Subcomponent 1.3: Conflict Management and Secure Access to Key Resources (Total: US\$4.00 million of which US\$3.00 million from IDA and US\$1.00 million from IFAD).** This subcomponent will finance five sets of activities that will help to properly understand the root causes of conflict in the project areas, facilitate knowledge management and conflict resolution platforms and more importantly ensure conflict sensitive planning and implementation of activities across the components. It will also finance activities towards ensuring pastoralists access to key natural resources such as seasonal grazing lands and water points. The activities include: (i) providing support for conducting area-specific conflict analyses and conflict mapping to inform planning for RMIPs and other investments under Components 1, 2, and 3; (ii) supporting identification, recognition, and capacity building of customary institutions and traditional conflict resolution practices as the basis for supporting innovative and durable conflict resolution initiatives;¹³ (iii) supporting conflict resolution, social cohesion, and peace-building platforms (inter-community, inter-woreda, inter-regional, and cross-border platforms, as appropriate), and it will establish or strengthen linkages with existing platforms and initiatives, such as the Conflict Early Warning and Response Mechanism and other similar initiatives; (iv) supporting identification and understanding critical challenges constraining pastoralists' access to key natural resources; initiate studies (through Component 3),¹⁴ and facilitate policy dialogues between communities, local and federal governments, civil society organizations (CSOs), and other relevant stakeholders with an objective of ensuring secure access to key resources by pastoralists; and (v) providing capacity building support including local and cross-border visits for relevant staff of the MoP, other institutions and sector ministries, relevant CSOs, and other implementing agencies for the project to share experiences with traditional and modern conflict management approaches.

¹³ This activity includes supporting alternative mechanisms that operate through local/customary institutions, markets, communication, or basic services that offer common ground for reciprocity and mutual dependence.

¹⁴ These studies will consist of thematic action research that focuses on understanding the underlying drivers of conflict (spatial mapping, identifying the drivers and actors, and identifying alternative resolution mechanisms), as well as on understanding the Lowlands political economy (the changing livelihood pattern) and institutions involved in natural resource management and use.



Component 2: Livelihood Improvement and Diversification (Total: US\$109.77 million equivalent of which US\$87.32 million from IDA and US\$2.45 million from IFAD)

34. This component will finance activities that will support three categories of communities, namely those who want to pursue the pastoral system, those who opt to diversify within the pastoral system including to agro-pastoralism, and those who have moved out of the PAP systems and are looking for alternative livelihoods options. This component will deliver the proposed support through the existing extension and veterinary systems at woreda and community levels. The component will also benefit from other projects (such as the Agricultural Growth Project (AGP II P148591) and LFSDP (P159382) institutional capacity building support being provided to the extension and veterinary systems at federal and regional levels.

35. **Subcomponent 2.1: Enhancing Pastoral and Agro-Pastoral Production Systems (Total: US\$54.3 million of which US\$43.19 million from IDA and US\$11.10 million from IFAD).** The current outreach of agricultural extension services in Lowlands areas is much limited in comparison to the Highlands. There are certain aspects, namely: (i) geographical dispersion of population over wide geographical area; (ii) mobility of population along cattle corridors; and (iii) challenging living conditions and limited social and economic services contributing to higher attrition rates of development agents, which makes it challenging to deliver agricultural extension services¹⁵ in Ethiopian Lowlands. This subcomponent aims at improving the productivity of PAP production systems (cattle, camels, small ruminants, and poultry, as well as crops including maize, sorghum, and vegetables) in the targeted project areas. The nature of agricultural extension need in Ethiopian Lowlands warrants a multi-pronged strategy relying on improving the ability of extension agents to deliver services by upgrading pastoral and farmer training centers; pastoral field schools aimed at delivering these services to mobile populations; and deploying information and communication technology (ICT) tools to deliver to a geographically dispersed population. The project will enhance the delivery of livestock and crop production extension services and animal health services in the targeted woredas, complementing the SIs under Component 1 and help to support a fit for purpose extension service for pastoralists and agro-pastoralists.

36. More specifically, Subcomponent 2.1 will finance three kinds of activities to enhance the existing woreda and kebele level agricultural extension and veterinary service delivery capacities. First, it will strengthen the service delivery capacities of woreda level extension systems through organizational and human resource capacity building supports and by upgrading Pastoral Training Centers (PTCs) or Farmer Training Centers (FTCs). Second, it will strengthen the outreach of the extension system through PAP Field schools. Third, it will support research through PAP Research and Extension Groups, managed by universities and research centers.

37. To foster improvements in livelihoods, this subcomponent will support the extension system to promote a number of technologies and pursue different types of training and demonstration activities, including: technologies that improve animal productivity in terms of parameters such as milk and meat production, growth rate, and reproductive performance; crop productivity technologies such as improved and drought-tolerant seed and market-oriented crop varieties; feed and forage technologies; community-based breed improvement for cattle, camels, and small ruminants (mainly through community-based breed improvement initiatives); on-farm/pasture land demonstrations of good pastoral practices; and on-farm demonstrations of improved crop husbandry practices for dryland agriculture, irrigation, and water conservation schemes. Nutrition will be

¹⁵ The World Bank is supporting the agricultural extension through ESPES project which contributes to the salaries of the development agents and AGP2 which is helping improve the delivery of agricultural extension by providing resources for upgradation of farmer training centers and demonstration facilities. This project is building upon the successful agricultural extension support from the Bank financed projects in the Ethiopian Highlands such as AGP2 and LFSDP and customizing it to the needs of PAP communities in Ethiopian Lowlands.



incorporated into the efforts of PAP Field schools through a nutrition curriculum and the provision of inputs, including seeds of high-value vegetables and biofortified varieties. Under this subcomponent, the extension system will help to promote gender equality by ensuring equal participation of women and men in extension activities and to improve production and the productivity of their activities. Women's training modules may include components on non-cognitive skills such as perseverance and optimism, which are positively linked to the adoption of higher-value crops by female farmers in other countries, even in patrilocal communities.

38. Under this subcomponent, the proposed project will also strengthen the availability of animal health services in the selected communities, as well as outreach by the animal health system. For example, it will help to upgrade and equip animal health posts; support, establish, and/or strengthen networks of animal health services and/or public-private partnership (PPP) arrangements to make animal drugs, vaccines, and treatments available; and train and equip Community Animal Health Workers (CAHWs).

39. **Subcomponent 2.2: Promoting Livelihood Diversification and Market Access (Total: US\$55.47 million of which US\$44.12 million from IDA and US\$11.34 million from IFAD).** This subcomponent will support livelihood diversification, strengthen market linkages and commercialization, and improve access to financial services. To support multiple avenues of **livelihood diversification**, this subcomponent will finance the following activities: (1) selected technical and vocational education and training (TVET) centers and other relevant institutions to develop and deliver customized technical vocational training and entrepreneurship training to individuals and groups in rural areas to improve their skill base; (2) recruitment of competent technical providers of business development services, through competitive selection process, to support individuals and groups to successfully develop and manage business ventures; and (3) development of common interest groups (CIGs) and financing of their business plans through matching grants as deemed appropriate by the local authorities and following the CIG guidelines provided in the Project Implementation Manual (PIM). Two distinct types of CIG will be supported. One will be productive alliance CIGs (discussed next), which will link producers in a CIG to a private enterprise such as a processor. A second type will be open-market CIGs, formed to provide particular goods and services (such as inputs or transport) to large numbers of consumers. These activities are expected to target mostly women as well as young men and women with no productive assets. To measure the project achievements towards diversification and alternative income generating livelihoods activities, as well as the level of the private sector engagement, the project will use appropriate indicators such as the number of project beneficiaries engaged on viable alternative income generating livelihoods activities and the number of productive partnerships established between the producers and the potential buyers.

40. To strengthen **market linkage and commercialization**, under Subcomponent 2.2 the project will finance five sets of activities. First, it will provide support to facilitate the development of partnerships (formal or informal contractual arrangements) between private companies and groups of producers in a CIG. These productive partnerships will help connect producers to markets, and the development of business plans for these partnerships will be financed through productive alliance CIG matching grants. Second, market linkages and commercialization will be strengthened by the development of a rangeland value chain platform to ensure private sector constraints are addressed through RMIPs. A third set of activities to be supported includes the piloting of innovative market arrangements such as livestock auctions; the development of product standards, traceability, and certification systems; the use of mobile phones to aggregate demand and conduct other commercial transactions; and scaling up the Livestock Market Information System.

41. To improve **access to financial services**, under Subcomponent 2.2 the project will provide technical assistance for the development of strong unions of RUSACCOs. Weak and intermediate RUSACCOs will receive



technical assistance to improve their financial performance and sustainability. New RUSACCOs will be developed in communities where they do not exist, and they will receive savings leverage grants to kickstart financial inclusion through rotating saving and credit to their members. In addition, microfinance institutions (MFIs) will receive technical assistance to enhance digital financial services and offer products tailored to PAP communities.

42. The value chains prioritized for the proposed project include (1) beef; (2) dairy; (3) small ruminants (sheep and goats); (4) animal feed and fodder; (5) camels; (6) vegetables and high-value horticulture, and (7) crops (maize, sorghum, possibly others). Other activities that may be considered for diversifying livelihoods include beekeeping, poultry production, handicrafts, natural gum, and tourism. These value chains and activities were selected based on their current spread and potential in project areas, opportunities for value chain integration, and opportunities for youth and women to participate.

Component 3: Improving Basic Services and Capacity Building (Total: US\$75.73 million equivalent of which US\$55.92 million from IDA, US\$12.21 million from IFAD and US\$7.60 million beneficiary's contribution)

43. **Subcomponent 3.1: Provision of Basic Social Services and Infrastructure (Total: US\$53.20 million of which US\$38.00 million from IDA, US\$7.60 million from IFAD, and US\$7.60 million beneficiaries' contribution).** This subcomponent will use a CDD approach to support better access to and use of basic social and economic services among the target communities, through a Community Investment Fund (CIF). Infrastructure development will adopt a spatial orientation and finance investment at the inter-community, kebele, and woreda levels. This subcomponent builds on the PCDP experience but will work only in woredas and kebeles that did not benefit from the PCDP. Similar to PCDP, each community will receive support only for a maximum of three subprojects, after which it will graduate from CIF support. The proposed project will use a full-fledged CDD approach to give priority to investments (identified through a participatory community process) that directly benefit women. It is also expected that the woredas selected to implement this subcomponent will follow the CDD approach for the entire woreda annual planning and budgeting process.

44. **Subcomponent 3.2: Institutional Capacity Building (Total: US\$6.06 million of which US\$4.82 million from IDA and US\$1.24 million from IFAD).** Subcomponent 3.2 is designed to improve the capacity of public institutions to deliver services. Considering the weak institutional environment and limited implementation capacity in the Lowlands areas covered by the proposed project, a significant investment in capacity building will be made at federal, regional, woreda, kebele, and community levels. The process will start by identifying key institutions and partners, including research and academic institutions, followed by a capacity needs assessment, the development of a capacity-building plan, and financing of the capacity-building plan. Stakeholder institutions will be strengthened to engage meaningfully with public and private partners to offer market access, disease control, and other services for their members. Capacity building will involve physical, human, and system capacity building.

45. **Subcomponent 3.3: Knowledge Management, Research, and Policy Support (Total: US\$16.47 million of which US\$13.10 million from IDA, US\$3.36 million from IFAD).** A weak link in past programs and projects was that little information on lessons and best practices was documented or disseminated. To enable adaptive management, integrate changes at the local level, and benefit from the feedback of beneficiaries, the proposed project will support continuous learning, adaptable knowledge management, and communication on innovative tools and approaches. This subcomponent will also identify the indigenous knowledge and customary institutions that are expected to play pivotal roles in strengthening various development activities among PAP communities. It will also support research and capacity building in thematic priority areas of PAP systems. Memorandums of



Understanding (MoUs) will be signed with research, academic, and higher learning institutions to conduct research on such topics as rangeland management, breed improvement, rainfed and irrigated agriculture in arid and semiarid areas, and socioeconomic research in pastoral areas.

46. In addition, Subcomponent 3.3 will introduce digital technologies and pilot other innovations to solve critical bottlenecks in PAP value chains. Such technologies could include, for example, an integrated pastoral decision support system (rainfall, pasture, water availability, market price, conflict early warning etc.), certification and traceability systems for livestock products, and geo-spatial monitoring, among others. Priority will be given to innovative technologies that not only enhance the competitiveness and sustainability of rangeland management but also (1) provide low-cost, climate-proof solutions and (2) are adapted to the needs of women and young people.

47. Considering the need to strengthen policies on land use, pastoral mobility, community land certificates, and community ownership of rangeland, this subcomponent will also finance technical assistance for evidence-based policy-making and community engagement in policy dialogue. This activity will provide evidence to the GoE to inform pastoral-friendly policies, consistent with the constitution, that can support resilient PAP livelihoods.

Component 4. Project Management, Monitoring, and Evaluation (Total: US\$42.10 million of which US\$33.51 million from IDA and US\$8.59 million from IFAD)

48. Component 4 will ensure that the proposed project is managed and implemented efficiently, on time, and in accordance with the PDO and Financing Agreement, and that its performance and effectiveness are tracked. As part of the Grievance Redress Mechanism (GRM), Component 4 will also explore and support the development of innovative grievance collection and feedback mechanisms, including support by mobile phone and other forms of ICT, taking the specific local context into account.

C. Project Beneficiaries

49. The primary beneficiaries of the proposed project interventions are expected to number about 2.5 million people (about 500,000 households). These beneficiaries are selected individuals, households, and communities residing in PAP areas in the six Lowlands regions mentioned in the paragraph 4 previously. They include pure pastoralists (camel, cattle, sheep, and goat owners) and agro-pastoralists in the targeted rangelands; those opting out of pastoralism and/or interested in taking up alternative forms of livelihood; and the populations in the selected woredas and kebeles who gain access to basic social services and public goods (such as education, health, water, veterinary services). In addition, private enterprises active in the supported value chains, public institutions delivering public goods and services, cooperatives and MFIs engaged in financial and nonfinancial service provision, and government line departments will also benefit from the interventions.

50. Women and men in PAP societies have differing access to and control over resources, including monetary income. Men make most of the economic decisions, partly because men are recognized as household heads and inheritance usually follows the male line. Despite women's contribution to PAP life, women have only limited access to, and control over, key productive resources such as livestock and land. They cannot easily obtain credit, extension, veterinary services, and business information. A range of factors determine women's participation in income-generating activities, including their level of mobility and resources, cultural and religious norms, and the gender division of roles in the chain of activities from production to marketing. Women are largely deprived of property ownership, so they cannot offer collateral for bank loans.



51. Half of the beneficiaries that this project intends to reach will be women. To close the gender gap and strengthen women's participation as economic actors in the productive sectors the proposed project will: (1) promote women's participation in key committees, community-based organizations, local government institutions, and strategic planning processes (for public economic infrastructures and land use, as well as basic social services); (2) support women's participation in value chain development on equal footing with men; (3) assist women to move out of low-input, low-output activities and develop their skills and entrepreneurial capacities; (4) provide women equal access to extension support and financial services. Annex 4 presents the gender analysis conducted for this project, the gender strategy, and the gender results chain.

52. Activities at the community level will be directed to women as well as men, tailored to their different productive activities and the gender division of roles in PAP sectors (Component 1). Women, in particular, should benefit from activities to develop alternative livelihoods and access to financial services (Component 2). As noted, women will serve on decision-making committees at all levels (committees will have a minimum female membership of 30 percent), particularly under Component 1, to secure access to natural resources and strategic economic investments.

Strategic Alignment

53. **Climate co-benefits.** Livelihoods that exhibit resilience to climate change are central to the project, and the interventions are designed to maximize mitigation. Greenhouse gas (GHG) accounting finds that the project constitutes a sizeable net carbon sink of 9,926,759 tCO₂eq over 20 years (496,338 tCO₂eq annually) due to the introduction of improved rangeland management, agricultural practices, water conservation techniques, and livestock productivity (Annex 7). Annex 8 provides details on how project subcomponents provide pathways for climate change mitigation and adaptation.

54. **Maximizing Finance for Development.** Component 2 aims to crowd in private financing by integrating livelihoods more closely with value chains, developing agribusiness alliances, and attracting commercial financing from MFIs. These actions will contribute to private delivery of feed, fodder, and animal health services and the development of markets in the livestock and crop subsectors. The subcomponent on policy support addresses bottlenecks in the regulatory and enabling environment for private sector participation. In Component 1 the SIs, especially the investments in developing market infrastructure, will also increase private sector participation in the project areas.

55. **Transformative technologies and a digital dividend.** The project interventions will leverage transformative technologies; for example, small-scale irrigation will emphasize water- and energy-efficient technologies to get more crop and income per drop of water. The project has set aside resources to pilot digital solutions. Examples include the development of an integrated decision support system that relies on mobile phones, use of drones to map rangelands, deploying technology for improving traceability of livestock products to assess the potential for scaling them up across the project geography. Rangeland performance will be monitored through remote sensing. Through pastoral research and extension groups as well as PAP field schools, the project will transmit off-the-shelf technologies to pastoralists and agro-pastoralists; it will also invest in research to develop new technologies (Subcomponent 3.3).

56. **Jobs for youth.** Component 2, especially the livelihood diversification subcomponent, focuses explicitly on creating livelihood opportunities for young people. Support in the form of CIGs, RUSACCOs, skill development,



and business development training will develop new livelihood options and help to create jobs for youth in the project geography.

57. **Nutrition- and gender-sensitive outcomes.** The project will address the very high rates of under-five child undernutrition¹⁶ in the target regions as well as the poor nutritional status of women of reproductive age by supporting nutrition sensitive activities within the framework of the three major project components. Activities will contribute to increasing year-round availability, access, and consumption of diverse, safe, and nutritious foods. The project will scale-up proven approaches like production and marketing of fodder, which will allow milk-producing animals to remain close to children and women during the dry season and test new approaches to increase household access to food throughout the year. The project will support improvements in safe food handling, processing, preservation, and storage for expanded food diversity in the markets and dietary diversity in the households. The project will support nutrition sensitive training for livestock and agriculture extension workers and for PAP field schools in coordination with the health extension program. Using the findings of the gender assessment (Annex 4), the project has incorporated gender into the project design to promote gender sensitive outcomes. All major indicators are disaggregated by gender and 30 percent of the project’s target beneficiaries are women.

58. **Synergies.** The proposed project is expected to collaborate closely and build synergies with other projects. IFAD will ensure strong alignment of the proposed project with the third phase of its Rural Financial Intermediation Project, which will extend a line of credit for MFIs in the project geographies, as well as develop capacity among financial cooperatives. USAID is currently designing two projects that will complement the activities of the proposed project: LAND-II¹⁷ (focusing on communal land certification) and PRIME-II (focusing on commercialization and private sector engagement). During the implementation stage, the proposed project will continue to collaborate closely with other projects and initiatives to ensure alignment and synergies. Table 2 summarizes complementarities of the proposed Lowlands Livelihood Resilience Project with current World Bank operations in the Ethiopian Lowlands.

Table 2: Complementarities and synergies of the proposed Lowlands Livelihood Resilience Project (LLRP) with current and planned World Bank operations

Operation	Geographical overlap and synergies	Activity overlap and synergies
1. Enhancing Shared Prosperity through Equitable Services (ESPES) P151432	Under this national program for result (P4R), all the woredas of LLRP receive budgetary support.	ESPES provides budgetary support to several bureaus (agriculture, pastoral, and others) to pay salaries of agricultural extension staff. LLRP will build upon ESPES by providing financial support for extension service delivery, demonstrations, and upgrading Pastoral Training Centers, all of which will help government officers to deliver their services to LLRP beneficiaries.
2. Productive Safety Net Project (PSNP) P163438	This national program is implemented in Highlands and Lowlands areas. Many of the woredas involved in LLRP also implement PSNP.	PSNP provides food and cash transfer to poor households and supports a cash-for-work (public works) program. In areas where PSNP and LLRP both work, the project teams will collaborate to ensure complementarities between rangeland management and investment plans (especially in relation to

¹⁶ Wasting rates are above the national average (10 percent) in five out of the six target regions: Somali (23 percent), Afar (18 percent), Gambella (14 percent), Benishangul-Gumuz (12 percent) and Oromia (11 percent) according to the 2016 DHS. Wasting is associated with increased risk of child mortality. Any wasting above 10percent is considered the threshold for determining an emergency nutrition situation.

¹⁷ Land Administration to Nurture Development.



Operation	Geographical overlap and synergies	Activity overlap and synergies
		natural resource management and PSNP public work programs in the selected woredas).
3. Pastoral Community Development Project (PCDP) P130276	PCDP (ending in July 2019) operates in 113 woreda of pastoral areas, excluding Gambella and Benishangul-Gumuz; and there is an overlap of 49 woredas between PCDP and LLRP.	Table A2.1 (Annex 2) describes PCDP–LLRP complementarities and lessons learned from PCDP (e.g., LLRP incorporates lessons on CDD and builds on PCDP investments in savings and credit cooperatives).
4. Regional Pastoral Livelihoods Resilience Project (RPLRP) P129408	RPLRP (ending December 2019) works in 21 Lowlands woredas; of them 7 woredas overlap with LLRP.	RPLRP and LLRP activities overlap significantly. In woredas where both projects operate, activities already undertaken by RPLRP will be identified to prevent duplication of activities and build upon RPLRP investments.
5. One WaSH-CWA (Consolidated WaSH Account) Project P167794	This Consolidated Water Supply, Sanitation, and Hygiene Account Project is to be implemented in Highlands and Lowlands woredas, but the final selection of woredas has not yet been made for One WaSH-CWA.	One WaSH and LLRP both pursue water resource development and small-scale irrigation. Steps to ensure complementarity in these activities include: (i) in woredas where One WaSH is developing water resources, LLRP will not invest in such activities; (ii) both projects will adopt and implement the small-scale irrigation guidelines developed by the AGP; (ii) One WaSH will adopt a broader rangeland and pastoral mobility approach in its Lowlands water investments.
6. Development Response to Displacement Impact Project (DRDIP) P152822	DRDIP is implemented in both Highlands and Lowlands areas and DRDIP and LLRP have a few woredas in common.	There is limited overlap in activities between DRDIP and LLRP.

Project Cost and Financing

59. The proposed project would be supported through Investment Project Financing (IPF) for a period of six years. The total cost of US\$451 million encompasses US\$350 million in the form of an International Development Association (IDA) in the form of grant and credit, US\$90 million in the form of an IFAD grant/loan, and a US\$11 million contribution from beneficiary communities. Table 3 summarizes costs and contributions from partners.

Table 3: Costs and financing partners for the proposed Lowlands Livelihood Resilience Project

Component/subcomponent (US\$ 000s)	IDA	IFAD	Beneficiary	Total
Component 1: Integrated Rangeland Development and Management				
1.1 Integrated Rangeland Management Planning	13,464	3,333	—	16,797
1.2 Supporting Strategic Investments	156,775	42,424	3,400*	202,599
1.3 Conflict Management and Secure Access to Key Resources	3,000	1,000	—	4,000
Subtotal	173,239	46,757	3,400	223,396
Component 2: Livelihood Improvement and Diversification				
2.1 Enhancing Pastoral and Agro-Pastoral Production Systems	43,195	11,104	—	54,299
2.2 Promoting Livelihood Diversification and Market Access	44,128	11,344	—	55,472
Subtotal	87,322	22,448	—	109,770
Component 3: Improving Basic Services and Capacity Building				
3.1 Provision of Basic Social Services and Infrastructure	38,000	7,600	7,600**	53,200
3.2 Institutional Capacity Building	4,824	1,240	—	6,064
3.3 Knowledge Management, Research and Policy Support	13,100	3,368	—	16,468



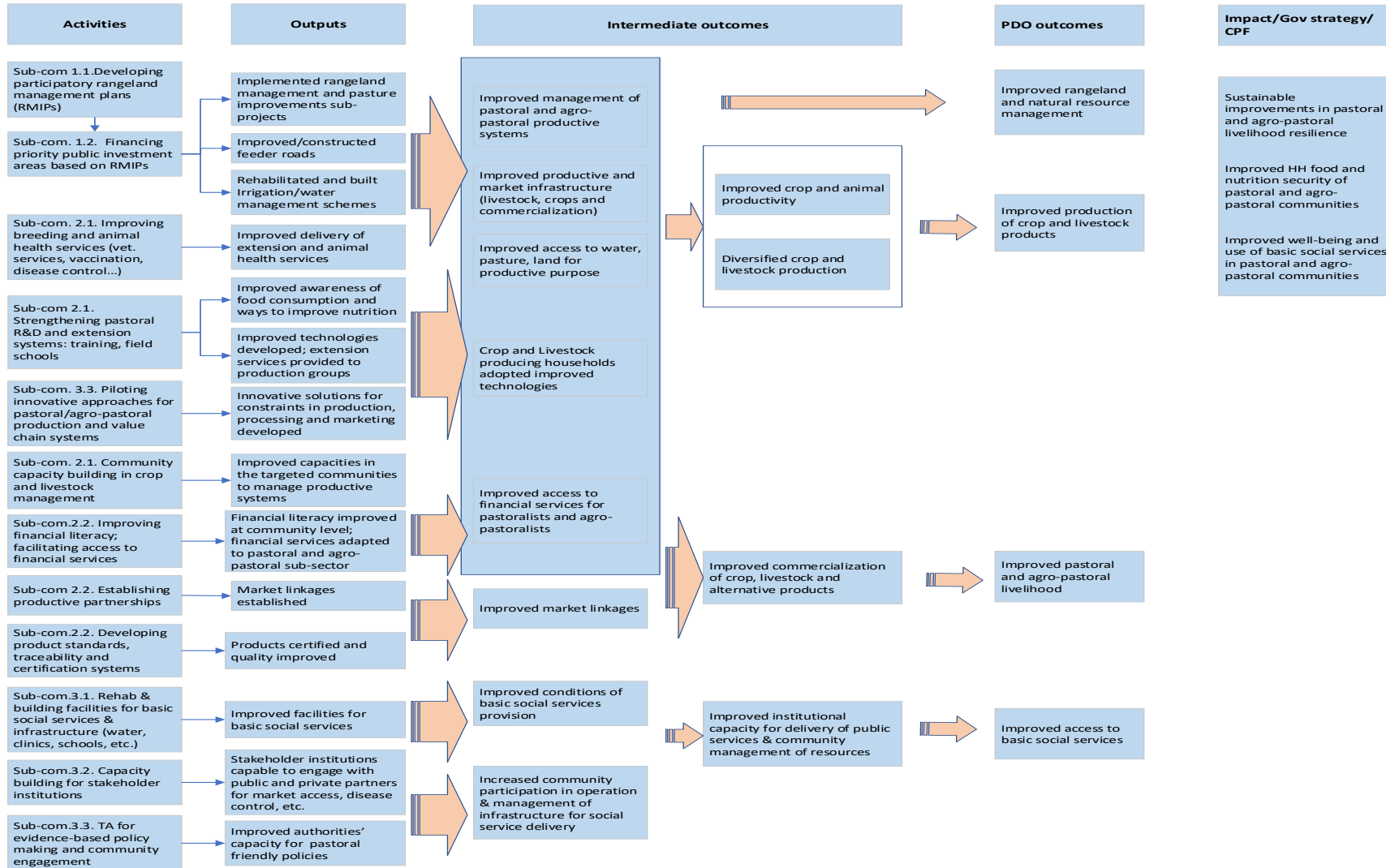
Component/subcomponent (US\$ 000s)	IDA	IFAD	Beneficiary	Total
Component 1: Integrated Rangeland Development and Management				
Subtotal	55,924	12,208	7,600	75,732
Component 4: Project Management, Monitoring and Evaluation				
Project Management, Monitoring and Evaluation	33,514	8,587	—	42,101
Total	350,000	90,000	11,000	451,000

*In-Kind contribution

** Combination of in-kind and cash contribution



D. Results Chain





E. Rationale for World Bank Involvement and Role of Partners

60. The proposed project builds upon 15 successive years of work in the Ethiopian Lowlands under the World Bank/IFAD-funded PCDP and helps to implement recommendations of the two analytical studies by the World Bank and partners, described in Section B. The World Bank has financed many projects on livelihood resilience in PAP areas of the Sahel, Horn of Africa, Latin America, and Central Asia, so it brings strong technical insights and operational experience into this proposed operation. Aside from these contributions, the World Bank and IFAD will add value in three main ways. First, they will convene global experience and financing to support the client to build sustainable and scalable resilience in PAP systems. Second, they will provide operational supervision and technical assistance to the client to implement the operation. Enhanced support for implementation will focus on the project's fiduciary aspects, including social and environmental risks, results monitoring, capacity development of the client, strategic communications, knowledge development, and impact evaluation. Third, support from the World Bank and IFAD is expected to leverage additional resources from other development partners and build synergies with other projects.

F. Lessons Learned and Reflected in the Project Design

61. RPLRP, DRSLP, and PCDP have yielded important lessons that influenced the design of the proposed project. They are summarized in the following paragraphs.

62. **A spatial and holistic approach to development is required to support pastoral livelihoods, and it should be based on a thorough understanding of the mobility requirements and dependence on natural resources inherent to those livelihoods.** Supporting livelihoods in PAP communities requires a strong understanding of their dynamic interface with the environment, natural resources (including rangelands and pastures, water points, and cattle corridors), and markets to ensure that interventions respond to livestock mobility requirements. Most often, administrative boundaries are used to plan economic, social, and natural resource interventions, yet these boundaries rarely accommodate the mobile nature of pastoralist societies and territories. The LLRP represents a departure from this framework by adopting a spatial and landscape orientation in planning productive natural resource management and supporting the GoE in strengthening planning processes across administrative boundaries.

63. **The promotion of rangeland and natural resource management and PAP value chains should occur in parallel with investments in social services and not compete with them under the CIF.** In addition, investments in enhancing the PAP economy as well as alternative livelihoods require specialized technical skills, implying a need to improve coordination and collaboration with the relevant line ministries in implementation.

64. **Farm-to-plate solutions require a value chain orientation and attention to market links.** The project will use a value chain approach and support commercially viable solutions to binding constraints in value chains. Strong market demand will be a key criterion for selecting value chains and activities to be supported under the project, which will also promote strong market links, especially for non-traditional alternative livelihoods.

65. **Scaling up will require careful integration of CDD lessons and good practices.** To approach a scale that fosters transformative change in PAP areas, this project will address the enabling environment as well as community and household livelihood issues by further scaling up and institutionalizing the CDD approach and livelihood support interventions. The CDD approach for LLRP incorporate lessons and good practices from other projects and programs. For example, the project will build on the experience and results of the PCDP with respect



to institutional development and service delivery by integrating CDD into an inclusive and participatory rangeland planning and management process. The CDD approach and its interface with the value chain approach will be fine-tuned and institutionalized, backed by institutional capacity building at all administrative levels.

66. **RUSACCOs are effective tools to facilitate income diversification and promote women's entrepreneurship in pastoral areas, but they need further support to sustainably expand their business opportunities.** The technical support and seed money provided by programs such as the PCDP have helped to establish RUSACCOs, but their sustainability hinges on improving access to larger and formal financial institutions to expand their business opportunities and provide effective financial services to PAP communities.

67. **Strong PPPs will go a long way toward expanding the coverage of animal health services and making them sustainable.** Programs such as the PCDP, RPLRP, and DRSLP have invested in the construction of health posts and clinics but have done very little to engage the private sector, providing either heavily subsidized or free services. Through PPPs, the GoE retains control of its regulatory mandate to provide public goods, while the private sector is leveraged to invest in the viable provision of private goods and services.

68. **Decentralized and autonomous decision-making offers flexibility to respond to evolving community requirements.** To respond to community demand and provide flexibility to adapt to changing market, environment, and community dynamics, the project will place strong emphasis on creating decentralized and autonomous project implementation structures.

III. IMPLEMENTATION ARRANGEMENTS

A. Institutional and Implementation Arrangements

69. The project will be implemented under the management of the MoP. It will establish dedicated Project Coordination Units (PCUs) at the federal level (the Federal Project Coordination Unit, F-PCU) and regional level (Regional Project Coordination Units, R-PCUs). The F-PCU and R-PCUs are directly accountable for implementation and coordination. They will be guided by a Federal Steering Committee (FSC) and Regional Steering Committees (RSCs). Implementation will rely largely on existing government structures and their decentralized bureaus and offices. Project activities will form an integral part of sector development plans, as well as development plans approved by regional parliaments. Partnerships will be established with research institutions, universities, the private sector, and other entities, and service providers (consultants, consulting firms, and non-governmental organizations (NGO)) will be contracted for strategic support where they possess a comparative advantage and high capacity.

70. To enhance and sustain project interventions in livestock production and veterinary and agricultural extension services, the Ministry of Agriculture (MoA) will also play a pivotal role in implementing the project. The detailed roles and responsibilities of the MoA under the project has been delineated in the PIM¹⁸. Briefly, the responsibilities of MoA will include: (1) ensuring alignment between the broader MoA policy and strategy in pastoral areas and the policy and strategic directions of the proposed project; (2) developing a package of good practices for PAP activities in different agro-ecological zones where the project operates; (3) developing detailed guidelines for upgrading PTCs, FTCs, PAP field schools, and animal health posts; (4) providing high-level technical

¹⁸ Adoption of PIM by the Government of Ethiopia is an effectiveness condition of the project.



assistance and quality assurance support in building institutional capacity to improve the delivery of rural services; and (5) regularly monitoring the project’s performance based on key indicators, and evaluating the lessons learned for adapting and scaling up interventions in the future. With support from project funds, the MoA will also identify service delivery capacity constraints, prepare strategic institutional capacity-building plans, and provide technical support and supervision for the implementation of those plans. In coordination with the MoP, the MoA will coordinate efforts with specialized local and international service providers, United Nations (UN) agencies, and other partners.

71. Given the administrative structure in Ethiopia, the project will be executed through woredas and will cascade down to the kebele and community levels for implementation. In recognition of the project’s spatial rangeland approach, however, and because it will operate in an environment of weak local capacity and institutions, the project will establish Rangeland Cluster Support Teams (RCSTs) to cover multiple woredas. The RCSTs will have a dual mandate to (1) provide technical support and build capacity for implementation in the woredas and kebeles and (2) support holistic (cross-woreda) rangeland development planning and implementation. A project focal point will directly support each rangeland unit (covering 2–5 woredas) in the project areas and will also provide direct support to the Rangeland Management Committees (RMCs). A financial officer will support woreda offices of finance and economic development, where funds for project implementation will flow, following government systems. The project will finance a number of matching grants (Table 4). Detailed implementation arrangements and matching grant guidelines will be specific in the PIM.

Table 4: Grants to be financed by the Lowlands Livelihood Resilience Project

Grant type	Purpose	Beneficiary contribution	Project contribution
CIF	To finance community infrastructure investments	5% cash and 10% in-kind	85%
RUSACCO Saving Leverage Grant	In leveraging savings and hence availing meaningful loan size to the members, the project will match (1:2) the savings mobilized by RUSACCOs	33.33%	66.66%
CIG Matching Grant	To finance the business plans of CIGs, the project will match the financial investments mobilized by each CIG, up to a ceiling of US\$8000 per CIG.	30%	70%

72. Participatory, community-driven, bottom-up planning processes will form the basis of project-supported development plans and of the project’s Annual Work Plan and Budget (AWPB). The project will support the institutionalization of these approaches through capacity building at all levels.

73. Physical infrastructures will be constructed by contractors and services by providers procured according to the World Bank policies. Studies and technical assistances will be carried out by consultants selected according to the World Bank policies. In line with the project’s main objective of supporting resilient PAP livelihoods, it will provide specific technical assistance through the Food and Agriculture Organization of the United Nations (FAO) and other agencies (such as specialized service providers and academic and research institutions), to support capacity building in specific activities, including remote sensing for monitoring rangelands and feed balance, new technology and innovations in feed and fodder production and processing, and PAP field schools.



B. Results Monitoring and Evaluation Arrangements

74. The monitoring and evaluation (M&E) arrangements for the project combine knowledge management with the objective of establishing a robust, user-friendly, and web-based Management Information System (MIS) for M&E, learning, and reporting, including planning, self-monitoring, and knowledge sharing for all relevant institutional entities. The main activities are to: (1) establish a web-based MIS to support and link all the project-supported information systems in the various components, such as the rangeland monitoring system and implementation progress monitoring; (2) evaluate the LLRP outcomes and impact, including the potential evaluation of innovative gender programming; (3) set up a PAP livelihoods decision support information system; (4) foster internal learning and knowledge sharing; and (5) set up a rangeland monitoring system. The project M&E system will be a national-level database system, with technical support provided to the F-PCU by a specialized service provider during the initial development and rolling out of the system.

C. Sustainability

75. Ensuring longer term sustainability of the three pathways of livelihood described in Figure 1 requires investments in building sustainable systems. The project's approach to future sustainability relies on the following five pillars : a) community ownership, contribution, and management will increase buy-in and raise the stake for successful management of investments after the project closure; b) private sector engagement including through the value chain based productive alliance between the private sector and the PAP producer communities will ensure that commercial incentives are aligned to deliver goods and services that are critical for livelihoods; c) improving service delivery of public sector institutions to facilitate beneficiaries' adoption of highly productive and commercially viable technologies will help support sustainable livelihood now and in future; d) demand-driven approach will ensure that the support provided by the project meets the needs of the population and respond to market demands; and e) supporting the integrated rangeland management system will create the necessary natural resource base and conducive environment to sustainably supply requisite inputs needed to support PAP production systems. With respect to climate change, more sustainable livestock and crop management practices supported under the project will reduce GHG emissions relative to the current practices, thus contributing to the overall national goal of GHG reduction by agriculture and livestock.

IV. PROJECT APPRAISAL SUMMARY

A. Technical, Economic and Financial Analysis (if applicable)

76. To assess the efficiency of the project investment ex-ante, an economic and financial analysis was carried out (Annex 6). Twenty financial models were developed, of which nine were for PAP activities and 11 were for agribusiness and off-farm activities. The financial analysis shows that the targeted activities are commercially sound. The economic analysis shows that the project is economically viable, with an economic internal rate of return (EIRR) for the overall project of 15.0 percent and net present value (NPV) of US\$404.8 million. The project is sensitive to changes in some of the model's variables (variations in benefits and costs, various lags in the realization of benefits, and variations in adoption rates and social carbon price), confirming that sustainable investments in rangeland management, agricultural practices, animal nutrition and health, water conservation and livestock productivity are key to project success.

77. Environmental externalities were calculated by using the Ex-Ante Carbon-balance Tool (EX-ACT), developed by FAO to calculate the economic value of the GHGs mitigated. EX-ACT is intended to complement



conventional ex-ante economic analysis by enabling investment planners to design programs with high-return outcomes in terms of mitigating climate change. The EX-ACT analysis shows a marginal carbon emission savings of 9,926,759 tCO₂eq, equivalent to 496,338 tCO₂eq per year.

B. Fiduciary

(i) Financial Management

78. A financial management (FM) assessment for the project was conducted in accordance with the Financial Management Practices Manual for World Bank-financed investment operations issued by the Financial Management Sector Board on March 1, 2010 (revised February 2015). The main implementing entity responsible for FM is the MoP. Based on the design and nature of the project, it is agreed with the Government at this stage that funds will flow directly from the development partners (IDA and IFAD) to the sector ministry, which is the MoP. World Bank and IFAD financing will be administered through separate designated accounts (DAs) denominated in U.S. dollars and managed by the MoP; funds will flow from the DAs into a pooled project account denominated in Ethiopian Birr. From the MoP, funds will flow to the regional pastoral bureaus and then to woreda finance offices. The project will use report-based disbursement, in which advances will be provided based on two quarters' cash forecasts. Quarterly financial reports as well as annual audit reports will be submitted to the World Bank. Project co-financing between the World Bank and IFAD will be based on percentages to be communicated by the task team leader (TTL) on a quarterly basis. Capacity-building initiatives will focus particularly on Benishangul-Gumuz and Gambella Regions, which were not implementers of the PCDP. Based on the assessment conducted, the current FM arrangements for the project satisfy the World Bank's minimum requirements and can provide reasonable assurance that project resources are used for the intended purpose and that accurate and timely information will be obtained on the status of the proposed project. Detailed FM Arrangement and FM action plan recommended to mitigate the risks is outlined under Annex 3.

(ii) Procurement

79. Procurement activities under the proposed project will be carried out in accordance with the World Bank's "Procurement Regulations for IPF Borrowers" ("Procurement Regulations") dated July 2016 and revised in November 2017 and August 2018 under the New Procurement Framework; the "Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants," dated July 1, 2016; and the provisions stipulated in the Financing Agreement.

80. The Borrower has prepared a Project Procurement Strategy Document (PPSD) which has been cleared by the World Bank. The PPSD will subsequently be updated, at least annually, or as required, to reflect changes in the procurement arrangements that may arise from a change in requirements, market conditions, the procurement environment, or some other factor.

81. A procurement capacity assessment was carried out using the Procurement Risk Assessment and Management System framework. The assessment reviewed the organizational structure, functions, staff skills and experience, and adequacy for implementation of the procurement activities in the project at the different levels of implementation (federal, regional, woreda, and community). The assessment revealed that the existing government structure at the MoP and Bureaus responsible for PAP development¹⁹ in the regions and the Pool

¹⁹ In Gambella there is a bureau for Livestock and Fisheries development and another bureau of Agriculture, in Oromia and SNNPR there



System under the Woreda Finance Office have adequate procurement capacity to implement the project. Nevertheless, the assessment revealed a number of short comings which includes: (i) lack of experience in World Bank procurement procedures within the permanent structure and staff; (ii) lack of experience in the procurement and management of works contract; (iii) inadequacy of organizational structure and staffing level to support CDD procurement; (iv) inadequate internal control and procurement performance reviews; (v) inadequate procurement complaint management system at lower level including lack of clarity of roles and responsibilities among players; (vi) inability to attract and retain proficient procurement and contract management experts etc. The proposed mitigation measures include: (i) Enhancing procurement capacity at the IAs with support from PCUs staffed with proficient procurement and contract management experts; (ii) Recruiting and assigning procurement experts at the Woreda Finance office to support procurement implementation at Woreda and community level; (iii) Ensuring active involvement of the relevant sector in the procurement and management of works contracts; (iv) Preparing procurement manual and providing training to procurement and technical experts.

82. Procurement in LLRP will be carried out at federal, regional, woreda and community level. The MoP and the Regional Pastoral and Agro- Pastoral Development Bureaus their equivalents will be responsible for the implementation of the procurement activities at federal and regional level respectively. These IAs shall be supported by PCUs staffed with adequate and proficient procurement and contract management experts. The woreda finance offices in the targeted 100 woredas shall be responsible for the implementation of procurement activities at Woreda level. The communities including CIGs shall implement procurement using CDD arrangement. The respective RPCUs shall recruit and assign procurement officer at the Woreda Office for Finance and Economic Development (WOFED) who will provide support for smooth procurement implementation at the woreda and community level.

83. The overall project procurement risk is assessed as “Substantial” and is likely to reduce to “Moderate” with the implementation of the proposed risk mitigation measures. Details of the risks and mitigation measures, the action plan, and the procurement arrangement for the project, summary of the PPSD, frequency of supervision are presented in the Procurement Section of Annex 3.

C. Safeguards

(i) Environmental and Social Safeguards

84. **Environmental and social safeguard instruments.** The Borrower has prepared an environmental and social management framework (ESMF) in compliance with World Bank Operational Policy (OP) 4.01, as well as a resettlement policy framework (RPF) to guide any land acquisition, including the preparation of abbreviated resettlement action plans (ARAPs). A social assessment (SA) was also prepared in line with OP 4.10 (Indigenous Peoples). The assessment outlines project community characteristics and social risks, with a focus on changing social structures, conflict, and vulnerability. The key measures identified for mitigating those risks rely on a community-centered, adaptive management approach. The ESMF, RPF, and SA have been reviewed and cleared by the World Bank and IFAD and have been disclosed in-country (on March 19, 2019) and on the World Bank external website (on March 20, 2019). Alignment of the World Bank's Operational Policies with IFAD's Social, Environment and Climate Assessment Procedures has been verified during the project design. The preparation of

is a dedicated Pastoral Development Commission, and in Somalia region there is a joint bureau of Agriculture and Pastoral Development.



the LLRP safeguard instruments benefited from information and experience with predecessor projects financed by the World Bank and other partners, including PCDP, AGP, and DRDIP.

85. The safeguard policy OP 7.50, “Projects on International Waterways”, is triggered as small-scale and micro-irrigation development and management; water development for rural water supply and for livestock sub-projects would abstract water from streams or rivers that are tributary to rivers crossing international borders. In accordance with this policy three of the riparian countries Djibouti, Kenya and Somalia were notified as the project may abstract water from streams or rivers that are tributary to rivers crossing to these three countries. The World Bank’s assessment is that no appreciable harm will be caused to any of the riparian countries concerned²⁰. Details of safeguard policies triggered by this project are provided in the table 5 below.

Table 5: Safeguard Policies Triggered

Safeguard policies	Triggered	Explanation
Environmental Assessment OP/BP 4.01	Yes	The client has prepared an ESMF which has been publicly disclosed.
Natural Habitats OP/BP 4.04	Yes	OP/BP 4.04 is triggered as a precautionary measure to protect non-critical natural habitats from an anticipated damage. To ensure that sub-projects are screened, and impacts are avoided on natural habitats, appropriate preventive and mitigation measures have been included in the ESMF of the Project.
Forests OP/BP 4.36	Yes	OP/BP 4.04 is triggered as a precautionary measure to protect non-critical natural habitats from an anticipated damage. To ensure that sub-projects are screened, and impacts are avoided on natural habitats, appropriate preventive and mitigation measures have been included in the ESMF of the Project.
Pest Management OP 4.09	Yes	OP/BP 4.36 is triggered to avoid any anticipated potential impacts that may affect the natural forests found in Gambella and Benishangul Gumuz regions. Project activities will not be undertaken in forests. The proposed ESMF have a screening criterion for screening sub-projects so that natural or plantation forests will not be affected.
Physical Cultural Resources OP/BP 4.11	Yes	Promotion of rain fed and/or irrigated farming where feasible and profitable is part of promoting sustainable livelihoods and may indirectly involve use of agrochemicals including fertilizers and pesticides for both crop and livestock improvements. The ESMF includes a section on Pesticide Management Guidelines and Integrated Pesticides Management Plans (PMPs) that elaborates on actions that need to be undertaken to minimize environmental and public health impacts.
Indigenous Peoples OP/BP 4.10	Yes	Although the nature and scope of the LLRP sub-projects is not known now, they are unlikely to involve any major excavation work or inundation of areas with water and are thus not likely to affect any physical cultural resources. Nonetheless, the policy is triggered, predicated on the assumption that there could be “chance find”. A set of procedures for ensuring that Physical CRs are considered in the designing process of LLRP sub-projects are included in the ESMF.
Involuntary Resettlement	Yes	The Project triggered OP 4.10 as the vast majority of people in Afar, Ethio-Somali, Gambella, Benishangul-Gumuz and parts of Oromia and SNNP meet the criteria for

²⁰ The memo on Results of Riparian Notification Process under OP 7.50, Projects on International Waterways was approved by the Regional Vice President on April 3, 2019.



OP/BP 4.12		OP 4.10, with the project explicitly targeting lowlands in emerging regions. The client has prepared a Social Assessment which has been publicly disclosed. The SA in its Social Development Plan (Annex 9) has outlined the potential social risks and impacts with proposed mitigation measures.
Safety of Dams OP/BP 4.37	Yes	LLRP interventions may involve acquisition of land and /or restriction of access to communal natural resources. Therefore, an RPF has been prepared, and publicly disclosed, to ensure that appropriate measures are in place to address any issues which might arise from potential land acquisition and or restriction of access to communal natural resources under the Project.
Projects on International Waterways OP/BP 7.50	Yes	LLRP is not expected to finance any investments aimed at rehabilitating or constructing large dams. Although there could possibly be construction of small dams under LLRP, particularly for small scale irrigation, they may not be large (more than 4.5 meters high) and therefore may not require special procedures that are normally applied for large dams to follow. This notwithstanding, the Project has triggered OP 4.37 (Safety of Dams). In cases of small dams construction (less than 4.5 meters), the Project will use the FAO 'Manual on Small Earth Dams, A Guide to Siting, Design and Construction'. In addition, the guideline for small dam construction prepared by the MoA will be used to ensure safety of small dams.
Projects on International Waterways OP/BP 7.50	Yes	LLRP will extract very small amounts of water from any of the shared rivers or drainage systems. This notwithstanding, the Project has, in accordance with the requirements of the policy, completed the Riparian notification process.
Projects in Disputed Areas OP/BP 7.60	No	The project is not expected to be implemented in any disputed areas hence this safeguard policy is not triggered.
Performance Standards for Private Sector Activities OP/BP 4.03	No	The project is not expected to fund Private Sector interventions hence this safeguard policy is not triggered.

86. ***Institutional capacity to implement environmental and social safeguards.*** Rapid institutional capacity assessments undertaken in preparing the proposed project note that for the LLRP, the client will rely on systems and experience developed through other projects and the ESMF, RPF, and SA prepared for the LLRP. Details on the operational steps for implementing safeguard instruments will be included in the PIM. The project will also recruit or assign one qualified environmental expert and one social development expert (whose remit will also include gender) at the federal level. At the regional level, an environmental and social development expert (whose remit will also include gender) will be responsible for environmental and social matters, and each project focal person at the regional level will serve as a liaison on environmental and social matters. At the cluster level, a social development officer will be integrated into the RCST. At the woreda level, the woreda focal person will be responsible for coordination and seeking support on environmental and social issues, such as support from the Woreda Environment, Forest, and Climate Change Office. The Development Agent is the frontline individual responsible for screening of low-risk LLRP subproject activities at the local level.

87. ***Safeguard management approach and capacity.*** In managing safeguards, the proposed project builds on the implementation of related projects such as RPLRP and PCDP. The PCDP implementing entities and their staff at all levels are generally trained in and aware of World Bank safeguard requirements for CDD-type projects. Local institutions in Gambella and Benishangul-Gumuz Regions, although they were not part of PCDP, have been trained



under other World Bank-funded projects, including DRDIP, AGP, and SLMP. Safeguard experts at the federal and six national regional state levels will be responsible for the preparation of site-specific safeguard instruments for high-risk subprojects. They are also required to oversee preparation of the required site-specific safeguard instruments by the zonal and woreda-level focal persons, monitoring due diligence related to safeguards; and providing quarterly reports during implementation. Each officer at the regional, cluster, and woreda level will be responsible for only a limited volume of subprojects. The PIM will outline a formula, defining a threshold after which additional officers will need to be assigned. The World Bank will provide the technical support required for the designated counterpart staff during project implementation, including annual training. Lastly, the project will link its environmental and social safeguard officers with the technical assistance components and respective experts (from universities or consultancies) to ensure close interaction, leading to the adaptive risk management approach noted toward the end of this section.

88. **Risks related to the environment.** The LLRP is expected to be beneficial for communities and the environment, since it will implement numerous environmentally and socially sound activities, many emphasizing management of natural resources (including rangeland): small-scale and micro-irrigation water resource development and management; water development for rural water supply and for livestock; market center development; livelihood development; pasture rehabilitation and incorporation of forage crops into pastures; and development and compliance with grazing land management rules.

89. Any negative environmental impacts of LLRP are expected to be site-specific and reversible. For example, a new water supply scheme could lead to unmanaged local livestock movements and ecologically destabilizing overgrazing. Groundwater could be depleted, and pumps could malfunction if excessive amounts of water are discharged, especially during a drought. Other environmental issues and ecological impacts of livestock production include GHG emissions; hazardous material management; animal disease outbreaks; threats to biodiversity and the environment from pasture and farmland expansion at forest margins, or the introduction of new animal breeds, seed, and plant and crop species; and possible failure of small dam structures. The impacts of these hazards will be minimized by incorporating mitigation measures which are detailed in the ESMF and summarized in Annex 7.

90. **Social risks.** The proposed project triggers OP 4.10 (Indigenous Peoples), as the vast majority of people that the project seeks to assist meet its criteria. As noted in the SA, the project seeks the sustainable empowerment of PAP communities and thus anticipates considerable positive impacts on those communities. At the same time, global experience with development approaches for pastoralist communities highlights the social challenges of socioeconomic transformation within communities, in the relations between communities, and in their interactions with markets and wider institutions. For instance, development can exacerbate income disparities between households and communities, establish new institutions alongside traditional institutions, and alter the prevailing resource control structures or the value assigned to specific types of skills and expertise. Social change of this kind is likely to happen even in the absence of development projects, but it may be expedited by their intervention. At the same time, the proposed project presents opportunities to facilitate socioeconomic transformation in ways that reduce the potential for conflict, expand the influence of local stakeholders on the nature of the transformation, and increase the prospects of more sustainable and equitable outcomes. With such objectives in mind, the proposed project is explicitly designed to mitigate this risk by ensuring strong engagement among stakeholders (through CDD and other mechanisms, as discussed throughout this project appraisal document (PAD)). Given the transformative nature of the project and the general volatility of social relationships in the Lowlands, however, the social risks are considered substantial, and cannot be mitigated completely.



91. **Gender-based violence.** Gender-based violence (GBV) is addressed by Ethiopia's legal system and institutional initiatives, including by the Ministry of Women and Children Affairs, the respective directorates in the line ministries and regional and local government institutions, and development initiatives. Although GBV indicators show a positive trend, domestic violence and female genital mutilation remain challenges, particularly in rural areas. Additional risks arise as the rapid socioeconomic transition continues to redefine gender-relations and traditional power structures. In targeting increased social equity, the proposed project in theory will help to reduce GBV, although the project also carries risks that GBV could increase directly (as a result of infrastructure construction in remote areas which could contribute to influx of external labor) and indirectly (as social relations change within target communities). To prevent and reduce such risks, aside from adopting a code of conduct for project staff and workers, the project will engage in awareness and stakeholder engagement campaigns as part of the continuous community consultation that will accompany project activities. For cases of GBV and sexual exploitation and abuse (SEA), the Woreda Women and Children Affairs Office²¹ will be the first responder, and the project will allocate adequate resources to build awareness of this mechanism for bringing GBV grievances to the attention of the authorities. The Woreda Women and Children Affairs Office will receive training in the basic principles of GBV case management, encompassing confidentiality, a non-judgmental approach, and service referrals for survivors. The office will have working procedures related to standards of service, referrals, data collection, and the importance of focusing on the best interests of survivors. Details of the GBV GRM will be developed and defined in detail in the PIM with regard to the specific context of the Woreda Women and Children Affairs Office. The LLRP will not provide resources for the respective woredas unless awareness and training on GBV and SEA are provided to the Woreda Women and Children Affairs Office.

92. **Labor and working conditions.** The civil works to be performed under LLRP are small in scale to minimize the impacts of the influx of external labor on the community. Such impacts could include, for example, unfair wages paid by contractors, increased living costs and food prices in local markets, the risk of cultural misunderstandings or exploitation, and the risk of sexual exploitation in workers' relations with local women or girls. The proposed project will ensure that adequate risk mitigation measures are adopted, based on the scope of the civil works to be supported, by: (1) ensuring equitable project benefits for women and girls; (2) promoting prevention, mitigation, and referral services to address risks of GBV and SEA ; (3) promoting fair treatment, non-discrimination, and equal pay for equal work for all workers; and (4) incorporating a code of conduct on relationships with the local community into bidding documents, including labor management procedures to prevent and address sexual harassment, unwanted pregnancies, and intimidation or exploitation of members of the local community.

93. **Land acquisition.** Given that the project may involve the acquisition of land and/or restriction of access to communal natural resources, it triggers OP 4.12 (Involuntary Resettlement). RPF was prepared to put appropriate measures and tools in place to address any issues that might arise from potential land acquisition or restriction of access as a result of subprojects. Although it is based on the framework used in a previous project, it has been revised and improved in light of the strategic infrastructure subcomponent, which will probably require the development of ARAPs based on the screening criteria outlined in the ESMF. The RPF also has a chapter dedicated to the key processes that will be followed in developing rangelands and enforcing their management.

94. **The Commune Development Program.** The Commune Development Program (CDP), implemented solely by the Federal Democratic Republic of Ethiopia in the emerging regions (six Lowlands regions described in paragraph 4), closed in 2015. The proposed LLRP recognizes the need to ensure a strategic approach to risk

²¹ This is a GoE-mandated sector office on women's and children's affairs.



management where there is a potential interface between the proposed project activities and the erstwhile CDP investments. A procedure was developed and agreed upon with the GoE in 2014-15 for proactively managing the interface between the federal government CDP and World Bank-financed projects. To that end, the ESMF for the project includes the “Supporting Results and Alignment of Operations in Ethiopia’s Rural Areas Screening Checklist,” which the Borrower will use to screen for potential interfaces with CDP to ensure a high standard of environmental and social safeguard risk management. Where there is a confirmed interface, the World Bank will verify the client’s screening to identify time-bound gap-filling measures.

95. **Monitoring and adaptive risk management.** As discussed, the high degree of social change in PAP areas calls for the project to engage closely with local communities to participate in the continuing assessment and adaptive management of project-related social developments. The SA charts the aspirations and concerns of communities and groups toward the project at its onset, but during implementation it is vital for the project to be accompanied by social, rural, and anthropological expertise to facilitate continuous dialogue with communities and a professional assessment of the direction of change. Throughout its life cycle, the project will engage with a university and/or national and international experts, including the deployment of junior anthropologists, sociologists, and rural/pastoral development experts for fieldwork. Information from these experts will flow into the preparation of subprojects, annual progress reports, and the midterm report, continuously informing project dynamics in response to developments in local communities.

96. **Conflict prevention and mitigation.** As noted, the capacity of PAP systems to remain resilient is eroded to varying degrees by conflict. Conflict in PAP areas is caused and perpetuated by a very wide range of related factors, such as competition for dwindling natural resources, insecure tenure rights, restrictions on mobility that limit access to water and pasture, cattle rustling, group politics, a lack of public investment, and a lack of social inclusion in decision-making, among many others. Conflicts can erupt into violence and lead to displacement and insecurity. The nature, magnitude of impact, and sources of conflict differ by locality, making a robust analysis of the conflict context and the nature of the conflicting parties essential to the design of any conflict prevention and mitigation interventions outlined in Component 1.3.

97. **Citizen and stakeholder engagement.** A unifying theme of the proposed LLRP is that it both requires and promotes continuous and meaningful consultation with project communities, households, and individuals. The project will use different techniques, from informant and household interviews to focus group discussions and village consultations, to ensure that different groups of beneficiaries are being addressed and their voices heard, including the most vulnerable. In such consultations, information will be disclosed regularly, in the appropriate local languages and in a manner that is accessible and culturally appropriate, considering any specific needs of groups that may be differentially or disproportionately affected by the project or groups of the population with specific information needs (such as different forms of disability, literacy, gender, mobility, and differences in language or accessibility). It is understood that meaningful consultation goes beyond the disclosure of information: it is a two-way process, designed to receive feedback from project beneficiaries that will inform the design and implementation of the project and any subprojects in an adaptive manner. Given that the LLRP is designed to foster social transformation, meaningful consultation is even more important than usual, as social change becomes visible and understandable to local communities throughout implementation. Feedback will also help to ensure the continuous identification and mitigation of environmental and social risks and impacts, including use of a mechanism to convey and redress grievances (see the next section). The stakes in LLRP are higher than in the earlier PCDP, as Components 1 and 2 extend beyond CDD approaches; they not only require communication by the project with the government, communities, and households, but also between different communities. Communication among communities is a key element in mitigating the risk of social conflict and will



need proactive planning and facilitation by the project. Stakeholder engagement will be facilitated and reported on by project staff and extension workers, but a new feature of this project is that it will also be accompanied by expertise from various sources, including universities, to ensure the analysis of and adaptation to social change. The process of citizen engagement and community consultation informing the design of subprojects at the community level will not only help LLRP close the feedback loop, but also ensure sustainable use of project investment and stewardship. Further, the proposed GRM and the MIS are complementary tools that ensure appropriate and timely feedback.

98. The ESMF has been reviewed and cleared by the World Bank and disclosed publicly in Ethiopia and on the public World Bank website and a link provided on IFAD's website. Site-specific environmental impact assessments and environmental and social management plans will be prepared, reviewed, and cleared by the World Bank as needed, based on the guidance and standards set forth in the ESMF, with special attention given to social and economic infrastructure subprojects (for roads, water supply, and small-scale irrigation, for example) prior to implementation.

(ii) Grievance Redress Mechanisms

99. The objective of a GRM is to establish a system for project stakeholders, including communities, to address grievances (including to request information and provide feedback on project implementation) in an amicable way. A GRM is oriented toward providing solutions and incorporates the principles of transparency, accessibility, due diligence, and responsiveness. The project will recognize customary and/or traditional conflict resolution mechanisms and the Social Audit Committee as a first layer of grievance redress at the community level, with capacity support by the project. When no solution can be found, grievances will be addressed at the woreda-level, with the inclusion of local government units, project representatives, elders (religious and/or clan leaders), beneficiaries, and (where feasible) other stakeholders. A third layer of grievance redress will be installed at the regional and federal level. The project will provide resources to ensure the functioning of the GRM system. Grievance information will be entered into the project MIS and be included in the regular progress reports. The project will equally ensure that grievances related to GBV are recognized and referred to respective service providers based on a survivor-centered approach (that is, based on the demands of survivors and ensuring confidentiality at all times, as outlined previously). Such grievances shall not be handled according to standard GRM procedures but by the Woreda Women and Children Affairs Office²² or female GBV focal points to be selected and trained to provide basic referrals. GRM procedures are outlined in the ESMF, RPF, and SA, and they will form part of the training provided to grievance committees. Campaigns to raise awareness of the GRM will be conducted for communities at the outset of the project. The project, for the first time in Ethiopia, will use a mobile phone-based system for soliciting feedback, ensuring citizen engagement, and redressing grievances.

100. Communities and individuals who believe that they are adversely affected by a World Bank-supported project may submit complaints to project-level GRMs or the World Bank Grievance Redress Service (GRS). The Grievance Redress Service ensures that complaints received are promptly reviewed to address project-related concerns. Project-affected communities and individuals may submit their complaint to the World Bank's independent Inspection Panel, which determines whether harm occurred, or could occur, as a result of World Bank non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity

²² As noted, this office, given the mandate, will be the primary entry point for issues related to GBV. The LLRP will ensure adequate capacity building, including arrangements for sorting and communicating project-specific cases.



to respond. For information on how to submit complaints to the World Bank corporate Grievance Redress Service, visit <http://www.worldbank.org/en/projects-operations/products-and-services/grievance-redress-service>. For information on how to submit complaints to the World Bank Inspection Panel, visit www.inspectionpanel.org.

V. KEY RISKS

101. The overall risk to achieving the PDO of the proposed operation is Substantial. Possible individual risks are identified, and their ratings listed in the following paragraphs, along with proposed measures to mitigate their impacts during project preparation and/or implementation. The experiences gained, challenges encountered, and lessons learned during the preparation and subsequent implementation of other projects have been instrumental to identifying these risks and mitigation measures²³.

102. **Political and governance risk is High.** The political and governance situation has remained volatile, especially over the last three years. Although calm has prevailed since the new Prime Minister was elected in April 2018, implementation of the proposed operation could slow or even stop if political unrest or civil protests resume. This risk will be mitigated by adopting approaches used in other World Bank-financed projects, which include: (1) careful planning and execution of implementation support missions; (2) continued, regular, and strategic communication between government counterparts (project teams) and the World Bank/IFAD teams; (3) proper implementation and monitoring of safeguard instruments, building on the PCDP, RPLRP, and DRDIP experience and capacity created; and (4) ensuring enhanced transparency, (downward) accountability, and citizen engagement in project-supported activities.

103. The proposed operation will directly help to alleviate some of the drivers of political unrest and civil protests in several ways. For example, it will improve the management and reduce the degradation of natural resources (rangeland and water), which should improve the availability of natural resources and reduce human migration. It will improve citizens' access to basic social services, improve livelihood resilience, and diversify economic opportunities, which should increase well-being, incomes, and employment.

104. **Sector strategies and technical design risk is Substantial:** This project takes a new approach around integrated rangeland development and management which has not been executed, at scale, by the government structure in Ethiopia. In addition, the sector strategies and policies in the past were not very favorable to the mobility of pastoral and agro-pastoral communities. This risk is mitigated by the following factors: a) the government is in the process of approving a new policy on pastoral development which creates a favorable enabling environment for the new project; b) the government is strongly focusing on Lowlands to bring about equitable development in Ethiopia and this is a flagship project in that direction with a strong government buy-in from federal and regional levels; c) extensive consultation with communities, government, civil society, and private sector were undertaken to improve robustness of the technical design; and d) the design is based on the successful experience of pilot projects in Ethiopia and large-scale efforts in other countries.

105. **Institutional capacity and sustainability risk is Substantial,** for at least six reasons. First, the institutional capacity of the lead implementing agency (the MoP) is limited, as is the capacity of the other implementing entities at the federal level, such as the MoA, the Ministry of Water, Irrigation, and Electricity (MoWIE), and others. These

²³ Including the three phases of the PCDP, RPLRP, DRDIP, PSNP, SLMP, Promoting Basic Services Program, and projects financed by the African Development Bank, USAID, European Union (EU), the German Reconstruction Credit Institute (KfW), and GIZ.



limitations in capacity extend to the regional and local organizational setup and staffing of these entities. They are partly the result of the scale of the LLRP compared to the PCDP, RPLRP, and DRDIP, and partly the result of the project's design, which encompass livelihood resilience, market commercialization, natural resource management, and conflict resolution.

106. A second source of risk is the limited capacity for targeting women and youth who are pastoralists and agro-pastoralists in the Lowlands. A third source is the limited capacity (when available) or unavailability (near absence) of human resources, combined with high staff turnover (especially at the local level), to support PAP communities in planning, implementation, and M&E, as well as to effectively deliver the required technical assistance and undertake fiduciary and safeguards tasks. A fourth source of risk is the inclusion of new PAP regions and/or woredas with limited or no previous experience of implementing World Bank–financed operations in the planning, implementation, and management of the proposed operation. A fifth source of risk is related to the challenge of designing and implementing a robust M&E system for improving project management, coordination, and implementation and therefore the ability to adapt the project as needed in particular and results monitoring in general at all levels. A sixth source of risk is the weak links and coordination among institutions, sectors, programs, and projects at all levels.

107. This set of risks will be mitigated by applying approaches used in the other World Bank–financed projects, including continuous awareness creation and sensitization events and continuous training (capacity-building) initiatives targeting the leadership of implementing entities at all levels, technical staff and project staff at the various levels, and PAP communities, including local youth, women, elders, and opinion leaders. Risk related to the limited institutional capacity of the MoP will be mitigated by establishing and strengthening a capable F-PCU and R-PCUs with competent technical staff. To help mitigate the coordination risk, at the policy level the proposed operation will rely on existing government coordination platforms, including the Emerging Regions Coordination Council and the Rural Economic Development and Food Security Sector Working Group. The coordination risk will also be mitigated by the adoption of the new Pastoral Areas Development Policy and Strategy Framework (which is expected to be approved by December 2019), which will improve coordination and guide investments in PAP areas. At the operational level, coordination risk will be mitigated by establishing and strengthening Steering and Technical Committees as well as various other mechanisms, including task forces, working groups, committees, and/or local-level community institutions as part of the institutional and implementation arrangements of the new operation.

108. **Fiduciary risk is Substantial.** This risk is attributed to persistent issues related to procurement and FM, such as high turnover of project staff and project-trained staff as well as staff of implementing agencies, weak internal audit function and poor quality and delayed planning and reporting. Although it is encouraging that the PCDP, RPLRP, and DRDIP have not had qualified audits to date, internal control weaknesses continue to be observed. The inclusion of the two new regions (Gambella and Benishangul-Gumuz) in the proposed operation may present challenges for meeting high fiduciary standards. In addition, possible foreign exchange risk may affect project resources, forcing project activities to be scaled down.

109. Fiduciary risks will be mitigated in a number of ways, including the timely preparation of project Procurement and Financial Management Manuals satisfactory to all parties, and an assessment of the fiduciary capacity of implementing agencies at all levels, devising mitigation measures, including capacity-building needs, and monitoring their implementation progress. Risks related to staff turnover will be mitigated through a continuous capacity-building (training) initiative and will also consider the recent increase and harmonization by the Ministry of Finance (MoF) of salaries for World Bank–financed project procurement and FM staff. Risks related



to the inclusion of new regions and woredas will be mitigated by implementing carefully planned capacity-building measures. Project and implementing agency staff will also be encouraged to participate in tailor-made fiduciary training programs provided by the World Bank or external entities organized abroad.

110. **Stakeholder risk is Substantial.** This rating reflects (1) the potential for political unrest and civil disturbances to re-emerge; (2) potential for institutional/organizational restructuring or reorganization; (3) weak multisectoral coordination mechanisms; (4) potential elite capture of project benefits and exclusion of project beneficiaries, particularly underserved members of targeted communities, and (5) possible inaccurate perceptions that the project is associated with the government's CDP (which resettles communities to crowd in public services or to avoid flooding risk) or the Mass Mobilization Campaign, neither of which the World Bank finances.

111. The identified stakeholder risk will be mitigated by implementing a series of carefully planned and properly executed consultations, involving key government counterparts, civil society, NGOs, the private sector, and beneficiary communities during implementation. The consultations, besides playing an important role in creating awareness, will help in refining the design and strengthening participatory development models and in enhancing transparency and accountability in project-supported activities and safeguards operational steps. To mitigate risks related to potential re-emergence of political unrest and civil disturbances, the World Bank team will maintain regular communication with the design team and be involved in intensive supervision missions.

112. **Environmental and social risk is Substantial** for the reasons noted in detail above and outlined in the ESMF, RPF, and SA. Risk mitigation measures will be implemented either as specific safeguard processes (such as project screening, site-specific environmental assessments, abbreviated resettlement action plans) described in those instruments or as part of the project itself, notably Subcomponents 1.3 (conflict management), 3.3 (research and adaptive management), and 3.4 (monitoring and capacity building). The project will also establish stakeholder engagement structures and processes, along with grievance redress channels, to address site-specific risks as they emerge.

113. Depending on the type and size of infrastructure to be developed, the project will put in place corresponding provisions for managing environmental and social risks. The project has been assessed as Category B, which puts a de facto cap on the types of subprojects that will be feasible and excludes any infrastructure development that has significant adverse, irreversible impacts on the environment or local communities, including impacts on natural habitats or major resettlement. Although the project is categorized as B, the scope of some investments is not yet known due to the CDD approach. The ESMF and the PIM provide screening tools and clear criteria to classify the sub-projects and activities under the project with regard to their environmental, social and climate impacts, and necessitate the preparation of a full ESIA and ESMP as appropriate. Subproject proposals will be screened in line with procedures outlined and thresholds in the ESMF and in the PIM. In addition, the ESMF will also develop a list of feasible subprojects and corresponding limitations to ensure that there is a common understanding of where the line between Category A and B projects lies.

114. **Climate change-related risk is Substantial.** Risks related to climate change, particularly drought and flooding, can critically affect project implementation and the achievement of project outcomes. Recurrent drought in PAP areas affects PAP livelihoods by degrading rangeland and water resources, weakening the resilience of PAP communities, causing households to lose some or even all of their assets, and ultimately forcing them to migrate and/or seek alternative opportunities to maintain a livelihood. Similarly, some structures built by the project to provide water, support social services, or aid in the management of natural resources, for example, may be destroyed totally or partially by floods, and rangeland and cropland may be flooded. The mitigation



measures to reduce the impacts of climate risk are imbedded in the technical design of the project itself, which explicitly aims to reduce adverse outcomes of climate change (specifically drought and flooding) by building the resilience of PAP livelihoods.

115. **Conflict-related risk is Substantial.** This project, by adopting a rangeland development approach and improving access to key resources (grazing, water, mobility, markets) will help to reduce conflict over scarce resources in the project areas. At the same time, there is a risk that project activities could inadvertently contribute to conflict in the form of (1) access to and contestation of migration routes, (2) access to and use of water points, (3) access to river banks (during dry-season grazing); and (4) access to pastures. Subcomponent 1.3 (conflict management) will help to mitigate the risk by proactively engaging with the communities involved and investing in conflict management. In addition, because the project will work across a landscape where the risk of ethnic conflict is acute, broader conflicts may erupt and impair the implementation of the project. This risk will be mitigated by frequently monitoring the incidence and type of conflict and taking appropriate and timely steps to respond to the situation on the ground.



VI. RESULTS FRAMEWORK AND MONITORING

Results Framework

COUNTRY: Ethiopia

Lowlands Livelihood Resilience Project

Project Development Objectives(s)

To Improve Livelihood Resilience of Pastoral and Agro-Pastoral Communities in Ethiopia

Project Development Objective Indicators

Indicator Name	DLI	Baseline	End Target
To improve Livelihood Resilience of Pastoral and Agro-Pastoral Communities in Ethiopia			
Land area under sustainable landscape management practices (CRI, Hectare(Ha))		0.00	700,000.00
Increase in yield of targeted commodities (Livestock and Crop) (Percentage)		0.00	25.00
People with improved access to economic and social Services (of which 50% female and 20% youth) (Number (Thousand))		0.00	1,250.00
Farmers reached with agricultural assets or services (CRI, Number)		0.00	1,500,000.00
Farmers reached with agricultural assets or services - Female (CRI, Number)		0.00	600,000.00



Intermediate Results Indicators by Components

Indicator Name	DLI	Baseline	End Target
Integrated Rangeland Development and Management			
Project beneficiaries with improved access to key natural resources (of which 50% female and 20 % youth) (Percentage)		0.00	50.00
Rangeland Management and Investment Plans (RMIPs) under implementation (Number)		0.00	70.00
Project area with increased NDVI/Biomass Index corrected for weather variability (Percentage)		0.00	30.00
Number of strategic economic infrastructure investments operational (Number)		0.00	300.00
Livelihoods Improvement and Diversification			
Beneficiaries participating in additional or alternative diversified income generating livelihoods activities (of which 50 % female and 20 % youth) (Number)		0.00	200,000.00
RUSACCOs and Unions supported by the project (Number)		0.00	520.00
Project beneficiaries with access to rural financial services (of which 60 % female and 20 % youth) (Number)		0.00	50,000.00
Farmers adopting improved agricultural technology (CRI, Number)		0.00	100,000.00
Farmers adopting improved agricultural technology - Female (CRI, Number)		0.00	30,000.00
Farmers adopting improved agricultural technology - male (CRI, Number)		0.00	70,000.00
Increased volume of marketed commodities, in targeted value chains by project beneficiaries (Percentage)		0.00	25.00
Productive alliances established between the producers and the private sector (Number)		0.00	30.00
Improving Basic Services and Capacity Building			



Indicator Name	DLI	Baseline	End Target
Community sub-projects operational (Percentage)		0.00	90.00
Knowledge products with policy implications for Pastoral and Agro-Pastoral Systems completed (Number)		0.00	30.00
Targeted clients satisfied with livestock, veterinary and agricultural extension services (Percentage)		0.00	80.00
Project Management, Monitoring and Evaluation			
Project direct beneficiaries (of which 50% female and 20% youth) (Number)		0.00	2,500,000.00

Monitoring & Evaluation Plan: PDO Indicators

Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
Land area under sustainable landscape management practices	The indicator measures, in hectares, the land area for which new and/or improved sustainable landscape management practices have been introduced. Land is the terrestrial biologically productive system comprising soil, vegetation, and the associated ecological and hydrological processes; Adoption refers to change of practice or	Annually	MIS		FPCU



	change in the use of a technology promoted or introduced by the project; Sustainable landscape management (SLM) practices refers to a combination of at least two technologies and approaches to increase land quality and restore degraded lands for example, agronomic, vegetative, structural, and management measures that, applied as a combination, increase the connectivity between protected areas, forest land, rangeland, and agriculture land.				
Increase in yield of targeted commodities (Livestock and Crop)	The indicator measures Increase in yield of primary livestock products by project beneficiaries (Camel, Cattle, Shoats.) and increase in yield of selected agricultural crop productions for project beneficiaries (Maize, Sorghum, Vegetables etc.)	Baseline, PY 3 and PY 6	MIS, Survey	MIS,Survey	FPCU
People with improved access to economic and social Services (of which 50% female and 20% youth)	This indicator will measure the number of people provided with improved	Baseline, Annually, PY3 and PY6	MIS	MIS, MTR, EoP Surveys	FPCU



	<p>access to economic and social services disaggregated by types of services and by gender. This includes people who benefited either from the economic services under component 1.2 or the basic services under component 3.1. Thus the type of services can include; rural road, bridges, Small Scale Irrigation Schemes, Water Schemes (Deep Water Wells) and others under component 1.2 and education, health, water supply and sanitation,, veterinary, etc. under component 3.1. From the total target of 1,250,000, at least 50 percent should be female and 20 percent should be youth beneficiaries.</p>				
<p>Farmers reached with agricultural assets or services</p>	<p>This indicator measures the number of farmers who were provided with agricultural assets or services as a result of World Bank project support. "Agriculture" or</p>	<p>Annually</p>	<p>MIS</p>	<p>MIS, MTR and End of Project (EoP) Surveys</p>	<p>FPCU</p>



	<p>"Agricultural" includes: crops, livestock, capture fisheries, aquaculture, agroforestry, timber, and non-timber forest products. Assets include property, biological assets, and farm and processing equipment. Biological assets may include animal agriculture breeds (e.g., livestock, fisheries) and genetic material of livestock, crops, trees, and shrubs (including fiber and fuel crops). Services include research, extension, training, education, ICTs, inputs (e.g., fertilizers, pesticides, labor), production-related services (e.g., soil testing, animal health/veterinary services), phyto-sanitary and food safety services, agricultural marketing support services (e.g., price monitoring, export promotion), access to farm and post-harvest machinery and storage facilities, employment, irrigation and drainage, and finance. Farmers are people</p>				
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	engaged in agricultural activities or members of an agriculture-related business (disaggregated by men and women) targeted by the project.				
Farmers reached with agricultural assets or services - Female		Annually	MIS	MIS, MTR and EoP Surveys	FPCU

Monitoring & Evaluation Plan: Intermediate Results Indicators

Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
Project beneficiaries with improved access to key natural resources (of which 50% female and 20 % youth)	This indicator measures the percent of project beneficiaries who have got Improved access to key natural resources as a result of the adoption of sustainable landscape management practices supported by the project. The key natural resources can include pasture, water, and land. The improved access to land would come from the average 7,000 hectare of land in the target 100 woredas (with a total of 700,000 hectare) that have	Baseline, PY4 and PY 6	MIS, MTR, EoP and Special Surevys	Survey and Cumulative Annual Reports	FPCU



	<p>been severely degraded and were not in use for any purpose and later healed and become available for productive purposes, and from areas that have been invaded by invasive alien and native plant species, and later managed and become available for other productive purposes, such as fodder production, crop cultivation (as appropriate) and construction of residences. Out of the 50 percent target at least 50 percent shall be female and 20 percent youth beneficiaries.</p>				
<p>Rangeland Management and Investment Plans (RMIPs) under implementation</p>	<p>This indicator measures the number of Range land Management and Investment Plans (RMIPs) prepared for integrated and sustainable management of selected range lands across the six LLRP regions, that are approved by the concerned regional /woreda authorities and Rangeland Management Committees, as per the provision in the</p>	<p>Baseline, PY3 and PY6</p>	<p>MIS and Rangeland Monitoring Information System</p>	<p>MIS, MTR & EoP Surveys</p>	<p>FPCU</p>



	LLRP PIM and financed and being implemented by the project.				
Project area with increased NDVI/Biomass Index corrected for weather variability	Assesses the percentage of areas under project interventions, showing improvement in vegetation cover with economically important and environmental friendly plant species. It assesses the impact of the project supported sustainable landscape management practices in the targeted range lands. The indicator will consider the changes related to weather variability to specifically measure the changes attributed to the project investments.	Baseline,PY 4 and PY6	GIS, Rangeland Monitoring Information System	MIS, GIS and Special Survey	FPCU and RPCUs
Number of strategic economic infrastructure investments operational	This indicator measures the number of strategic investments planned, implemented and made operational by the project under component 1.2. It can include rural roads and bridges built and or rehabilitated, number of Small Scale Irrigation	Baseline, MIS, MTR and EoP	MIS and Survey	MIS and Survey	FPCU and RPCUs



	Schemes built or rehabilitated, number of water supply facilities and other strategic investments etc. that will be identified during the planning process.				
Beneficiaries participating in additional or alternative diversified income generating livelihoods activities (of which 50 % female and 20 % youth)	This indicator measures the number of project beneficiaries (pastorals, agro-pastorals, and other community members) who participate in the project supported diversified livelihoods activities (either additional income generating activities for pastoral and agro-pastoral households or alternative livelihoods for people currently not engaged in any income generating activity) supported by business plans. Out of the total target of 200,000 people, at least 50 percent should be female and 20 percent youth.	PY 4 and PY6	MIS and MTR and EoP Surveys		FPCU and RPCUs
RUSACCOs and Unions supported by the project	Measures the number of Rural Saving and Credit Cooperatives (RUSACCOs) that are established and or strengthened by the project (500 RUSACCOs (by PY2 and	Annually, at PY2 , PY3 and PY5		MIS, Annual Report and Surveys	FPCUs and RPCUs



	Py3) and are providing rural financial services to their members well ahead of the project end. The indicator will also measure RUSACCO unions formed (20 Unions towards the end of the project at PY5) that are providing proper services to their member RUSACCOs.				
Project beneficiaries with access to rural financial services (of which 60 % female and 20 % youth)	Measures the number of project beneficiaries (can be members of RUSACCOs, CIGs etc) with access to rural financial services from project supported RUSACCOs, CIGs and MFIs. Out of the total 50,000 target, at least 60 percent should be female and 20 percent youth beneficiaries	Annually	MIS and Surveys		FPCU and RPCUs
Farmers adopting improved agricultural technology	The household irrigation systems will be used for supplementary irrigation of rained agriculture, for diversification of production or for the transformation from a primarily subsistence agriculture towards the production of one or two marketable products, depending on the regional	Baseline, MTR and EoP	MIS and Surveys	MIS and Surveys	FPCU



	<p>conditions and depending on the farmers' interests. Technical assistance will introduce good agricultural practices adjusted to each situation. These are, among other, the use of organic fertilizer, certified seeds, diversification and shifting cultivation and will be identified during project implementation. The indicator evaluates if at least one good agricultural practice transferred during technical assistance is being adopted by the farmer. Municipal staff using their site visits will evaluate use of agricultural practices or improved agricultural technology. One year after the completion of the first systems, an independent evaluation will confirm monitoring results of the municipal staff. If needed, an additional independent evaluation will be realized during mid-term review.</p>				
Farmers adopting improved agricultural technology - Female		Baseline, PY3 and	MIS, and MTR and EoP		FPCU and RPCUs



		PY6	Surveys		
Farmers adopting improved agricultural technology - male		Baseline, PY3 and PY6		MIS, MTR and EoP Surveys	FPCU and RPCUs
Increased volume of marketed commodities, in targeted value chains by project beneficiaries	Measures the increased volume of commodities marketed by the project beneficiaries, as a result of the project support on production, productivity (through technologies, inputs and practices) and commercialization through market linkage, access to market and other related supports.	Baseline, MTR and EoP	MIS, Surveys		FPCU and RPCUs
Productive alliances established between the producers and the private sector	It measures the number of productive alliances established between the producers and buyers. The producers can include; pastoralists, agro-pastoralists, farmers or other organized producer cooperatives with marketable products, while the buyers can be aggregators, industrial processors (be it small, medium or large scale),	PY4 and PY6	MIS, MTR, EoP	Survey MIS	FPCU, RPCUs



	whole sellers or exporters. The project will support the producers and the buyers to establish productive alliances wherein both parties will mutually benefit.				
Community sub-projects operational	This indicator measures the proportion of project supported community sub projects that are completed, functional and have community managed operation and maintenance arrangements.	Annually	MIS		FPCU
Knowledge products with policy implications for Pastoral and Agro-Pastoral Systems completed	Measures the number of knowledge products with policy implications to the pastoral and agro-pastoral production and livelihoods systems identified, studied, disseminated and/or published with the project support.	Baseline, PY4 and PY6	MIS and Surveys		FPCU
Targeted clients satisfied with livestock, veterinary and agricultural extension services	This indicator assesses the targeted clients' level of satisfaction to the livestock, veterinary and agricultural extension services provided by the public entities, that are supported by the project. The indicator indirectly assesses the	Baseline, MTR and EoP	MIS, Surveys		FPCU and RPCUs



	impact of the project's capacity building support to the public service providers towards improving their service delivery capacities.				
Project direct beneficiaries (of which 50% female and 20% youth)	This indicator measure the number of people who directly benefit from any of the project interventions under the three components of which 50 percent shall be female and 20 percent youth beneficiaries.	Annually	MIS	Baseline, Mid Term and End of Project (EoP) Surveys	FPCU



ANNEX 1: IMPLEMENTATION ARRANGEMENTS AND SUPPORT PLAN

A. Approach behind the Implementation Arrangements

1. The approaches and principles behind the implementation arrangements include **multisectoralism**, to ensure sustainability, overcome institutional fragmentation, and complement and strengthen existing structures (rather than developing parallel structures), while allowing adequate space and incentives for the engagement of universities and other learning institutions at the regional and federal levels. Also critical for implementation is the **identification of mechanisms for smooth project coordination and implementation and efficient disbursement**, including existing and well-established structures and building in particular on the institutional arrangements and lessons of PCDP III. Given the rangeland-based spatial entry point of the project, the implementation arrangements are especially cognizant of the need to **strengthen planning** across administrative boundaries and for integrated development planning. Similarly, the implementation arrangements recognize the **characteristics of the project area**, which is remote and presents challenging living and working conditions, weak institutions and low capacity, and high staff turnover. A final principle underlying the implementation arrangements is that the **maximum expenditure on project management will be 10 percent** and will favor staff at decentralized levels.

B. Oversight and Strategic Coordination

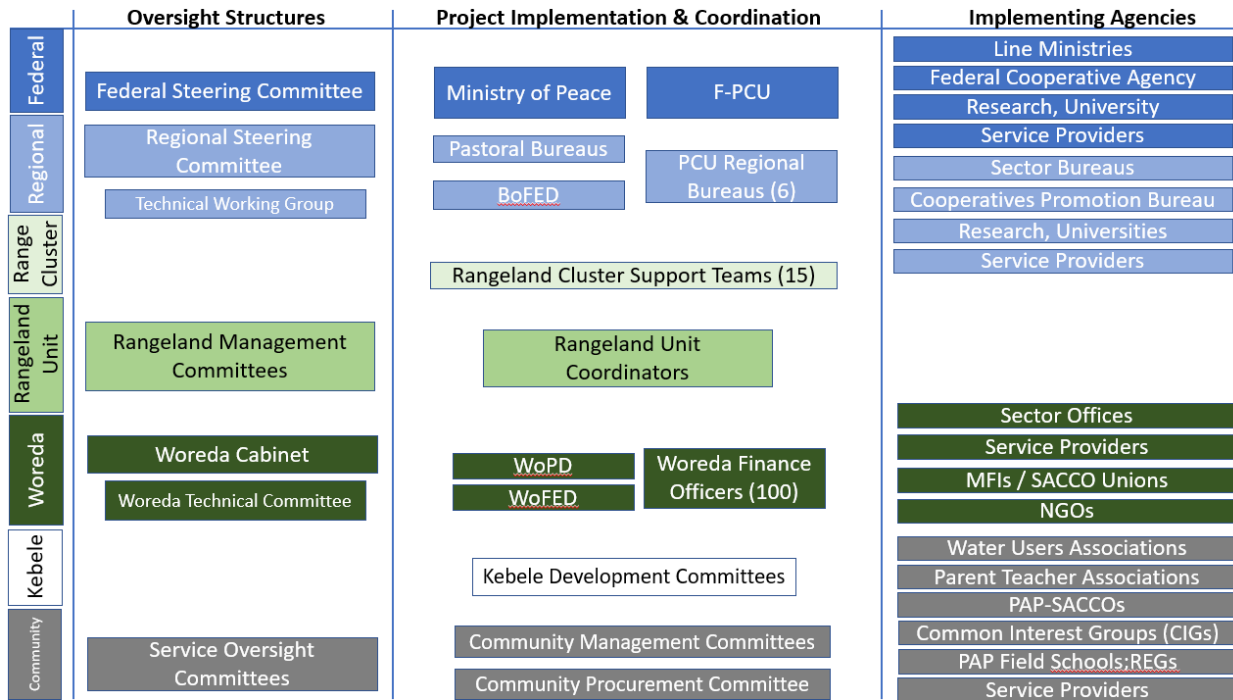
2. Figure A1.1 summarizes the oversight structure, project implementation and coordination mechanisms, and implementing agencies. The MoP will be the lead ministry for project implementation and will establish appropriate oversight and implementation mechanisms to ensure efficient implementation and coordination. Within the first six months of project effectiveness, the MoP will establish appropriate oversight mechanisms, including:

- (a) An **FSC**, responsible for providing oversight and strategic coordination for the project at the federal level. The FSC will be chaired by the Minister of Peace and comprise decision makers from line ministries involved in implementation, including MoA, the Ministry of Education, Ministry of Health, MoWIE, Ministry of Transport, Ministry of Women and Children Affairs, and MoF. The FSC meets at least biannually and approves annual reports and AWPBs; provides policy guidance on the management, implementation, and strategy of the project; ensures alignment and coordination of interventions; and follows up on and adjusts implementation as appropriate, including performance assessment of implementing partners for future or continued disbursements. Ad hoc meetings will be called as required and the options for distance approval of minor decisions (for example, through e-mail) will be explored.
- (b) An **RSC**, responsible for providing oversight and strategic coordination at the regional level. The RSC meets every six months and reviews progress; plans; provides strategic guidance in terms of policy, coordination, and implementation; and endorses consolidated AWPBs. It comprises senior staff from regional sector bureaus. A subcommittee overseeing Component 1 activities will be established, comprising specialists in rangeland management, natural resource management, land management, and governance.



- (c) A **regional Technical Working Group**, to provide technical guidance to the RSC on prioritization of activities and review of proposed strategic projects under each component of the project. The working group will comprise technical experts from regional sector bureaus, the Regional Presidents Office, the R-PCU, and other agencies.
- (d) The **woreda cabinet**, comprising different sector offices, will be responsible for direct oversight of project activities and meet quarterly. It is also responsible for approving project plans at the woreda level and integrating them with the activities planned for the sector. The cabinet is supported by the **Woreda Technical Committee**. It meets every three months.
- (e) **Service Oversight Committees**, established around the provision of specific services (in this case, investments).

Figure A1.1. Oversight structure, project implementation and coordination mechanisms, and implementing agencies for the proposed Lowlands Livelihood Resilience Project



C. Project-established Implementation Units

3. To ensure smooth project implementation, designated staff (organized in units) will be hired, on a competitive basis, at the federal, regional, rangeland cluster, rangeland unit, and woreda levels. In some cases, these units will be directly responsible for implementation (for example, for larger procurements or knowledge management activities), although in most cases they will have a facilitating or coordinating role in relation to other implementing agencies. These agencies include line ministries (at the federal, bureau, or sector level), woreda and kebele administrative structures, or other agencies, public or private, as well as service providers. Detailed implementation plans and performance indicators between the project and implementing agencies are spelled out in MoUs or contracts. structures.



4. The MoP will establish the following units:

- (a) **F-PCU** will undertake day-to-day activities of the project and have overall responsibility for project implementation, with particular emphasis on coordination. It will have a high degree of independence from the ministry and is capacitated to take decisions and act. The F-PCU will be hosted within the MoP and comprise about 14 technical and 8 support staff, including a project coordinator, component heads, technical officers in charge of cross-cutting issues, and finance and procurement teams. If additional technical expertise is required, it will be sought from line ministries or, in special cases, through short- or long-term consultancies. The technical officers at the federal level are technically responsible for the implementation of their component activities, cascading down through the implementation structures.
- (b) Regional Project coordination Units (**R-PCUs**), which will be hosted at the pastoral bureaus (or equivalent) in each of the six project regions. The R-PCUs will be an extension of the F-PCU and comprise about 21 staff, reflecting the composition at the federal level. Component heads will report technically to the component senior officers at the F-PCU and to the regional coordinator on day-to-day affairs. Officers will be mobile and provide technical assistance and oversight.
- (c) Rangeland Cluster Support Teams (**RCSTs**), which will be the extension of the RPCUs within each region. Their structure builds on the experiences of the mobile support teams under the PCDP, but in addition to providing technical support to lower-level implementers, the RCSTs will play a strategic role in the project's overall spatial approach. They will support, encourage, and foster cross-rangeland unit (and cross-woreda) and holistic planning of development projects. The RCSTs will be established once the clustering of rangeland units selected for project implementation is completed. The RCSTs will comprise approximately five technical staff and two drivers. The basic staff will consist of a team leader (M&E and planning specialist) and a finance officer. An additional three technical positions will be identified, based on anticipated project activities in the cluster. Positions could potentially include a civil engineer; a water and irrigation livelihoods specialist focusing on either production, marketing, entrepreneurship, or similar area; and a community or social mobilization specialist. There will also be options to recruit short- or long-term technical assistance.
- (d) **A rangeland unit facilitator**, who will be a designated staff person to support rangeland planning and cross-woreda coordination.
- (e) **Rangeland Cluster and woreda Finance Officers** will be recruited to support accounting funds that will flow to the WOFED for implementation of project activities, through the government's regular flow of funds mechanisms.
- (f) **Rangeland Cluster and woreda Procurement Officers** will be recruited to support procurement implementation at the woreda and community levels.

D. Federal and Regional Implementation Arrangements

5. MoUs will be signed between the MoP and line ministries and other federal-level implementing agencies. The expected deliverable will be clearly outlined, and AWPB development for the subsequent year will be based



on an assessment of performance in line with the PDO. Line ministries must ensure that project investment is in line with, and part of, sectoral policies and investment plans.

6. Regional Bureaus of Pastoral Development or Bureaus of Agriculture and Livestock (as per the regional arrangements) will host the R-PCU staff and enter into MoUs with relevant bureaus regarding their specific role in implementation and any funds flow required, according to regional specificities, priorities, and project activities. Project funds will flow through the regional Bureaus of Finance and Economic Development, while the R-PCU will provide technical support to the relevant structures, to ensure that activities take place in the most efficient manner. Several activities will be managed at the regional level, including: (1) consolidation of AWPBs coming from the woreda levels, including approval processes through the RSCs and regional parliaments; (2) provision of technical support to woreda levels; (3) management of the Strategic Investment Fund; (4) linkages to regional agricultural research centers, TVET centers, regional veterinary services, and others; (5) spearheading knowledge management activities; (6) training of steering committees, subcommittees, and working groups; (7) recruitment of service providers and technical assistance, if needed; and (8) carry out fiduciary responsibility and other tasks, to be identified.

E. Implementation at Woreda, Kebele, and Community Levels

7. Project activities will be implemented mainly through woreda sector offices, kebele administrations, and appointed kebele facilitation teams. The bodies responsible for day-to-day implementation of project activities include:

- (a) The **woreda cabinet**, in addition to its role in oversight of project activities, also provides overall management support to the project at the woreda level, including approving subprojects, approving AWPBs, ensuring effective integration of the project into woreda development plans, as well as ensuring community participation and proper allocation of budgets. This use of existing structures avoids duplication and heavy implementation arrangements and promotes the institutionalization of project approaches within government systems.
- (b) The **Woreda Technical Committee** draws experts from sector offices and provides technical support to the woreda cabinet in its project management function. It works closely with Community Management and Procurement Committees in the planning, implementation, and functionalization of activities and investments, including supporting implementation of the Community Action Plan. It also ensures that Community Development Plans are feasible, realistic, and in accordance with the federal and regional development policies and priorities. It also consolidates work plans from the kebele level. It ensures alignment with the overall Woreda Development Plan and considers social and environmental issues, technical soundness, gender equity, and compliance with rules and issues raised by the community. Members are taken from the WOFED and other selected sectoral offices, as per the activities undertaken in the woreda.
- (c) The **Woreda Office of Pastoral/Agriculture/Livestock Development** is the lead institution at the woreda level for project implementation and the woreda project coordinator will provide all the necessary support.
- (d) The **WOFED**, with support from project accountant and procurement officers will be responsible for administering project resources and carrying out procurement activities at local level.



- (e) The **Kebele Development Committee (KDC)** provides implementation oversight at the community level and leads community mobilization. The KDC is responsible for community consultative planning processes and for ensuring that due consideration is given to vulnerable and underserved populations, youth, and gender sensitivity. It also leads development of Community Development Plans, Community Action Plans, and Community Livelihood Plans, as well as CIF subprojects. For RMIP development, KDCs may mobilize communities and support member identification, as well as appoint their representatives, as and when needed. The KDC also oversees the establishment of community-level oversight institutions and organizes and facilitates the establishment of CIGs, primary cooperatives, and other groupings.
- (f) **Kebele-level technical staff** are civil servants posted at the kebele level, representing each of their sectors in frontline service delivery. They may include agricultural extension workers (Development Agents), animal health technicians, teachers, health extension workers, and others.
- (g) **Community-based management committees** are formed around the establishment and/or construction/rehabilitation of facilities to ensure operation and maintenance. The exact committees depend on the type of investment but could include management and procurement committees to oversee implementation of an investment or parent-teacher associations or water-user associations to operationalize and maintain investments such as schools and irrigation schemes. Some committees may have a more formal role (requiring registration), while others may be more informal. The project will work to achieve 30 percent of women and 10 percent of youth representation in each community-based management committee established.



ANNEX 2: DETAILED PROJECT DESCRIPTION

COUNTRY: Ethiopia

Lowlands Livelihood Resilience Project

1. The PDO of this project is to improve livelihood resilience of pastoral and agro-pastoral communities in Ethiopia. To achieve the PDO, the LLRP will combine three complementary layers of investment, provided through three technical project components.
2. The principal beneficiaries of the LLRP will include (1) pastoralists (herders, including camel, cattle, sheep, and goat owners) and agro-pastoralists in the targeted rangelands; (2) individuals opting out of pastoralism or interested in taking up alternative forms of livelihood; and (3) the populations in the selected woredas and kebeles who gain access to social services (education, health, drinking water). The project will also benefit private enterprises engaged in commercial businesses related to PAP value chains, public institutions delivering public goods and services, cooperatives, and MFIs providing financial and non-financial services.
3. The six strategic pillars identified in the World Bank–IFAD study “Pastoral Development in Ethiopia” (2018) form the basis for this new operation to achieve drought-resilient, transformed, and sustainable PAP livelihoods; ecosystems; and institutions: (1) livelihood support; (2) integrated rangeland and water development and secure access to key resources; (3) transformation and commercialization of the livestock industry in PAP areas; (4) enhanced access and use of basic social and economic services; (5) enhanced social protection and disaster risk management; and (6) institutional capacity building and other cross-cutting issues.
4. This project will build on the longstanding experience of the PCDP for inclusive development through CDD-oriented service delivery, the RPLRP, and other related projects under the IDDRSI livelihoods resilience framework. It will place additional emphasis on rangeland and natural resource management, livelihood improvement and diversification, private sector engagement, market access, and digital technologies. Table A2.1 summarizes the basic features of PCDP and LLRP to demonstrate areas of convergence and divergence.
5. The technical design of the proposed project reflects many aspects of successful projects implemented in Ethiopia. The approach to rangeland and natural resource management builds upon successful experiences with the SLMP, implemented by the government in the Ethiopian Highlands, the RPLRP, and African Development Bank’s DRLSP. The elements of the proposed project related to livelihood improvement build upon the design of the Livestock and Fisheries Sector Development Project and AGP. Elements of private sector integration reflect lessons from the USAID PRIME project and AGP. The approach to financial inclusion and CIGs builds upon the experience of the PCDP and AGP. The proposed project’s approach to CDD is based on the longstanding experience of PCDP III and predecessor projects with the challenges of inclusive development and participatory planning.

Table A2.1: Basic similarities and differences between the Pastoral Community Development Project (PCDP) and



Lowlands Livelihood Resilience Project (LLRP)

PCDP III	LLRP
Target regions and woredas	
Four PAP regions: Afar, Somali, Oromia, and SNNPR	Six PAP Regions: Afar, Somali, Oromia, SNNPR, Gambella, and Benishangul Gumuz
113 woredas	100 woredas
Project Development Objective	
Improve access to community demand-driven social and economic services for pastoralists and agro-pastoralists of Ethiopia	Improve livelihood resilience of PAP communities in Ethiopia
Basic features	
Focus on improving access to basic social services through decentralized CDD approach. Each community is given a maximum of three Community Investment Grants, after which the community graduate from the program	Focus on improving livelihood resilience by supporting development at the ecosystem (rangeland) and production system (PAP) levels, livelihood diversification, and market access
Mainly CDD approach supporting small-scale community subprojects with a maximum budget size of US\$50,000 per subproject	Broader landscape and systems approach incorporating CDD elements, holistic and strategic planning and investments for integrated natural resource management, and strategic economic infrastructure with bigger dollar value. Full-fledged CDD approach to be used for basic service delivery sub component.
Limited livelihood dimension, focusing on the household level	Provides a wider range of investment to improve livelihoods of pastoralists, agro-pastoralists, and vulnerable groups (drop-outs, destitute), with focus on women and youth
Access to rural finance, through rural savings and credit cooperatives (RUSACCOs), the main entry for livelihood improvement	Addresses production, productivity, and commercialization of livestock and crops; strongly emphasizes livelihood diversification and opportunities for alternative livelihoods; and includes access to rural finance through RUSACCOs, RUSACCO unions, and microfinance institutions
Main entry points for decentralized investments are administrative units (woreda and kebele)	Rangelands are the main entry point for strategic resilience building and investments in production systems
Limited institutional capacity building, focused on the local level; limited need for interministerial coordination at the federal and regional levels	Strong emphasis on institutional capacity building at all levels, and enhanced interministerial coordination needed, with a significant role by MoA
Limited high-level technical support needed	High-level technical support needed from specialized agencies in areas such as business development, integrated rangeland management and investment planning, information systems development (rangeland monitoring, satellite imagery, geographic information systems (GIS), pastoral livelihood decision information, and others)

6. The project addresses the complex livelihood challenges of the PAP community in a comprehensive manner. It takes rangeland as the principal spatial unit for project intervention and attempts to simplify the design, keeping in mind the weak implementation capacity on the ground. The three layers of complementary interventions, each of which are demand-driven and flexible enough to accommodate different needs of communities and rangelands, are technically robust and build upon successful experiences in Ethiopia and elsewhere.

7. The geographical coverage of the proposed project includes PAP areas in six regions: Afar, Benishangul-Gumuz, Gambella, Oromia, SNNPR, and Somali. Within these six regions, the project will intervene in approximately 100 woredas. It will adopt a woreda-clustering approach to spatially cover the rangelands to be



identified. Criteria for selecting woredas include: (1) they are pastoral or agro-pastoral; (2) rangelands are present, as well as an institutional or governance structure that provides secure access to wet- and dry-season grazing, (3) they offer opportunities for SIs and market access for PAP products; (4) they show potential for enterprise development along PAP value chains; and (5) they have high incidences of poverty and the presence of underserved communities lacking basic social services. Annex 10 provides maps of the project intervention areas.

8. The sections that follow describe the project components in detail.

Component 1: Integrated Rangeland Development and Management

9. Pastoralism is an efficient and sustainable management of the dryland resources in the arid and semi-arid Lowlands that are not well suited for other forms of practices such as farming. Thus, component one will support the overall management of rangelands where PAP production systems operate. Its activities will encompass the management of all rangeland resources, including dry-season and wet-season grazing land, and drought reserve grazing areas; wetlands; forest and woodlands; water sources for livestock, crops, and humans; and areas reserved for crop and fodder production. The aim is to prevent or reverse degradation, manage encroachment, rehabilitate rangelands, and enhance production of improved forage. The improved productivity of rangelands and pastures will lead to improved livestock productivity and production, which in turn should contribute to improved livelihoods and resilient rangeland ecosystems. This effort will be complemented by SIs in economic and market infrastructure. Component 1 will have three subcomponents: (1) Integrated Rangeland Management Planning; (2) Supporting Strategic Investments; and (3) Conflict Management and Access to Key Resources.

Subcomponent 1.1: Integrated Rangeland Management Planning

10. Subcomponent 1.1 will support five sets of activities: (1) conducting regional assessments of rangelands and associated PAP communities, institutions, and governance structures; (2) developing an inventory of existing investment and strategic plans (such as disaster preparedness SI plans and woreda-level investment plans) to ensure that any subsequent work undertaken by the project is aligned with and does not duplicate those efforts; (3) formulating participatory RMIPs; (4) setting up a rangeland monitoring system; and (5) building stakeholders' capacity to plan and implement RMIPs. Each set of activities is described next.

11. **Regional assessments of rangeland areas and associated PAP communities, institutions, and governance structures.** Once woredas have been clustered into appropriate planning units, the next step will be a regional scoping and assessment of rangeland areas.²⁴ That exercise will identify PAP communities, institutions, and agroecological zones associated with those rangelands. It will also review information that has already been compiled through woreda land-use planning, and woreda/regional investment or disaster preparedness plans and information collected through various projects (such as the USAID's PRIME and LAND projects, GIZ project in Lowlands). All of this information, particularly information on the implementation status of any rangeland management plans that already exist, will be confirmed with local, regional, and federal stakeholders.

12. More specifically, the review will identify: (1) the geographic coverage of particular rangeland areas, the resource availability and use within them, and their current health status, identifying areas of high degradation, water availability, and current infrastructure; (2) major migratory and stock routes for grazing, water, and markets,

²⁴ Woredas are estimated to range in size from 300,000 hectares to 700,000 hectares, so a cluster of three to five woredas will cover quite a large landscape and one or more rangelands.



as well as the presence of pastures and relevant infrastructure, facilities, and services, especially those associated with animal health, livestock development, and commercialization; (3) the communities using the rangelands at different times, the different social groups within these communities, and the ownership and lifestyle systems of these groups; (4) the status and roles of customary rangeland management institutions as well as coverage by regional and woreda-level government agencies as well as NGOs and CSOs supporting rangeland planning and management; and (5) the status of existing rangeland and broader land-use management and development plans.

13. That review will confirm the clustering of woredas based on rangelands and will prioritize project areas of intervention based on their investment needs and opportunities. Ideally woredas will be clustered to cover a coherent rangeland. Consideration should also be given to the proximity of similarly clustered woredas in adjacent regions. In parallel, a manual will be developed to guide this process, based on existing guidelines for participatory rangeland management and land-use planning in PAP areas and adapted as appropriate.

14. **Assessment and inventory of existing investment plans.** Many investment and strategic plans have been developed at the regional, woreda, and kebele levels. Prepared by local governments, development partners, and NGOs, these plans cover different aspects of livelihood resilience and include disaster preparedness SI plans, woreda-level investment plans, land-use plans, rangeland development plans, woreda risk profiles, and woreda disaster management and contingency plans. Regional and woreda administrations will collect and compile all such existing plans, which will form the foundation of any subsequent work. If a rangeland has already developed rangeland management plans and identified areas of investment, the project will endorse such plans and finance those investments. In other places where existing plans may need updating or no similar plans exist, the project will finance detailed development of the RMIPs.

15. **Formulation of RMIPs.** Once rangeland assessments and stocktaking are complete, participatory rangeland management planning can commence. A series of consultations with key stakeholders, particularly leaders of customary institutions dealing with development; local communities (including women and youth); relevant woreda, zonal, and regional officials; and development partners will be undertaken to confirm their interest in jointly planning, managing, and developing their rangelands and pastures. This process will include the identification and training of community facilitators, mobilization of communities, and an awareness campaign to ensure that all target groups are adequately heard and represented. Agreements to collaborate will include the establishment of an RMC. Its exact structure and role may vary from rangeland to rangeland, but it will largely comprise the above-mentioned stakeholders. The RMC will be facilitated by the social development and community mobilization specialist of the cluster support team (RCST). Technical expertise may be drawn from the regional Bureaus of Environmental Protection and Land Administration and Use, other regional bureaus, service providers, or others.

16. Following confirmation of the RMC, further sensitization and awareness raising will be undertaken with all key stakeholders from the regional to local level, who will then review the rangeland units in more detail. This review will be accompanied by the compilation of relevant satellite imagery, maps, and other spatial and socioeconomic data that will then be used to collect and analyze information from different interest groups (pastoralists and agro-pastoralists, the better-off and poorer groups, women, youth, and service providers) on existing land and natural resource use, identifying challenges, opportunities, and proposed solutions.

17. As much as possible, this planning process will be integrated into woreda land-use planning processes and use existing information. The process should be carried out with care, using a combination of customary and modern thinking as well as best practices. As noted, the starting point for developing the RMIP will be the



assessment of existing investment plans to ensure that the RMIP is fully aligned with them. Each RMIP will be developed with both a gender conflict lens to ensure maximum participation of women and minimize conflict over competition for resources. The Rangeland Value Chain Alliance will provide its feedback and input into the prioritization of public goods in RMIPs, which can help crowd-in private investments. At a minimum, the exercise must identify and confirm other land uses (particularly cropland, existing irrigation schemes, forested areas, and wetlands) and relevant infrastructure and facilities. Each RMIP will have five key components: (1) natural resource and pasture development; (2) water resource development; (3) small-scale irrigation scheme development; (4) market infrastructure development, such as access roads, market facilities (primary, secondary, and tertiary), and so on; and (5) other economic infrastructure. Subcomponent 1.2 will finance priorities identified in the RMIPs.

18. The RMCs will also facilitate an exercise to identify and prioritize requirements for pasture improvement initiatives, strategic public economic infrastructure (ranging from boreholes to irrigation schemes or markets and roads), and the associated capacity and skills development required to develop the rangelands, in the short, medium, and long term. The development of RMIPs will be supported by highly specialized service providers for each region, who will provide the technical capacity to evaluate technical and economic feasibility, as well as expertise in GISs and global positioning systems. The consolidated and prioritized RMIPs will be validated with the participating communities and user groups and through the regional government technical working group. Investment plans will be accompanied by the formulation of management bylaws and the approval of consolidated RMIPs by the relevant traditional and government authorities.

19. **Capacity building in rangeland management, mapping, and governance.** Throughout the process delineated here, the regional Bureaus of Environmental Protection and Land Administration and Use and/or contracted service providers (where necessary) will provide specialized capacity building in rangeland management and governance to all relevant government and community-level organizations, CSOs, and NGOs. This capacity building will include training in the use of appropriate mapping and geo-information technologies, the identification and costing of interventions, and M&E of RMIP implementation and the status of rangelands. Equipment and materials will also be provided to woreda planning teams to support the formulation of RMIPs. If necessary, the MoP/R-PCUs could enter into MoUs with other government agencies (such as regional or woreda-level land administration offices) to provide oversight of the quality of services provided and the RMIPs produced. The role of customary institutions in rangeland management will also be strengthened.

20. **Setting up a rangeland monitoring system.** For biophysical monitoring following international protocols, the project will establish a GIS-based rangeland and pasture monitoring system, based on the interpretation of satellite/aerial imagery. The monitoring system will be a national-level database system, with technical support provided to the F-PCU by a specialized national and/or international service provider. The national and international technical assistance will ensure that greater national capacity is built to use GIS for land-use planning. Imagery interpretation may be supplemented by regular (on the ground) data collection on rangeland health and other trends, including the traditional rangeland management system. A synthesis report will be produced to inform management decision making.

Subcomponent 1.2: Supporting Strategic Investments

21. Guided by the RMIPs, this subcomponent will finance investments with strategic relevance for sustainable management of rangelands, improved productivity of PAP systems and enhancing disaster risk management and livelihoods resilience. More specifically the sub component will finance two categories of SIs: (1) rangeland management and pasture improvement initiatives, which are smaller investments with a natural resource



management objective and (2) public economic infrastructure (larger strategic infrastructure such as access roads, market facilities, and small-scale irrigation facilities). Each category of investment is described in detail below. Rangeland management and pasture improvement investments will be prioritized based on development needs and economic opportunities with respect to rangeland management and pasture development. While the equitable distribution of investments is a consideration, more emphasis will be placed on identifying opportunities that can catalyze wider local economic benefits and development. Economic infrastructure will be developed in accordance with professional and modern designs that incorporate gender-sensitive considerations, such as provisions for high-value vegetable crop production, priority to the rights of women's water-user groups in irrigation schemes, decent toilets for both men and women in market places, and so on.

22. **Rangeland management and pasture improvement initiatives.** Based on the approved RMIPs, subprojects will be identified, planned, and implemented on an annual basis. Drawing on the experience of the CDD approach under the PCDP, a menu of activities and investment options will be identified and costed to guide the selection of subprojects and levels of community contribution.

23. An indicative list of eligible subprojects includes: (1) livestock water resource development, both localized and along livestock mobility routes, including small dams, rainwater harvesting, and boreholes; (2) soil and water conservation and gully control measures (multipurpose tree and grass planting to prevent erosion, soil and stone bunds, cutoff drains and check dams, and so on); (3) demarcation of livestock routes, area enclosures, grass reseeding, and afforestation; (4) pasture and forage development (including nurseries for forage seed and improving seed supplies, fodder banks, hay making, and construction of feed stores); and (5) animal health facilities. This list will be reviewed and if necessary revised and costed during the planning exercise, with annual updates on costs as required. Trees will be an integral part of rangeland rehabilitation, including the conservation and planting of indigenous multipurpose and drought-tolerant tree species.

24. An overall envelope for the RMIP investments will be set, including an allocation for each woreda to finance identified subprojects. Proposals must include joint approval of the other woredas in the cluster and the relevant kebeles, and they must be included in the woreda development plans. This mechanism ensures that subprojects are based on joint agreements reached between the various users and their respective representative bodies on their shared use of the resource before financing is approved. Subproject proposals must also include management arrangements, bylaws, and user rights. Such detailed plans will be developed by the woreda administrations as part of the annual planning and budgeting exercise, with input from the KDCs and the RCST.

25. Subprojects will be implemented at the woreda level, supported by the RMC for cross-woreda projects, as required. Community procurement will be used to the extent possible, and community contributions in kind and labor will be solicited. The RMCs will play a critical role in monitoring adherence to rangeland management bylaws. They will be trained in using the established rangeland monitoring system to assess and monitor the condition of the rangeland and to identify and monitor range management problems, such as invasive species, erosion, and deforestation.

26. **Public economic infrastructure.** The second category of SIs consists of strategic public economic investments that cover a large geographic area associated with improved rangeland management (several communities and in some cases possibly several woredas) and that are especially important to foster links



between improved rangeland management, pasture development, and livestock development and marketing, as identified in the RMIPs.

27. An indicative list of eligible investments includes: (1) livestock water provision along livestock routes and in a wider rangeland area; (2) spot improvements to public infrastructure, such as bridges and tertiary roads; (3) economic facilities such as secondary and primary markets; (4) investments aimed at facilitating public-private-producer partnerships; (5) the establishment or upgrading of small-scale irrigation schemes; (6) water harvesting and conservation schemes, which aim either to support household food security or to diversify and commercialize the cash crop and forage/fodder production necessary for improved rangeland management and livestock commercialization, such as fattening and dairying; and (7) based on a detailed gap assessment, investments to rehabilitate and equip regional veterinary institutions such as laboratories in the six regions.

28. All investments in water infrastructure and facilities will be preceded by feasibility studies to confirm the long-term availability of water resources, ensure complementarity with human and animal use, and support pastoral mobility. Water sources for small-scale irrigation schemes could use surface water, groundwater, and rainwater harvesting, with an emphasis on maximizing the efficiency of water use (for example, through drip irrigation). In addition to social and environmental considerations, financial feasibility assessments will include an assessment of the financial rate of return and cost per hectare. To ensure sustainability of irrigation schemes, water user associations will be established or strengthened, and operations and management support will be provided to them. Similarly, market infrastructure development will be preceded by an appropriate assessment of demand and technical feasibility. Appropriate governance and management structures will be put in place to ensure the sustainability of market infrastructure. IDA resources will not be used to finance water infrastructure and facilities in Gambella and Benishangul-Gumuz Regions.

Subcomponent 1.3: Conflict Management and Secure Access to Key Resources

29. Conflict, resulting in the loss of key grazing lands and water resources and limiting access to key natural resources, undermines the resilience of pastoral systems in Ethiopia. It increases vulnerability by constraining development and eroding development gains, restricting movements of people and livestock (concentrating populations and degrading resources), disrupting markets and public service delivery, and even resulting in the loss of life. Conflict in pastoral areas is caused by a range of interrelated factors, that include insecure tenure rights, ethnic politics, restrictions on mobility that limit access to water and pasture, competition for dwindling natural resources, cattle theft and the spread of small arms, a lack of public investment, and the exclusion of pastoralists from decision-making processes.

30. Conflict in pastoral areas differs by region and the parties involved. There are inter-regional conflicts (Oromia versus Somali, Afar versus Somali); inter-clan conflict in Somali Regional State; the Kuraz and Hammer in South Omo; cross-border conflict (Ethiopia-Kenya; Sudan-Ethiopia; the Fellatas cross border movement in Benishangul-Gumuz Region; Murielle cattle rustling in Gambella Region)—all with their unique features. A robust analysis of the conflict context and the nature of the conflicting parties is essential for the design of any conflict management interventions.

31. To ensure uninterrupted and conflict-sensitive planning and implementation of LLRP interventions, this subcomponent supports conflict prevention and mitigation measures, supplemented by additional activities. The conflict avoidance and mitigation measures are based on community response mechanisms incorporating socially defined and acceptable ways of negotiation. In formulating the RMIPs, the project will make use of the Conflict



Sensitive Prevention Toolkit and guidelines developed under the Pastoralism and Stability in the Sahel and Horn of Africa Project (P153713). Subcomponent 1.3 will also finance five activities, among others: (1) conduct area-specific conflict analyses and conflict mapping to inform planning for RMIPs and other investments under Components 1, 2, and 3; (2) identify, recognize, and build the capacity of customary institutions and traditional conflict resolution practices, and, on a case-by-case basis, finance innovative and durable conflict resolution initiatives (this activity includes supporting alternative mechanisms that operate through local/customary institutions, markets, communication, or basic services that offer common ground for reciprocity and mutual dependence); (3) conflict resolution, social cohesion, and peace-building platforms (inter-community, inter-woreda, inter-regional, and cross-border platforms, as appropriate) and establish or strengthen linkages with existing platforms and initiatives such as the Conflict Early Warning and Response Mechanism and similar initiatives; (4) identify/understand critical challenges constraining pastoralists' access to key natural resources, initiate studies (through Component 3),²⁵ and facilitate policy dialogues between communities, local and federal governments, CSOs, and other relevant stakeholders; and (5) for relevant staff of the MoP, other institutions and sector ministries, relevant CSOs, and other implementing agencies of the project, provide capacity building and local and cross-border visits to share experiences with traditional and modern conflict management approaches, Conflict Sensitive Prevention Toolkit, and other technologies and practices.

32. By adhering to the proposed prevention and mitigation measures, the project will help to enhance common resource management systems, institutions, interdependence/reciprocity, and exchange. Depending on the complexity of the specific context, to support the respective government officers in facilitating these measures, the project may outsource some activities to firms, CSOs, and others.

Component 2: Livelihood Improvement and Diversification

Subcomponent 2.1: Enhancing Pastoral and Agro-Pastoral Production Systems

33. This component will finance activities that will support three categories of communities, namely those who want to pursue the pastoral system, those who opt to diversify the pastoral system including to agro-pastoralism and those who have moved out of the PAP systems and are looking for alternative livelihoods options with focus on youth and women. This subcomponent aims at improving the productivity of PAP production systems—cattle, camels, small ruminants, poultry, and crops (including maize, sorghum, and vegetables)—in the targeted rangelands. The project will enhance the delivery of extension and animal health services in the targeted woredas and provide complementarity to the SIs under Component 1.

34. **Enhanced delivery of extension services.** Support for extension services will entail: (1) strengthening the extension system through improving the organizational and human resource capacities of woreda extension systems and by upgrading PTCs and FTCs; (2) strengthening the mobile outreach extension delivery system through PAP field schools; and (c) supporting research through PAP Research and Extension Groups, managed by universities and research centers.

35. A strengthened extension service will promote **feed technologies** (vitamin and premix preparation, innovative urea-multi-nutrient block production, ration formulation, silage formulation, fodder production and management, and feed-producing technologies) as well as **forage technologies** (an innovative three-phase

²⁵ The thematic action research will focus on understanding the underlying drivers of conflict (spatial mapping, unpacking the drivers, identifying the actors, and identifying alternative resolution mechanisms), the Lowlands political economy (the changing livelihood pattern), and the institutions influencing natural resource management and use.



feeding strategy—comprising wet-season feeding, pre-drought feeding, and drought feeding—for livestock production in drought-prone areas). Extension will also promote **community-based breed improvement initiatives** focusing on cattle, camels, and small ruminants. Support could include training, equipment, and improved breeding animals as appropriate. Rangeland and pasture land demonstrations will promote **improved animal husbandry practices** (improved breeds, productivity, forage, and feed) and **good herd/stock management practices** (herd size, herd composition, destocking); as appropriate; at a very limited scale, improved exotic breeds can be considered for high-potential areas. **Improved crop husbandry practices** will be promoted through on-farm demonstrations for dryland agriculture, irrigation, and water conservation schemes, which would include climate-smart agriculture practices and technologies, new and drought-tolerant varieties, integrated pest management practices, improved inputs, mechanization, and improved water and soil management. **Nutrition education and homestead gardening** will be an integral part of the PAP Field School modules and demonstrations. Training will cover nutrient-dense crop production and more nutritious consumption patterns, with a particular emphasis on pregnant and lactating women and children under five. The goal is to reduce malnutrition and stunting by breaking food myths, promoting dairy consumption, and addressing food safety and handling practices. A curriculum will be developed to train community facilitators and PAP Field School facilitators on women’s nutrition and empowerment. The extension system will also be better positioned to promote **gender equality** by ensuring that women and men participate equally in extension activities and that all receive key information to improve the production and productivity of their activities. The modules of the training curriculum will include specific sections related to gender. PAP Field School facilitators will work with women’s groups to identify potential constraints limiting women’s capacity to unlock their potential and will facilitate the discussion. Training for women will also aim to develop non-cognitive skills (such as perseverance, optimism, and a passion for work), which have been positively linked to the adoption of higher-value crops among female farmers in other countries, even in patrilocal communities.

36. **Enhanced delivery of animal health services.** This subcomponent will support execution of the Ethiopia Pastoral Areas Veterinary Services Delivery Strategy (2018-2027) developed by the MoA and Agricultural Transformation Agency. The availability of animal health services in the selected communities, as well as outreach functions of the system, will be strengthened by: (1) upgrading and equipping animal health posts; (2) supporting, establishing, and/or strengthening networks of animal health services and/or PPP arrangements to ensure a sustainable supply of quality veterinary drugs; (3) training and equipping CAHWs; and (4) providing targeted capacity building to veterinary institutions at the regional and woreda levels, which can include veterinary laboratories, diagnostic centers, and specialized centers such as tsetse control centers in the Lowlands areas as appropriate.

Subcomponent 2.2: Promoting Livelihood Diversification and Market Access

37. Using the existing woreda and community-level PAP extension systems, Subcomponent 2.2 will (1) support livelihood development by providing business development services and training in technical skills, particularly for youth and women, (2) strengthening market development and commercialization, and (3) improving access to financial services. These activities will be facilitated for CIGs and rural institutions such as livestock marketing groups and pastoral cooperatives, as well as individuals, in particular youth, women, and those who have left the pastoral sector. In addition, partnerships with the private sector (wholesale traders, input suppliers, slaughterhouses, veterinary drug and agro-input suppliers, and other relevant service providers) will be facilitated. Access to finance will be improved by strengthening RUSACCOs, unions, and MFI outreach.



38. **Livelihood diversification.** The project focuses on livelihoods related to several priority value chains: beef; dairy; small ruminants (sheep and goats); animal feed and fodder; camels; vegetable and high-value horticultural production; and crops (maize, sorghum, and others). These value chains have been selected based on their current spread and future potential in the project areas, opportunities for value chain integration, and opportunities for youth and women to participate in the value chains. Other activities that may be considered for diversifying livelihoods include beekeeping, poultry production, handicrafts, natural gum, and tourism.

39. Priority for inclusion in livelihood opportunities supported by the project will be given to those lacking productive assets and ranking as the most vulnerable—namely, youth without livestock and women who have no or very limited opportunities to engage in a traditional PAP livelihood system. Direct targeted interventions will be undertaken to ensure that women and youth are included and participate fully in activities supporting traditional as well as alternative livelihoods. The project will also support individuals operating at a very low subsistence level, who are interested in combining their small-scale production (and very low income) with alternative livelihood activities to bring in additional income and improve household resilience.

40. This subcomponent will support three main avenues for livelihood diversification. The first is the **provision of business development services** for young entrepreneurs to develop business plans or for groups of young people and women to develop skills related to marketing, business, trade, service provision, support service delivery, or input supply. There is limited experience in Ethiopia in the provision of these specialized services. Local business incubators (Blue Moon, ICE Addis) offer business services to young entrepreneurs in Addis Ababa but lack extensive experience in the rural space. A few contractors (such as Technoserve, ACDI-VOCA, and CARE) have some experience in providing business development services. This activity will be implemented by competitively recruited external service providers. Competent and qualified institutions will be invited to submit their proposals for providing business development services to young entrepreneurs and group enterprises in the project geography.

41. A second avenue of livelihood diversification involves the development of **vocational and business skills** through specialized training focusing on entrepreneurial skills, financial literacy, and carefully selected vocational and technical skills for individuals and groups to meet the demand for skilled labor in expanding pastoral towns and adjacent urban economies. Such training would include the development of an entrepreneurial mindset and socio-emotional skills, which have been showing to substantially improve business performance among micro-entrepreneurs, especially women. Training would be implemented through relevant agencies and bureaus at the regional and woreda levels, as well as through existing TVET centers, management institutes, and other entities. After looking at the market demand and need for vocational education, the project will sign MoUs with selected TVET centers and universities in the project geography to develop and roll out short- and medium-term vocational/technical education programs.

42. The third avenue of livelihood diversification is to provide **matching grants for CIGs** to develop business plans and start an enterprise as deemed appropriate by the local authorities and following the CIG guidelines provided in the PIM. The formation of CIGs and the provision of financial support to them will target mostly women, as well as young men and women who have no productive assets. The enterprises of interest to CIGs will include but will not be limited to animal fattening, forage/fodder production, poultry production, milk production and dairy processing, beekeeping, operating a tannery, and other off-farm activities (carpentry and metal working, for instance). The project team and woreda line department will organize the CIGs and link them to relevant agencies at the woreda and regional levels and to frontline service providers. Each CIG will prepare a business plan and plans that meet the criteria for matching grant support will be selected for financing. Two types of CIGs will



be formed. Productive partnership CIGs will be linked directly to commercial buyers, whereas open-market CIGs will not be linked to a single buyer but will focus on providing a good or service to multiple consumers. Detailed guidelines for matching grant are included in the PIM.

43. **Strengthening market linkages and commercialization.** To promote livelihood diversification, this subcomponent will also finance market assessments and rapid market appraisals to identify business opportunities, to plan support, and to guide the preparation of business plans for large investments. Support will include environmental and social screening of the design and eventual implementation of investments and related companies. These assessments will be supported through networks of business development service providers and the MoA, Ministry of Trade and Industry, and the Federal Cooperatives Agency (FCA). The project will support technical assistance to explore market potential for the industrialization of pastoral livestock systems through value chain analysis to attract aggregators, processors, abattoirs, feedlot operators, live animal and meat exporters, and other prospective value chain participants to PAP areas. A private sector roundtable organized during project preparation highlighted the mis-match between supply and demand. The private meat processor association and member companies emphasized that their plants are operating at 30–40 percent capacity because they cannot source sufficient numbers of goats and sheep from the Lowlands. At the same time, pastoralists maintain that buyers and demand from the markets are lacking. The clear disconnect between the production base and market demonstrates the extent to which strong partnerships between producers and buyers are needed to optimize the potential of the Lowlands. The project will provide technical support to encourage entrepreneurs among the pastoralists to invest in the higher end of the livestock value chain (for example, feedlot operation, aggregation, processing, and exporting), either individually or in groups. The ultimate aim is to develop and upgrade the value chain and ensure that economic activities are as inclusive, sustainable, and resilient as possible. Only items that are integral parts of sound business plans will be financed.

44. Priority value chains contributing to the long-run development of the livestock sector in PAP areas as identified in Ethiopia’s Livestock Master Plan (2015-2020) include dairy, red meat (from indigenous cattle, sheep, goats, and camels) and leather. Key challenges faced by these value chains include: inappropriate feeding, poor husbandry practices, access to markets and lack of access to veterinary services. Support activities across value chains will be contextualized in view of the region and location specific issues, focusing on (i) feed; (ii) genetic potential; (iii) animal health services; (iv) marketing and processing; and (v) policy improvements.

45. Over its lifetime, the project is expected to establish productive partnerships (Box A2.1) between 40–50 private enterprises and thousands of project beneficiaries. The enterprises involved could range from meat processors and exporters, to agro-industrial parks, live animal traders, abattoirs, food retailers, agro-processors, dairy companies, logistics providers, and feed manufacturers, among others. With that aim, the project will support:

- **Productive partnerships.** Partnerships (formal or informal contractual arrangements) will be facilitated between individual private companies and groups of producers. These producer groups could be CIGs, producer cooperatives, traditional clan and sub clan systems, and RMCs. These alliances will help to close the demand-supply gap and communicate market signals related to quantity and quality specifications, pricing, logistics, and so on. The business proposition of these productive alliances will be financed through other project components (productive partnership CIG matching grants and RMIPs).
- **Rangeland value chain platforms.** Rangeland value chain platforms will comprise different private sector actors that perform different functions in priority value chains and have a strong commercial



interest in a given rangeland. The participation of private companies in these platforms will help to incorporate their concerns into the decision making and prioritization of investments within RMIPs and should help RMIP investments to alleviate bottlenecks to private sector engagement. In this way, public investments under the project will help to address constraints to private sector participation as well as constraints identified by the communities and should help to crowd-in private investments. The platforms may also help to create pipeline for potential IFC investment and advisory services.

- **Innovative market arrangements.** To spur innovation in the market space, in addition to productive partnerships, the project will finance new innovative market arrangements that include: (1) developing auctions; (2) rolling out product standards and traceability and certification systems; (3) using mobile phones to aggregate demand and facilitate commercial transactions; and (4) other efforts that may have a huge multiplier effect in terms of retaining a good portion of the revenue generated from the livestock value chain within PAP areas and creating jobs for youth, women, skilled labor, TVET and university graduates, and others.
- **Livestock market information system.** A livestock market information system based on mobile-phone applications will improve access in PAP areas to timely and reliable information for decision making, such as prices for different agricultural commodities in nearby markets. Rather than developing a brand-new system, the project will scale up livestock market information systems that have been launched by other projects.

46. This set of activities would be outsourced to a service provider or institutions such as the Agricultural Transformation Agency.

Box A2.1: The productive partnership/alliance approach

A productive alliance involves three core agents: (1) a group of smallholder producers; (2) one or more buyers, and (3) the public sector. The producers are typically united in a producer organization; the buyer(s) can be active at different levels of a value chain in either commercial or institutional markets, and the public-sector agent is commonly represented by the MoA or Project Coordination Agency. These three agents are connected through a business proposition (“business plan”), which describes the capital and services needed by producers and proposes improvements that would allow them to upgrade their production capacities and skills to strengthen their linkage with the market—that is, with the buyer(s). Productive alliance projects typically support the development and realization of business plans through three core inputs and/or activities directed toward producers’ needs: (1) productive investments; (2) technical assistance; and (3) business development.

Productive investments typically include the provision of machinery and equipment, infrastructure (on-farm or off-farm), and production inputs (such as seed, fertilizer, veterinary supplies) for producers. Similarly, technical assistance entails the delivery of extension services, technology transfer, and specialized assistance on technical matters related to production, processing, and environmental issues, as well as market studies. Finally, business development focuses on strengthening producers’ business development capacities in management, accounting, business administration, and marketing. Productive alliance projects vary in their emphasis on each of these core inputs, but all provide support for goods and services to enhance the fulfilment of a business plan. One key characteristic of a productive alliance project is that the core inputs to support the business plan are normally financed through grants provided by the public sector, which are matched by the producers and in a few cases also by the buyer(s).

These mutually beneficial arrangements “tighten” links between producers and buyers in the value chain. Producers benefit primarily by gaining direct access to a buyer and potentially earning a higher income (by receiving higher prices for their goods) and reducing their transaction costs. Other benefits that producers may receive from a direct relationship with a buyer may involve guaranteed volumes of purchases, fixed prices in



advance of sales, and extension and technical assistance to improve production and quality. In addition to these benefits from working directly and collaboratively with a buyer, the producer group will also receive financial and technical support provided by the public sector. This support may include assistance in putting together business plans, grants to assist in financing productive investments (such as warehouses, machinery, productive technology and assistance). The buyers in the alliance benefit by securing a set quantity and quality of an agricultural commodity that they require for their business. These arrangements can be especially valuable when it is challenging to get sufficient volumes at a particular level of quality and at key times.

There are common elements required for a productive alliance to succeed. First, the producers (who are generally small-scale producers with surplus production of a commodity) need to be organized. A group of producers must form a legally recognized producer organization that can receive and invest funds and contract with buyers for delivery of a commodity. The second element for a productive alliance is a business plan. A business plan developed for an alliance needs to include details of productive investments, technical assistance, business development, and all of the other activities that will make the alliance work for all parties involved. A third critical element of a productive alliance is that a producer group must be matched with a buyer, with a commitment by both parties to fulfill specific requirements to produce and deliver goods (producers), and to buy and pay for the goods (buyers) at specific points in time.

Source: Briefing Note on Productive Alliances (World Bank 2018)

47. **Improved access to rural financial services.** Beneficiaries (particularly women and youth) who have received crop and livestock production support, skill development, business support services, and market access, will also be linked to the formal financial sector. The project strategy for providing improved access to financial services builds on **RUSACCOs** and **MFIs**.

48. **RUSACCOs** are locally-based institutions with simple procedures for savings and obtaining credit; they generally provide small loans and have no required volume of deposits. The project will assess the existing RUSACCOs and classify them as weak or dormant, intermediate, or strong. A specific and targeted support package would be defined to strengthen each category of RUSACCO, building on the experience in PCDP.

49. In areas without RUSACCOs, training and capacity development will help to mobilize potential members, establish the new RUSACCOs, and provide initial training for the founding members, office holders (manager, treasurer, chair, heads of RUSACCO committees), and board members. In addition to soft skills and human capital development, newly established RUSACCOs will be supported with a financial package consisting of office furniture, ledger books, and a safe for deposits, as well as seed capital. This approach was successful in PCDP III. The RUSACCOs will be established and supported early in the life of the project, preferably during its first and second years. This early support should enable the RUSACCOs to graduate from project support well before the end of the project, thereby ensuring sustainability.

50. Weak and Intermediate RUSACCOs will receive refresher training and technical support to improve their financial performance. Targeted technical assistance is expected to help these RUSACCOs move up to the next tier of classification (strong RUSACCOs) and join the credit union in the project's fourth or fifth year.

51. Strong RUSACCOs will pilot the creation of credit unions. Second-tier cooperatives (unions) of this kind are important for several reasons. They can coordinate support functions for member RUSACCOs (auditing and training, for example) but above all they can act as recipients for liquidity from the commercial banking or MFI sector. In other words, RUSACCOs will not be able to develop credit links with the Ethiopian commercial banking



sector unless they form unions. The Lowlands areas of the six regions where the project will operate have hardly any cooperative unions. Based on effective demand and possibly following the rangeland cluster approach, around 20 unions will be piloted. The project will provide technical assistance to the newly created unions and link them with potential source of financing.

52. To ensure the quality of the training materials and coordinate all support to financial cooperatives, a partnership with the FCA and Rural Financial Intermediation Project III is envisaged. The project emphasizes building the capacity of the cooperative agency at the woreda and kebele levels and hence limit the operational support from the project team to the RUSACCOs.

53. **Activities for MFIs** are the next layer of project support. To permit larger loans for micro and small entrepreneurs with investment requirements, the project will provide technical support and assistance for existing MFIs to link with existing sources of financing. MFIs will receive technical support for improving their downward linkages to the financial cooperative system (which operates at a smaller and more decentralized level) and for introduction of new, relevant products, such as Islamic finance, sharia compliance, or products designed for women. MFIs will also receive training to facilitate the adoption of digital financial service products. Women derive particular benefits from mobile money and other digital payment systems, which offer greater privacy and control over household expenditures.

54. In addition to capacity development, the project will also provide technical support to facilitate regional knowledge transfer with the aim of speeding the adoption and dissemination of digital financial services in the Ethiopian Lowlands, where they can significantly reduce transaction costs and create new profit centers for participating MFIs. The project will also provide technical assistance to facilitate downward linkages with RUSACCO unions for MFIs with temporary surplus liquidity.

Component 3: Improving Basic Services and Capacity Building

Subcomponent 3.1: Provision of Basic Social Services and Infrastructure

55. This subcomponent will improve access to, and utilization of, basic social and economic services among the target communities through a decentralized CDD approach. It will target areas within the rangelands that have not previously implemented CDD investments under any phase of the PCDP.²⁶ To avoid potential duplication of investments in nearby kebeles and enhance complementarity, the project, as part of the CDD planning process, will promote inter-kebele consultations among the KDC members. It will provide investment funds that together with community contributions will help expand and improve service delivery and build infrastructure for local development. The CDD approach from the PCDP will be updated to accommodate the requirements of the rangeland approach in the proposed project—for example, subprojects will now include several communities as necessary. Investments will be identified, prioritized, implemented, and monitored by the beneficiary communities, which will also be responsible for procurement and FM of subprojects.

56. This subcomponent comprises a **CIF** and related **technical support** to promote broad participation and community decision-making in local development. At the local level, options available for selection and financing through the CIF include (but are not limited to) education, health, veterinary services, potable water, spot improvements of rural feeder roads, and small bridges. The PIM will list the options that are not eligible for support

²⁶ It is estimated that the PCDP (Phases 1–3) invested in 60 percent of kebeles, leaving 40 percent still to be covered.



from the project. In addition to meeting basic standards, requirements for this public infrastructure will include off-grid clean energy solutions (solar energy, bio digesters) to support their critical functions while contributing to climate change mitigation. The prioritization and final selection of community investments will continue to be done through the preparation of Community Development Plans at the kebele level, which will be consolidated at the woreda level and ultimately feed into AWPB processes. Special attention will be given to the priorities identified by women. Investments will be based on a three-step planning process: (1) an initial sensitization and social mapping process to identify traditional organizations and engage with different elements of PAP societies (including the poor and vulnerable, who are often neglected in local development processes); (2) situation analysis and articulation of a development vision for the kebele at the sub kebele level (that is, in relatively small groups); and (3) development of a Community Development Plan at the kebele (with representatives, including women, from different community groups), as well as the prioritization of subprojects and development of Community Action Plans for the CIF. It is also expected that the Woredas selected to implement this subcomponent will follow the CDD approach for the entire woreda annual planning and budgeting process.

57. As learned from the PCDP, the delivery of basic social services benefits all target groups but has a significant and immediate positive impact on certain groups, such as women and individuals engaged in more sedentary livelihood systems, including children and elders. Lessons from PCDP III have also demonstrated that gender-sensitive facilitators are essential for supporting communities during the prioritization process, to ensure that women's views are captured. For that reason, the proposed project will continue providing gender-sensitive capacity building for facilitators working at the community level as well as leadership training for women leaders directly engaged in prioritizing community subprojects.

Subcomponent 3.2: Institutional Capacity Building

58. A significant investment is necessary to build institutional capacity in the remote settings where this project will operate. In these areas, staff retention is a critical issue, and implementation capacity is weak. Capacity building will be done at all levels of implementation, spanning the federal, regional, woreda, kebele, and community levels, and it will include physical capacity, human capacity, and system capacity building. The process will start by identifying key institutions that will be involved in implementing the project, including research and academic institutions (and others, as deemed necessary) and undertaking a capacity needs assessment. Next, a capacity-building plan will be developed and financed. The types of support provided will include:

- Capacity building for relevant key public service delivery institutions such as agriculture, water, pastoral development, cooperative agency, and others. These institutions will be strengthened to enhance the quality and outreach of their services and to meaningfully engage with other public and private partners to deliver production and productivity, market access, disease control, and other services for their members. The project will also support alternative ways of implementing the capacity development program, including outsourcing to consulting firms through a capacity development support facility.
- Targeted short- and long-term courses for the staff of relevant public-sector institutions, focusing on disciplines relevant to PAP livelihoods and production systems. This training can include diploma, certificate, bachelor's, and master's programs, financed through partnership with the appropriate academic institutions. Preference will be given to the project implementing agencies and to persons originally from and residing in PAP areas.

59. The project will pay careful attention to ensure that training responds to women's needs. To ensure their inclusion (50 percent participants), strong consideration will be given to providing training at appropriate times



and locations and to the gender sensitivity of service providers (that is, the extension, veterinary services, and project staff). Training for women will include topics relevant to them, such as animal health, human nutrition, milk handling and hygiene, small ruminant fattening, animal husbandry, dryland irrigated farming, nutrition/cooking demonstrations, demonstrations of time-saving technologies, and marketing and trading, including ICT. Visits that enable participants to see new technology and methods will be organized.

Subcomponent 3.3: Knowledge Management, Research, and Policy Support

60. **Knowledge management and communication.** A weak link in past programs and projects was that little information on lessons and best practices was documented or disseminated to enable adaptive management, integrate changes at the local level, and benefit from the feedback of beneficiaries. For that reason, the project will support continuous learning, adaptable knowledge management, and communication on innovative tools and approaches. This subcomponent will also identify the indigenous knowledge and customary institutions that are expected to play pivotal roles in strengthening various development activities among PAP communities. Part of this effort will be to document indigenous knowledge and best practices and success stories will be identified and disseminated to all stakeholders. Any studies, reports, and related materials directly related to PAP communities in Ethiopia will be assembled and made available to the public through the development of a robust database to be maintained at a carefully selected host institution. This subcomponent also provides support to formulate a communication and knowledge management strategy during the first year of the project to ensure that all of the information and learning from the project initiatives are appropriately communicated, organized, and accessible.

61. **Policy support.** Considering the need to strengthen policies on land use, pastoral mobility, trade (to enhance cross-border and domestic livestock trade), community land certificates, community ownership of rangeland, and (most importantly) access of PAP communities to key natural resources, this subcomponent will finance technical assistance for evidence-based policy making and for promoting community engagement in policy dialogue. Policies should recognize the role and authorities of customary institutions in governing resources, managing and resolving conflict, and presiding over traditional social protection mechanisms. This initiative will inform the GoE on pastoral-friendly policies that are consistent with the current constitution and facilitate improved, resilient PAP livelihoods.

62. To support evidence-based policy making, this subcomponent will finance analytical work, workshops, assessments, action research, small pilots, and studies. The F-PCU will call for proposals to undertake analytical activities. Questions to be explored include: What is the significance of informal cross-border trade in livelihoods in the Ethiopian Lowlands, and what mechanisms can be put in place to strengthen and facilitate trade in this geography? How is decentralized financing working in PAP areas, and how can its performance be improved further? What is the efficacy of contingency planning and disaster preparedness in PAP areas, and how can market-based solutions be incorporated into disaster response and humanitarian assistance programs? What are the mechanisms for investing in livelihoods without trapping people in poor places? How can mobility and migration be facilitated and become part of an overall livelihood strategy? What mechanisms could incentivize commercial stocking and destocking in the Ethiopian Lowlands? How can cultural norms and behavior adapt in ways that increase commercial activity among pastoralist households?

63. **Research on PAP systems.** The project will support research and capacity building in priority thematic areas of PAP systems. Therefore, under this subcomponent, MoUs will be signed with research, academic, and higher learning institutions to conduct specific research on topics such as rangeland management and breed improvement to respond to a changing climate, rainfed and irrigated agriculture in arid and semi-arid areas,



livestock production and productivity technologies and improved practices, socioeconomic research in pastoral areas, and piloting innovative approaches such as the provision of specialized business development services, as appropriate.

64. **Piloting innovations.** The project will also pilot innovations to remove core bottlenecks related to production, processing, marketing, and business arrangements in PAP production systems and value chains (such as certification and traceability of livestock products, the use of drones to map rangelands and grazing units, piloting of livestock business incubators, and an integrated decision support system). In particular, an integrated decision support system could provide access to the following key information: prices of major commodities in nearby markets, condition of pastures, water points, nearby markets, and conflicts. This system could also enable aggregation of produce (through geo-location and uploading of information on produce that needs to be sold) and enhance the ability of rural producers to market their products. An integrated decision support system will be piloted under this effort to remove bottlenecks in value chains; it could be scaled up based on the results of the pilot.

65. Core bottlenecks in PAP systems will be identified and requests for proposals will be organized. Innovative pilot projects will be identified, prioritized, prepared, and vetted. Proposals will come from the private or public sector and specialized actors in the targeted livestock, dairy, and crop value chains. Priority will be given to piloting innovative technologies that enhance the competitiveness and sustainability of rangeland management and additionally provide low-cost climate proof solutions, are adapted to the needs of youth and women, and help to improve nutrition and food security.

Component 4. Project Management, Monitoring, and Evaluation

66. This component aims to ensure that the project's performance and impact are carefully tracked and that the project is managed and implemented efficiently, on time, and in accordance with the PDO and Financing Agreement. These activities are the responsibility of the F-PCU and R-PCUs. The project will ensure coordination and communication at the national, regional, woreda, and kebele levels for fiduciary matters, communication, planning, and monitoring of safeguard mitigation measures. The project will be implemented in partnership with relevant sector ministries, bureaus, and offices, under the technical lead of the woreda offices of pastoral development/agriculture development. To provide technical assistance to woredas and kebeles, and to strengthen cross-woreda planning for holistic rangeland development, the project will establish RCSTs, supplemented by the RMC. The project will finance project staff costs, consultants, equipment, and capacity-building activities at all levels.

67. The project will establish the FSC and the RSCs, supported by technical working groups. The woreda cabinet will provide oversight at the woreda and community levels and ensure institutionalization of the participatory planning processes introduced or further supported under the project. It will also ensure that project activities correspond to the needs of the target groups are well integrated into sector and local development plans. The PIM will further define the institutional arrangements.

68. The successful targeting of beneficiaries, increased resilience, and the achievement of gender-sensitive and nutrition-sensitive outcomes will be among the main performance indicators that are monitored. An MIS will be set up within the first year of implementation to track the performance of the project in real time, and a strong M&E system has been developed to focus on project results and outcomes. The project will finance baseline, midterm, and impact evaluations of the project. The ILRI is being proposed as the institution to perform the



baseline, midterm, and end of project (impact) evaluations, given its technical competence, good understanding of PAP communities, and record with similar assessments.

69. Within the PCU, an expert responsible for cross-cutting issues (gender, youth, and nutrition) will be recruited within six months of project implementation to support overall implementation of activities related to those issues and liaise with key partners. The M&E system places strong emphasis on monitoring performance in targeting. It requires all implementers to provide disaggregated data on the participation of women and youth. The M&E system will collect and analyze information about project outreach, the effectiveness of the targeting strategy, and specific benefits for women and youth. This effort will require strong coordination and collaboration between the M&E unit and the subject matter specialist (gender and youth) at all levels. Impact will be assessed through methodologically gender-sensitive baseline, midterm, and completion surveys, which will use key indicators to measure women's empowerment.



ANNEX 3: FINANCIAL MANAGEMENT AND PROCUREMENT

COUNTRY: Ethiopia: Lowlands Livelihood Resilience Project

A. Financial Management

1. An assessment of FM was conducted in accordance with the Bank policy and directive on investment project financing to determine whether the participating institutions have adequate FM systems and related capacity in place. The FM arrangements consist of the planning, budgeting, accounting, internal control, funds flow, financial reporting, and auditing arrangements of the Borrower and entity or entities responsible for project implementation. The World Bank conducted the assessment in light of lessons from PCDP III. Additional assessments examined the implementing entities at the federal and selected regional and woreda levels. Discussions were also conducted with IFAD for donor harmonization.

B. Country Context

2. The GoE has been implementing a comprehensive public financial management (PFM) reform program with support from development partners, including the World Bank, through the Expenditure Management and Control subprogram of the government's civil service reform program. The PFM reform program was supported by the IDA-financed Public-Sector Capacity Building Support Program (P074040) and Protection of Basic Services Program (P103022), which have closed. PFM reforms are on-going under the current IDA-financed Promoting Basic Services Program (P128891), Enhancing Shared Prosperity through Equitable Services Program (P151432), PFM Project (P150922), and other projects financed by other donors as well as by the government. These programs focus on strengthening the basics of PFM systems: budget preparation, revenue administration, budget execution, internal controls, cash management, accounting, reporting, and auditing.

3. A Public Expenditure and Financial Accountability (PEFA) assessment is currently underway and expected to be completed by December 2019. The last PEFA was conducted in 2014/15 for the Federal Government as well as for Amhara, Oromia, Tigray, SNNPR, and Somali Regions, as well as the Addis Ababa city administration. Good improvement was noted in most Federal Government ratings, although ratings for the regions varied. In general, Ethiopia's budget credibility continues to be supported by robust budget execution and internal control systems. Budget transparency and comprehensiveness have also become stronger since the 2010 PEFA assessment. Good performance was also noted in arrears management, public access to fiscal information, and revenue administration. The tax audit function is gradually increasing the focus on risk assessment, but capacity constraints remain. Procurement systems have been strengthened since the 2010 assessment, although publication of procurement information has not progressed as much. The effectiveness of scrutiny has grown stronger to some extent, given that the Macroeconomic and Fiscal Framework is being reviewed by the relevant legislation unit and owing to the strengthened procedure for reviewing the draft budget. Legislative scrutiny of audit reports improved with regard to the depth of hearings and monitoring the implementation of recommendations.

4. Although improvements are noted, efforts to strengthen the internal audit function have progressed more slowly than expected. High staff turnover and capacity constraints remain in procurement and internal audit. The provision of electronic links between the Integrated Budget and Expenditure (IBEX) systems in Bureaus of Finance and Economic Development and those in sector bureaus, where IBEX was being established on a stand-alone basis,



remains a constraint and affects ratings on accounting and reporting. In addition, timeliness of the preparation of statements and coverage have improved, although regional reports are submitted to the federal level with a delay. The assessment also indicated that external audit has progressed overall, but capacity constraints remain.

C. Project Financial Management Arrangement

Budgeting

5. **Budget preparation and approval.** The GoE budget system is complex²⁷, reflecting the fiscal decentralization structure.

6. Budgeting for the proposed project will follow the government budget process. Timely preparation and approval of the budget are crucial for smooth implementation, so preparation and submission of the AWPB for the LLRP will follow the government budget calendar. Budget preparation will begin at the woreda level, and the draft budget will be approved by the steering committee at each level. The R-PCU will be responsible for consolidating the annual work plan at the regional level, whereas the F-PCU will consolidate the budget for all implementing agencies. The F-PCU will be responsible for obtaining the federal-level steering committee's approval and the World Bank "no objection." It will also submit the budget to the MoF as part of the MoP's annual budget and will obtain approval. The consolidated budget for the project will be proclaimed under the aegis of the MoP at the federal level.

7. **Budget control and monitoring.** The detailed approved budget will be disseminated to all implementing agencies for proper follow-up on or before the beginning of the budget year. The budget tracking record will be kept up to date. Variance analysis, including explanations, will be part of the regular reports. Management will undertake mid-course corrections based on the reports and explanations provided. The Financial Management Manual for the project will specify the control procedures in detail.

Accounting

8. **Policies and procedures.** The GoE follows the double-entry bookkeeping system and modified cash basis of accounting, as documented in the government Accounting Manual. Government accounting policies and procedures will largely be used for accounting for the proposed project. The Financial Management Manual has already been developed by the project and is currently under review. The manual incorporates the design and details of the FM arrangements for the proposed project. The manual also addresses lessons from PCDP III. The F-PCU will obtain the World Bank "no objection" on this manual before proceeding to use it.

9. **Accounting system.** The MoP and FCA have applied the Integrated Financial Management Information System (IFMIS), while the other entities visited for the FM assessment use IBEX to capture treasury transactions and prepare periodic reports. Donor-funded projects have used Peachtree accounting software, although IFMIS is also used to prepare a separate report for the government. The application of the IFMIS for the project at all locations is unlikely, as IFMIS is still being rolled out at the federal level. The project can use Peachtree accounting software at the regional, RCST, and woreda levels, as experience has been gained in using it in prior donor-funded

²⁷ The budget is processed at federal, regional, zonal (in some regions), woreda, and municipality levels. The budget preparation procedure and steps are recorded in the government's budget manual. The budgets are reviewed first by the MoF and then by the Council of Ministers. The regional budget process follows the same approach.



projects. However, the use of manual accounting practices (Excel) currently implemented in some federal entities is unacceptable, as it is prone to error and manipulation and reports require time to prepare and produce.

10. **Chart of accounts.** The chart of accounts for the project will be developed using the government chart of accounts to properly capture the components, subcomponents, categories, and activities of project expenditures. This chart of accounts will form part of the Financial Management Manual of the project.

11. **Accounting centers and accounting documents.** Accounting centers for program funds are expected to include the MoP (F-PCU), FCA, the MoA, Ethiopian Institute of Agriculture Research (EIAR), pastoral bureaus and/or R-PCUs, cooperative bureaus and Bureaus of Agriculture, regional research institutions, and the WOFEDs. All these institutions will maintain separate acceptable accounting books and records and prepare financial reports in line with the system outlined in the project Financial Management Manual, which will be made available to regular supervision missions of the World Bank and to external auditors.

Staffing

12. Understaffing has been noted in the entities assessed, particularly in the finance, budget, internal audit, and property administration units, due to the low pay scale. The PCDP recruited and maintained a number of accountants at all levels. Vacant posts are observed due to staff turnover, which the project tried to fill as much as possible. Inadequate staffing creates a risk that project implementation and reporting will be delayed. The F-PCU should have one senior finance officer, two finance officers, one senior auditor, and an accountant. Each region should at a minimum have finance officers, accountants, and an internal auditor. Each RCST and woreda should have an accountant in place. As the current accountants and auditors working on the PCDP have extensive experience, it is recommended that they be transferred to the proposed LLRP. This FM capacity will be enhanced by recruitment for any vacant positions that arise. Project management will study and determine the staffing requirement, including the staff required to transition from the PCDP to the LLRP and for new positions under the proposed project.

13. **Financial management support and capacity building.** Training in FM is essential for the proposed project to succeed, especially considering the decentralized environment where it will operate and the persistent risks of low capacity and turnover at project implementing entities. The project should allocate funds for FM training, which should be conducted initially after effectiveness and annually during implementation. Thus, the F-PCU and R-PCUs will include annual FM training as part of the AWPB. Attention should be given on building FM capacity for project operations in Benishangul-Gumuz and Gambella Regions which are new to this type of project.

Internal Control and Internal Audit

14. **Internal controls.** Internal control comprises the whole system of control, financial or otherwise, established by management to (1) carry out project activities in an orderly and efficient manner, (2) ensure adherence to policies and procedures, (3) ensure maintenance of complete and accurate accounting records, and (4) safeguard project assets. The proposed project will follow regular government internal control systems and procedures, including those relating to authorization, recording, and custody controls. The internal control system of the entities visited for the assessment is found to be reasonable, although weaknesses are noted in property management, training payments, receiving bank guarantee for construction advances, liquidating advances, finalizing bank reconciliation statements, and internal audit.



15. The project-specific control requirements will be documented in the project Financial Management Manual. The procedures outlined in the manual will be applied stringently. The project Financial Management Manual should address internal control challenges noted in the implementing entities. It will also include important accounting and control procedures relating to activities implemented at the community level.

16. **Internal audit.** All the entities have internal audit units or directorates. However, these units are severely understaffed due to low salary scales and hence are not able to cover funds other than the treasury accounts. To fill the gap observed in internal audit review, one internal auditor has been employed for the PCDP at each of the federal and regional coordination units. Internal auditors conduct audit and produce individual audit reports as well as quarterly and annual summary reports. However, challenges were also noted in consolidating formal quarterly report and following up on recommendations. Despite the weaknesses noted, it is still recommended that the project retain the internal audit units across the federal unit and regions. The project will adopt the internal audit manual of the PCDP III project. The project coordinators will ensure that audit finding action plans are implemented. It is also advisable that all internal auditors including that of the RPCU should be accountable to the F-PCU to improve their independence status. It has been agreed that the list of woredas visited, major weaknesses noted, and the action taken on the audit report finding should be reported on the quarterly Interim Financial Reports (IFRs) of the project.

Financial Reporting

17. The project will prepare consolidated unaudited IFRs by collecting reports of federal-level entities and regions. These IFRs will be submitted to the World Bank (and development partners) within 45 days of the end of each quarter. The format and the content, consistent with World Bank standards, will be agreed with the MoF/F-PCU. R-PCUs will monitor and support participating woredas, RCSTs, and regional entities to ensure that financial reports meet the standards and that they are submitted on time. A common single IFR will be used for all financing of the project by all development partners.

18. In compliance with the government's financial rules and regulations as well as IDA requirements, the F-PCU will produce annual financial statements. The annual financial statements will be similar to the IFRs, with the modifications indicated in the terms of reference (ToR) for the audit. These financial statements will be submitted for audit within three months after the end of each financial year.

External Audit

19. The MoP/F-PCU will be responsible for having the annual financial statements of the project audited. The annual project audit report will be submitted to IDA within six months from the end of the fiscal year. The draft annual financial statements will be prepared within three months of the end of the fiscal year and provided to the auditors. The annual financial statements will be prepared in accordance with the standards indicated in the audit ToR that has been agreed during negotiations. The Office of the Federal Auditor General (OFAG), or a qualified auditor nominated by the OFAG and acceptable to IDA, will carry out the audit. The auditor will express an opinion on the project financial statements. The audit will be carried out in accordance with the International Standards on Auditing issued by the International Federation of Accountants. The auditor will prepare a work plan to ensure adequate coverage of the various institutions that receive project funds and cover all the major risk areas.



20. The auditor will prepare a work plan to ensure adequate coverage of the various institutions that receive project funds and cover all the major risk areas. Given the large number of institutions and to meet the timetable for completion of the annual audit, the auditor will carry out interim audit semiannually following the audit plan. The interim audit is not a separate exercise but is intended to facilitate the process of the annual audit, and also provide early information to project management to enable them to take corrective actions. The auditor will submit interim audit report to project Management and the same must be forwarded to World Bank and DPs for follow up. The interim audit will be included in the ToR for the audit.

21. In accordance with World Bank policies, the World Bank requires that the Borrower disclose the audited financial statements in a manner acceptable to the World Bank. Therefore, the MoF/F-PCU will disclose the reports (for example, on the ministry's website). Following formal receipt by the World Bank of audit reports from the Borrower, the World Bank makes them available to the public in accordance with its Policy on Access to Information, effective July 1, 2010.

Financial Management-Related Costs

22. Project work plans, and budgets include the costs of (1) project-dedicated accountants; (2) audit costs; (3) logistics and supervision costs (for example, transportation, per diem, and accommodation while travelling); and (4) providing training in FM, among others.

Governance and Anti-Corruption

23. The GoE established the Federal Ethics and Anti-Corruption Commission of Ethiopia in May 2001 (and defined powers in the revised Proclamation 433 of 2005). Furthermore, regional states set up their own ethics and anti-corruption commissions in accordance with their respective constitutional jurisdictions to tackle corruption and impropriety before it becomes rampant and widespread in their respective regions. The MoP has an ethics and anti-corruption unit with officers who have the responsibility to act on instances of suspected fraud, waste, or misuse of resources or property. As part of strengthening the unit, the MoP has restructured the unit at the director level with four experts, including the director. Currently, there is only one officer against the requirement of two. On the other hand, the ethics and anti-corruption unit and/or officer is not observed in the other federal and regional entities. These offices have reported that there have been many possibilities of reporting fraud incidents, including reporting to heads of offices, the regional Ethics and Anti-Corruption Commission, and region administrators. Ethics and anti-corruption structures and reporting mechanisms of implementing entities will also apply to the project.

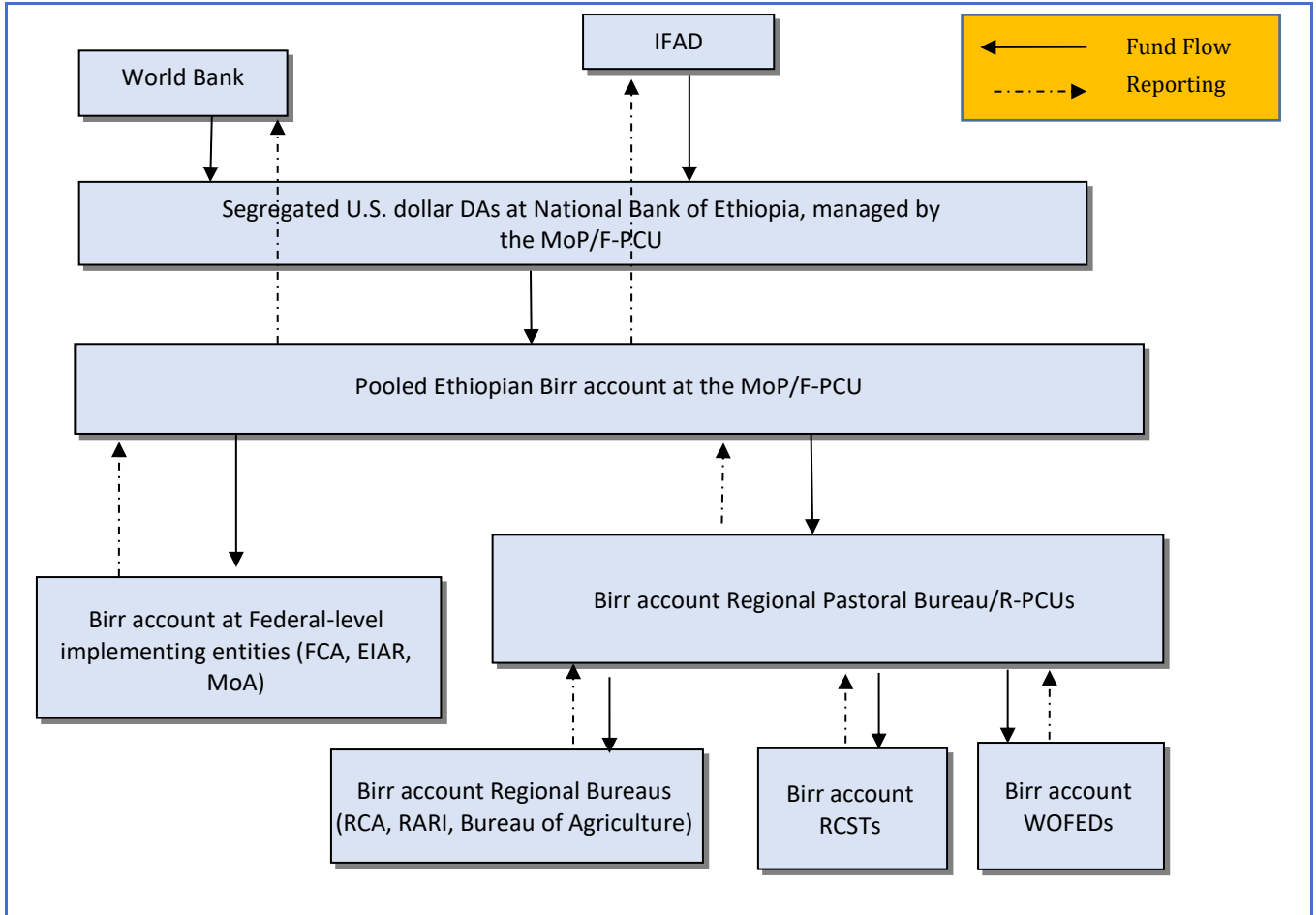
Funds Flow and Disbursement

24. Figure A3.1 summarizes funds flow arrangements for the project. The project will follow the government's channel-two funds flow mechanism, whereby funds will flow directly to the implementing sector ministry and then downward to other federal-level implementing entities, regions, and woredas. IDA funds will be deposited into a separate DA to be opened by the MoP/F-PCU at the National Bank of Ethiopia (NBE). The MoP/F-PCU will open another separate DA for IFAD financing. The authorized ceiling of the DA will be two-quarters of forecasted expenditure based on the approved AWPB. Funds from the separate designated U.S. dollar accounts will be further transferred to a pooled Ethiopian Birr account to be held by the MoP/F-PCU. From the pooled local-currency account, funds will be transferred to separate local-currency bank accounts to be opened by the other federal-level implementing entities and regional pastoral bureaus/R-PCUs. Regional pastoral bureaus/R-PCUs in



turn will transfer funds to separate bank accounts opened for the LLRP by woredas, RCSTs, and other regional entities. A single cash forecast for the project will be prepared based on the approved AWPB for the project.

Figure A3.1: Funds flow for the proposed Lowlands Livelihood Resilience Project



Note: Solid arrow indicates funds flow. Dotted arrow indicates reporting. RCA = Regional Cooperative Agency; RARI = Regional Agricultural Research Institution

25. The project will use the report-based disbursement method. Disbursement will be made quarterly and will cover cash requirements for the next six months based on the forecasts provided in the IFRs. The project may follow one or a combination of the following disbursement methods: DA, direct payment, reimbursement, and special commitment. Regular, timely IFRs are needed to ensure smooth disbursements.

26. The expenditures financed under this operation are financed from IDA, IFAD, the community, and the GoE, and hence the financing percentage applicable for advances and documentation purposes will be as notified by the TTL and as much as possible will be proportionate between IDA and IFAD. The first notification will be issued against an initial six-month cash expenditure forecast and will subsequently be issued quarterly as per the IFR clearance process.



27. Before transferring any money to the lower level, the MoP/F-PCU must ensure that separate bank accounts have been opened for the project. Any implementing entity that does not report on time on how the advances have been expended will not receive additional funds until the initial advance is reasonably settled. The Financial Management Manual will indicate in detail the funds flow arrangements to each implementing entity, including the accounting and internal controls required around the project earmarked funds. The fund flow and expenditure recognition for the various aspects of the project is detailed out below:

- Fund flow to CIF and range land management sub projects – fund will be disbursed from the woreda to the community for implementation of the sub projects by the community. The detail procedure for the implementation and pre-requisite measures is outlined in the PIM. The community will report back actual expenditures to the woreda and the woreda will document the same under the appropriate expenditure category. Documents will be retained at the woreda level.
- Fund flow SACCOs – the savings leverage grant for established SACCOs which meet the required eligibility requirements will receive the grant directly from the woreda and will be treated as a grant once the fund is disbursed to the SACCOs i.e. the woreda will recognize expenditure once the grant is disbursed to the SACCOs. Detail procedure of the transfer as well as eligibility criteria as depicted in the PIM. The project’s M&E system will include reporting on use of the savings leverage fund to monitor that it is on lent to SACCO members for agreed purposes and/or activities.
- Fund flow to PAPREG grant – will be managed at the regional level by regional research institutes or universities. The resource will be transferred through the woreda to the research centers or universities based on MoU. This institutes will report back on the fund utilization and hence the woreda will report on actual expenditures.
- Matching grant to CRG - CIGs to the tune of maximum US\$8,000 per group may be provided once the initial skills development is completed. The minimum requirements for the formation of the CIG and resource transfer will be indicated in the PIM. Once the business plans and other criteria are met, the project gives a certain portion of its contribution to the CIG through an account to be opened for the CIG, and the CIG procures and implements the business plan and submits the documents to the Woreda at which time expenditure will be recorded. Next tranche can be released once a certain percentage is accounted for. The CIGs will be included in the audit of the project.

Financial Management Risk Assessment, Strengths, Weaknesses, Lessons Learned, Action Plan

28. **Risk assessment.** The FM risk of the project is Substantial. The mitigating measures proposed in the action plan will help reduce this risk, once they are implemented and applied during project implementation.

29. **Strength and weaknesses.** The program will inherit the various strengths of the country’s PFM system. As discussed earlier, several aspects of the PFM system function well, such as the budget process, classification system, and compliance with financial regulations. Significant ongoing work is directed at improving country PFM systems through the government’s Expenditure Management and Control subprogram. The government’s existing arrangements are already being used in a number of projects under implementation, including the Enhancing Shared Prosperity through Equitable Services Program. The proposed project should also benefit from the country’s internal control system, which provides sufficiently for the separation of responsibilities, powers, and duties, and from the effort being made to improve the internal audit function. An additional strength for the proposed project is the extensive experience of the MoP and regions in handling World Bank–financed projects.



30. The main weaknesses in FM are the high turnover and a shortage of qualified accountants and auditors (mainly at the lower level), delays in taking appropriate action on audit report findings, persistent internal control weaknesses across the project, the limited focus of internal audit, and delayed budget approvals.

31. **Financial management action plan.** Factoring in these strengths and weaknesses, the agreed actions displayed Table A3.1 will be taken to mitigate the FM risks identified in the proposed project.

Table A3.1: Financial management action plan for the Lowlands Livelihood Resilience Project

	Action	Expected Completion date	Responsible
1	Budget (a) Align proclaimed budget with working budget in timing and amount (b) Maintain budget tracking record on the accounting system in use and provide variance reports and the related explanation for major variances in periodic reports	(a) Ongoing annually (b) Ongoing quarterly	(a) MoP/F-PCU (b) All implementing entities
2	Accounting (a) Apply uniform accounting system at all implementing entities. Federal entities that have applied manual accounting (Excel) will be encouraged and supported to apply computerized accounting applied in the project	During implementation	All implementing entities
3	Staffing and capacity development (a) Ensure that the necessary FM staff are in place (PCDP III FM staff are transferred to the LLRP or employment finalized for new/vacant positions) (b) Initial training on the project operation as well as on the Financial Management Manual will be provided to project FM staff and when possible will include finance heads and internal auditors of implementing entities (c) Strengthened FM capacity building and support to Benishangul-Gumuz and Gambella Regions	(a)–(b) Within 2 months of effectiveness (c) On a yearly basis	MoP/F-PCU
4	Internal audit (a) Hire internal auditors required in the project (PCDP III internal auditors are transferred to the LLRP or employment finalized for new/vacant positions created)	Within 2 months of effectiveness	MoP/F-PCU
5	IFR/report issues (a) Higher entities will conduct robust reviews and checks on the reports of lower entities and provide feedback and support to lower entities. IFRs will then be submitted to the World Bank within 45 days from end of the quarter at required quality	45 days after the end of the quarter	MoP/F-PCU
6	Audit issues (a) Recruitment of external auditors at early stages of the project (b) Project annual financial statements will be prepared on time and strict follow-up on timely closure of accounts will be made (c) Submission of annual audited financial statements and audit report, including the Management Letter (d) Submit the GoE's response to the findings in the annual audit report to the World Bank and an action plan for any follow-up actions (e) Prepare status report of action taken on audit findings	(a) Within 3 months of effectiveness (b) Within 3 months after end of budget year (c) Within 6 months of the end of each fiscal year (d) Within 1 month of submission of the audit report to the World Bank (e) Within 3 months of submission of the audit report to the World Bank	MoP/F-PCU for actions (a) to (e) MoP/ F-PCU for action "f (i)" and World Bank for action "f (ii)"



	Action	Expected Completion date	Responsible
	(f) Disclosure in accordance with the World Bank policy (i) The World Bank requires that the Borrower disclose the audited financial statements in a manner acceptable to the World Bank (ii) Following the World Bank’s formal receipt of these statements from the Borrower, the World Bank makes them available to the public in accordance with the World Bank policy on Access to Information	(within 2 months of preparing action plan) (f) Annually	

Financial Management Covenants

32. The covenants related to FM will include: (1) maintaining a satisfactory FM system for the program; (2) submission of IFRs for the program for each fiscal quarter within 45 days of the end of the quarter covering the quarter by the MoP/F-PCU; and (3) submission of annual audited financial statements and audit report within six months of the end of each fiscal year.

Supervision Plan

33. The FM supervision mission will be an integral part of project implementation reviews to ensure the continuing adequacy of the FM arrangements and to ensure that expenditures incurred under all components of the project remain eligible for World Bank funding. As the FM risk for the project is Substantial, the project will be supervised twice per year. Risks will be recalibrated following each supervision. Supervision activities will include on-site visits to the various project institutions at all levels, including federal, regional, and woreda-level implementing entities. These visits will include a review of the controls and the overall operation of the FM system; a review of internal audit operation; review of records and selected transactions; sample verification of existence and ownership of assets; reviews of IFRs and follow-up on actions needed; and review of audit reports and Management Letters and follow-up on the action needed.

D. Procurement

Applicable Procurement Procedures

34. **Procurement procedures.** Procurement activities under the proposed project will be carried out in accordance with the World Bank’s “Procurement Regulations for IPF Borrowers” (“Procurement Regulations”) dated July 2016 and revised in November 2017 and August 2018 under the New Procurement Framework; the “Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants,” dated July 1, 2016; and the provisions stipulated in the Financing Agreement.

35. **National procurement procedures.** National open competitive procurement may be used while approaching the national market, provided that the procurement procedures are consistent with the World Bank’s core procurement principles pursuant to paragraph 5.4 of the Procurement Regulations. Other national procurement arrangements (other than national open competitive procurement) that may be applied by the Borrower (such as limited/restricted competitive bidding, request for quotations/shopping, direct selection) will be consistent with the World Bank’s core procurement principles, and the Borrower will ensure that the World Bank Anti-Corruption Guidelines and Sanctions Framework and contractual remedies set out in the Legal Agreement apply.



36. **Project Procurement Strategy for Development (PPSD).** The Borrower prepared the PPSD which has been reviewed and commented by the World Bank. The summary of the PPSD is presented in the table A3.2 below and establishes the procurement arrangement and market approach options for all categories of procurement ranging from strategically critical to tactical item of low-value/low-risk procurement activities. The PPSD will be updated at least annually, or as required, to reflect changes in the procurement arrangements that may be necessary due to changes in requirements, market conditions, and the procurement environment in general.

37. **Systematic Tracking of Exchanges in Procurement (STEP).** As part of the New Procurement Framework, the World Bank introduced STEP which is an online procurement planning, implementation, monitoring and reporting system. The IAs at federal and regional level shall use STEP for all procurements they carry out under the project. The procurement specialist at the F-PCU and R-PCUs, who are responsible for interacting procurement information through STEP, shall be provided with the necessary facilities and training on how to operate the system. With regard to the Procurement Plan at the WOFED, the Procurement Officer at the WOFED shall prepare an annual Procurement Plan based on the approved work plan and submit to the R-PCU for consolidation and approval.

38. **Procurement documents.** The World Bank's latest Standard Procurement Documents (SPDs) will be used for procurement of goods, works, and non-consulting services while approaching the international market. The SPDs are available on the World Bank external website: www.worldbank.org/procurement/standarddocuments.

39. For procurements from the national market, the Borrower may use the national procurement procedure, as agreed in the Procurement Plan, subject to addressing the conditions stated in the Procurement Regulation paragraphs 5.3 and 5.4 (a to i). The Project Procurement Plan Standard Bidding Documents may be used for procurement under national procedures. Similarly, selection of consultant firms will be done using the World Bank SPDs, in line with procedures described in the Procurement Regulations.

40. **Procurement manual.** To support procurement implementation, the F-PCU will prepare a procurement manual that stipulates the procurement arrangement, roles, and responsibilities among the different players, the procurement decision-making structure and business standard, staffing arrangement, and capacity-building action plans, among other items. As part of the main procurement manual; a detailed community procurement manual will also be prepared by effectiveness for community-based procurement that highlights the procurement arrangements at the community level--the structure, membership, and reporting structure of the Community Procurement Committees; and procurement procedures, including threshold, applicable procurement methods, planning, advertisement, bidding document, evaluation, approval, and contract signing and management, including complaint-handling procedures.

Procurement Capacity Assessment

41. The assessment reviewed the procurement legal framework, organizational structure, functions, staff capacity, and complaint handling system and procurement cycle management and the overall adequacy of the system and capacity to implement LLRP.

42. **Public procurement in Ethiopia.** Public procurement in Ethiopia is governed by the Public Procurement and Property Administration Proclamation (No. 649/2009) and the procurement Directive issued in June 2010 and amended in December 2015. Among other provisions, the proclamation stipulates the organization responsible for procurement at the federal level, the key procurement principles and operational procedures, and the



complaint-handling system. It also reestablishes the Federal Public Procurement and Property Administration Agency (PPPAA), which is responsible, among others, for regulating procurement, building capacity, and providing guidance on public procurement policies, principles, and implementation. Currently the PPPAA is revising the procurement proclamation to ensure that it accommodates emerging developments and addresses gaps noted in the proclamation, including the regulation of the procurement of state-owned enterprises which is not covered within the current proclamation.

43. **Procurement at the subnational state/city administration level.** The nine subnational states and the two city administrations have their own procurement proclamations and directives, drafted using the federal procurement proclamation as a prototype. Thus, all six subnational states implementing LLRP (Afar, Benishangul-Gumuz, Gambella, Oromia, SNNPR, and Somali) have established the basic legal framework and structure for implementation of procurement, which in addition to the proclamation, includes issuance of the directives, manual, and SBDs. **Procurement at the woreda level.** As opposed to the decentralized structure adopted at the federal and subnational levels, which have delegated procurement operations to line ministries and sector bureaus, procurement at the woreda level is conducted centrally at WoFEDs. However, this structure has not been adequately covered in any of the procurement proclamations (federal and regional). Instead, subnational states have issued a pool manual that has been adopted by the regional council based on the prototype issued by the MoF. The pool manual delegates procurement responsibility to WoFED, which consolidates requirements of all the sector offices and procures centrally, following the procedure stipulated in the procurement documents of the respective subnational state.

44. **Community-Based Based Procurement.** Community-based procurement is not covered in the government's procurement proclamation (federal/subnational states). Thus, CDD procurement is not practiced in the projects financed by the GoE or subnational states, which leads to weak procurement experience at the community level. There are isolated experiences of CDD procurement in projects financed by community contributions especially in towns and in developed rural communities. The experience gained through the World Bank-financed projects such as the PCDP has not been institutionalized and retained. Thus, to be successful in procurement implementation and achieve the PDO, the proposed LLRP should be able to provide adequate hand-holding support and step-by-step procedures on CDD procurement applicable in the project.

45. **Procurement Complaint Handling System:** The procurement complaint handling system follows a two-tier structure that allows aggrieved bidders to lodge first level complaint to the head of the procuring entity and an appeal to a higher body in the structure. At federal level and in some regions like SNNPR, an appeal is handled by a Complaint Handling Board (CHB) which has representative from the private sector and is considered as Quasi-independent from the procurement decision making process. The system provides standstill period that halts the procurement process and allow resolution of procurement complaint before procurement action is advanced to contract award and signing stage. However, the assessment has also revealed weaknesses in the system like the restrictions on the aspects of the procurement on which potential bidders can lodge complain like selection of procurement method which is uncontested as per the procedure, inconsistency between the procedure and the practice, inadequate structure that undermines the neutrality and independence of the system, and inaccessibility of the appeal structure for bidders located at woreda/local level.

Procurement Implementation Arrangement:

46. **Federal level:** Procurement activities under the project will be undertaken at four levels—the federal, regional, woreda, and community levels. At the federal and regional levels, procurement will be implemented



using the existing procurement structure in the MoP. Hence the Procurement, Finance, and Property Administration Directorate in the MoP assumes the primary responsibility for the implementation of procurement activities at the **federal level**. However, the F-PCU will facilitate and provide support for smooth implementation of the procurement activities in the project. The F-PCU will, among other procurement functions, play a key role in coordinating with other players in filtering and determining requirements, facilitating communication to the procurement unit, and ensuring that the procurement activities have started on time. To that end, the F-PCU will hire one senior procurement specialist and one junior procurement specialist who will work closely with the procurement unit in the ministry.

47. **Regional Level:** Procurement activities at the **regional level** will be carried out in the respective PAP bureaus or their equivalents using the existing procurement structure. The procurement units in the Procurement, Finance, and Property Administration Directorate at the PAP Development bureaus are responsible for procurement activities in their respective regions. Following the same arrangement as those at the federal level, the R-PCUs will be responsible for facilitating and supporting the implementation of the procurement activities in the regions. The responsibilities of the R-PCUs include coordinating with other agencies in identifying and communicating procurement requirements and necessary documents to the procurement unit for timely implementation.

48. The line ministries, sector bureaus, Research Institutes, Universities etc. **are** involved in providing technical expertise and assistance required for the smooth implementation of the procurement activities in the project. These agencies will provide support in identifying and defining requirements, advising on BOQs, technical specifications, TORs, support in technical evaluation, contract management etc. The works contract in infrastructure investment component in particular, the procurement of infrastructure requires capacity in the procurement of works and contract management, which is not adequately available in the procurement unit at the bureaus. Thus, the technical aspect related to the infrastructure procurement will be supported by the respective sector including responsibility for contract supervision. Additionally, the project R-PCUs will hire two qualified senior procurement specialists and one contract management specialist (infrastructure engineer with experience in contract management). Based on the volume of work, the World Bank will review the adequacy of the capacity during supervision missions, and additional capacity enhancement interventions could be agreed, as required, as part of approval of the Procurement Plan.

49. Procurement at the **woreda level** will be implemented in the WOFED based on the structure established through the pool system. Accordingly, the procurement case team at the WOFED will carry out the procurement activities of the project in accordance with the agreed procurement Procedure. To augment its procurement capacity, within four months of the establishment of RPCUs, the project will recruit and assign a qualified procurement officer who will facilitate and support procurement implementation at the woreda and community levels.

50. Members of the community will implement **CDD procurement** in accordance with the procedure and arrangements provided in the community procurement manual to be issued by the project effectiveness. The manual shall provide simplified procurement arrangements and procedures applicable to market and capacity at community level. The procedures will be consistent with the World Bank's core procurement principles. The procurement officer hired by the project and assigned in the respective woreda finance office will have overall responsibility for providing technical and hand holding support to members of the Community Procurement Committee and monitoring procurement activities, including undertaking field visits and ensuring that the



procedures described in the manual are adhered to and proper records are kept. A detailed description of the officer’s responsibilities will be included in the CDD procurement manual.

51. It is envisaged that Common Interest Groups (CIGs) will carry out procurement of small value Goods, Services and Works contract that are required for the realization of their business plans. These procurements could be live animals, seeds, hand tools, construction materials and skilled labor, transport services etc. that could be sourced from the local market. The CIGs shall carry out the procurement activities following the CDD arrangement as reflected in the CDD procurement manual. The procurement officer hired and assigned at WoFED shall provide hand holding support and training to members of the CIGs and ensure that the procurement documents are complete and consistent. As part of a proper financial settlement and documentation, the WoFED shall collect the full set of the procurement documents from the CIGs and keep the records for future reviews and audit.

52. **Training and workshops.** The project under component 2 envisages massive technical, vocational and entrepreneurship trainings. These trainings will be provided by TVET Centers and other relevant institutions following their regular schedule or customized to the needs of specific training. Based on the agreed schedule, the WoFED or Regional PAP Bureau (as applicable) in collaboration with the relevant TVET or Institution procure materials required for the training including training tool kits, services of technical experts etc. The procurement would be conducted following the agreed procedure under the responsibility of the respective WoFED or RPCU, as applicable.

53. The project could finance training and workshops to improve project management and address capacity limitations in various areas **Training and workshops.** The project will finance training and workshops based on an annual training plan and budget that will be submitted to the World Bank for its prior review and approval. The annual training plan will identify, among other items, (1) the training envisaged, (2) the justification for the training, (3) the personnel to be trained, (4) the duration of such training, and (5) the estimated cost of the training. At the time of the actual training, the request will be submitted to the World Bank for review and approval. Upon completion of the training, the trainees will be required to prepare and submit a report on the training received.

Table A3.2: Summary of the procurement activities in PPSD

Contract Title, description and category	Estimated cost (US\$),000	World Bank oversight	Procurement approaches/ competition	Selection methods	Evaluation methods
Consultancy service for preparation of Range Land Management and Investment Plans (RMIPs)	1,200.00	Prior	Open/ International	QCBS	Most Advantageous Proposal
Construction of Irrigation Dams, Roads/Bridges, Market Centers based on the RMIPs	200/package	Post	Open/national	RFB	Most Advantageous Bid
Establishing Lowlands Livelihood Decision Making System	2,000.00	Prior	Open/National/Multi Stage	RFP	Most Advantageous Proposal
Procurement of Vehicles and Motor Cycles	2,500.00	Prior	UN Agencies (UNOPS)	Direct Selection	Negotiation
Procurement of IT equipment and computers	1000.00	Post	Open/International	RFB	Most Advantageous Bid



Contract Title, description and category	Estimated cost (US\$),000	World Bank oversight	Procurement approaches/ competition	Selection methods	Evaluation methods
Office Equipment	335	Post	Open/National	RFB	Least Cost
Procurement of, Drones	150.00	Post	Open/national	RFB	Most Advantageous Bid
Procurement of IT equipment and computers	2,000.00	Prior	International / Open	RFB	Least cost
Procurement of Seeds and Improved breeds (Goods) various contract	15/contract	Post	Limited /National	RFQ/DS from Research Institutions	Most Advantageous Offer
Goods and Works contract under CDD arrangement	15/Contract	Post	Limited/Direct	RFQ/Direct Selection	Least Cost

54. A procurement capacity assessment in the MoP; the PAP Development bureaus in Oromia, Afar, SNNPR, and Somali subnational states; and WOFED was conducted in October and November 2018. The assessment reviewed the organizational structure, functions, staff capacity, and adequacy for implementing the LLRP. The results of the assessment are reflected in the Procurement Risk Assessment and Management System. The implementing agencies, except in the newly added regions (Gambella and Benishangul Gumuz subnational states), have successfully implemented the three successive phases of the PCDP. However, the assessment also shows that PCDP III was not able to improve on the procurement risk and performance rating throughout the project implementation period, which implies the need for capacity building and closer follow-up in the proposed project.

55. **Identified risks, mitigation measures, capacity building, and action plan agreed.** Given the nature of the decentralized procurement arrangements for the project, which extend to the community level, and in view of the associated capacity gaps, communities need to be strengthened through training and technical support for effective implementation of the procurement activities under the project.

56. **The overall project procurement risk is assessed to be Substantial.** After implementation of the mitigation measures noted in Table A3.3, the risk could potentially be reduced to a residual rating of Moderate.

Table A3.3: Procurement risk and mitigation measures

Identified risk	Likelihood/ impact	Mitigation measure	Responsible body	Timeframe
Failure to carry out planned procurement of infrastructure facilities within the project period due to lack of capacity, delay, and lack of adequate or no bid from private sector	H/H	Recruit qualified procurement and contract management specialists at the R-PCUs (at least 2) to support procurement implementation at regional level	R-PCUs	Three months after effectiveness
		Sign MoU with the relevant sector offices and ensure their early engagement	R-PCUs	60 days after effectiveness
		Deploy consultant to prepare Rangeland Management and Investment Plan through advance procurement process	F-PCU	Before 30 th June, 2019
		Consider using government resource through Force Account in case bids fail to attract private sector	F-PCU and R-PCUs	As required
Failure to carry out planned procurement at community level through CDD arrangement	H/H	Assign procurement officer at woreda level	R-PCUs	Within four months of establishment of RPCU
		As part of the main procurement manual, prepare CDD procurement manual covering all topics, including	F-PCU	Before effectiveness



Identified risk	Likelihood/ impact	Mitigation measure	Responsible body	Timeframe
		complaint-handling system, and provide adequate checklist		
		Provide continuous training to members of community procurement committees	R-PCUs	Biannually
Procurement non-compliance due to lack of adequate internal control, clarity of roles, conditions for use of national procurement procedures, weak record management system	M/H	Establish and maintain a dedicated Bid Endorsing Committee at the federal and regional level	F-PCU, R-PCUs	Within six months of implementation
		Prepare procurement manual and provide training	F-PCU	Before effectiveness
		Modify the national Standard Bidding Documents to meet the conditions stated in the regulation or continue to use World Bank Standard Procurement Documents for all open competitive procurements	F-PCU	Within six months of implementation
		Undertake procurement review and procurement supervision (semiannually)	World Bank and F-PCU	Annually
		Establish procurement record management system and provide adequate resources, including shelves, box files, and so on	F-PCU, R-PCUs, WoFEDs	Continuously
Bidders discouraged due to non-responsive complaint-handling system	L/M	Provide training on the complaint-handling system	F-PCU	Biannually
		Ensure that the procurement manuals cover procurement complaint system and arrangement	F-PCU	Before effectiveness
Failure to achieve value for money due to poor quality of procurement processing and contract management	M/H	Prepare procurement manual with a section on contract management	F-PCU	Before effectiveness
		Provide 3 weeks training on works procurement and contract management to procurement officers and technical experts	F-PCU, R-PCUs	At the first year
		Provide procurement clinic to relevant individuals and officials	F-PCU	Annually
		Establish and implement contract management system	F-PCU, R-PCUs	Continuous
		Allocate adequate resources (logistics) to support supervision of works	F-PCU, R-PCUs	Continuous
Failure to achieve strong and sustainable procurement implementation capacity	M/H	Ensure that procurement implementation is led by the existing structure with involvement of procurement experts working in the existing structure with support from the F-PCU and R-PCUs	Implementing agencies, F-PCU, R-PCUs	Continuous
		Provide competitive package to attract and retain qualified staff	F-PCU	Continuous

Note: H – high, M = moderate, L=Low.

57. **Procurement oversight and monitoring arrangements.** The World Bank exercises its procurement oversight through a risk-based approach comprising prior and post reviews as appropriate. The World Bank sets mandatory thresholds for prior review based on the procurement risk rating of the project. The procurement review threshold varies based on the procurement activity risk, as determined in the Procurement plan. The prior review threshold applicable in the project for the different risk levels is provided in the table A3.5 below:

Table A3.5 Procurement Prior Review Thresholds (US\$ millions)

Type of procurement	High risk	Substantial risk	Moderate risk	Low risk
Works	5.0	10.0	15.0	20.0
Goods, ITs and non-consulting services	1.5	2.0	4.0	6.0



Consultants (firms)	0.5	1.0	2.0	4.0
Individual consultants	0.2	0.3	0.4	0.5

58. The New Procurement Framework allows the World Bank to delegate to Supreme Audit Institutions in the Borrower Country the task of undertaking post procurement review on World Bank financed projects as part of their regular audit responsibility. Discussion is going on between the procurement team in the World Bank and OFAG on the details of the delegation, roles and responsibility among client, OFAG and WB, reporting arrangement and content and the required capacity intervention measures. Once the arrangement is put in place, World Bank might delegate to OFAG to carry out post procurement review of the project annually, starting from the second year of implementation in accordance with the ToR agreed with the World Bank and submit the review report directly to the World Bank. However, this delegation does not preclude the World Bank’s right to undertake a post procurement review itself for all or a selected group of contracts in the project.

59. **Frequency of procurement supervision.** In addition to the prior review supervision to be carried out from World Bank offices, the capacity assessment of the implementing agencies recommends that one supervision mission be undertaken every six months to visit the field to provide support and carry out reviews of procurement actions.



ANNEX 4: TARGETING GENDER, YOUTH, AND NUTRITION

A. Types of Beneficiaries and Their Livelihoods

1. About 2.5 million people, corresponding to approximately 500,000 households (each with an average of five members), are expected to be the primary beneficiaries of the proposed LLRP.²⁸ These individuals include PAP communities as well as former pastoralists living in PAP woredas. The proposed project has been designed with a particular focus on women and youth as potential beneficiaries of its interventions. The project will be implemented in about 100 woredas of the Afar, Benishangul-Gumuz, Gambella, Oromia, SNNPR, and Somali Regions as follows: 20 woredas in Afar, 9 in Benishangul-Gumuz, 10 in Gambella, 18 in Oromia, 8 in SNNPR, and 36 in Somali. The target rangelands and their corresponding woreda clusters are indicated in Table A4.1.

Table A4.1: Lowlands Livelihood Resilience Project woredas and clusters

Region	Cluster	Woredas Covered		Administrative Zone(s)
		#	List	
Afar	Cluster - 1 (Berahle)	2	Dalol, Berahle	Kilbatiyesu
	Cluster - 2 (Erebt)i	6	Erebt, Afdhera, Bidu, Magale, Yallo, Teru,	Kilbatiyesu and
	Cluster - 3 (Dubti)	5	Dubti, Awra, Kori, Adaar, Elidaar	Fantiresu and
	Cluster - 4 (Hadale-ela)	3	Talalak, Semurobi, Hadale-ela	Hariresu
	Cluster- 5 (Amibara)	4	Amibara, Galalo, Argoba, Dulesa	Gebiresu
	Sub total	20		
Somali	Cluster - 6 (Hadagala)	4	Geblelu, Hadagala, Dembel, Harewa	Siti and Fafan
	Cluster - 7 (Degahmedow)	5	Goljano, Mulla, Bililbur, Shabeley,	Fafan and Jarar
	Cluster - 8 (Danod)	5	Dig, Danor, Mersen, Danod, Gelhamur	Jarar, Qorahey, Dollo
	Cluster - 9 (Denan)	4	El-Ogaden, Adadle, Denan, Elele	Qorahey and Shebeley
	Cluster - 10 (Filtu)	4	Filtu, Dekasuftu, Mubarek, Bokolmayo	Liban and Dawa
	Cluster - 11 (Gerbo)	5	Yuhob, Ayun, Duhun, Harare, Gerbo	Nogob and Erar
	Cluster- 12 (Chereti)	5	Qohle, God-God, Barey, Dolobay, Chereti	Afdher
	Cluster- 13 (Salahad)	4	Salahad, Lagahida, Qubi, Meyumuluke	Erar
	Sub Total	36		
Oromiya	Cluster -14 (Wachile)	3	Arero, Dhas, Wachile	Borena
	Cluster- 15 (Yabello)	3	Gomole, Elewoye, Surobarguda	Borena and West Guji
	Cluster -16 (Negele)	3	Gume-eldalo, Agawayu, Medawelabu	Guji and Bale
	Cluster- 17 (Raytu)	3	Deweserer, Rayitu, Sewena	Bale
	Cluster -18 (Golo-Oda)	3	Midegatolla, Qumbi, Golo-oda	East Hararghe
	Cluster- 19 (Gumbi)	3	Gumbi-borded, Miesso, Fentale	West hararghe
	Sub Total	18		
SNNPR	Cluster - 20 (Hammer)	3	Dasenech, Nangatom, Hammer	South Omo
	Cluster - 21 (Benatsemay)	3	Benatsemay, Male, Selamago	South Omo
	Cluster - 22 (Meanit)	3	Meanit-Goldiya, Meanit-Shasha, Surma	Benach Maji
	Sub Total	9		
Gambella	Cluster -23 (Mekoy)	3	Mekoy, Wantuwa, Jikawo	Nuer
	Cluster -24 (Etang)	3	Lare, Etang, Jor	Nuer, Etang,
	Cluster -25 (Dimma)	2	Mengish, Dimma	Mejang and Agnuwah
	Sub Total	8		
Benishangul Gumuz	Cluster -26 (Sherkole)	3	Kurmuk, Sherkole, Mao-komo	Assosa
	Cluster -27 (Bulen)	3	Guba, Wember, Bulen	Metekel
	Cluster -28 (Sedal)	3	Sedal, Agalometi, Oda Bildigidu	Kamashi
	Sub Total	9		
	Grand Total	100		

²⁸ This number, estimated at the project appraisal stage, is based on the coverage of PCDP III, which targeted 113 woredas (9 kebeles each) and a total of 900 kebeles and reached out to a target population of 2.6 million. The average number per kebele is 2,800 beneficiaries. The number of LLRP beneficiaries will be refined when the final selection of woredas and kebele is done.



Characteristics of beneficiaries

2. Ethiopia's highly diverse pastoral societies encompass approximately 29 ethnic groups. The three main pastoral groups in Ethiopia are the Afar in the northeast, Borana in the south, and the Somali in the southeast, in addition to numerous smaller groups. Differences among groups are evident not only in their size, the configuration of the social and cultural systems (including the norms, practices, and traditional institutions that regulate their societies), and the social segments and cultural units that constitute each society (clan, sub-clan, or group) but also in terms of their relative vulnerability and the range of opportunities available to them.

3. Given the diversity across PAP societies, to identify target groups the project will rely on key characteristics (described below) that are considered common to all categories of PAP societies. An overall description of average herd size for pastoralists and agro-pastoralists will be provided by the livestock sector analysis. Differences between regions also need to be factored into the targeting of beneficiaries; they will be detailed in the PIM.

4. The project divides its primary beneficiaries into three main target groups, based on the nature of their livelihoods: (1) pastoral and (2) agro pastoral communities, engaged in traditional livelihood activities, and (3) households transitioning out of pastoralism (permanent or temporary). For the third group, the project will provide either alternative livelihood and entrepreneurial opportunities, alongside but not limited to the livestock subsector, or opportunities to re-engage in traditional livelihood activities. This third category includes youth without livestock who are either not included or uninterested in a traditional livelihood system.

5. Extensive herding (camels, cattle, sheep, and goats) is the dominant economic activity for pastoralists, although some groups (agro-pastoralists) depend on a mixture of farming and small- to medium-scale livestock rearing (cattle, dairy cattle, sheep, goats, and poultry). A minority in the project areas relies on neither livelihood system, preferring to pursue sedentary farming or some other occupation. Groups who engage in farming work on land located alongside rivers, near other water points, and in peri-urban areas. It is important to highlight that although the target groups for the project are defined by type of livelihood, the production systems of the main PAP groups and subgroups exhibit considerable diversity.

6. The project will provide support to underserved communities in the form of basic social services and will develop direct targeted interventions for specific categories of beneficiaries, particularly women (50 percent of beneficiaries) and youth (30 percent of beneficiaries). Given the variation in socioeconomic characteristics in the project areas, the project will use the following additional criteria to better identify and serve the target intended beneficiaries: (1) economically active pastoralists and agro pastoralists with potential to increase their production and productivity; (2) pastoralists and agro pastoralists engaged in micro and small-scale livestock production and/or dryland crop production at the subsistence level on small plots with limited economic potential; (3) former pastoralists with no or very limited assets, engaged in (or looking for) alternative means of making a living (such as petty trading, animal fattening, fodder production, beekeeping, poultry production, dairy processing, fisheries, occasional labor) or seeking to return to pastoralism; (4) underserved communities (encompassing all three beneficiary categories) lacking basic social services such as health, education, and water. The first three groups are described in more detail in Box A4.1.



Box A4.1. Characteristics of three main groups of beneficiaries targeted by the Lowlands Livelihood Resilience Project

Commercially oriented with high potential. This group includes men and women pastoralists and agro pastoralists who typically own larger numbers of animals and practice intensive as well as extensive herd management. They have access to natural resources, including rangelands and water resources (to different degrees) but lack connectivity to networks and markets, including market information, technical capacity, and scale. If they are agro-pastoralists, their livestock production provides more than half of their annual income; if they are pure pastoralists, livestock production is close to a full-time activity. These producers have the potential to consistently increase the quantity and quality of their output to meet the requirements of local and regional markets, including product standards. The men are mostly responsible for cattle and camels, while women engaged mostly in the production of small ruminants (sheep and goats) and dairy cattle. This group is relatively better off than the others. The average number of animals is within or above the threshold for pastoralism to be a viable livelihood (which varies by region): 24-42 cattle, 100-462 goats and sheep, or 12-30 camels in Somali Regional State, † compared to 3-4 camels, 10-20 cows, and more than 100 goats and sheep in Afar Regional State. Among agro-pastoralists, a better-off household in Afar is described as farming 1-2 hectares (maize, sorghum, groundnuts, sesame), owning 2-5 cattle, 10-15 small ruminants, 2 oxen (for plowing), and 1-2 milking cows. ‡

Subsistence-level production with limited potential. The livelihoods of these poorer households in PAP communities depend on very small-scale livestock production coupled with agriculture. They derive additional income from off-farm activities (petty trading, performed mostly by women; animal fattening, poultry and dairy production, and so on) and irregular remittances from occasional labor by male and younger household members. More specifically, they have 0.4-1.0 hectares dedicated to dryland or irrigated agriculture in irrigation schemes or alongside rivers. They usually grow some fruits and vegetables for domestic consumption and keep a few animals, having limited access to rangelands for animal feed. In Afar Regional State, a subsistence pastoralist household has been described as a family with no camels, 2-5 cattle, and 30 to 40 sheep and goats, while a subsistence agro-pastoralist has 0.5-1.0 hectares, 1-2 cattle, 5-10 sheep and goats, and 1 ox. A very poor household owns only 5-10 sheep and goats and provides labor for others, such as taking animals to grazing areas, including areas far from the settlement, and/or to market.

Pastoral-dropouts, people who are moving out of pastoralism, women, and youth without livestock. These groups of former pastoralists have lost livestock owing to natural causes, mismanagement of herds, lack of support from the community for restocking, or animal diseases. As a result, they have had to abandon pastoralism for other livelihood options, moving from the traditional systems and settlements to a more sedentary life in search of employment and cultivable land. They have better access to basic social services, which is resulting in improved levels of child education, nutrition (including benefits from school feeding programs), better access to health facilities, and other benefits for women. ††

† PCDP supervision report.

‡ Data gathered during design mission.

†† Based on the PCDP experience.

7. Changes in the livelihoods of pastoralists, especially those moving from nomadic or transhumant groups to sedentary groups, have brought change not only with respect to the management of natural resources but to aspects of social systems such as gender roles. Changes in gender roles have opened more socioeconomic space and opportunities for women, including social gains through trading activities, economic gains from greater authority over their own earnings, as well as expanded access to educational and health facilities. The PCDP demonstrated that sedenterization has served to empower pastoralist women economically and socially through market integration and access to financial services, which in turn advanced their social status, health, and education.



The LLRP will attempt to identify and integrate interventions that initiate or accelerate changes in norms that foster women's empowerment and agency.

8. **Youth.** As defined in Ethiopia's National Youth Policy (2004), a youth is a person between 15 and 29 years of age. This group tends to be largely unemployed, underemployed, and underpaid, and not surprisingly, young people rank among the working poor. Young women in the poor PAP areas in many instances are subject to early marriages and unwanted pregnancies. In the pastoralist sector, access to livestock is the prime barrier for youth to enter upon traditional livelihoods, compounded by a lack of credit and motivation. Youth who have no livestock but reside with pastoral communities need to rely on alternative livelihood strategies, and they seek employment or casual labor either on or off of the farm. Often, they tend to migrate to urban and peri-urban centers in search of jobs and better services compared to those available in the rural areas. To ensure the inclusion of youth and expand the local opportunities open to them, the project will mobilize young people to participate in key strategic planning processes, including planning related to land use and public infrastructure. Meanwhile, for those who are interested in pursuing alternative livelihood opportunities or starting a business, the project will help to develop skills in key segments of value chains, from production to value added and service delivery, and it will offer opportunities for the development of entrepreneurial capacity and business skills.

9. **Transformation drivers.** Another target group with which the project will engage is the drivers of transformation in PAP livelihoods. They are the actors found at least one step away from production in the livestock value chain: the suppliers, traders, processors, entrepreneurs, and other private sector actors who can demonstrate the viability of new pathways to resilient PAP livelihoods (including employment opportunities for youth). The project will engage with them not as producers but as a conduit to market services. In the economic development, cluster-based approach adopted for this project, the private sector will play a crucial role in driving market-led enterprise growth and providing commercial outlets for the other target groups. The drivers of transformation will represent a small percentage of all project actors, and the project will provide technical assistance to support private entrepreneurs aiming to invest in sectors that are key to creating jobs, among other opportunities.

B. Benefits to Categories of Beneficiaries from Project Interventions

10. This section describes how the elements of the proposed project are expected to benefit the diverse array of participants, especially the target groups. *Subcomponent 1.1 (Integrated Rangeland Management Planning)* is expected to benefit PAP communities engaged in traditional livelihood systems and producing at the small to medium scale (those with limited but upside potential). Since these actors rely mostly on traditional livelihood systems, the rangeland management identification and mapping activities are the key to identifying essential resources and opportunities, such as grazing areas, water sources, suitable agricultural land, stock routes, and market opportunities. *Subcomponent 1.2 (Supporting Strategic Investments)* is expected to benefit the wider community by supporting SIs such as spot improvements to roads (including bridges), small scale irrigation, and processing and market facilities. Small-scale irrigation should particularly benefit women (and possibly youth) either through group schemes (1) for crop or fodder production or the allocation of family plots for household food, or (2) for local market production. Women and youth will be included in the consultations surrounding access to and use of natural resources, as well as resource management and SI planning processes. In addition to benefiting female producers, these activities should also benefit female processors who are involved (or potentially involved) in other activities along the value chains of pastoral products, such as milk processing.

11. Women will participate in developing action plans for SIs, management of rangelands and other natural resources, and the delivery of basic social services. *Subcomponent 1.1 (Integrated Rangeland Management*



Planning) and *Subcomponent 1.2. (Supporting Strategic Investment)* will seek 50 percent participation by women (engaged in PAP productive activities at all levels—low, medium, and high). Of the community representatives in decision-making committees, at least 30 percent will be women and 10 percent youth. The number of SIs will be directly relevant to productive activities in which women and youth are engaged (fattening, dairy, small ruminants) to ensure that SIs equally benefit men, women, and youth. *Subcomponent 1.3 (Conflict Management and Secure Access to Key Resources)* will adopt the Conflict Sensitive Prevention Toolkit and guidelines. The toolkit integrates gender and social inclusion tools for effective consultation with all social actors. Women are expected to be consulted on a 50 percent basis.

12. The same target groups will benefit from activities related to *Component 2 (Livelihood Improvement and Diversification)*. For example, under *Subcomponent 2.1 (Enhancing Pastoral and Agro-Pastoral Production Systems)*, the project will support men and women through PAP Field schools and nutrition education. Women engaged in traditional PAP livelihoods (better off, small- to medium-scale production) will participate in PAP Field schools; on an equal footing with men, they will receive key information to improve their production and productivity (in small ruminant and dairy production, for instance). Training for women will aim to foster non-cognitive skills such as perseverance, passion for work, and optimism, based on impact evaluations of efforts elsewhere in Africa showing a positive link between these characteristics and the adoption of cash crops—especially in patrilocal communities. The implication is that these skills are most important where cultural and social institutions militate against women’s empowerment. Field school training modules will also include specific sections related to gender: field school facilitators will work with the groups to identify and discuss constraints preventing women from unlocking their potential. Recognizing prevailing sociocultural constraints, field schools solely for women will be organized as needed, and the location, timing, and childcare arrangements for the schools will allow women to participate in classes and demonstrations. These stipulations make it likely that the facilitators of women-only field schools will be young women. Nutrition education will also form part of the field school training modules, including the promotion of homestead gardens with a demonstration. A curriculum will be developed for basic training in nutrition and dietary knowledge and livestock-sourced food. It will focus on the advantages for agro-pastoralists of growing nutrient-dense crops and adopting nutritious consumption patterns. The advantages will be particularly emphasized for pregnant and lactating women and children under five (to reduce malnutrition and stunting). Field school classes will also include demonstrations of time saving technologies for women.

13. Beneficiaries engaged or willing to engage in alternative livelihoods (unemployed people, women, and youth) will benefit from training to develop their business skills, leadership training (especially for women and youth, to enable their active participation and representation), and access to finance to upgrade or expand production or initiate an entrepreneurial activity related to the cluster development opportunities. *Subcomponent 2.2 (Promoting Livelihood Diversification and Market Access)* will be particularly relevant for women to organize or become members of RUSACCOs, and for youth to enhance their skills.

14. Women and youth will benefit from organizing into *Common Interest Groups (CIGs)* related to the range of alternative livelihood opportunities, on and off of the farm, that have been identified, including (but not limited to) fattening animals, producing forage and fodder, producing and processing milk, keeping bees, tanning hides, and other off-farm activities (carpentry, metal working). CIGs are expected to target unemployed people—mostly women, but also young men and women who have no productive assets. The project will create new CIGs where none exist and revive “dormant” CIGs by adding new interests and activities.

15. The project will also benefit young men and women by promoting their involvement in services such as veterinary and para-veterinary services, pasture production, transportation, distribution, and labor employed in



processing centers. It will also promote their involvement as producers by introducing them to a business-oriented approach to production and marketing. Finally, it will promote their involvement as entrepreneurs through participation in business incubators for young entrepreneurs.

16. The project will also support women to access financial services by mobilizing women and young girls to join existing (or newly created) RUSACCOs to initiate (or expand) alternative income-generating activities. It is expected that a small percentage of women involved in these activities will forge ahead to become more entrepreneurial and business oriented. In the absence of collateral, and with limited information available on the creditworthiness of women Borrowers, alternative credit-scoring technologies using psychometric tests may ease women's access to larger business loans. Preliminary results from an impact evaluation in Ethiopia suggest that psychometric testing is a reliable indicator of whether an entrepreneur will repay a loan. Customers who scored at a high threshold on the test were seven times more likely to repay their loans compared to lower-performing customers. Special sessions will be organized to create awareness of income generation and household expenditures for nutritious food and improved nutrition education.

17. *Business development training for women* will include packages for women with different levels of interest and lower to medium income levels. Training programs will apply lessons from psychology to encourage women to act with an entrepreneurial mindset and to develop socioemotional skills (evidence from an impact evaluation in Togo shows that these skills have positive and significant effects on sales and profits of female-led micro-enterprises). Training and opportunities to access financial services will be given to women who are interested in expanding their small businesses, who require different skills than new entrants, or lower-income women requiring smaller amounts of funds. This category of women entrepreneurs will benefit from business development training organized by the project and will be supported to prepare viable business plans to access higher amounts of credit (from MFIs) than are available from RUSACCOs.

18. The LLRP will provide basic social services and infrastructure to underserved communities through *Subcomponent 3.1 (Provision of Basic Social Services and Infrastructure)*. This subcomponent, which is based on the experience with the PCDP, will provide grants to communities to implement community subprojects identified through a CDD approach. It will support community subprojects in targeted PAP kebeles to build demand-driven social and economic infrastructure. It will provide investment funds that together with community contributions will help expand and improve service delivery and build infrastructure for local development (schools, health posts, and water points, among others).

19. Basic service provision is expected to benefit all target groups, most of whom will be from underserved PAP communities (some that may have benefited from PCDP, and others that did not). As such, they will be eligible to receive basic social services benefiting the community at large. Basic services will particularly benefit disadvantaged community members, such as poor unemployed men and women, as well as individuals remaining around permanent settlements (particularly women, children, and elders) who engage in small-scale livestock activities alongside other income-generating activities. Basic social services, as demonstrated by PCDP interventions, benefited women—for instance, reducing their burden by making it easier to obtain water—in addition to increasing access to education for young boys and girls and making health services available to all.

C. Selection and Participation of Beneficiaries

20. The targeting strategy will include a mix of methods and approaches. Self-targeting will be one of them, as many activities will be of immediate relevance to the pastoralists and agro pastoralists (poor and better off) and



other actors that could benefit from opportunities originating through development along the value chain (women/youth processors/traders).

Geographic targeting and key selection criteria for project intervention areas

21. Given the project’s landscape and livelihood orientation, geographic targeting and key selection criteria for intervention areas (woredas) will benefit from a cluster-based approach that facilitates interventions across coherent rangelands. Under such an approach, each cluster of woredas delineated to participate in the project is expected to encompass about 3-5 woredas and to consider the coherence between a traditional area of rangeland management (including wet- and dry-season grazing and drought reserves), areas for rangeland-related interventions and investments (SIs), and opportunities for more resilient livelihoods (including opportunities for value chain development) and the delivery of basic services. In other words, a woreda cluster ideally will be a spatial area covering multiple woredas, usually in proximity to each other, that have been selected because:

- They are pastoral or agro-pastoral woredas (as per administrative definition).
- They cover a given rangeland—specifically, rangelands or a grazing unit with an institutional or governance structure that provides secure access to wet- and dry-season grazing.
- They present opportunities for potential SIs and market access for PAP products.
- They offer potential for enterprises to be developed along value chains.
- They have underserved communities lacking basic social services (either PCDP or non-PCDP beneficiaries).

22. The list of woreda clusters identified according to these criteria will form the basis for geographic targeting of interventions. If possible, the list should be accompanied by a brief explanation of the selection process, especially of how each cluster presents a coherent area to support an integrated set of interventions (related to rangeland, SIs, economic opportunities, market access, and basic service delivery) within woredas. A map could show the spatial demarcation of a woreda cluster with the types of interventions expected to take place, including (1) demarcation of the rangeland areas, (2) the selection of spots for SI interventions; (3) livelihood-related activities, and (4) basic service delivery.

Implementation modalities for the targeting and social inclusion strategy

23. The targeting and social inclusion strategy will rely on strong community mobilization at the beginning of the project, with KDCs and community facilitators playing a crucial role. Capacity building is recommended to support mobilization and equal participation and representation of all target groups, and to prevent elite capture. A social development expert (part of the RCST) will provide technical assistance to train KDCs as well as community facilitators (men and women in equal numbers) engaged in different parts of overall project implementation. At the federal level, overall implementation of activities related to social inclusion will be the responsibility of safeguard staff (full-time) and the Social Development, Gender, and Nutrition Advisor recruited by the F-PCU on a full-time basis (the draft ToR will be included in the PIM).

24. It is expected that at the beginning of the project the safeguard expert and cross-cutting issues expert (federal level, F-PCU) will draft the ToRs and follow up on the recruitment of the social development experts who will form part of the RCSTs; the number of experts corresponds to the size of the regions/geographic coverage. Those experts will be recruited to support (among others) grassroots-level institutions and project implementers to undertake any action related to ensuring that women, youth, and other socially disadvantaged groups are included, represented, and benefit from project services. Their support will include but not be limited to training the



committees and community facilitators implementing the project at the community level. The training will ensure that campaigns to create awareness of project interventions and mobilize participation will occur at times and locations that facilitate women's participation and that take the calendar of mobility for transhumant pastoralist communities into account. The same considerations will apply during any planning process foreseen by the project (for rangeland management, SIs, basic social service delivery, and so on).

25. Community facilitators (the number will vary according to the respective regional coverage) trained by the social inclusion experts will ensure that proper capacity building is in place at the community level for women and youth representatives. The social inclusion expert from the Woreda Support Team is expected to provide the necessary support at least during the first year of the project, when most of the activities regarding self-targeting and direct targeting take place and need to be closely followed up.

26. At the federal level, the safeguard and cross-cutting issue experts will prepare/adapt guidelines to train the woreda-level social experts on how to undertake mobilization, community engagement, women and youth inclusion, discussion in separate sessions or focus groups, and related topics, including methods to conduct the wealth-ranking exercise at the community level (Component 1). The training will be undertaken in Addis Ababa at the beginning of the project and materials will be distributed. Training materials developed by the PCDP should be considered and adapted. The F-PCU cross-cutting expert will be responsible for the above.

27. The RCST social development experts will be responsible for training facilitators and KDCs, including support for undertaking the community-level wealth ranking (one per region). Training of trainers will be considered to expand the training to a wider audience at the grassroots level and to identify community focal persons to engage in this process (Component 1).

28. The community facilitators, with support from RCST social development experts, will organize consultations with women and youth to help them organize into different groups (RUSACCOs, CIGs, field schools) based on their activities, aspirations, and opportunities. Equal numbers of male and female facilitators must work at the community level to ensure equitable outreach to target groups as well as gender sensitivity. Activities will consider women-specific constraints and domestic obligations, including timing, location, and socio-cultural limitations on participation in groups. For example, socio-cultural constraints that limit female participation in mixed groups may require women-only PAP Field schools to be established and women field school facilitators to be trained accordingly.

29. Technical training for women and youth in different segments of the value chain will be provided by individual experts (technical assistance) recruited on an ad hoc basis, depending on the type of course to be undertaken. For business and entrepreneurial skills development (Component 2), the training package will include exposure visits and interactions with entrepreneurs already in business, who can model the skills required by aspiring entrepreneurs. The training package for women will also consider their range of income levels and entrepreneurial capacity. For example, training to meet the needs of low-income women interested in supplementing household income with low-risk activities will differ from the needs of female entrepreneurs who want to expand their businesses by acquiring additional skills and accessing financial services beyond those provided through RUSACCOs.

30. The AWPB will reflect activities related to mobilization and their related costs, which will include (among others): the number of social experts operating at the woreda level and estimated costs of technical assistance (number of days/months); estimated costs of preparing and distributing training materials; estimated costs of workshop/training in Addis (in which woreda social experts will participate); estimated costs of training and related



travel for community facilitators and KDCs (woreda and kebele levels); number of training events and courses organized and costed, including the number of facilitators and KDCs expected to participate, and the estimated number of community members and focal points receiving training of trainers; and the formation of women and youth groups, including separate consultations with them at the beginning of the project.

D. Gender

31. Women constitute approximately half of the population in pastoralist areas. They play a vital role in livestock production and an increasingly important role in diversifying pastoralist livelihoods, which helps to increase household resilience and reduce vulnerability. Women play central roles as livestock keepers, natural resource managers, income generators, and service providers. As in any society, among Ethiopian pastoralists these tasks are influenced by gender norms, values, and relations.

Gender division of roles and responsibilities

32. Men's and women's roles and responsibilities depend on the livelihoods they pursue, which vary across PAP areas and groups. Broadly speaking, however, women's productive and reproductive roles can be defined to include bearing and rearing children; processing, preparing, and serving food; building and maintaining shelters/huts; cleaning huts; caring for sick family members; collecting water for people and calves; milking goats and cattle; making milking mats and vessels; sterilizing and storing the milk implements; churning milk to make butter; getting forage for calves; caring for young animals; taking animals to water; managing pack animals; gathering firewood; going to market; grinding grain; gathering wild foods; marketing dairy products; herding, watering, and selling small stock; and engaging in petty trade and animal fattening.

33. The gendered division of labor varies by season. During the dry season and drought periods, men move their herds in search of pasture. Children also move with the livestock, staying with them for the whole day when there is rain and the whole season when it is dry. Grass, which is used as livestock fodder, is often collected by women from the edges of irrigation canals (when available). During the wet season this task is easy, but during the dry season women and girls have to travel longer distances to obtain fodder. Collecting water is another time-consuming responsibility of women and girls, who can travel up to four hours to fetch water during the dry season.

34. Women and men in PAP societies have differentiated access to and control over resources, including cash income. While men engage in strategic decision-making in livestock production, movement, and sale, women engage in the day-to-day management and retain primary responsibility for dairy activities and smaller animals such as sheep and goats.

35. Men and woman also have different decision-making status when it comes to disposing of household assets. Men make most economic decisions, partly because they are recognized as household heads and inheritance usually occurs along the male line. More often than not, women have a secondary role in these decisions, as they have no control over the household's principal assets. Women usually control the income from sales of milk and small ruminants, while men make decisions over large stock such as cattle and camels and decide how to spend any revenues if they are sold. Usually the proceeds from milk sales are small, and women use them to cover miscellaneous household expenditures.

36. Male adults manage the herd and make decisions in council for the community, while young men are responsible for long-distance herding and defense of the family and its herd. Women's representation and decision-



making power in the councils is limited. A major factor in women's exclusion from decision-making is the influence of customary institutions and traditional clan systems.

Gender inequalities

37. Despite women's contribution to PAP life, they have only limited access to, and control over, key productive resources such as livestock and land. They also have limited access to healthcare, education, family planning, and reproductive health services. Access to credit, extension, and veterinary services are higher for male-headed households than for female-headed households. Access to credit is generally limited in pastoral areas, but although the number of households receiving credit is very small, the share of women who benefit from credit is still somewhat lower than that of men.

Women and alternative livelihood opportunities

38. Women's participation in income-generating activities is circumscribed by a range of factors, including a lack of mobility and resources, cultural and religious constraints, and the type of task performed in the chain of activities from production to marketing. Another major constraint for pastoralists, particularly female pastoralists, is a lack of information.

39. As a result of these constraints, low-income women tend to engage in the same small range of micro-enterprises, such as petty trading, animal fattening, or operating food kiosks. These businesses require little capital and are familiar, so the risk of starting the enterprise is low. Women often get their business ideas when they see other women make money by selling a particular product or service. A high percentage of low-income women have few options to acquire the skills, ability to innovate, or exposure to new ideas that can inspire and sustain a successful business.

Lessons learned and success stories from PCDP

40. One way that women have overcome obstacles to starting micro and small enterprises is through "traditional" savings and credit groups. Many women participate in these groups, paying in small amounts of cash and withdrawing lump sums at intervals. By earning income independent of their husbands, who have seen their livestock assets decline due to drought and other factors, women have taken on greater responsibilities and their status has risen.

41. Organizing pastoralists into savings and credit schemes is one approach used to diversify incomes and strengthen overall household resilience. Lessons from PCDP have shown that economic diversification, following entry into a more settled existence, gives women more freedom by offering greater access to more sources of income that they can control.

42. In line with these considerations, alternative livelihood development, based on alternative income-generating activities, has been seen as a particularly important development intervention for women because of their high level of participation in savings and credit groups. Women's accounts of their success show that group members appreciate the support for learning to manage their finances more efficiently. The expansion of women's self-employment and stimulation of the local economy in general have had a positive effect on poverty alleviation and gender inequality.

Gender strategy for the proposed project



43. The proposed project will target women as 50 percent of beneficiaries. To close the gender gap, strengthen women's participation as economic actors in productive sectors, and enhance their social status and recognition as transformation drivers within their communities, the project will take four specific actions: (1) promote women's participation in key committees, community-based organizations, local government institutions, and strategic planning processes related to the project, such as public economic infrastructure, land-use planning, and the provision of basic social services; (2) support women's participation in value chain development on an equal footing with men; (3) assist women to move out of low-input, low-output activities and develop a more powerful set of skills and entrepreneurial capacities; and (4) provide women equal access to extension support and financial services.

44. These actions are supported by specific objectives related to gender equality and women's empowerment.

45. **Strengthen women's decision-making role in the household and community and their representation in the membership and leadership of grassroots institutions and organizations.** The capacity building discussed earlier will help to ensure that women participate fully in decisions in the household and in regard to economic activities in value chains, including strategic planning processes involving the whole community. At the community level, local committees are expected to have at least 30 percent active participation and representation by women. This approach is considered particularly relevant for women, as well as for youth and other social categories that are otherwise under-represented or not represented at all. These individuals will be able to claim a space within a newly created form of organization, different from traditional institutions, which should increase their opportunities to participate proactively, share their views, and overcome limitations that they face in traditional institutions, where their presence is low.

46. Leadership training will be organized to foster active participation by women representatives in the community-based organizations formed under the project, such as RMCs, land-use committees, and water management committees, in addition to local government institutions at the kebele and woreda levels, such as KDCs and Woreda Development Committees (WDCs). Women's increased participation should ensure that women's views and interests are captured in community planning processes, including planning for SIs and basic services and in other key decisions taken at that level, such as the formulation of the SI plan). The project will promote childcare facilities to allow women to balance family obligations with participation in project activities. A system of leadership based on rotation/alternate leader will also be proposed among women's groups.

47. **Achieve a reduced workload and an equitable workload balance between women and men, girls and boys.** The project will promote time- and labor-saving technologies. Another main contribution to the equitable balance of workloads will come from women's participation in planning and decision making for the basic services supported under Component 3; for instance, a basic service such as a more accessible source of water can reduce the labor of women and girls and give them time to focus on other activities.

48. **Enhance women's access to information, skills, and entrepreneurial opportunities.** Women extensionists, veterinarians, para-veterinarians, CAHWs, and community facilitators will be trained and mobilized to ensure better outreach to women pastoralists and agro pastoralists. Socio-cultural norms can limit women's interaction with male service providers, so the presence of more female service providers should lead to more balanced and equitable outreach.

49. Women pastoralists and agro-pastoralists will be mobilized and organized into groups to receive specialized training based on their interests, activities, and aspirations related to current entrepreneurial opportunities or new opportunities resulting from cluster development. Training will focus on (but not be limited to) improved production



and productivity, financial literacy, and business skills, to expand women’s capacity to engage in a profitable business. The training will target women who are already members of groups or who have the potential to become active members of a group, as well as individual entrepreneurs with a low to medium income level and interest in growing their businesses.

50. Women producers/processors will be assisted in obtaining financial services to purchase relevant assets and inputs for their economic activities. They will be supported in becoming RUSACCO members, and those who wish to expand a profitable business will be assisted to submit applications to rural financial institutions to gain a higher level of financial support.

51. Compared to their male counterparts, women tend to have less access to information and ICTs. As noted, a range of information, education, and communication campaigns will be rolled out under the project, and the use of modern ICT will be considered. ICT may offer particular advantages for creating a new, or linking up with an existing, market information system on PAP products, particularly for women.

52. **Provide training that responds to women’s needs.** Given that 50 percent of the participants in the proposed project will be female, a crucial part of the gender strategy is to ensure that training responds to women’s needs. To recapitulate some of the points made earlier, training for women will include topics relevant to them, such as animal health, human nutrition, milk handling and hygiene, small-ruminant fattening, animal husbandry, dry and irrigated farming, nutrition/cooking demonstrations, demonstrations of time-saving technologies, and marketing/trading, including ICT. Participation in exposure visits will also be organized. Careful consideration will be given to providing training at appropriate times and locations, and to ensuring the gender-sensitivity of service providers (including extension workers, veterinarians, and project staff).

Gender and monitoring and evaluation

53. Many indicators will be disaggregated by sex and age. Additional specific indicators will include: (1) women and youth participating in RUSACCOs and CIGs, (2) women accessing time- and labor-saving technologies; and (3) number of women representatives in local committees and community-based organizations. The gender results chain displayed in Table A4.2 provides a detailed list of activities and indicators.

Table A4.2: Gender results chain for the proposed Lowlands Livelihood Resilience Project

Gender issues and their integration in project components	Actions to close the gender gap, and indicators <i>Note: Some of the indicators listed here are captured (directly/indirectly) in the main results framework for the project, whereas others (the majority) are not integrated in the framework, as they refer exclusively to activity/output-based indicators to monitor gender-specific actions.</i>
<p>Issues: Women have low access to and control over key productive assets and basic services, including natural resources, as well as low representation in decision-making processes at the community level.</p> <p>Components 1 and 3: will close this gender gap by promoting self-awareness and leadership training among women to increase self-confidence in decision-making and representation at community level.</p>	<p>Indicators</p> <ul style="list-style-type: none"> • Increased percentage of women (50 percent) accessing natural resources for pastoral/agro-pastoral activities (i.e., pasture land, agriculture land, water). • Percent of women accessing basic social services (50 percent). • percent of women leaders and percent of women members of groups/associations at community/kebele level has increased (%) to achieve the target of a minimum of 30 percent women representation.



	<ul style="list-style-type: none"> • Number of SIs having direct relevance for productive activities in which women engage (small ruminant, dairy, fodder production). <p>Source: Baseline.</p>
<p>Women’s leaders and women’s participation in decision-making processes at all levels (community and household level).</p> <p>(preparatory activities, relevant for all project components, especially 1 and 3).</p>	<p>Action: Strengthen individual women through relevant training in self-confidence and leadership, especially for female leaders and spokespersons.</p> <p>Indicator: Number of leadership/self-confidence training events organized.</p> <p>Action: Organize events to create awareness at the community level by engaging with traditional leaders and key traditional organizations (usually male dominated) to create awareness of the role and importance of women.</p> <p>Indicator: Number of gender awareness events organized and Number of traditional leaders and men participating.</p> <p>Action: Training for community facilitators (women) on specific gender methodology to address sensitive issue and promote behavioral change at all levels.</p> <p>Indicator: Number of training events delivered and Number of trainees.</p> <p>Action: Community facilitators engaged in community conversations at community and household level to touch on specific issues, i.e., cultural barriers that limit women’s full access to inputs, assets, and control over income at the household level.</p> <p>Indicator: Number of events organized at the community level, and Number of community members (men, women, and youth) participating.</p>
<p>Women participate in development of action plans for SIs, management of rangelands and natural resources, and the delivery of basic services.</p> <p>Subcomponent 1.1 (Integrated Rangeland Management Planning) and Subcomponent 1.2 (Supporting Strategic Investment) will consider 50 percent women participation (women engaged in pastoral/agro-pastoral productive activities from all levels: low, medium, high) in planning for natural resource management and SIs. At least 30 percent women will be representatives in the decision-making committees. Number of SIs (50 percent) will show direct relevance for productive activities in which women engage (animal fattening, dairy, small ruminants, and others) to ensure that SIs equally benefit men and women.</p> <p>Subcomponent 1.3 (Conflict Management and Secure Access to Key Resources) will adopt the Conflict Sensitive Prevention Toolkit and guidelines. The toolkit integrates gender and social inclusion tools for effective consultation with all social actors. Women are expected to be consulted on a 50 percent basis.</p> <p>Subcomponent 3.1 (Provision of Basic Social Services and Infrastructure) will engage with women through the CDD methodology. It is expected that 50 percent of beneficiaries will be women.</p>	<p>Action: Women participate in community-based organizations and councils to actively contribute to the development of action plans.</p> <p>Indicator: percent of women (not less than 50 percent) participating in consultative processes on the different plans (i.e., SIs, rangelands and natural resources, basic service delivery), and 30 percent hold formal representation in decision-making bodies, including in key positions.</p> <p>Action: SIs consider sectors and value chains in which women are engaged (dairy, small ruminants, animal fattening, fodder production, etc.).</p> <p>Indicators: percent of SIs that show direct relevance for productive activities in which women engage (50 percent), and a correspondingly high number of women as beneficiaries.</p> <p>Action: Conflict Sensitive and Prevention activities consider consultation with women (50 percent).</p> <p>Indicator: percent of women consulted (50 percent of the all actors consulted) applying the Conflict Sensitive Prevention Toolkit tools/checklists.</p> <p>Implementation: RCST social expert and community facilitators.</p>



<p>Issue: Low levels of gender sensitivity and an unresponsive service delivery system limit women’s access to knowledge, information, and inputs for improving/increasing PAP production and productivity.</p> <p>Subcomponent 2.1 (Enhance Pastoral and Agro-Pastoral Production Systems) will alleviate constraints on women’s access to services by providing more female extension staff—female veterinarians, para-veterinarians, and CAHWs—as well as building the capacity of service providers to be gender-responsive (specifically community facilitators for PAP Field schools).</p> <p>Issue: Women (low and medium income level) involved in supplementary income-generating activities lack skills and capacity that support success, including financial literacy, access to finance, and entrepreneurial skills.</p> <p>Subcomponent 2.2 (Promoting Livelihood Diversification and Market Access) will provide training for women to develop their skills and capacity and will help them to access financial services through rural savings and credit cooperatives (RUSACCOs) and other sources such as MFIs.</p>	<p>Indicators:</p> <ul style="list-style-type: none"> • Number of female veterinarians, para-veterinarians, CAHWs, community facilitators, and Field School facilitators has increased. • Number of PAP women who have received advisory services through extension and PAP Field schools has increased. • Adoption of technology, especially of time-saving technology, has increased among women. • Number of technologies developed that save time for women. <p>Source: Baseline.</p> <p>Indicators:</p> <ul style="list-style-type: none"> • Number of women participating in the training events (skills development, business development, financial literacy). • Number of women members of RUSACCOs and CIGs. • Number of women entrepreneurs preparing a business plan and getting a loan from a financial institution other than a RUSACCO increased by (%). • Number of women micro-entrepreneurs consolidating and expanding their businesses increased by (%). • Number of women (% of total target beneficiaries) engaged in alternative income-generating activities graduated from low income to medium income level. <p>Source: Baseline.</p>
<p>Capacity is built in the extension/advisory service system to respond to women’s needs.</p>	<p>Action: Production/adaptation of training and communication materials to ensure that extension training, information, and knowledge are of interest to women on the basis of livelihood options; pastoral, agro-pastoral, or alternative income-generating activities; and the gender division of roles.</p> <p>Indicator: Number of gender-responsive training materials and modules produced and used by extension workers and facilitators.</p> <p>Action: Deliver a curriculum on techniques that favor agricultural production specifically for improving nutrition (e.g., homestead gardening for nutritious crops and household consumption) through on-site demonstrations as part of the PAP Field schools.</p> <p>Indicators: Number of training materials developed; Number of on-site demonstrations for nutrition-sensitive agriculture by PAP Field schools; and Number of participants (men and women).</p> <p>Implementation: Rangeland Cluster Support Teams (RCSTs), social inclusion experts, and community facilitators, with technical assistance from FAO for PAP Field schools.</p>
<p>Women access information, suitable technologies, skills, and capacities, including for business development and accessing financial services.</p>	<p>Action: Identification of technologies that work for women.</p> <p>Indicator: Number of technologies identified.</p> <p>Action: Organize events to demonstrate technologies.</p> <p>Indicator: Number of demonstrations with women participating and taking up technologies.</p> <p>Action: Women participate in PAP field schools to improve knowledge of specific topics of interest for their livelihoods (pastoral and agro pastoral).</p> <p>Indicator: Number of women participating in PAP field schools and dedicated training modules delivered.</p> <p>Action: Women engaged in alternative livelihoods participate in</p>



	training to improve their skills and capacity (including financial literacy, basic business skills) and participate in exposure visits.
	Indicators: Number of women participating in training and dedicated training modules delivered. Number of exposure visits organized, and number of women participating.
	Implementation: RCSTs, social inclusion experts, and community facilitators, with technical assistance from FAO for PAP field schools.
<p>Issues: Food insecurity, acute malnutrition, and famine (in some areas) have reached unprecedented levels, leading to negative coping mechanisms.</p> <p>Subcomponent 2.2 (Promoting Livelihood Diversification and Market Access) will support improved, gender-sensitive nutrition through agriculture (homestead gardens), and nutrition education with focus on pregnant and lactating women and children under age five.</p>	<p>Indicators:</p> <ul style="list-style-type: none"> • Improved dietary diversity. • Increase in income dedicated to and spent on nutritious food. <p>Source: Baseline.</p>
<p>Activities that support nutrition-sensitive agriculture are integrated within farming systems (mainly for agro-pastoralists) to increase production of nutrient-dense crops. Activities also support nutrition by promoting more nutritious consumption patterns, particularly for pregnant and lactating women and children under five (to reduce malnutrition and stunting).</p>	<p>Action: Nutrition awareness events related to food utilization, nutritious recipes, safe food storage and preservation, and the nutritional needs of infants and women.</p> <p>Indicator: Number of events organized with women participating.</p> <p>Action: Establish homestead gardens to cultivate vegetables rich in micronutrients for home consumption, benefiting lactating women in particular.</p> <p>Indicator: Number of homestead gardens established.</p> <p>Implementation: RCSTs, social inclusion experts, and community facilitators, with technical assistance from FAO for PAP Field schools.</p>

E. Nutrition

The role of the livestock sector in improving nutrition intake in Ethiopia

54. Levels of malnourishment are relatively high in Ethiopia. Among Ethiopian children under the age of five, 40 percent are stunted (owing to chronic malnourishment), 9 percent are wasted (owing to acute malnourishment), and 27 percent are underweight. With impacts starting at conception (the nutritional status of the mother affects the fetus), the consequences of malnourishment for children can be devastating, permanently impairing their cognitive and physical development and preventing them from reaching their full potential. The proposed project recognizes the important role of Ethiopia’s livestock subsector in combatting malnutrition. The intake of animal-sourced products is effective in reducing child malnutrition, not the least iron deficiency anemia.

55. The project will support beneficiaries in addressing gaps in nutrition knowledge and food handling and preservation skills for improved dietary intake within households. In coordination with health extension providers, the project will support strengthening such skills among livestock extension workers as well as through PAP Field schools. In general, extension workers will be exposed to basic nutrition in addition to their regular responsibilities. Explicit nutrition-sensitive interventions will be facilitated and supported by the nutrition focal point appointed within the R-PCU. As the discussion on gender indicates, women are the main target group for these activities, but for optimal uptake, increased awareness of nutrition issues among men is essential. Nevertheless, the emphasis of these activities is to improve dietary intake among women of reproductive age (15-49) as well as younger (0-2) and older children (2-14).



Nutrition activities considered by the project

56. A curriculum on nutrition will be developed and integrated into the training plans of PAP Field schools. The curriculum will describe the key competencies in "nutrition" to be included in the training of livestock extension workers and community facilitators as well as PAP Field School facilitators. These competencies will include, among others, awareness of nutrition-sensitive agriculture, basic knowledge of nutrition, ability to promote the consumption of more nutritious food and consumption patterns in varied agro ecologies. Training for participants in PAP Field schools will include the promotion of homestead gardens and other means of increasing nutrition at the household level. Integrating nutrition-sensitive agriculture within farming systems will increase the production of nutrient-dense crops and encourage more nutritious consumption patterns, particularly among pregnant and lactating women and small children.

Coordination and monitoring

57. Within the F-PCU, an expert responsible for cross-cutting issues (gender, youth, and nutrition) will be recruited to support overall implementation of activities related to these issues and to liaise with key partners. The M&E system will give strong emphasis to monitoring performance in targeting beneficiaries. All implementers are required to provide disaggregated data on women and youth participation, in relation to overall project targets of 50 percent participation of women and 10 percent participation of youth. The M&E system will collect and analyze information about project outreach, effectiveness of the targeting strategy, and specific benefits for women and youth. This effort will require strong coordination and collaboration between the M&E unit and the subject matter specialist (gender, youth, nutrition) at all levels. Impact will be assessed on the basis of methodologically gender-sensitive baseline, midterm, and completion surveys, which will use key indicators to measure women's empowerment.



ANNEX 5: MONITORING, EVALUATION, AND KNOWLEDGE MANAGEMENT

COUNTRY: Ethiopia

Lowlands Livelihood Resilience Project

1. The proposed project will establish a robust and user-friendly M&E, learning, and reporting system, including planning, self-monitoring, and knowledge sharing for all the institutional entities involved in the implementation arrangements for the project. Table A5.1 presents the overall monitoring framework for the proposed project.

2. The key result will be clarity on the implementation progress of the project, including physical and financial reports prepared on time and with acceptable quality. It is expected that project implementation processes will be continuously improved through the reporting evaluation and learning inputs.

Table A5.1: Overall monitoring framework for the proposed Lowlands Livelihood Resilience Project

Activity	Levels involved	Main tools
1. Monitoring of inputs, outputs, and processes— progress and quality	Woreda, regional, and federal level	<ul style="list-style-type: none"> • Snapshot report/status report on output and milestones • Quarterly/half-yearly progress reports showing intermediate outcomes, outputs, and milestones • Case studies
2. Evaluation	Project level	<ul style="list-style-type: none"> • Results framework • Midterm and project completion assessments • Thematic studies and audits • Satellite imagery for estimating biomass development
3. Self-monitoring	PAP institution level, woreda level, and regional level	<ul style="list-style-type: none"> • PAP Institution/Woreda Profile Matrix • PAP Institution/Woreda Implementation Status Matrix • Social Audit Committee
4. Internal learning and knowledge sharing	PAP institution level, woreda level, regional level, federal level, and civil society	<ul style="list-style-type: none"> • Quarterly Rangeland/Woreda Learning Forum • Half-yearly Regional Learning Forum • Annual Federal Learning Forum • National and international knowledge exchange visits • Knowledge hubs • Social media/web platforms
5. Process monitoring	Rangeland	<ul style="list-style-type: none"> • Independent process monitoring

Specific Activities

Monitoring inputs, outputs, and implementation processes

3. Implementation progress will be monitored based on a state-of-the-art MIS to be developed for the project within the first year of implementation. The data collected internally through project monitoring reports will be strengthened through regular assessments of rangeland- and woreda-level planning, technical audits of infrastructure, and review of the effectiveness and quality of capacity-building efforts and value chain interventions. Findings from monitoring will be shared with the PCUs and learning forums at different levels. The project will fund technical assistance to develop reporting formats and media, acquire or develop software solutions, access storage, and undertake frequent data auditing.



Evaluating project outcomes and impacts

4. Progress toward the PDO and intermediate outcomes will be measured through a detailed baseline survey and two qualitative as well as quantitative evaluations, one at midterm and one at the end of project implementation. The evaluations will be carried out by a competitively recruited consulting firm. Evaluations will be complemented by annual thematic studies, assessments, and case studies on domains, sectors, and subcomponents agreed to by the FSC, World Bank, and IFAD.

5. More specifically, satellite imagery and biomass estimation tools and techniques will be employed to monitor the impact of rangeland management interventions. In addition, the potential for conducting a rigorous impact evaluation based on scientific methods will be assessed, to determine whether project activities allowed women to realize their economic potential and empower them as agents of change in their communities. Working with the World Bank Gender Innovation Lab, the team will focus on studying the impact of innovative programming for gender. The team will work closely with the project management unit and other project stakeholders, through an initial impact evaluation workshop and regular consultations, to identify such innovative interventions. These workshops will also help to develop study designs that will outline the research methodologies and, in particular, detail the selection of appropriate counterfactuals. The precise final selection of innovations to be tested and the design of the impact evaluation studies will be determined during the initial phase of project implementation. During this process, the interest of the project management unit and other stakeholders as well as feasibility concerns will guide the work of the impact evaluation team.

6. Examples of possible studies include estimating the impact of women's representation in leadership groups on communal outcomes and perceptions of women in positions of authority; gender norm interventions; and activities targeted at diversifying and intensifying women's income generation. The empirical analysis will typically build on survey data deliberately collected for this purpose: (1) a baseline survey carried out prior to respondents' exposure to any relevant intervention activities; (2) an end line survey administered after the project is well into operation; and (3) depending on sufficient implementation and funding, a midterm survey to capture shorter term impacts. The information will be collected from representatives of a treatment and control group. While the empirical analysis will be carried out by impact evaluation experts from the World Bank, of necessity the data collection will be contracted out to an organization/firm with extensive experience and local capacity in the administration of large-scale surveys. The impact evaluation is subject to funding and the identification of policy-relevant research questions, as well as the feasibility of a suitable rigorous research design.

Participatory M&E and learning

7. The project recognizes the monitoring roles of PAP communities and the need to engage them upfront in the planning as well as implementation of the rangeland management plans, delivery of basic services, and other activities under the project. Therefore, the participatory M&E and learning will provide for (1) joint operations with other implementation entities in ensuring project progress; (2) easy-to-use decision support systems, information, and tools to identify land for grazing and fallowing, optimal herd composition and crop mixes, and markets to tap; and (3) disseminating the key agreements in the rangeland management plans and the level of compliance with the plans.

8. The LLRP will implement participatory M&E by (1) introducing simple monitoring formats to be used by PAP institutional entities to track project milestones—focusing on results—and budget use and to identify implementation problems and best practices; (2) introducing digitized resource maps and pictographic information on the rangeland management plans and their implementation progress; (3) facilitating periodic



structured discussions on learning and findings; (4) capacity building of PAP institution leaders and committee members on managing relevant information and promoting learning from such information; and (5) developing information sharing and learning hubs at the rangeland level. The project will overlay community-level monitoring processes and integrate them into the upgraded MIS. As part of self-monitoring, accountability mechanisms such as Social Audit Committees, public display of information, participation in meetings, and a participatory GRM will be implemented.

Process monitoring

9. The project envisages the participation of the PAP community at various stages of implementation and the involvement of key stakeholders in planning, implementation, and learning. To capture whether the process steps have been complied with, and to capture process experiences to be fed back into implementation, an external agency will be hired to undertake process monitoring. The main focus of the process monitoring exercise is (1) planning and approval of procedures for the rangeland management plan; (2) effectiveness of the targeted PAP community participation; (3) performance of the mandated functions of the PAP organizations and management structure; (4) coordination, links, and collaborative performance among stakeholders; and (5) compliance with guidelines and manuals both on the actions and by the actors.

10. In this way, the process monitoring will close the feedback loop for continuous incorporation of lessons from implementation to the project and serve as a quality enhancement tool. Lessons and recommendations from process monitoring will be submitted to woreda, regional, and federal management and form the basis of the learning forums at various levels.

Setting up the MIS–PAP information system

11. Monitoring data entered into an MIS will be collated, synthesized, and shared through semiannual progress reports. A results chain based on all components and subcomponents has been developed to ensure that data structure and data needs at different levels are comprehensively met. The PAP information system will consist of (1) conventional electronic databases residing in cloud servers; (2) distributed data collection (including crowdsourcing involving PAP communities in the main areas of rangeland management, production and productivity of PAP production system, and marketing through the established links) using technology and tools connecting users at all levels using mobile- friendly apps; (3) geo-spatial platforms embedding digitized maps, geo-tagged photographs of physical structures, and drone imagery (with special authorization from concerned authorities) of rangeland improvements. The PAP information system in addition to the main monitoring modules will also link up with market information modules and rangeland planning modules to be developed as part of the program component activities.

12. The key characteristics of the MIS to be set up for within the first year of the project include: (1) the ability of all stakeholders to access and transact the MIS from remote areas over mobile or internet connectivity; (2) the ability to enable authenticated data recording and backup at all levels with a user-friendly interface; and (3) sufficient flexibility to accommodate improvements to the input and report data structures and other MIS components. The MIS will be programmed to generate infographic dashboards for all stakeholders, with drill-down access to details depending on levels, authority, and information needs. The progress reporting data are input at the woreda level onward. A mobile application will be developed and utilized for inputting progress data electronically through smartphones/tablets with SIM cards. The staff will also have the option to use desktop computers. The marketing and rangeland information system will also have mobile apps to gather information from wider numbers of producers and market operators and will have two-way information flows. To ensure the



timely generation and management of the above-indicated project activities, the MIS will be designed and installed and ready to use by the end of the first year of project implementation.

Annual work planning

13. Bottom-up participatory planning and management of project resources and the corresponding implementation of interventions proposed under the project components will require systematic phasing and scheduling of activities. An annual planning exercise will be instituted, fully reflecting the demands and priorities of the rangelands, PAP community, and woredas. The PAP community and staff at various levels will build capacity in annual work planning.

Capacity building

14. Continuous capacity building of M&E officers, PCU staff, woreda staff, and supporting line ministries will be undertaken. The overall purpose of the capacity-building efforts will be to provide skills in planning, monitoring activities, evaluating results, auditing data, and other specific technical skills to support the preparation and implementation of the project's M&E activities, including the mobile apps. The capacity of the PAP community on the M&E and learning activities will be built following a training of trainers' model combining learning by doing, peer learning, and user-friendly pictorial learning materials. The capacity building of project staff will benefit from structured learning events, technical assistance, learning, and sharing through thematic group events and from manuals and self-learning modules. Experience-sharing visits among stakeholder groups to disseminate innovative approaches and best practices related to different project subcomponents will be an important element of the capacity building.

Internal learning and knowledge sharing

15. The LLRP will actively promote learning by its implementing entities, including PAP-level stakeholders, from implementation experience as well as from international experience. In addition to the multi-stakeholder national discussion forums on pastoral issues, learning and experience-sharing events for stakeholders from the regional and woreda levels will be organized. The LLRP implementation experience and lessons as well as findings from relevant studies (including syntheses, briefs, and policy papers posted on the project website), the LLRP M&E reports, process monitoring reports, and outputs from lower-level learning forums will be presented and discussed. The learning forums are interactive platforms where stakeholders at the PAP community, rangeland, and higher levels meet at agreed intervals to critically self-evaluate activities, achievements, and gaps, in the presence of the next-higher-level facilitators to collectively improve the quality and pace of implementation. Implementation issues are best resolved by stakeholders themselves at each level and should be escalated to the next level only if they cannot be resolved. Best practices related to rangeland management and value chain interventions will be documented and identified for scaling up. These products will be in hard and soft versions, and dissemination will increasingly use social media in addition to print and web platforms. All communication materials will be translated into the local language to ensure wider dissemination.

M&E and learning manual

16. A comprehensive M&E and learning manual has been developed to fully reflect the needs and requirements of the new project, including the broad scope of its components and subcomponents (participatory rangeland management and value chain-based livelihood development) compared to previous projects. In addition to the information requirements, the innovative technologies to be deployed for collection, collation, and information generation will also be included in the manual. The manual will develop the results chain and



contain all data collection and reporting templates included in the M&E and learning framework. Simplified pictographic templates for use at the PAP community level will also be included in the manual. The project design team will prepare the draft M&E and learning manual, taking the PCDP manual as a starting point and with quality assurance support from the World Bank.

Organizational Setup for Monitoring and Evaluation

17. The organizational setup for M&E under the proposed project has multiple levels, aligned with the institutional arrangements for the project. Overall responsibility for M&E will rest with the M&E specialist of the F-PCU, who will be supported by technical assistance on MIS and information technology. M&E officers at the regional level will report directly to the M&E specialist in the F-PCU as well as the regional coordinator. The regional M&E officers will work closely with the RCST leader, and the team will have a focal person to support monitoring activities at the woreda level. The focal persons will support the Woreda Office for Pastoral Developments (WOPDs) in their monitoring work. The woreda coordinator will be in charge of the M&E and learning activities at the woreda level. The data management, analytical, and reporting capacities of the RCST and at local levels will be continuously enhanced through capacity-building programs and technical assistance. To support an integrated M&E system, the M&E team will work closely with staff in charge of each component. Evaluation activities, thematic studies, PAP information system design, development and capacity building, process monitoring, and other activities will be undertaken by external consultants to be procured on a competitive basis.

18. The LLRP will have four levels of reporting, using simple basic formats with a set of indicators to be monitored:

1. **PAP institution level.** The PAP-level activities will be monitored by woreda coordinators following a predetermined format, while the woreda coordinators will use the collected information for woreda-level reporting. Simplified pictographic templates will be introduced at PAP-level institutions, with care to avoid fatigue from information overloading.
2. **Woreda level.** Each woreda coordinator will produce a monthly report with data on each of the woreda's project kebeles and on woreda-level activities. Woreda reports will be based on agreed-upon formats to report/document kebele characteristics, project outputs, progress against plans, procurement, and financial issues. In addition to providing information on each kebele, the woreda reports will aggregate kebele data and provide woreda-wide information on performance (covering all components), implementation bottlenecks, best practices, and success stories. The woreda reports will be submitted to the WDCs for decision making and the RCST for compilation and inputting into the project MIS.
3. **Regional level.** The R-PCU will receive reports on each woreda from the RCSTs and will access detailed woreda and kebele information from the MIS. The system will be designed to electronically gather and aggregate data from the next lower level. The regional M&E officer will be responsible for entering additional regional information into the MIS and for checking on the veracity of data input into the MIS by the RCST. Based on a review by component leaders of information from these sources, the regional M&E officer will produce quarterly regional reports that review performance of each woreda and at the regional level, document progress against plans, and identify region-wide implementation issues and best practices. Regional reports will be submitted to the RSC and F-PCU



and used to provide feedback to the WDCs. In addition, these reports will be used as a single source of information at the regional level for annual events to share experience and lessons learned.

4. **Federal level.** The F-PCU will receive reports electronically aggregated on the system on each region from R-PCUs and will access detailed regional, woreda, and kebele information from the MIS. The federal M&E officer will then be responsible for entering additional national-level information into the MIS. The federal M&E officer will prepare quarterly and annual progress reports to be shared with the FSC, IFAD, and World Bank. These reports will also be the single source for posting the LLRP-related information on the website of the project.



ANNEX 6: ECONOMIC AND FINANCIAL ANALYSIS

ETHIOPIA: Lowlands Livelihood Resilience Project

1. This annex presents results of the economic and financial analysis for the proposed LLRP. The methodological approach for the analysis follows the guiding principles of Gittinger (1982)²⁹ and Belli et al. (2001)³⁰ and is in line with recent guidelines published on economic and financial analysis³¹ by IFAD and the World Bank. For the livestock modeling, different modules of the Livestock Sector Investment Policy Toolkit (LSIPT) have been used. The LSIPT was developed by FAO and CIRAD under the ALIVE initiative.

A. Financial Analysis

Methodology

2. The financial analysis was performed from the perspective of beneficiary households or cooperatives. The analysis had to include some strong assumptions about the overall mix of benefits, given the difficulty of carrying out economic and financial analysis of projects that include a significant portion of CDD subprojects. Based on the experience of past and ongoing projects and field discussions during the project formulation process, some indicative activities have been identified. Based on these, 19 financial household, cooperative, and enterprise models, each having a “with-project” and “without-project” scenario, were developed to analyze the financial performance of the economic activities that were supported by the project. The financial discount rate used is 10 percent; the duration is 15 years for the enterprise and cooperative models and 20 years for the livestock and crop models.

3. The first group of project beneficiaries are pure pastoralists and agro-pastoralists in the targeted rangelands. They will benefit from the investments of Component 1 as well as Subcomponent 2.1. Component 1 finances the rangeland management planning (Subcomponent 1.1) as well as the identified investments (Subcomponent 1.2). Subcomponent 2.1 supports improved PAP management in the rangelands for beneficiaries who also benefit from Component 1 support. It is assumed that this whole package of investments is required to achieve the targeted productivity increases in the PAP farming systems. Nine financial models were developed to simulate the financial performance of these investments in the livestock sector, including small-scale cattle pastoralism; large-scale cattle pastoralism; cattle agro-pastoralism; goat, sheep, and camel pastoralism; and beef fattening (at small and large scale). Three financial models simulate crop production, including (1) small-scale irrigation, (2) water conservation for food and feed production; and (3) forage seed production.

4. The second group of project beneficiaries are those opting out of pastoralism or those interested in taking up alternative forms of livelihood. Eight financial models were developed to capture the benefits of Subcomponent 2.2. The financial household models for off-farm activities include milk trade, beekeeping, and workshops (carpentry or metal working). The financial models for cooperative/enterprise investments in agribusiness include tanneries, slaughterhouses, animal feed processors, milk collection centers, and dairy processors.

²⁹ Gittinger, P. 1982. *Economic Analysis of Agricultural Projects*.

³⁰ Belli, P., J.R. Anderson, H.N. Barnum, J.A. Dixon, and J-P. Tan. 2001. *Economic Analysis of Investment Operations: Analytical Tools and Practical Applications*. WBI Development Studies. World Bank Institute. Washington, DC: World Bank.

³¹ IFAD. 2015. *Economic and Financial Analysis of Rural Investment Projects, Basic Concepts and Rationale*.



5. The third group of beneficiaries are the populations in the selected woredas and kebeles who gain access to better social services (education, health) and collective public goods. The social benefits of Component 3 are included in the economic analysis, but not in the financial analysis. Given the complexity of these investments, detailed modeling of benefits was not possible at this stage, and a factor of 25 percent of the other identified investments (in line with previous findings) has been considered to include them in the analysis.

6. The financial models are discussed below, structured in three groups: the livestock and pastoral models; the irrigation and water conservation management models; and the agribusiness and off-farm models.

Livestock and pastoral models

7. For estimating the livestock benefits arising from project interventions, different modules of the LSIPT have been used. The LSIPT calculates, for with- and without-project scenarios, different livestock production outputs (meat, milk, manure, eggs, and so on) and financial outputs that are used to derive economic and financial performance indicators such as the internal rate of return (IRR) and NPV. All the models estimate the with- and without-project scenarios over a 20-year period. For the cattle, goat, camel, and sheep models, the ECORUM module of the LSIPT for simulating bioeconomic performance of a herd of tropical domestic ruminants has been used. Other modules of the LSIPT have been used, such as performance of ruminant fattening systems.

8. A first model (**Cattle Pastoralist, Small Scale**) represents a subsistence pastoralist with a small herd of nine local breed cows. Their productivity is extremely low, less than 2 liters per day (exactly 1.5 liters per day) due to inappropriate feeding, poor husbandry practices, and lack of access to proper veterinary services. The annual milking period length is equal to 160 days per cow. The project intervention will help to improve animal health and feed and increase productivity gradually until it reaches 1.8 liters per day per cow in Year 14. The major changes are reducing mortality rates, increasing off-take rates, and increasing the parturition rate from 0.56 to 0.58. In particular, the mortality rates for male juveniles are 16 percent, subadults 12 percent, and adults 9 percent, while in the with-project scenario the juvenile mortality rate decreases to 12.8 percent, subadults to 10.8 percent, and adults to 8 percent. The mortality rates for females are slightly lower, for juveniles 12 percent, for subadults 7 percent, and for adults 5 percent, while in the with-project scenario the rates decline to 9.6 percent, 6.3 percent, and 4.5 percent, respectively. During the project analysis, the annual reduction is 0.16 percent and 0.12 percent for subadult male and female; 0.06 percent and 0.03 percent for male and female subadults, and 0.05 percent and 0.02 percent for male and female adults, respectively. During the without-project scenario, more than 90 percent of the feed in the Lowlands grazing areas comes from rangeland, while project interventions are improving feed by giving 0.016 kg of concentrates to female adults per day at a cost of ETB 3/kg and 0.25 kg of salts/minerals per day at ETB 1.42. In addition, veterinary services and medicine costs duplicate the without-project scenario.

9. A second model (**Cattle Pastoralist, Large Scale**) shows a pastoralist with a larger herd of 18 local breed cows. There are few differences with the first model. The productivity remains very low at 1.6 liters per day without project interventions for the same reasons, while in the with-project scenario, milk productivity increases to 1.88 liters per day. The annual milking period remains the same length at 180 days per cow. The project interventions on feed are the same as above but the daily amount of salt/minerals increases to 1.08 kg.

10. The third model (**Cattle Agro-pastoralist**) represents an agro-pastoralist with a herd of seven local breed cows. Project interventions increase milk productivity from 1.5 to 1.8 liters per day. The rest of the parameters



and project interventions on feed are the same as the previous models, but in this case the daily amount of salt/minerals changes to 0.7 kg.

11. A fourth model (**Beef Fattening, Small Scale**) illustrates a beef fattener with two animals per cycle. The length of each cycle is six months, two cycles per year. One person is required to work full-time on the farm. The amount of feed purchased is 50 percent of the total feed requirement of the animal. As a result of all project interventions such as improvements in diet and feed, the carcass percentage rises from 50 to 54 percent.

12. The fifth model (**Beef Fattening, Large Scale**) shows a larger beef fattener with 75 animals per cycle. The length of the cycle is shorter at 3.3 cycles per year. The number of employees increases to three full-time workers and 1,825 days for part-time workers per year. The amount of feed purchased increases to 100 percent.

13. The sixth model (**Goats, Pastoralist**) represents a pastoralist with a herd of 15 goats. The daily milk productivity is extremely low at 0.2 liters in the without-project scenario, increasing to 0.4 liter per day after project interventions. The annual milking period length remains stable at 84 days per cow. The project intervention increases costs of veterinary services, which double from ETB 7 to ETB 14 per animal. Mortality rates decrease by 3 percent and 4 percent for adults and subadults and by 10 percent for juveniles during the 20-years analysis period. The project is improving feed by providing 0.0075 kg of concentrate per female at ETB 3/kg.

14. The seventh model (**Camels, Pastoralist**) represents a pastoralist with a herd of 11 camels. The milk productivity is low, 3.6 liters per day, due to inappropriate feeding, poor husbandry practices, and lack of access to veterinary services. Due to all project interventions, milk productivity increases to 3.9 liters per day. The annual milking period length remains stable at 360 days per cow. The project interventions increase the cost of veterinary services, which almost double from ETB 16 to ETB 31 per animal. Due to better husbandry practices, mortality rates decrease by 11 percent for juveniles and by 1 percent for subadults during the 20-year analysis period. The project is improving feed by providing 0.016 kg of concentrate per female at ETB 3/kg.

15. The eighth model (**Sheep, Pastoralist**) represents a pastoralist with a herd of 16 sheep. Due to better husbandry practices and animal health, mortality rates decrease by 9 percent for juveniles and by 4 percent and 3 percent for subadults and adults, respectively, during the 20-year analysis period. The cost of veterinary services increases from ETB 9 to ETB 16.4 per animal.

Irrigation and water conservation management models

16. **Forage Production under Irrigation.** The project will support irrigation schemes for cultivating forage to improve animal feed and reduce production costs, thereby reducing feed prices. The following model shows 1 hectare of maize fodder cultivation under irrigation. The average maize yield will be 3 tons per hectare for Year 1, and due to all the project interventions, the yield increases to 5 tons per hectare year in Year 3, remaining stable for the rest of the project life. Inputs such as seed, fertilizer, and herbicides represent half of the total operational costs, and the other half represents labor costs.

17. The project will also support **Water Conservation**, specifically water-spreading weirs³² for growing maize for forage. The model considers 1 hectare of maize produced under the weir. The investment is equal to US\$1,250, mostly to build the weir. The average yield of maize straw increases from 3.5 tons per hectare to 5.7 tons per hectare, of maize cobs from .028 tons per year to .056 tons per year, and maize grain from .0710 tons per year to

³² GIZ data on yield and biomass measurements for the production year 2017 at Chifra (Ethiopia).



.1120 tons per year. Inputs such as seed and bags represent 30 percent of the operational cost; the other 70 percent represents costs of labor to prepare land, harvest, and carry out other operations.

18. **Forage Seed Production.** Another means of improving animal feed and reducing forage production costs is to increase the availability of forage seed and planting materials.³³ This model shows 1 ha of forage seed production. The investment is equal to US\$5,000 to build the irrigation infrastructure. The average forage seed yield will be 230 kg per year in Year 1, reaching 300 kg per year during Year 3 of production. Inputs such as seed, fertilizer, and herbicides represent almost 50 percent of the total operational costs, labor represents 30 percent, and the remainder is transportation costs.

Agribusiness and off-farm models

19. Ethiopia has a niche market for processing hides and skins and given the growing livestock population and improved collection of hides and skins, investing in tanneries could be a lucrative business opportunity.³⁴ This first cooperative model presents a **Tannery**³⁵ with a processing capacity of 150,000 m² of wet blue hides per year, reaching 90 percent capacity utilization at Year 6. The source of income is sales of finished leather. About 80 percent of the total operational cost represents the purchase of wet blue hides. The personnel involved in this plant are one manager, one accountant, one secretary, one technician, two supervisors, seven operators/plant workers, one cleaner, one driver, and one security guard.

20. The second model shows a cooperative **Slaughterhouse** for cattle and small ruminants (mainly goats) with a capacity of 610 tons per year (3 cattle and 30 goats per day).³⁶ This model represents a slaughterhouse where animals are purchased, slaughtered, and processed. The source of income is sales of processed meat, skins, and goat offal. Around 90 percent of the operational costs represent the purchase of animals. Year 1 is focused just on building the new slaughterhouse, and the operational rate increases yearly. In Year 8, the slaughterhouse operates at 90 percent of capacity. Losses decrease from 12 percent in Year 1 to the minimum percentage of 5 percent in Year 4. The number of staff employed in this processing unit is one manager, one accountant, one secretary, one quality control head (vet), two butcher supervisors, five butchers, one cleaner, one driver, and one security guard.

21. The third model represents a **Beekeeper** with five modern beehives producing 30 kg of honey per year. The use of modern beehives in Ethiopia is still very low, even though traditional beehives have a lower yield of 6-8 kg per year. Beekeeping is an excellent income-generating activity with positive environmental benefits such as plant pollination and conservation of natural flora.³⁷ It is also an activity that young people can easily pursue. In this model, losses decrease from 5 percent in Year 1 to reach 1 percent in Year 4. About 70 percent of the total operational cost represents purchases of sugar for feeding and maintenance and the remaining 30 percent is labor cost.

³³ ILRI data on forage seed production. Forage into use and benefits from adapting forage seed production and ex ante assessment of demand for improved forage seed and planting materials among smallholder farmers in Ethiopia: A contingent valuation analysis.

³⁴ ILRI (2017), The Ethiopian Livestock Sector Analysis.

³⁵ Model based on "Project Profile on the Establishment of Finished Leather Making Plant" Development Studies Associates (DSA). Investment Office ANRS (October 2008, Addis Ababa).

³⁶ Model based on "Feasibility Study for the Establishment of Meat Products Processing" Ethiopian Meat and Dairy Industry Development Institute, 2017.

³⁷ Model based on "Honey Production in Ethiopia: A Cost-Benefit Analysis of Modern vs Traditional Beekeeping Technologies." Development Discussion Paper: 2013–17 (USAID).



22. Model 4 presents a cooperative **Milk Collection Center** with improved quality of milk and an expansion in capacity from 200 liters to 500 liters per day, reaching the full capacity in Year 3. Cooling tanks, cans, milk testing equipment, and a generator will be used to cool milk, prevent spoilage, and contribute to sustainability and food safety. The project will provide training and equipment to enable the cooperative to meet milk quality standards, and these interventions enable losses to decrease from 18 percent to 3 percent in Year 3. The staff employed in this model is one manager/accountant, two operators, one cleaner, one security guard full-time, and one animal health specialist/veterinarian part-time.

23. Model 5 depicts a medium-scale **Milk Processing Plant**, with capacity to produce 500-1,000 liters of pasteurized milk per day at full development, reaching full development in Year 4. The personnel hired in this milk processing plant are one manager/accountant, two operators full-time, one additional operator part-time, one cleaner, and one security guard. The model is very sensitive to fluctuations in the raw milk price, and purchases of raw milk represent about the 70 percent of the operational costs.

24. The sixth model illustrates a **Milk Trader/Transporter**, increasing the amount of milk transported from 100 liters to 350 liters per day. This model is extremely sensitive to price and cost changes. Because it is the nature of the business to require a large amount of working capital to purchase raw milk, the cost of milk represents 84 percent of operating costs. The model also includes a sales assistant and the owner/manager. The without-project scenario includes daily purchase of 100 liters, while the with-project scenario assumes that milk purchases increase up to 300 liters per day. The average purchase price of raw milk is assumed at US\$0.36 (ETB 10), and the cost of transportation to markets is assumed to be 3 percent of the total milk cost.

25. The next model illustrates an off-farm activity, a **Workshop (Carpentry or Metal Working)**. This new off-farm activity is an attractive means of generating income for those opting out of pastoralism, particularly youth.

26. A major barrier to development of the livestock subsector is the lack of animal feed of acceptable quality. Meeting the demand for better-quality feed is the main rationale for investing in a higher number of animal feed processing plants. Model 8 describes an **Animal Feed Processing Unit**. The annual capacity of the processing unit is 10,000 tons of animal feed³⁸ or 40 tons per day. The source of income is sales of animal feed. The model is sensitive to fluctuations in prices of raw material (maize, bran cereals, oil cake, and so on), and purchase of raw material represents about the 90 percent of the total operational costs.

Summary of the performance of the financial models

27. Table A6.1 summarizes the financial performance of the household and cooperative models. The financial internal rate of return (FIRR), NPV, and benefit/cost ratio for the models are good, indicating that the proposed activities are financially viable.

28. **It is assumed that households gradually develop their enterprises, so that negative cash flows** during the first years are minimal. The partnership with the financial institutions should make it possible to overcome some remaining constraints. In addition, in the case of cooperatives, some project support will be used.

³⁸ Model based on "Feasibility Study for the Establishment of Animal Feed Processing." Ethiopian Meat and Dairy Industry Development Institute (2017, Ethiopia).



Table A6.1: Performance of the financial models

Model	Unit	Financial internal rate of return (%)	Net present value (US\$) †	Benefit/cost ratio
Livestock models				
Cattle Pastoralist Small Scale	Household	14.0	121	
Cattle Pastoralist Large Scale	Household	20.8	740	
Cattle Agro-pastoralist	Household	18.2	115	
Beef Fattening Small Scale	Household	67.7	5,945	
Beef Fattening Large Scale	Cooperative	52.4	389,159	
Goat Pastoralist	Household	27.8	184	
Camel Pastoralist	Household	21.6	608	
Sheep Pastoralist	Household	10.2	30	
Irrigation and water conservation models				
Irrigation Fodder Cultivation	Group	20.1	2,706	1.92
Water Conservation: Fodder Crops	Group	20.7	578	1.64
Forage Seed Production	Group	62.3	12,134	2.02
Agribusiness and off-farm models				
Tannery	Cooperative	20.2	204,562	1.18
Slaughterhouse	Cooperative	58.8	444,901	1.16
Beekeeping	Household	26.7	629	1.45
Milk Collection Center	Cooperative	14.9	16,526	1.04
Milk Processing Unit	Cooperative	27.0	105,178	1.12
Milk Trader	Household	28.3	4,529	1.02
Workshop (Carpentry, Metal Working)	Household	24.9	6,439	1.27
Animal Feed Processing	Cooperative	30.2	1,418,452	1.10

† Financial analysis for over 15 years at 10 percent discount rate, for consistency with the other models.

B. Project Costs and Indicators for the Results Framework

29. Table A6.2 provides information on project costs and beneficiaries. The average cost per beneficiary is approximately US\$174.

Table A6.2: Project costs per component and beneficiary

Component	Costs of World Bank, IFAD (US\$ millions)	Number of beneficiaries	Cost/beneficiary (US\$)
Integrated Rangeland Development and Management	223	2,239,500	99.57
Livelihood Improvement and Diversification	110	2,500,000	44
Improving Basic Services and Capacity Building	76	2,500,000	30
Project Management, Monitoring, and Evaluation	42	0	n.a.
Total	451	2,500,000	174

C. Economic Analysis

Main assumptions

30. **Economic benefits and costs.** The period of analysis is 20 years to account for the phasing and realization of benefits of the proposed interventions. Economic benefits from the farm and enterprise models have been aggregated using average incremental net benefits and beneficiaries for each livestock, agribusiness, and off-farm



activity under the project and assuming different adoption rates, extracted from the costing exercise. Economic benefits from enterprise models have been aggregated using an expected number of small enterprises to be supported by the project. Benefits are phased in progressively for all types of interventions. For the commercial activities, the economic benefits have been derived from the financial models by applying economic prices for investments, inputs, and outputs. All models are expressed in 2018 constant prices. Conservative assumptions and parameters have been applied, to avoid overestimation of benefits and provide realistic results.

31. To capture the social benefits of Component 3, a factor of 25 percent was applied on the incremental benefit flow of the farm and enterprise models. In addition, the environmental benefits have been calculated using the EX-ACT tool (see below).

32. In line with estimates from the Economist Intelligence Unit, the official exchange rate has been set at US\$1.00: ETB 27.75, the rate prevailing in August 2018. The economic cost of the project has been calculated using the COSTAB software. Corrections have been made to avoid double counting.

33. **Economic prices.** Financial prices have been converted into economic prices by applying the standard conversion factors (SCFs), presented in Table A6.3. For non-tradable goods, the SCF of 1 was used since they are generally purchased at the local level, without significant tax distortions. For labor, the opportunity cost conversion factor is 0.77,³⁹ based on the rural unemployment rate. For the tradeable goods and equipment, the SCF of 0.86 has been calculated. Import parity prices have also been calculated for milk and red meat, which are the main outputs of the project. Both have been derived from international market prices. The SCF is 0.94 for milk and 0.95 for red meat.

34. In conformity with the World Bank “Technical Note on Discounting Cost and Benefits in Economic Analysis,” a 6 percent discount rate has been used to reflect the social opportunity cost of capital in Ethiopia.⁴⁰ This discount rate has been applied to calculate the economic NPV and future net incremental benefits.

35. **The environmental externalities** were calculated by using EX-ACT, a tool developed by the FAO, to calculate the economic value from the GHG mitigated. EX-ACT enables investment planners to design program activities that target high-return outcomes in terms of climate change mitigation and is intended to complement conventional ex ante economic analysis.⁴¹ The result shows a marginal carbon emission savings for the project of 9,926,759 tCO₂eq, equivalent to 496,338 tCO₂eq per year. The World Bank “Guidance Note on the Shadow Price of Carbon in Economic Analysis” (2017) recommends that economic analysis for a project should use an estimation range of the carbon price of US\$40-80. The economic indicators have been calculated for (1) excluding environmental benefits; (2) environmental benefits at constant market price; (3) at the low estimate range; and finally (4) at the high estimate range.

Table A6.3: Standard conversion and social discount factors

Item	Discount factor
Tradeable goods and equipment	0.86
Vehicles	0.55
Nontradable goods	1.00
Milk	0.94
Meat	0.95
Labor	0.77
Social discount rate	6%

³⁹ Rural youth and employment in Ethiopia (December 2016), Ethiopia Strategy Support Program - EDRI and IFPRI.

⁴⁰ World Bank (2016), “Technical Note on Discounting Costs and Benefits in Economic Analysis of World Bank Projects.”

⁴¹ EX-ACT. User Manual: “Estimating and Targeting Greenhouse Gas Mitigation in Agriculture”, FAO, World Bank, and the Institut de Recherche pour le Développement.



Aggregation of beneficiaries and phasing

36. The target population was estimated to be 500,000 households, disaggregated as follows: (1) 447,900 households involved in PAP activities and (2) 52,100 households involved in agribusinesses and off-farm activities. Table A6.4 provides an overview of the phasing of households, benefitting from different interventions during the project life, which was used for aggregation in the economic analysis.

Results of the economic analysis

37. The project economic cash flow represents the overall project aggregation of economic costs and benefits. It includes the net incremental benefits of each financial model in economic terms, converted with shadow prices, and multiplied by the number of direct beneficiaries of each category. It also includes additional social benefits as well as institutional benefits of investments under Component 3.

38. Economic costs associated with improving livestock productivity and agribusiness/off-farm activities were estimated at US\$362 million. After the project period, an annual cost of US\$5.7 million is assumed to maintain the results of the project. The economic costs have then been deducted from the overall economic benefit stream to obtain the project’s net incremental benefit stream.

39. The economic analysis shows satisfactory results (Table A6.5), with an NPV at US\$386.9 million and a 14.7 percent EIRR, suggesting that the overall project is economically profitable.

Table A6.4: Phasing and number of households

Models		Y1	Y2	Y3	Y4	Y5	Y6	Total
Models for pastoralist and agro-pastoralist activities (Component 2 and Sub-Component 2.1)								
Cattle Pastoralist Small Size	household	0	18,000	18,000	18,000	18,000	18,000	90,000
Cattle Pastoralist Large Size	household	0	7,500	7,500	7,500	7,500	7,500	37,500
Cattle Agro-Pastoralist	household	0	21,000	21,000	21,000	21,000	21,000	105,000
Beef Fattening Small Size	household	0	3,000	3,000	3,000	3,000	3,000	15,000
Beef Fattening Large Size	household	0	2,400	2,400	2,400	2,400	2,400	12,000
Goats Pastoralist	household	0	15,000	15,000	15,000	15,000	15,000	75,000
Camel Pastoralist	household	0	5,000	5,000	5,000	5,000	5,000	25,000
Sheep Pastoralist	household	0	12,000	12,000	12,000	12,000	12,000	60,000
Irrigation Fodder Cultivation	household	0	2,000	2,000	2,000	2,000	2,000	10,000
Water Conservation: Fodder Cultivation	household	0	4,000	4,000	4,000	4,000	4,000	20,000
Forage Seed Production	household	0	100	100	100	100	100	500
Subtotal		0	90,000	90,000	90,000	90,000	90,000	450,000
Models for agribusiness and off-farm activities (Sub-Component 2.2)								
Tannery	household	0	120	120	120	120	120	600
Slaughterhouse	household	0	240	240	240	240	240	1,200
Beekeeping	household	0	2,000	2,000	2,000	2,000	2,000	10,000
Milk Collection Centre (MCC)	household	0	960	960	960	960	960	4,800
Dairy Processor (small scale)	household	0	480	480	480	480	480	2,400
Milk Traders	household	0	1,500	1,500	1,500	1,500	1,500	7,500
Workshop (wood, metal)	household	0	4,500	4,500	4,500	4,500	4,500	22,500
Animal Feed Processing	household	0	200	200	200	200	200	1,000
Subtotal			10,000	10,000	10,000	10,000	10,000	50,000
Total Households			100,000	100,000	100,000	100,000	100,000	500,000



Table A6.5: Results of the economic analysis

	Economic internal rate of return (%)	Net present value at 6%, 20 years
Base scenario	14.7%	US\$386.9 million

40. **Sensitivity analysis.** Results were tested for sensitivity to variations in benefits and costs and for various lags in the realization of benefits. The two most impactful scenarios are a delay of two years in the generation of benefits or a decline of 30 percent relative to the base scenario, which would reduce the EIRR to 11.4 percent and 10.6 percent, respectively, substantially above the discount rate (Table A6.6). Cost overruns would have a similar moderate impact, with the EIRR falling to 11.7 percent with a 30 percent increase. Individually taken, all scenarios show robust results under all hypothetical situations.

41. **The project is profitable under all scenarios, without and with valuation of environmental benefits.** The scenario without the valuation of environmental benefits is considered the baseline scenario; in this scenario, the NPV is estimated to be US\$387 million, and the EIRR is estimated to be 14.7 percent. With environmental valuation at market prices, the project is expected to generate an NPV of US\$433 million and an EIRR of 15.7 percent. Including the GHG mitigation valued at the low estimate range (on average, US\$49/tCO₂eq), LLRP could generate an NPV of US\$609 million and an EIRR of 19.3 percent. With environmental benefits valued at the high estimate range (on average, US\$98/tCO₂eq), the project’s results would be an NPV of US\$831 million and an EIRR of 23.8 percent. These four scenarios are summarized in Table A6.7.

Table A6.6: Results of the sensitivity analysis

Modelling scenario	Economic internal rate of return (%)	NPV (US\$ millions)
Base scenario	14.7	386.9
Delay of benefits		
By 1 year	12.9	316.2
By 2 years	11.4	246.3
Decrease of benefits		
By 10%	13.5	314.5
By 20%	12.1	242.1
By 30%	10.6	169.7
Increase of benefits		
By 10%	15.7	459.3
By 20%	16.7	531.7
Increase of costs		
By 10%	13.6	353.2
By 20%	12.6	319.5
By 30%	11.7	285.8



Table A6.7: Scenarios for valuation of environmental benefits

Indicators	A) Results excl. ENV benefits	B) Results incl. ENV benefits, valued @ market cost (10 USD/tCO2e)	C) Results incl. ENV benefits, valued @ low estimate range (average 49 USD/tCO2e)	D) Results incl. ENV benefits, valued @ high estimate range (average 98 USD/tCO2e)
	NPV NAB (USD, @6%)	386,943,948	432,811,504	609,107,457
ERR	14.7%	15.7%	19.3%	23.8%
NPVb (USD, @6%)	724,082,885	769,950,440	946,246,394	1,167,813,802
NPVc (USD, @6%)	337,138,936	337,138,936	337,138,936	337,138,936
B/C ratio	2.15	2.28	2.81	3.46
Discount rate	6%	6%	6%	6%
Switching values - Benefits	-53%	-56%	-64%	-71%
Switching values - Costs	115%	128%	181%	246%

42. **Risk analysis.** A preliminary risk has been undertaken to further investigate the robustness of the economic results of the project. Building on the project risks identified during preparation of the project, the impacts of key risks on the economic results are shown in Table A6.7. Based on previous project experiences, the probability distributions of each of the five types of potential impacts on project returns have been estimated and are summarized in Table A6.9.

Table A6.8: Risk analysis implications for the economic and financial analysis

Key risks identified		Implications for the economic and financial analysis					
		Rating	+ Delay	- Benefits	+ Costs	- Adoption	- Productivity
1	Political and governance	High	Yes	Yes			
2	Institutional capacity and sustainability	Substantial	Yes		Yes		
3	Fiduciary	Substantial	Yes		Yes		
4	Stakeholder	Substantial		Yes		Yes	
5	Climate change	Substantial					Yes

Table A6.8: Estimated probability distributions for the key impacts

Distributions							
Timing/delay	3-year delay	2-year delay	1-year delay	On time			
	5%	15%	30%	50%			
Benefits fluctuation	-30%	-20%	-10%	No change	+10%		
	10%	15%	20%	50%	5%		
Project costs	-5%	No change	+5%	+10%	+15%		
	5%	50%	25%	15%	5%		
Adoption	-20%	-15%	-10%	-5%	No change		
	5%	10%	15%	20%	50%		
Productivity	-25%	-20%	-15%	-10%	-5%	No change	+5%
	1%	2%	5%	15%	20%	50%	7%

43. **Risk analysis results.** Using the @Risk tool, a simulation with 10,000 iterations was executed for the values of the EIRR and the NPV of the net additional benefits. The results for the EIRR indicate that the expected mean results are lower than the static value calculated in the economic and financial analysis. Even so, the project remains economically viable in all possible scenarios.



ANNEX 7: GREENHOUSE GAS ACCOUNTING

COUNTRY: Ethiopia Lowlands Livelihood Resilience Project

Motivation

1. The World Bank *Environment Strategy* (2012) adopts a corporate mandate to account for the GHG emissions for investment lending. The quantification of GHG emissions is an important step in managing and ultimately reducing emissions, as it provides an understanding of a project's GHG mitigation potential and can support sectoral strategies toward low-carbon development.

GHG Accounting Methodology

2. The World Bank has adopted EX-ACT, developed by FAO in 2010⁴² to estimate the impact of agricultural investment lending on GHG emissions and carbon sequestration in the project area. EX-ACT allows the assessment of a project's net carbon balance, which is defined as the net balance across all GHGs expressed in CO₂ equivalents that will be emitted or sequestered due to project implementation ("with project"), as compared to a business-as-usual scenario ("without project"). EX-ACT is a land-based accounting system, estimating CO₂eq stock changes (that is, emissions or sinks of CO₂) expressed in equivalent tons of CO₂ per hectare and year. The tool was designed mostly using data from the Intergovernmental Panel on Climate Change "Guidelines for National Greenhouse Gas Inventories" (2006), which furnishes EX-ACT with recognized default values for emission factors and carbon values in soils and biomass (the so-called "Tier 1 level" of precision).

Assumptions in the EX-ACT Model

3. The project proposes several activities that were captured with the EX-ACT GHG accounting tool. The assumptions for this analysis were informed by discussions during project preparation and are aligned to the assumptions of the economic and financial analysis (Annex 6). The project area covers six regions of Ethiopia. The climate and moisture regime in these regions is assumed to be warm temperate. The dominant soil type is High Activity Clay. The project implementation duration is 6 years, and the capitalization period is assumed to be 14 years. Dynamics of implementation are assumed to be linear over the project period. Default Tier 1 coefficients are used. The project aims to improve livelihood resilience of pastoral communities through investments in rangeland and pasture improvements, strategic public economic infrastructure, and enhanced production and productivity of the PAP systems, including small-scale irrigation and water conservation measures. It is expected that about 500,000 households will be reached, mainly PAP households in the targeted rangelands. The benefits will come from increased livestock productivity due to increases in livestock outputs through better availability of forage (grassland management and forage cultivation) and increased resilience to climate change due to water management and irrigation schemes.

4. The GHG calculation is based on the following elements derived from the economic and financial analysis: (1) increased livestock productivity and more economic management; (2) improved rangeland and pasture management; (3) incremental production from productivity increases (maize and vegetables), with a shift from traditional cultivation to improved agronomic practices and water conservation, as well as fodder crop production;

⁴² See <http://www.fao.org/tc/exact/ex-act-home/en/>.



and (4) a slightly increased use of fertilizer and agrochemicals. The assumptions for the GHG calculation are summarized in Table A7.1.

Table A7.1: Data inputs to EX-ACT in the without-project and with-project scenarios

Activities	Without-project scenario	With-project scenario																
Livestock population growth		Herd management is assumed to be more efficient, with 80 percent of the total herd benefiting from improved animal feeding practices, leading to higher turnover (earlier slaughtering) and improved availability of forage for pastoralists and agro-pastoralists, although not to an increase in total herd size																
Productivity increases	5,000 ha under traditional cultivation, thereof: <ul style="list-style-type: none"> Maize 2,000 kg/ha 10,000 ha with no water conservation practices: <ul style="list-style-type: none"> Maize 710 kg/ha 	5,000 ha under improved agronomic practices: <ul style="list-style-type: none"> Maize 5,000 kg/ha 10,000 ha under irrigation and water conservation practices (water-spreading weirs) <ul style="list-style-type: none"> Maize 1,120 kg/ha 250 ha of forage seed cultivation and Irrigation and water conservation measures <ul style="list-style-type: none"> 300 kg/ha 																
Rangeland management	715,000 ha: Initial state is considered moderately degraded, of which without the project: <ul style="list-style-type: none"> 700,000 ha would be severely degraded, † and 15,000 ha would remain moderately degraded‡ 	Number of hectares: <ul style="list-style-type: none"> 10,000 ha: Improved without input management 5,000 ha: Improved with input improvement 700,000 ha of moderately degraded rangeland 																
Energy and fuel consumption for agribusiness and off-farm activities (59,100 households), including: small workshops (carpentry, metal working), tannery, slaughterhouse, beekeeping, milk collection center, dairy processing, and animal feed processing	<table border="1"> <tr> <td>Electricity</td> <td>0 MWh/yr</td> </tr> <tr> <td>Gasoil/diesel</td> <td>0 m³/yr</td> </tr> </table>	Electricity	0 MWh/yr	Gasoil/diesel	0 m ³ /yr	<table border="1"> <tr> <td>Electricity</td> <td>1.5 million MWh/yr</td> </tr> <tr> <td>Gasoil/diesel</td> <td>100 m³/yr</td> </tr> </table>	Electricity	1.5 million MWh/yr	Gasoil/diesel	100 m ³ /yr								
Electricity	0 MWh/yr																	
Gasoil/diesel	0 m ³ /yr																	
Electricity	1.5 million MWh/yr																	
Gasoil/diesel	100 m ³ /yr																	
Consumption of fertilizer and agrochemicals (insecticides, herbicides) on a total area of 5,250 ha of improved annual crops	<table border="1"> <tr> <td>N fertilizers</td> <td>11.81 t</td> </tr> <tr> <td>Phosphorus</td> <td>12.68 t</td> </tr> <tr> <td>Urea</td> <td>30.18 t</td> </tr> <tr> <td>Insecticides/herbicides</td> <td>0 t</td> </tr> </table>	N fertilizers	11.81 t	Phosphorus	12.68 t	Urea	30.18 t	Insecticides/herbicides	0 t	<table border="1"> <tr> <td>N fertilizers</td> <td>90.56 t</td> </tr> <tr> <td>Phosphorus</td> <td>35.43 t</td> </tr> <tr> <td>Urea</td> <td>90.56 t</td> </tr> <tr> <td>Insecticides/herbicides</td> <td>131.25 t</td> </tr> </table>	N fertilizers	90.56 t	Phosphorus	35.43 t	Urea	90.56 t	Insecticides/herbicides	131.25 t
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N fertilizers	90.56 t																	
Phosphorus	35.43 t																	
Urea	90.56 t																	
Insecticides/herbicides	131.25 t																	

† A “severely degraded” system is considered to have a corresponding soil C stock of 80 t C/ha.

‡ A “moderately degraded” system is considered to have a corresponding soil C stock of 83.6 t C/ha.



5. Results show that the project can constitute a sizeable net carbon sink of $-9,926,759$ tCO₂eq over 20 years, thus $-496,338$ tCO₂eq annually, due to the introduction of improved rangeland management, agricultural management practices, water conservation techniques, and livestock productivity. The rangeland management activities constitute an absolute carbon sink with a carbon balance of $-440,381$ tCO₂eq per year in the with-project scenario; the carbon balance for agricultural activities is $-14,777$ tCO₂eq per year, and for livestock population growth the projection is $-59,547$ tCO₂eq per year. The use of both electricity and fuel lead to an increase of $14,970$ tCO₂eq per year owing to increased transportation and processing as a result of improved market opportunities, and greater use of fertilizer and insecticides/herbicides leads to an increase of $3,346.2$ tCO₂eq per year.

Table 7.1. Detailed results of the EX-ACT analysis

Project Name	Pastoral and Agro-Pastoral		Climate	Warm Temperate (Moist)			Duration of the Project (Years)		20		
Continent	Africa		Dominant Regional Soil Type	HAC Soils			Total area (ha)		730250		
Components of the project	Gross fluxes			Share per GHG of the Balance					Result per year		
	Without	With	Balance	All GHG in tCO ₂ eq			N ₂ O	CH ₄	Without	With	Balance
All GHG in tCO ₂ eq			Biomass	Soil	Other	Positive = source / negative = sink					
Land use changes											
Deforestation	0	0	0	0	0	0	0	0	0	0	0
Afforestation	0	0	0	0	0	0	0	0	0	0	0
Other LUC	0	0	0	0	0	0	0	0	0	0	0
Agriculture											
Annual	0	-295,545	-295,545	0	-295,545	0	0	0	0	-14,777	-14,777
Perennial	0	0	0	0	0	0	0	0	0	0	0
Rice	0	0	0	0	0	0	0	0	0	0	0
Grassland & Livestocks											
Grassland	7,854,000	-953,625	-8,807,625	0	-8,807,625	0	0	392,700	-47,681	-440,381	
Livestocks	89,434,073	88,243,139	-1,190,934				-276,951	-913,982	4,471,704	4,412,157	-59,547
Degradation & Management	0	0	0	0	0	0	0	0	0	0	0
Coastal wetlands	0	0	0	0	0	0	0	0	0	0	0
Inputs & Investments	9,068	376,413	367,345			360,661	6,684	0	453	18,821	18,367
Fishery & Aquaculture	0	0	0			0	0	0	0	0	0
Total	97,297,140	87,370,381	-9,926,759	0	-9,103,170	360,661	-270,268	-913,982	4,864,857	4,368,519	-496,338
Per hectare	133	120	-14	0.5	-12.5	0.5	-0.4	-1.3			
Per hectare per year	6.7	6.0	-0.7	0.0	-0.6	0.0	0.0	-0.1	6.7	6.0	-0.7

6. The monetary value of the GHG balance has been estimated and taken into account as an economic benefit of the project (Annex 6). The recent draft guidance note on Shadow Price of Carbon in Economic Analysis (September 2017) recommends “projects’ economic analysis use a low and high estimate of the carbon price starting at US\$40 and 80, respectively, in 2020 and increasing to US\$50 and 100 by 2030.” Marginal abatement costs are designed to reflect the carbon price necessary to achieve various climate change targets. Carbon market prices are the market value of CO₂eq emission reductions or sequestration (offsets) that are registered and sold through various market structures. The economic indicators have been calculated (1) excluding environmental benefits; (2) for environmental benefits at a constant market price; (3) at a low estimate range; and finally (4) at a high estimate range.⁴³

⁴³ “Carbon pricing,” <https://www.worldbank.org/en/results/2017/12/01/carbon-pricing>.



ANNEX 8: CLIMATE CHANGE CO-BENEFITS

COUNTRY: Ethiopia

Lowlands Livelihood Resilience Project

1. Climate change, as evidenced by increased frequency and severity of droughts and floods in the past two decades, is a serious concern for Ethiopia. The country has witnessed eight major droughts in the past 15 years, with significant adverse consequences for the economy and livelihoods. In the past 10 years, the Ethiopian economy witnessed less than 10 percent growth only in three years (2009, 2012, and 2016), which were all associated with severe droughts. Long-term climate change predictions are mixed, with some models predicting a much drier climate with worsening droughts, while other models predict a much wetter climate, contributing to floods. Despite these differences, the overall consensus is that drought will continue to be a major stress factor for the Ethiopian economy and livelihoods over the next decade.
2. Pastoralists and agro-pastoralists residing in the Ethiopian Lowlands have been severely affected by the changing climate and frequent droughts. The resulting large-scale livestock mortality and morbidity have caused households to lose more of their assets. Some have been forced to exit pastoralism and agro-pastoralism. The humanitarian and social safety net caseload has been consistently higher in these areas than in the rest of the country.
3. A request from the GoE that the World Bank and IFAD consider supporting an effort to build resilience of PAP communities against frequent droughts and the changing climate has been the primary motivation behind this livelihood resilience project. All of the components and subcomponents have been designed to address both climate adaptation and mitigation issues in the Ethiopian Lowlands. The GoE has adopted the IDDRSI Strategy (2013) as its primary drought and climate change resilience strategy for the Lowlands areas. The strategy addresses the root causes and impacts of climate change-induced recurrent droughts and related shocks in the IGAD region in a sustainable and holistic manner through seven priority intervention areas: (1) ensuring equitable access and sustainable use of natural resources, while improving environmental management; (2) enhancing market access, facilitating trade, and availing versatile financial services; (3) providing equitable access to livelihood support and basic social services; (4) improving disaster risk management capabilities and preparedness for effective response; (5) enhancing the generation and use of research, knowledge, technology, and innovations in the IGAD region; (6) promoting conflict prevention and resolution and peace building; and (7) strengthening coordination mechanisms and institutional arrangements for more organized, collaborative, and synergistic action, as well as improving partnerships to increase the commitment and support necessary to execute the objectives of the initiative. The LLRP and its investment framework are perfectly aligned with the IDDRSI priority intervention areas.
4. The activities of the proposed project also adhere to the seven principals of environmental sustainability of livestock investment that are highlighted in the World Bank “Guide to Investing in Sustainable Livestock” (2018). They include: (1) contribute to a sustainable food future; (2) enhance carbon stocks; (3) increase productivity at the animal and herd levels; (4) source feed sustainably; (5) couple livestock to land; (6) minimize fossil fuel use; and (7) foster an enabling environment.
5. Table A8.1 explains how the various subcomponents of the proposed project will foster climate change adaptation and mitigation.



Table A8.1: Climate change adaptation and mitigation benefits of the project

Subcomponent	Climate change adaptation	Climate change mitigation
1.1: Integrated Rangeland Management Planning (US\$16.79 million)	Improving the planning, management, and monitoring of rangelands is at the core of a climate change adaptation strategy for pastoralist and agro-pastoralist (PAP) communities.	Planning undertaken through this subcomponent should increase soil carbon stocks and carbon sequestration, highlighting one way in which development investments help to reduce GHG emissions and mitigate effects of climate change.
1.2: Supporting Strategic Investments (US\$202.59 million)	SIs financed under this subcomponent, such as natural resource management, rangeland development, small-scale irrigation, water conservation, market infrastructure, and feed and fodder banks, all contribute to or are core aspects of adaptation to climate change in the Ethiopian Lowlands. Strategic destocking and restocking is a fundamental drought management strategy, but it requires functioning markets; hence, investment in market infrastructure is at the core of climate change adaptation in pastoral areas. In addition, feed and fodder banks, by providing animal feed during droughts, are critical to ensuring that animals survive.	By improving degraded rangelands, afforestation, green cover, and biomass production, this subcomponent will lead to carbon sequestration and soil carbon capture. Market infrastructure development will feature bio digestors as an integral element of the design, and any small-scale irrigation will deploy energy-efficient renewable solutions, which will all contribute to reduced GHG emissions. Improved feed and fodder availability (through fodder banks and improved pastures) will reduce enteric fermentation and GHG emissions.
1.3 Conflict Management (US\$4 million)	Climate change is driving conflicts, especially around access to key resources (water, pasture, migration routes) in the Lowlands. This subcomponent will improve community and institutional capacity to manage conflict and will help populations adapt to a changing climate.	
2.1: Enhancing Pastoral and Agro-pastoral Production Systems (US\$54.29 million)	This subcomponent is aimed at helping pastoralists and agro-pastoralists adopt climate-smart agriculture by investing in agricultural extension services. The end outcome of improved public extension services is enhanced resilience to drought, increased adaption of agronomic and livestock practices to a changing climate, and reduced emission intensity. The extension work will support nutrition education and homestead gardening (through the curriculum and demonstrations of PAP Field schools) to help communities cope with drought and changing climate. Livestock mortality and morbidity are often the principal direct impacts of drought. By improving delivery of animal health services, this subcomponent will help reduce mortality and morbidity during droughts.	By improving the productivity of PAP systems, this subcomponent will reduce the GHG emission intensity from the livestock sector. In addition, improvements in animal feed (reducing enteric fermentation of livestock) and better herd management will contribute to mitigation.
2.2: Promoting Livelihood Diversification and Market Access (US\$55.47 million)	Drought and the resulting large-scale loss of assets is the principal reason why a large share of the population abandoned pastoralism. This subcomponent, by promoting diversification and reducing reliance on rainfed PAP production systems, is a core element in the transformation toward greater resilience in PAP areas. This subcomponent will focus on youth (excluded	Emissions will be reduced through the project's support for alternate livelihoods, such as skill and enterprise development for off-grid energy (solar and bio digestors). Better market access will increase animal off-take and slaughter at appropriate times, thereby reducing carbon emissions. Tighter supply chain



Subcomponent	Climate change adaptation	Climate change mitigation
	<p>from pastoralism by drought) and women (of PAP households) and, by diversifying their sources of livelihood, help them adapt to changing climate.</p> <p>Improved access and integration into the market system is another core element in reducing vulnerability of PAP communities to a changing climate. A readily available market for livestock will improve the efficiency of PAP production system and reduce pressure on rangelands, both of which contribute to enhanced resilience.</p>	<p>integration will also contribute to reducing emissions.</p>
<p>3.1 Provision of Basic Social Services and Infrastructure (US\$53.2 million)</p>	<p>Droughts have severe adverse impacts on people as well as animals. Resilience to the impacts of drought significantly improves with improved access to basic social services (such as human healthcare, water supply, sanitation and hygiene, veterinary services, and others) in the short term and access to basic education and other services in the medium to long term. For that reason, humanitarian agencies are often involved in delivering basic social services as part of their emergency drought responses. Improving target beneficiaries' access to sustainable and equitable basic social services is another core element in improving the capacity of these communities to adapt to droughts and the changing climate in the medium to long term.</p>	<p>Ensuring sustainable and equitable access to basic social and economic services, such as health, water, sanitation, hygiene, veterinary services, basic education, and the integration of off-grid clean energy sources (solar and bio digestors) is central to the project's social service interventions and will enhance capacity in the target communities to mitigate the effects of climate change.</p>
<p>3.2 Institutional Capacity Building (US\$6.06 million)</p>	<p>In the weak institutional environment of the project target areas, building institutional capacity is much needed to achieve climate adaptation goals. By improving the institutional, physical, and human resource capacities of the public service providers, the project will help in availing local and national-level climate change adaptation capacities.</p>	<p>Supporting the institutional capacity will be integral to meeting Ethiopia's Climate Resilient Green Economy and national mitigation goal.</p>
<p>3.3 Knowledge Management, Research, and Policy Support (US\$16.46 million)</p>	<p>This subcomponent will collate local knowledge on adaptation, finance adaptive research to enhance resilience, and finance policy action to support adaption goals.</p> <p>The research will support the agenda of drought-tolerant livestock and crop varieties and research on livestock and crop management practices to adapt to a changing climate.</p> <p>Innovative pilots will deliver improved information (market, weather, and conflict) through mobile phones and contribute to improved decision making. Rangeland monitoring through remote sensing will enhance rangeland management.</p> <p>Policy support will focus on supporting systems, processes, regulations, and policies that contribute to better adaption to changing climate.</p>	<p>An improved knowledgebase and policy environment will also contribute to maximizing mitigation through research, informing policies that can reduce emissions, and supporting knowledge management around emission.</p>



ANNEX 9: SUMMARY OF LLRP SOCIAL DEVELOPMENT PLAN

1. As stated in Table A9.1, the social development plan will make certain that the project and its implementing agencies at various levels will respect the dignity, rights, and culture of groups meeting the OP 4.10 requirements and ensure that these people benefit from LLRP in a sustainable manner. The plan may be restructured during implementation, and further consultations will be undertaken for the underserved and vulnerable groups to ensure their full participation. The matrix in the table summarizes potential opportunities, social risks, and challenges, along with their mitigation measures, responsible bodies, and budget. Detailed contents of the Social Development Plan are included in the LLRP SA.

Table A9.1: Summary of LLRP Social Development Plan

Existing challenge vs. risk	Potential risks and challenges	Mitigation measures	Responsible body	Necessary resources/budget
Component 1: Integrated Rangeland Development and Management				
Challenge	Poor participatory rangeland management capacity and investment plans in natural resource and pasture.	Allocate resources and required skills for improved rangeland management, soil and water resource development strategies following the CDD approach.	PCU	Core activity of Component 1
Challenge	Prevailing Lowlands livelihoods are highly vulnerable to climatic shocks, primarily droughts as well as livestock diseases. Pressure on natural resources due to degradation, soil erosion, particularly on grazing land and water.	Improve degraded rangeland through afforestation activities, increasing green cover, and biomass production.	PCU	Core activity of Component 1
Risk	Underserved people may not be able to benefit from the project due to the nature of their livelihoods (pastoralism and agro-pastoralism).	<ul style="list-style-type: none"> - Participatory mapping of human and livestock mobility patterns with active engagement of pastoralists, including seasonally mobile groups. - Development of infrastructure (water) and rangeland management procedures to ensure provision of benefits to pastoralists. 	RCST	Facilitators, logistics, and infrastructure budget; covered by Components 1 and 4
Challenge	The invasion of <i>P. juliflora</i> deteriorated and reduced the diversity of grazing land (grasses, bushes, and herbaceous plants) and water in Afar Regional State and Oromia Region, ultimately changing grazing land ecosystem.	<ul style="list-style-type: none"> - Employ more labor-intensive methods such as cutting and burning as well chemical application. - Process <i>P. juliflora</i> to provide extra feed for livestock. - Support small scale cooperatives and business activities such as making charcoal, flour, and animal feed from <i>P. juliflora</i>. 	PCU, RCST	Core activity of Component 1
Risk	Risk that traditional rules and regulations could weaken, especially with the introduction of privatization, commercialization, and individualization on PAP community resources like water and grazing land.	<ul style="list-style-type: none"> - Participatory planning approaches. - Focus group discussions throughout the project lifecycle. - Embed research/anthropologists - Adaptive management to integrate community feedback and adjust project interventions. 	PCU, RCST, woreda extension staff, universities, CSOs, firms	Budgets of facilitators and researchers budgets covered by Subcomponents 1.3 and 3.3 and Component 4
Challenge	Lack of experience in natural resource management and rangeland development.	- Provision of training in a form accessible to local stakeholders (language, culturally sensitive, etc.).	Woredas, RCST, PCU	Core activity of Component 1
Challenge	Shortage of water for humans and animals	LLRP should support strengthening of existing water bases and further development of new water sources.	Woredas, RCST	Core activity of Component 1
Component 2: Livelihood Improvement and Diversification				
Challenge	Livestock production has shown decreasing trend due to shortage of	- Improve animal feed preparation system.	Woredas, RCST, PCU	Core activity of Component 2



Existing challenge vs. risk	Potential risks and challenges	Mitigation measures	Responsible body	Necessary resources/budget
	pasture, recurrent drought, and animal diseases.	<ul style="list-style-type: none"> - Provide better herd management methods through training and equipment. - Mechanisms to restock veterinary medicines and veterinary centers that are not functioning to improve livestock health and enhance productivity by exploring and developing PPP for veterinary services. - Create employment opportunities for youth in long-term small and medium enterprise, and private sector option for veterinary services. 		
Risks	Elite capture of and/or different interest groups, including traditional authority structures, in influencing community prioritization and manipulation of subprojects.	<ul style="list-style-type: none"> - Prepare inclusive training methodologies. - Proactive engagement of vulnerable groups. - Transparent consultation, targeting, and project selection processes. - Transparent reporting on project interventions. - Affirmative action for vulnerable groups. 	Woredas, RCST, PCU	Mainstreaming in activities of Component 2
Risks	Due to absence of a culture of trading in market centers in some PAP communities, market centers might be abandoned.	<ul style="list-style-type: none"> - Demand-driven market development and site selection in a participatory approach. - Participatory development of site-specific market management plan. 	Woredas, RCST, PCU	Core activities of Components 1 and 2
Risks	Ensure an inclusive strategy for vulnerable groups who cannot afford a minimum cash contribution to run income generating activities.	<ul style="list-style-type: none"> - Regular stakeholder engagement to discuss developments and provision of pilot funds for pro-poor innovations on social inclusion. - Participatory assessment of opportunities for vulnerable groups for developing inclusive targeting procedure. - Affirmative action and material support for vulnerable groups. - Assess and adapt to include vulnerable groups. 	Woredas, RCST, PCU	Mainstreaming of measures throughout activities of Components 2 and 3
Risk	Followers of Islam may not be interested in standard credit facilities.	<ul style="list-style-type: none"> - Support MFIs in setting up Islamic banking packages (available in Ethiopia). 	Woredas, RCST, PCU	Core activity of Component 2
Risk	Beneficiaries may receive credit without understanding and readiness to engage in livelihood activities.	<ul style="list-style-type: none"> - Financial literacy training. - Develop and apply financial services adapted to PAP situations. 	Woredas, RCST, PCU	Core activity of Component 2
Challenge	Lack of market and commercialization linkages and inaccessibility of roads.	<ul style="list-style-type: none"> - Support new market arrangements such as public auctions and out grower contracts. - Facilitate partnerships with private sector (wholesale traders, input suppliers, slaughterhouses, veterinary and phytosanitary input suppliers, and other relevant service providers). - Support priority value chains, including: live animals and livestock products; dairy processing and marketing; feed and forage production and marketing; crops (maize, sorghum, 	Woredas, RCST, PCU	Core activity of Component 2



Existing challenge vs. risk	Potential risks and challenges	Mitigation measures	Responsible body	Necessary resources/budget
		etc.) and vegetables; and other income-generating activities such as beekeeping, handicrafts, mining, natural gum, tourism, etc. as applicable to the different regions.		
Component 3: Improving Basic Services and Capacity Building				
Challenge	Lack of access and inadequacy of basic services such as healthcare, education, drinking water and sanitation, roads, electricity.	Develop new and rehabilitate existing basic service infrastructures	Woredas, RCST	Core activity of Component 3
Risk	Weak/limited institutional implementation capacity among public and private service provider institutions at federal, regional, woreda, kebele, and community levels.	<ul style="list-style-type: none"> - Using CDD approach at various levels (community, inter-community, kebele, woreda). - Culturally sensitive capacity building efforts need to be used at different levels to clearly define the process, content, and mechanisms for training. 	Woredas, RCST, PCU	Core activity of Component 3
Risk	Lack of industry–university-research linkages, including lack of incorporating indigenous knowledge when projects are implemented.	<ul style="list-style-type: none"> - Memoranda of Understanding with research and higher learning institutions to undertake specific research on topics such as political economy of PAP communities in the peripheries; perception of Lowlands groups toward themselves and the State in relation to vulnerability and resilience; identifying and exploiting opportunities for women’s economic empowerment in livestock production, processing, and trade; rangeland management and breed improvement to respond to/adapt to changing climate; rainfed and irrigated agriculture in arid and semi-arid areas; identify options for socio-economic service delivery, continuous learning, stakeholder engagement, adaptable knowledge management, and communication on innovative tools and approaches; land use and natural resource conservation practices; conflict resolution mechanisms, etc. - Setting up a research funding mechanism: establish an innovation fund to support ideas following a competitive selection process; selection criteria should focus on innovation, economic sustainability, community integration, youth and gender, multistakeholder collaboration, including research institutions, etc. - Support research in close collaboration on subprojects, - Annual workshops (at least) linking project, private sector, and research institutions. 	Woredas, RCST, PCU	Core activity of Subcomponent 3.3
Risk	Lack of capacity in managing projects at the kebele level, including timely budget provision and activity implementation	Capacity development initiatives covering an array of topics, including technical themes, project		



Existing challenge vs. risk	Potential risks and challenges	Mitigation measures	Responsible body	Necessary resources/budget
	according to schedule.	management, M&E, safeguards, gender, nutrition, etc.		
Challenge	Inclusion of new LLRP regions and/or woredas with limited or no previous experience in social risk management as required by the World Bank.	Continuous training of project staff on social risk management provisions.	Woredas, RCST, PCU, World Bank	Core activity of Component 4
Risk	Absence of a strong M&E system for improving project management, coordination, and implementation and results monitoring at large at all levels.	- Training on and logistical support of monitoring systems. - Support establishing IT-based monitoring systems.	Woredas, RCST, PCU, World Bank	Core activity of Component 4
Risk	Weak linkages and coordination among institutions, sectors, programs, and projects at all levels.	- Coordination by RCST. - Participatory approaches in subproject development and implementation. - Annual project implementation review.	Woredas, RCST, PCU, World Bank	Core activity of Component 4 and mainstreamed in other components
Cross-cutting Issues				
Risk	Risks of clan- and community conflicts in the project area following grievances over targeting and adverse impacts on access to resources. Also, external border conflicts with pastoralists in neighboring countries are possible. Risk that the respective tensions either lead to an escalation of conflict or to the abandonment of project investments.	- LLRP will assist cross-border meetings to be attended by border officials (from Ethiopia and other countries, mainly South Sudan and Sudan, Somali Land and Kenya). - LLRP will facilitate discussions between community representatives of clan leaders, kebele chairpersons, and elders to support peaceful inter-clan and inter-ethnic as well as cross-border relations by supporting regular forums and workshops that promote inter-ethnic dialogue. - The project will also support and strengthen forums at the zone level that will allow cross-woreda communication and exchange of ideas among Lowlands communities and support appropriate grievance redress mechanisms. - The project will undertake a careful conflict situation analysis to underpin the planning process and involve key stakeholders in each woreda in the planning process, including using resource use mapping to show key infrastructure and boundaries; in agreement with all communities on the nature of inclusive use of infrastructure or natural resources. - Mechanisms to ensure broad representation of community members in targeting committees, including women and youth as well as ethnic/clan diversity, will be outlined in the PIM.	Woredas, RCST, PCU, World Bank	Core activity of Subcomponent 1.3 and mainstreamed throughout the other components. Requires support from specialized conflict mitigation and mediation staff, including ad hoc task teams to address materializing risks.
Risk	If not properly managed, during community consultations and project implementation there may be a chance of increasing gender inequality and disregarding women, children, youth, people with disabilities, poor families,	- Support and arrange access for women and youth to get financial and credit services from MFIs and cooperatives to improve productivity. - Transparent targeting criteria for training and provision of inputs to	Woredas, RCST, PCU, World Bank	Core activity of Subcomponent 3.3 and mainstreamed throughout the other components. Requires support



Existing challenge vs. risk	Potential risks and challenges	Mitigation measures	Responsible body	Necessary resources/budget
	female headed households. The project requires 50 percent female participation; however, there is a risk that female and males in the project may not benefit to an equal degree, particularly female household heads, who have a double burden with their domestic role and a project-related role in the management of communal lands.	ensure participation of women, youth, and other vulnerable groups. - Requirements that committee compositions include women, youth, and other vulnerable groups. - Provision of pilot opportunities for women and youth.		from specialized staff.
Risk	Lack of property rights of women in polygamous unions in PAP areas may lead to over-proportional impacts on part of the family.	- Integration of all adult household members in consultations. - Additional slots for more than one wife per family. - Focus on compensation in kind rather than cash benefitting the whole family.	Woredas, RCST, PCU, World Bank	Mainstreamed throughout Components 1, 2, and 3
Challenges	Unemployed youth and women, inaccessibility of better market and business opportunities, and lack of financial facilities are raised as challenges in the PAP communities.	- Ensure equitable access of women, youth, ethnic minorities, and underserved peoples to social and economic benefits from different LLRP subcomponents to enhance their economic and social negotiating power.	Woredas, RCST, PCU, World Bank	Core activities of Components 1 and 2
Risk	High risk of GBV, including physical and sexual abuse of girls and women.	- Awareness campaigns for male and female representatives of the communities on gender equality and the rights of women and children. - Awareness campaigns for communities on gender equality and the rights of women and children. - Embedded social development specialists via respective research arrangements and conflict management. - Culturally sensitive capacity building efforts need to be used at different levels under the project components to clearly define the process, content, and mechanism for training. - Development of participatory, site-specific inclusion strategies to identify vulnerable segments of communities, and through a consultative, participatory process to find ways to provide project benefits to these groups at the cluster and kebele level. - Strengthening of the Woreda Bureaus of Women and Children Affairs as first contact points for GBV cases.	Woredas, RCST, PCU, World Bank	Core activity of Subcomponent 3.3 and mainstreamed throughout the other components. Requires support from specialized staff.
Risk	Limited participation of women in the design, implementation, and M&E of project activities due to cultural values and norms.	- Focus group discussion with women. - Quota for women in different project committees.	Woredas, RCST, PCU, World Bank	Core activity of Component 4 and mainstreamed in other components



ANNEX 10: PROJECT INTERVENTION AREA MAP

