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Report No: PAD4700

INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT APPRAISAL DOCUMENT
ON A
PROPOSED CREDIT

IN THE AMOUNT OF SDR 17.9 MILLION
(US\$25 MILLION EQUIVALENT)

AND A PROPOSED GRANT

IN THE AMOUNT OF SDR 17.9 MILLION
(US\$25 MILLION EQUIVALENT)

TO THE

KYRGYZ REPUBLIC

FOR A

SECOND REGIONAL ECONOMIC DEVELOPMENT PROJECT

February 9, 2022

Urban, Resilience and Land Global Practice
Europe And Central Asia Region

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CURRENCY EQUIVALENTS

(Exchange Rate Effective December 31, 2021)

Currency Unit = Kyrgyz Som (KGS)

KGS 84.78 = US\$ 1

SDR 0.7145 = US\$ 1

FISCAL YEAR

January 1 - December 31

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ABBREVIATIONS AND ACRONYMS

ADB	Asian Development Bank
ARIS	Community Development and Investment Agency
CBA	Cost Benefit Analysis
CERC	Contingent Emergency Response Component
CPF	Country Partnership Framework
CPSD	Country Private Sector Diagnostic
CRI	Corporate Result Indicator
CSO	Civil Society Organization
DA	Designated Account
e-GP	e-Government Procurement
ECA	Europe and Central Asia
EEU	Eurasian Economic Union
EIRR	Economic Internal Rate of Return
ESCP	Environmental and Social Commitment Plan
ESF	Environmental and Social Framework
ESIA	Environmental and Social Impact Assessment
ESMF	Environmental and Social Management Framework
ERR	Economic Rate of Return
ESS	Environmental and Social Standard
FAO	Food and Agriculture Organization
FIRR	Financial Internal Rate of Return
FM	Financial Management
GAP	Good Agricultural Practices
GDP	Gross Domestic Product
GHG	Greenhouse Gas
GIZ	German Development Agency
GRS	Grievance Redress Service
GRID	Green, Resilient, and Inclusive Development
HAACP	Hazard Analysis Critical Control Points
IDA	International Development Association
IFC	International Finance Corporation
IFR	Interim un-audited Financial Reports
IPF	Investment Project Financing
IRI	International roughness coefficient
IRR	Internal Rate of Return
KGS	Kyrgyz Som
MFI	Microfinance Institution
M&E	Monitoring and Evaluation
MoA	Ministry of Agriculture
MoF	Ministry of Finance

MoEC	Ministry of Economy and Commerce
NPV	Net Present Value
OP	Operational Policy
PDO	Project Development Objective
PFM	Public Financial Management
PIE	Project Implementation Entity
POM	Project Operation Manual
PPC	Public-Private Cooperation
PPP	Public Private Partnership
PPSD	Project Procurement Strategy for Development
PRAMS	Procurement Risk Assessment and Management System
RAP	Resettlement Action Plan
QCBS	Quality- and Cost-based Selection
RED-1	(First) Regional Economic Development Project
RED-2	Second Regional Economic Development Project
REDM	Roads Economic Decision Model
RFB	Request for Bids
RISE	Resilience, Inclusion, Sustainability, and Efficiency
RPF	Resettlement Policy Framework
SC	Steering Committee
SCD	Strategic Country Diagnostic
SME	Small and Medium Enterprise
SOE	Statement of Expenditure
SPS	Sanitary and Phytosanitary
STEP	Systematic Tracking of Exchange in Procurement
TA	Technical Assistance
US\$	United States Dollar
VSL	Value of Statistical Life
WASH	Water, Sanitation and Hygiene
WTO	World Trade Organization



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DATASHEET

BASIC INFORMATION

Country(ies)	Project Name	
Kyrgyz Republic	Second Regional Economic Development Project	
Project ID	Financing Instrument	Environmental and Social Risk Classification
P175587	Investment Project Financing	Substantial

Financing & Implementation Modalities

<input type="checkbox"/> Multiphase Programmatic Approach (MPA)	<input checked="" type="checkbox"/> Contingent Emergency Response Component (CERC)
<input type="checkbox"/> Series of Projects (SOP)	<input type="checkbox"/> Fragile State(s)
<input type="checkbox"/> Performance-Based Conditions (PBCs)	<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)	<input type="checkbox"/> Hands-on Enhanced Implementation Support (HEIS)

Expected Approval Date	Expected Closing Date
03-Mar-2022	17-Dec-2027

Bank/IFC Collaboration

No

Proposed Development Objective(s)

To improve access to basic municipal services, strengthen competitiveness of selected agriculture value chains, and increase SME activities in the Batken Region.



Components

Component Name	Cost (US\$, millions)
Component 1: Supporting municipal infrastructure, basic public services, and capacity building	24.00
Component 2: Strengthening Agriculture Competitiveness	21.00
Component 3: Promoting local economic development through the Small Grants Program	2.00
Component 4: Contingent Emergency Response Component (CERC)	0.00
Component 5: Operational Support	3.00

Organizations

Borrower: Ministry of Finance
Implementing Agency: Community Development and Investment Agency (ARIS)

PROJECT FINANCING DATA (US\$, Millions)

SUMMARY

Total Project Cost	50.00
Total Financing	50.00
of which IBRD/IDA	50.00
Financing Gap	0.00

DETAILS

World Bank Group Financing

International Development Association (IDA)	50.00
IDA Credit	25.00
IDA Grant	25.00



IDA Resources (in US\$, Millions)

	Credit Amount	Grant Amount	Guarantee Amount	Total Amount
Kyrgyz Republic	25.00	25.00	0.00	50.00
National PBA	25.00	25.00	0.00	50.00
Total	25.00	25.00	0.00	50.00

Expected Disbursements (in US\$, Millions)

WB Fiscal Year	2022	2023	2024	2025	2026	2027	2028
Annual	1.00	2.00	6.00	7.00	8.00	12.00	14.00
Cumulative	1.00	3.00	9.00	16.00	24.00	36.00	50.00

INSTITUTIONAL DATA

Practice Area (Lead)

Urban, Resilience and Land

Contributing Practice Areas

Agriculture and Food

Climate Change and Disaster Screening

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

SYSTEMATIC OPERATIONS RISK-RATING TOOL (SORT)

Risk Category	Rating
1. Political and Governance	● Substantial
2. Macroeconomic	● Moderate
3. Sector Strategies and Policies	● Moderate
4. Technical Design of Project or Program	● Moderate
5. Institutional Capacity for Implementation and Sustainability	● Substantial
6. Fiduciary	● High
7. Environment and Social	● Substantial



8. Stakeholders	● Moderate
9. Other	
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

Environmental and Social Standards Relevance Given its Context at the Time of Appraisal

E & S Standards	Relevance
Assessment and Management of Environmental and Social Risks and Impacts	Relevant
Stakeholder Engagement and Information Disclosure	Relevant
Labor and Working Conditions	Relevant
Resource Efficiency and Pollution Prevention and Management	Relevant
Community Health and Safety	Relevant
Land Acquisition, Restrictions on Land Use and Involuntary Resettlement	Relevant
Biodiversity Conservation and Sustainable Management of Living Natural Resources	Relevant
Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities	Not Currently Relevant
Cultural Heritage	Relevant
Financial Intermediaries	Not Currently Relevant



NOTE: For further information regarding the World Bank's due diligence assessment of the Project's potential environmental and social risks and impacts, please refer to the Project's Appraisal Environmental and Social Review Summary (ESRS).

Legal Covenants

Sections and Description

Hire, no later than thirty (30) days from the Effective Date, a Project Coordinator to be based in Bishkek with the qualifications and terms of reference acceptable to the Association (Financing Agreement, Schedule 2, Section 1, 4(a)).

Sections and Description

Hire, no later than thirty (30) days from the Effective Date, an environmental and social specialist to be based in Bishkek city and one environmental specialist and one social specialist to be based in Batken city with the qualifications and terms of reference acceptable to the Association (Financing Agreement, Schedule 2, Section 1, A.4(a)).

Sections and Description

Hire, no later than sixty (60) days from the Effective Date, (i) a disbursement specialist, and (ii) a procurement specialist (Financing Agreement, Schedule 2, Section 1, A.4(b)).

Sections and Description

The Recipient shall establish, no later than sixty (60) days from the Effective Date, and thereafter maintain, throughout the Project implementation period, a Steering Committee, with composition and terms of reference further detailed in the POM (Financing Agreement, Schedule 2, Section 1, A.9).

Sections and Description

To facilitate the carrying out of Part 2.2 of the Project, the Recipient shall entrust the MoA to establish, through an MoA decree, no later than sixty (60) days from the Effective Date, and thereafter maintain, throughout the Project implementation period, a Committee for Productive Partnerships, chaired by a representative of MoA and comprised of representatives of MoEC, MoF, state authorities and local self-governments and members of civil society, as further detailed in the Productive Partnerships Manual (Financing Agreement, Schedule 2, Section 1, A.10).

Sections and Description

To facilitate the carrying out of Part 3 of the Project, the Recipient shall entrust the MoEC to establish, through a MoEC decree, no later than sixty (60) days from the Effective Date, and thereafter maintain, throughout the Project implementation period, a Small Grants Program Committee, comprised of representatives of MoF, MoEC, MoA, PIE, state authorities and local self-governments, and civil society organizations, and, as further detailed in the Small Grants Handbook (Financing Agreement, Schedule 2, Section 1, A.12).

Conditions



Type Effectiveness	Financing source IBRD/IDA	Description <p>The Project Operations Manual has been prepared and adopted by the Project Implementing Entity satisfactory to the Association</p>
Type Effectiveness	Financing source IBRD/IDA	Description <p>The Subsidiary Agreement has been executed on behalf of the Recipient and the Project Implementing Entity, in form and substance satisfactory to the Association</p>
Type Effectiveness	Financing source IBRD/IDA	Description <p>The Cooperation Agreement has been signed between MoEC, MoA and the Project Implementing Entity in form and substance satisfactory to the Association</p>
Type Effectiveness	Financing source IBRD/IDA	Description <p>The Environmental and Social Management Framework has been finalized, accepted by the Association, consulted on, and disclosed</p>
Type Effectiveness	Financing source IBRD/IDA	Description <p>The report on the security and conflict risk assessment note has been finalized as further described in the Environmental Social Commitment Plan</p>
Type Effectiveness	Financing source IBRD/IDA	Description <p>The labor management procedures have been finalized and adopted, as further described in the Environmental Social Commitment Plan</p>
Type Disbursement	Financing source IBRD/IDA	Description <p>No withdrawal shall be made under Category (2) until the MoA, with the support from the PIE, has adopted the Productive Partnerships Manual under terms and conditions acceptable to the Association</p>
Type Disbursement	Financing source IBRD/IDA	Description <p>No withdrawal shall be made under Category (3) until the PIE has adopted the Small Grants Handbook under terms and conditions acceptable to the Association.</p>
Type Disbursement	Financing source IBRD/IDA	Description <p>No withdrawal shall be made under Category (4), unless and until all of the following conditions have been met in respect of said expenditures: (i) (A) the Recipient has determined that an Eligible Crisis or Emergency has occurred, and has furnished to the Association a request to withdraw Financing amounts under</p>



Category 4; and (B) the Association has agreed with such determination, accepted said request and notified the Recipient thereof; and (ii) the Recipient, through the Ministry of Finance, has adopted the CERC Manual and Emergency Action Plan, in form and substance acceptable to the Association.



I. STRATEGIC CONTEXT

A. Country Context

1. **The Kyrgyz Republic is a land-locked, mountainous country of 6.6 million people with considerable economic potential given its rich natural endowments and strategic location.** Relative to its Central Asian neighbors, the Kyrgyz Republic enjoys a more liberal political regime and a lighter state footprint in the economy. The country's strategic geographic location gives it full access to the Eurasian Economic Union (EEU) while sitting at the crossroads of the large Chinese, South Asian and Russian markets. Its rich, largely unexploited natural endowments hold great potential for significantly expanded agriculture and tourism activities.

2. **Prior to the pandemic, the Kyrgyz Republic economy had been growing steadily¹. Yet, the economic paradigm was insufficiently dynamic to sustainably address poverty and generate inclusive growth in the medium- to longer-term.** The main drivers of economic growth have been gold extraction on the one hand, and worker remittances on the other. This growth model has enabled the economy to grow at an average rate of 4.3 percent over the 2016-2019 period. Exports in relation to Gross Domestic Product (GDP) have stagnated at around 45 percent. This reflects a long process of de-industrialization as evidenced by declining traditional manufacturing activity and a failure to diversify into products or services with higher technological content. Although the agriculture sector contribution has also declined from 17 to 12 percent of GDP from 2010 to 2019, agriculture value added per worker has increased, averaging 7 percent annual growth per year over the same period, indicating exits by the least productive parts of the sector. Services have been expanding, but they remain low-productive in nature and show small gains, if any, in total factor productivity. Progress on poverty reduction has been uneven since 2009—effectively plateauing and even reversing among urban households. Despite a poverty rate of 20.1 percent in 2019, a large proportion of the population is clustered just above the poverty line, with a high risk of falling into poverty due to shocks and insufficient safety nets.

3. **The Kyrgyz Republic remains one of the poorest countries in Central Asia and COVID-19 has created a further set of challenges.** Due to the COVID-19 pandemic and policies to limit its spread, the Kyrgyz economy remains in a deep recession following a contraction of 8.6 percent in 2020. The Gross National Income per capita was US\$1,160 in 2020, which is slightly above the threshold for Lower Middle-Income Country status. The country has a population of about 6.6 million with over 60 percent living in rural areas. The COVID-19 crisis threatens to undo the gains in poverty reduction achieved over the past few years, and a high proportion of the population risks falling back into poverty. The COVID-19 crisis has adversely impacted labor income and remittances, and this, combined with inflation, leaves large segments of the population exposed to the economic consequences of the pandemic. The poverty rate was 20 percent in 2019², and a further 65 percent of the population was considered vulnerable to poverty. The poverty rate in the Kyrgyz Republic increased by 11 percentage points from 20 percent in 2019 to 31 percent in 2020, pushing an additional 700,000 people into poverty – a very large absolute increase for a population of 6.6 million³. The country is going through a third wave of the COVID-19 pandemic. With a slow rate of mass vaccination (14.5 percent of the total population since the start of vaccination) and a failure to follow social distancing and sanitary requirements by the majority of the population, the daily cases of newly infected started to increase in March 2021 (around 45 cases a day, measured as a 7-day moving average) and peaked at 353 cases a day in May 2021. The total number of infected people since the outbreak of the pandemic has reached 105,111 and the death toll reached 1,815 people as of May 31, 2021. Global economic factors and

¹ <https://data.worldbank.org/indicator/NY.GDP.MKTP.KD.ZG?end=2020&locations=KG&start=2015>

² National poverty rate

³ World Bank. 2021. One Year Later in the Kyrgyz Republic's Battle Against COVID-19.



especially the economic slowdown in Kazakhstan and Russia will exacerbate the economic shock from COVID-19 to the Kyrgyz economy. The pandemic has already affected food prices, the availability of medicines and medical supplies, employment and the remittance flow. This latter point is particularly important given the economy's dependence on remittances (27 percent of GDP).

4. The Kyrgyz Republic is highly exposed to natural hazards and affected by climate and disaster risks and ranks as the third most vulnerable country to the effects of climate change in the Europe and Central Asia (ECA) region. It is classified as the most seismically risky territory in Central Asia (96.7 percent of the population live under a high seismic risk). The annual average population affected by earthquakes in the country is about 200,000 and the annual average affected GDP is about US\$200 million. The fatalities and capital losses caused by more intense, less frequent events can be substantially larger⁴ than the annual averages. The country is also exposed to frequent flooding (annually, about 80,000 people are affected with about US\$60 million lost in potential GDP), landslides caused by rainfall patterns, terrain slope, geology, soil, land cover and earthquakes that make localized landslides a frequent hazard, and wildfires⁵. Heat stress may represent a serious risk to human life during peak summer temperatures, with a high likelihood that temperatures will more regularly exceed 40°C, particularly in lowland regions such as the Fergana Valley⁶. The economy and households are highly vulnerable to climate change because of both the low adaptive capacity of the economy and the high climate-sensitivity of its growth drivers. Growth opportunities are firmly linked to environmental resources, particularly in agriculture and tourism as well as hydropower, extractives, and forestry. The Third National Communication to the United Nations Framework Convention on Climate Change identifies agriculture, energy, and water sectors as the most vulnerable to climate change. The government is keenly aware of the need to complement its growth and poverty reduction initiatives with efforts to address the key challenges in social and environmental sustainability and exposure to disaster risks, including managing the transition from a predominantly rural to an increasingly urban society and economy.

5. The 2018 Strategic Country Diagnostic (SCD) also highlights the challenges deriving from climate change, which is expected to significantly affect agricultural growing conditions, including impacts from rising temperatures, increasing variability of precipitation, and the likely overall reduction in surface water due to increased evapotranspiration and glacial melt. The changes will likely increase aridity, affect access to irrigation water sources and accelerate desertification, which is already a significant concern and affects up to half the land in the country. Increases in temperatures, including temperature extremes, along with existing or worsening drought incidence can significantly affect yields, with high impact on sugar beets, wheat, and maize, the latter two of which are particularly sensitive to rainfall timing. Additionally, increasing temperatures and changing rainfall patterns can affect hydro-power production and contribute to increased outbreaks of agricultural diseases and pests, such as locusts. Climate change impacts on agriculture could decrease food security and slow improvement in poverty levels, particularly in rural areas. Long-term changes to water availability and irrigation resources will affect the expected 68 percent of all cropland, which is irrigated.

6. With respect to gender inequality targets, the Kyrgyz Republic fares better than most of its comparators, but challenges remain in some areas.⁷ Scores on international gender indexes are relatively high for education and health

⁴ For example, an earthquake with a 0.4 percent annual probability of occurrence (a 250-year return period event) could cause nearly 8,000 fatalities and \$4 billion in capital loss (about 60 percent of GDP). Floods in 1998 and 2005 each caused over \$3 million in damage. More recently, in 2012, flooding in Osh, Batken and Jalalabad affected about 11,000 people.

⁵ Think Hazard / Kyrgyz Republic

⁶ Climate Risk Profile | Kyrgyz Republic

⁷ The Country Partnership Framework (CPF) for the Kyrgyz Republic (FY19–22) (Report No. 130399-KG, discussed by the Board on November 13, 2018).



but low for civic empowerment and some aspects of economic participation and opportunities, such as labor force participation and earned income. According to the Country Partnership Framework (CPF) 2019–2022, women are less likely to be employed and, when employed, they earn on average 30 percent less than men. The employment gap is particularly significant for women aged 20–34, who are most likely to leave formal employment to care for young children. Data show gender segregation in the types of employment undertaken. Women predominate in the following sectors: health and social services—with 83.6 percent of the labor force being female; education—80.6 percent; and hotels and restaurants—58.4 percent. In contrast, highly paid technical sectors are dominated by men. Men account for 84.4 percent of employees in the mining industry; 90.5 percent in the production of gas, electricity, and water; 89.3 percent in the transport and communication sector; and 96.5 percent in the construction industry. The predominance of women in lower-paid sectors is reflected in the considerable gender wage differential, with women receiving on average just 74.3 percent of men's earnings in 2012, and 75.3 percent in 2016. Aggregate unemployment figures remain high, and traditionally women comprise the majority of the unemployed. In the post COVID-19 period the nationwide difference in employment rates between males and females has increased, including in Batken.

7. Women face a range of barriers to their entrepreneurship and employment opportunities in agriculture. Women are significantly involved in crop production. Most female rural entrepreneurs cultivate plants, vegetables, and tobacco (90 percent compared with 52 percent of men's businesses).⁸ Women are also engaged in greenhouse cultivation of medicinal plants, vegetables, flowers, and seedlings for sale to local households. Although women are active in production, they are less visible in post-production stages for commercial purposes. Similarly, even though Kyrgyz women have an important role in animal husbandry, men are customarily viewed as the owners of livestock. Female-headed households are less likely to own livestock than male-headed households (41 percent as opposed to 56 percent). Human and financial capital constraints hindering women's entrepreneurship and employment opportunities include a lack of technical skills, business knowledge, and limited access to financial services. Women tend to have less access to agricultural extension services and information on marketing opportunities for products. Women do not seem to have access on a regular basis to advice and expertise provided by an agricultural extension and advisory program.

8. Focusing on women's economic participation when promoting local economic development helps ensure women have the necessary resources, opportunities, protections, and skills to achieve their full potential. Improving supporting conditions, factors of employment, and an enabling environment for women to engage in paid work and enhancing women's participation in the workforce is essential to narrow the gender gap in employment. A mounting body of evidence, including the Bank's 2011 report on gender, confirm that access to SME finance is limited for women-led businesses. Female entrepreneurs only have access to short-term loans (a minimum of US\$500 to a maximum US\$10,000) and lack of collateral limits women's access to bank finance. Furthermore, when looking at the indicator on *Borrowed to start, operate, or expand a farm* Findex found that only 5 percent of women borrow money to start a business as compared to men 9 percent. Also, only 7 percent of women *saved to start, operate, or expand a farm or business* as compared to 12 percent of males. The Kyrgyz Republic country gender assessment of 2019 shows that women attempting to negotiate with male loan officers have reported encountering gender biases, including being told to bring their husbands if they wish to apply for a loan (Asian Development Bank (ADB) 2005; Ibraeva, Moldosheva, and Niyazova 2011). Research indicates that many women tend to use microfinance institutions (MFIs), which offer less credit for shorter terms, rather than borrowing from commercial banks. In addition, women are often restricted to micro and small businesses, taking up smaller loans than men. A 2016 study on MFIs found that 86 percent of female clients borrow less than US\$1,100 and only 2 percent borrow over US\$2,000. Women are also more likely than men to borrow as a group

⁸ Food and Agriculture Organization (FAO). 2016. National Gender Profile of Agricultural and Rural Livelihoods - Kyrgyz Republic. Available at: <http://www.fao.org/3/a-i5763e.pdf>



(FAO 2016) and are often not equipped with the information and knowledge needed to set up Small and Medium Enterprises (SME) (ADB 2005).⁹

B. Sectoral and Institutional Context

9. **Regional and spatial analysis, conducted by the Bank in 2019, identified the southern regions as the most lagging in the country.** The country's large urban-rural and intraregional disparities in the incidence of poverty highlight the economic dualism in the country while remote and mountainous regions bear the highest burden of poverty. To help the Government address the issues of regional disparities, **in March 2020, the Bank approved US\$60 million of International Development Association (IDA) financing¹⁰ for the Regional Economic Development Project (RED-1) designed to support one of the country's key lagging regions – Osh – and to enhance its economic development through targeted interventions in the selected economic sectors.** The selection of Osh as the pilot region for the first regional economic development operation was based on a regional and spatial analysis, which showed Osh as one of the key lagging regions despite its abundant assets and potential.

10. **This same regional and spatial analysis also identified Batken region as the second most lagging region characterized by high poverty and vulnerability.** Batken's Gross Regional Product per capita in 2019 was only 40 percent of the national average and only neighboring Osh oblast was lower. The unemployment rate at the regional level remains the highest in the country at 10 percent and was expected to grow in 2021 due to the COVID-19 pandemic, as more migrants are expected to return to their homes. Infrastructure and the provision of basic municipal services also put Batken among the poorest regions. As of 2019, out of the country's seven regions, Batken had the country's highest poverty rate amounting to 32.6 percent, while the national average was 20.1 percent. Batken's already high poverty level would be even higher without remittances. As a 2019 study showed¹¹, remittances have provided an essential safety net in Batken, as the regional poverty rate would be around 50 percent without remittances. This confirms the population's extreme vulnerability to poverty and heavy dependence on remittances. More sustainable poverty reduction will require local economic growth which results in sustainable and socially inclusive development. The poor need greater access to services, water and sanitation, employment, credit, and markets for produce.

11. **Batken is facing similar challenges as the Osh region, including low skilled labor, low level of enterprise development, low market accessibility, and low level of development of relevant economic institutions, infrastructure and services.** As of 2019, nearly 80 percent of households lacked access to safe drinking water and almost the entire population lacked access to safe sewage systems. Other public services, such as schools and kindergartens also remained a challenge. Analysis of accessibility shows that the main cities - Isfana, Batken, and Kadamjay - are isolated from, rather than integrated with each other, thus limiting the positive role they can play in terms of linking to rural areas, linking to each other, and linking to the rest of the country.

12. **While the system of settlements in the Batken region consists predominantly of smaller cities, towns, and villages, Batken is one of the fastest-growing regions by population in the Kyrgyz Republic.** The region contains three districts with 31 ayil okmotu (regional self-governance), two township administrations, one city administration, and 189 rural settlements. Between 2009 and 2018, the population in the region grew by 20 percent and according to the National Statistics Committee amounted to 537,300 in 2020¹², of which 24 percent is the urban population. Population growth is

⁹ ADB: Kyrgyz Republic Country Gender Assessment Report 2019

¹⁰ RED-1 is financed from US\$30 million equivalent IDA credit and US\$30 million equivalent IDA grant

¹¹ RED-1 Regional Development Analysis (2019)

¹² <http://www.stat.kg/ru/statistika-po-regionam/>



expected to continue given a large number of younger people along with a high fertility rate. In particular, a bulge in the working-age population, which already accounts for roughly 60 percent of the population across all regions, including Batken, is expected given the large number of females of reproductive age in urban areas.

13. The growing population in the region offers a great opportunity for development, but it also signifies increased demand for employment, infrastructure and basic urban services. The demand for infrastructure and services is further challenged by the aging infrastructure inherited from the old Soviet system, low capacity of the current service delivery system to keep up with the growth, energy inefficiencies, and high costs in relation to housing, public buildings and municipal services, low level of tariffs and cost recovery, heavy reliance on public funds and limited capacity to leverage public investments to mobilize private capital. A lack of reliable municipal services and infrastructure is one of the main obstacles to nurturing private sector development.

14. Furthermore, the Batken region has experienced conflicts with adjoining countries (most recently in April 2021) resulting in casualties and destruction of public and private infrastructure in the border areas of the Batken region, which has further hindered the development of this lagging region and has emphasized additional development challenges. The official estimates found that 36 people died, 156 were injured (including military and medical personnel), 220 facilities (including 136 houses, 15 social facilities, 27 gas stations, and 42 shops were destroyed) and there are between 60,000-70,000 people affected in 20 villages of the Batken region. The armed clashes led to forced displacement from the Batken region to other locations in the country, although with the stabilization of the situation, most have returned. Infrastructure and property destruction losses are estimated to be US\$15 million. Against this background, the COVID-19 pandemic added even greater stress to this lagging region, threatening to reverse a decade of advancements in poverty reduction and development.

15. Batken is part of the Ferghana Valley where agri-food products have considerable market potential¹³. Fresh fruits and vegetables are the most common Kyrgyz agricultural exports, comprising around 14 and 41 percent respectively of the US\$260 million agri-food exports of the country. There has been increased demand for high-value agricultural products and food, driven by the rising incomes of the population in Kazakhstan, China, and Russia. However, most Kyrgyz agri-food enterprises are small-scale producers (many informal), including those that export. They are generally not competitive, struggle to access markets and technology, and face difficulties in attracting investments and creating jobs.

C. Relevance to Higher Level Objectives

16. The proposed Second Regional Economic Development (RED-2) Project is aligned with the World Bank Group's twin goals of eliminating extreme poverty and boosting shared prosperity as well as with the current Country Partnership Framework (CPF) for 2019-2022¹⁴. The Project will improve infrastructure and livability, diversify economic opportunities, increase border trade and exports, and enhance regional and local potential, thereby contributing to reducing poverty and shared prosperity. The project is aligned with the CPF under Focus Area 3: enhance economic opportunities and resilience. The objectives of Focus Area 3 are to: (i) develop human capital (objective 7); (ii) support regional development (objective 8); and (iii) enhance resilience to climate change and disaster risks (objective 9). This is expected to be achieved under the Project by supporting the government to: (i) enhance regional and spatial analysis to inform their policies and interventions, and (ii) implement regional development initiatives in the lagging region of Batken and its cities. The Project would target activities focusing on improving the local economy and opportunities for local income generation, enhancing accessibility to markets, and improving key infrastructure and services, as well as the

¹³ Kyrgyz Republic: Developing Agri-food Value Chains, WB, 2018.

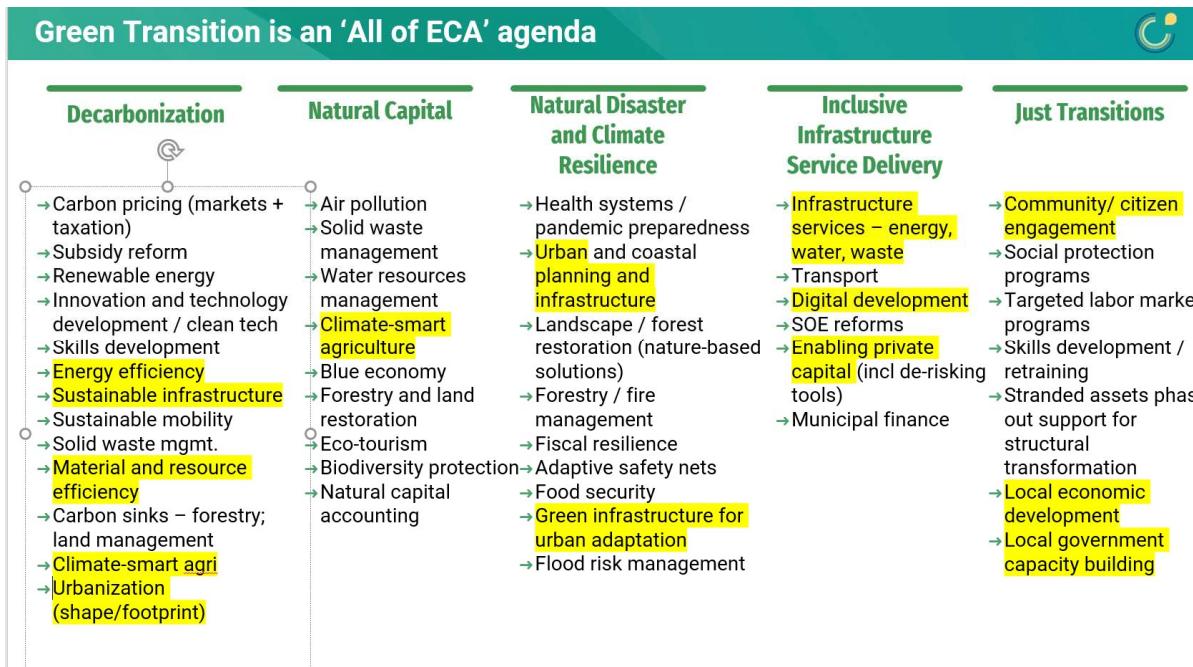
¹⁴ Report No. 130399-KG, discussed by the Board on November 13, 2018



institutional capacity to ensure their delivery. In turn, this would support the realization of the private sector-driven objectives of Focus Areas 1: Strengthen foundations for inclusive private sector-led growth by creating a better enabling environment for private sector development.

17. **The proposed Project is fully aligned with the Government's identified priorities for regional development for the coming decades.** One of the main goals of the 2019-2040 National Sustainable Development Strategy is to support economic prosperity, and regional development is one of its key pillars. To achieve this, the Government aims to create more opportunities for regions to reach their potential by using regional cities (or growth poles) as growth engines. The Kyrgyz Republic Regional Policy Concept (2018-2022), approved by the Government on March 31, 2017, provides further guidance on the Government's vision to support the development of its various regions by identifying 20 regional cities as the regional growth poles.

18. **The Project is in line with the Europe and Central Asia (ECA) Green Transition agenda**, as it will promote the application of green infrastructure and nature-based solutions for the improved municipal services in support of climate change mitigation and adaptation to climate change impacts. In particular, the Project responds to several aspects of the green transition framework, as highlighted in yellow below:



19. The Project is also committed to following the Green Resilient Inclusive Development (GRID) principles to identify critical constraints in an evidence-based manner as proposed by the Resilience, Inclusion, Sustainability, and Efficiency (RISE) approach.



II. PROJECT DESCRIPTION

A. Project Development Objective

PDO Statement

20. The Project Development Objective (PDO) is *to improve access to basic municipal services, strengthen competitiveness of selected agriculture value chains, and increase SME activities in the Batken region.*

21. The selection of Batken as the focus of the second Bank-financed regional development operation was requested by the Kyrgyz Government and is also aligned with the findings of the Bank-conducted regional and spatial analysis¹⁵, which has identified Batken as the second key lagging region after Osh. Furthermore, the selection of three key urban centers of the Batken region – namely, Batken, Isfana and Kadamjai – to participate in the Project is also aligned with the Government's strategic vision on regional development, with these three towns identified as growth poles for development at the regional scale¹⁶. As mentioned above, the challenges faced by the Batken region and particularly of these three cities include low skilled labor, low level of public infrastructure, and the provision of basic municipal services, low market accessibility, and low level of development of relevant economic institutions.

PDO Level Indicators

22. PDO indicators reflect the theory of change and are aimed at measuring the achievement of the intended project objectives. The proposed PDO indicators are:

- (a) People provided with improved urban living conditions (corporate indicator, Number),
- (b) Increase in the sale of agricultural products by the Project beneficiaries (Percentage), and
- (c) Number of SMEs becoming operational or scaling up activities under the Small Grants Program (Number)

B. Project Components

23. Consistent with the Government's priorities, the proposed Project will build on the experience of the ongoing RED-1 and expand horizontally to the west from the Osh Region to the Batken Region. It will help the Government to support regional economic development and address the issues of climate resilience through three key dimensions: (i) enhanced basic municipal infrastructure and services in Batken, Isfana and Kadamjai urban centers that will support local businesses and improve living conditions for the local communities, including support to recover infrastructure damaged during the recent armed clashes in April 2021, (ii) support provided to the farmers and producers living in the rural areas to enhance their economic performance resulting in strengthened agriculture competitiveness; (iii) improved capacity in starting and executing business activities and incremental financial support for turning business ideas into business activities. Aligned with the PDO of the project, the proposed RED-2 components are detailed below.

24. **Component 1: Supporting municipal infrastructure, basic public services, and capacity building (US\$24 million).** This component will follow the GRID principles to identify critical constraints in an evidence-based manner as proposed by the RISE approach. Following the GRID principles will help prioritize investment packages to improve municipal infrastructure and associated municipal services to meet the basic living standards in the selected towns and address the anticipated climate-related risks and impacts; that will also include activities to help reconstruct public facilities and

¹⁵ Regional Development Analysis (2019)

¹⁶ Kyrgyz Republic Regional Policy Concept 2018-2022, approved by the Government on March 31, 2017



spaces affected by the recent armed clashes in April 2021 with a total anticipated cost of up to US\$5-10 million. The types of project-supported climate-resilient infrastructure could include: (i) sewerage and water supply, stormwater and drainage systems, (ii) municipal and regional roads, sidewalks, and street lighting to improve access to key municipal services and markets; (iii) schools and kindergartens; (iv) other municipal assets such as parks and public spaces of high interest to the community. All intervention under this component will be led by climate-related assessment to identify potential climate-related impacts, risks and include relevant adaptation measures to make infrastructure climate-resilient and, as a result, deliver reliable municipal services. This will be taken into account in the corresponding designs and further applied to execution of the civil work contracts through the use of the corresponding construction technologies and climate-resilient materials. The Project investments will also look into the introduction of possible climate change mitigation measures, including through the use of energy-saving technologies leading to reduced building emissions, nature-based solutions and promotion of green infrastructure. Furthermore, all public buildings and spaces supported under the project will integrate appropriate measures to make these facilities accessible to people with disabilities. Selection criteria for investment identification and prioritization under this component are provided in ANNEX 2: Detailed Project Description.

25. This component will also support the Public-Private Cooperation (PPC) initiative to promote the attraction of private investments in the targeted sectors and locations. This initiative was first introduced in the ongoing RED-1 project and aims at creating an enabling environment for business development for medium and large-scale businesses. This initiative may finance public infrastructure to attract private investment across the region, where private sector entities are willing to invest but require complementary public infrastructure to make their investment viable (e.g., public infrastructure within vicinity of the investments, road/sidewalk, water/sanitation, etc.). Investments under this initiative will be limited to the determined ratio (e.g., 1 to 4) of the investments provided by the private sector. The PPC initiative will build on the screening and selection process, which was identified as part of RED-1 and will be specified in the RED-2 Project Operations Manual developed by the Project Implementing Entity (PIE) and acceptable to the Bank. The public infrastructure financed under the PPC initiative will be designed with due consideration of climate-related impact and risks, and include related climate change adaptation measures, with use of the corresponding designs, technologies and materials, and application of the energy-saving technologies, nature-based solutions, improved water management, etc., to contribute to climate change mitigation.

26. To address the issues of territorial and investment planning and development, seismic resiliency, and energy efficiency, this component will also support the respective capacity-building activities and technical assistance that would strengthen the role of local, regional and central governments. Areas for possible support under this component would result in improved (i) integrated and sustainable urban and spatial planning based on the GRID principles through the use of digitalization and global good practices and following best practices of climate change mitigation and adaptation; and (ii) capital investment planning, budgeting, asset management, operation and maintenance of local infrastructure and the local and regional levels, and inter- and intra-agency coordination. The scope will be further defined based on the discussions for needs identification with the local, regional and national stakeholders.

27. **Component 2: Strengthening Agriculture Competitiveness (US\$21 million).** This component will comprise two sub-components.

28. **Sub-Component 2.1: Improving basic public agricultural services (US\$3.0 million).** This sub-component will improve the infrastructure and services that underpin agri-food marketing and trade in Batken with a focus on strengthening capacity for sanitary and phytosanitary (SPS) control, food quality, and basic services. The sub-component will upgrade the Ministry of Agriculture's (MoA) facilities located in Batken city and region relating to the functions of



agri-food marketing and trade, food safety, and sanitary and phytosanitary control, complementing on-going investments to upgrade SPS capacity to align with EEU and WTO standards. This will include financing for laboratory equipment and facilities upgrading at border control points and upgrading sampling capacity at the district/rayon level. The component will also provide targeted investments to upgrade training capacity and equipment on agricultural export markets requirements, food safety regulations, Hazard Analysis Critical Control Points (HACCP), and modern food processing technologies. A detailed feasibility assessment for upgrading existing facilities will be conducted in the first year to detail technical specifications and required infrastructure upgrades. The sub-component will also support training and capacity building around food safety requirements for domestic markets and export promotion. Where possible, training will also incorporate climate risk analysis and linkages between climate risks and food safety and quality.

29. **Sub-component 2.2: Strengthening Agri-Food Clusters (US\$18.0 million).** This sub-component will facilitate the development of select agri-food clusters with the aim of improving production and productivity among small agricultural producers within the selected clusters, strengthening partnerships between market actors within a cluster (agri-businesses and small agricultural producers), and putting in place the needed infrastructure for trade and logistics within clusters. The project will use a competitive selection process to identify investment sub-projects that target investments that build agri-business partnerships and increase production/processing volumes for domestic or export markets.

30. Sub-projects would have an objective to develop “productive partnerships” across multiple producer groups in and across a value chain – including farmers, collectors, processors, traders, exporters, and other value chain partners. Each productive partnership will be expected to target a specific market opportunity; be managed by a lead farmer group, producer organization or cooperative; identify an investment program targeting critical constraints and include *bona fide* market opportunities with identified buyers/partners. Each partnership will be governed by a framework agreement and signed by the lead producer group and the buyer/aggregator or processing enterprise and any other relevant participant. Partnerships could be based on contractual arrangements or other less formal arrangements, with TA support provided as part of the partnership to develop appropriate governance arrangements. In particular, the project will finance TA and training to develop, select and monitor selected Productive Partnerships, with these investments including, *inter alia*, business planning, management of producer organizations or cooperatives, developing alliances within a partnership framework, and market analysis.

31. Financing for activities within a partnership will target two types of investment:

- a. Public services and infrastructure critical to improving the functioning of the value chain targeted in the partnership. This could be technical assistance and training for producers and other services around quality assurance, pest and disease control and food safety improvements and public infrastructure rehabilitation. Public infrastructure could include irrigation, access road repairs, electricity infrastructure, and other agriculture-related infrastructure including wholesale markets or trade and logistics-related infrastructure developed under Public-Private Partnership (PPP) arrangements.
- b. Investments for producers and processors that introduce the adoption of innovative technologies (particularly climate-resilient or resource-efficient technologies) including appropriate equipment, new crop or livestock varieties and farm inputs (including climate-resilient crop varieties); and post-harvest facilities (such as facilities for storage, washing, grading, packing, pre-cooling, cold storage) for specific producer groups. On-farm investments for producers and investment for processors will be co-financed by beneficiaries and subject to the Ministry of Finance’s (MoF) requirements.



32. The sub-project development process will be guided by a set of feasibility studies or assessments that will inform the development of business plans and detailed sub-project proposals. In particular, the project will finance three assessments immediately following effectiveness: (a) a value chain assessment that will identify high potential value chain opportunities and agri-business linkages; (b) a drip irrigation/groundwater feasibility study to guide investments in drip irrigation; and (c) a PPP feasibility assessment for potential trade and logistics centers on MoA owned sites in Batken region. Technical assistance will be provided to potential sub-project beneficiaries to mobilize participation and prepare business plans and partnership proposals.

33. Both public and on-farm investments will prioritize where possible climate-proofing and climate resilience through adaptation or mitigation technologies such as promotion of climate-smart varieties (drought and heat tolerant varieties), improved water management and climate-informed irrigation design, more optimal input use, livestock management practices that reduce emissions, and energy-efficient equipment at both the production and post-harvest stages. Where possible, contributions to reduction in GHG emissions will be pursued in livestock production systems, which represent a major source of GHG emissions in the agriculture sector. The project anticipates that drip irrigation will be heavily promoted and could include expansion of new orchards using drip irrigation technology as well as conversion of traditional furrow irrigation to drip irrigation technology. In order to stimulate adoption of climate smart technologies, beneficiaries will be exposed and sensitized to new technologies as part of the sub-project proposal development process and feasibility studies will incorporate a climate lens where possible.

34. A productive partnership may define an investment program including both types of investment (public and on-farm) or only one. The sequence of implementation of activities will be determined by the specific sub-project partnership proposal. Public investments will be 100 percent project financed. On farm investments will be governed by additional agreements signed with beneficiaries. In the case of larger agri-business participants in the partnership (for example, processors or trade and logistic centers), cooperation will be in line with best practice principles for public-private cooperation and participants will be required to develop formal supply chain linkages to producers within the partnership.

35. The detailed criteria for selection of the value chain and the productive partnership will be defined in the Productive Partnerships Manual, which will constitute a condition of disbursement for sub-projects. Key criteria for selection include existence of a market or buyer, potential for job creation or engagement of many small-scale farmers, sustainable comparative advantage or competitiveness, inclusion of women and youth, and climate resilience. The selection and award process will also include a feasibility study that will inform the development of business plans and detailed proposals. Given that many farmers are women, productive partnerships are expected to generate positive impacts for women and the criteria for selection will prioritize those demonstrating inclusion of youth, women and vulnerable groups.

36. **Component 3: Promoting local economic development through the Small Grants Program (US\$2 million).** To boost local economic development through improved business practices, the Project will support SME development through a training and small grants program. The small grants program will support the launching of new enterprise activities and the diversification and expansion of services offered by the existing SMEs. The program will follow a phased approach, where the selected participants will undergo a robust training program, among others, on how to start and execute a business, how to address climate-related risks and incorporate energy-efficient technical solutions and any other green infrastructure ideas in their business plans. Those who successfully complete the training program will be eligible to apply for grant financing. This component will build on the success of this initiative introduced under the



ongoing RED-1 and will be built on its experience, including the application of a Small Grants Handbook developed and used for the corresponding component under RED-1.

37. To address the issues of women's low participation in the labor force and access to finance, the Small Grants Program will give preference to women, as follows: (1) in the training program, female applicants will be given a priority at the selection stage as well. This will give women an opportunity to gain practical knowledge and skills in doing business; (2) when evaluating business plans for financing, women applicants will be given additional points. The same approach will be used for youth to promote young entrepreneurs at the local level and socially vulnerable groups, as defined by the Small Grants Handbook. The summary of Identified Gender Gap, Actions, and Expected Results and Indicators is included in Annex 2, paragraph 30.

38. The Small Grants Program will be guided by a Small Grants Handbook, which will be prepared by the PIE. Disbursement under this component will be subject to the adoption of this Handbook, acceptable to the Bank, by the PIE.

39. **Component 4: Contingent Emergency Response Component (CERC).** This zero-dollar component is to improve the Kyrgyz Republic's capacity to respond to disasters. Following an eligible crisis or emergency, including climate-related disasters, the recipient may request the Bank to reallocate project funds to support emergency response and reconstruction. This component would draw from the uncommitted credit/grant resources under the project from other project components to cover emergency response. An emergency eligible for financing is an event that has caused or is likely imminently to cause, a major adverse economic and/or social impact to the Borrower, associated with disaster.

40. The CERC will be guided by a CERC Manual, which will be prepared by the PIE. Disbursement under this component will be subject to the adoption of the CERC Manual, acceptable to the Bank, by the PIE.

41. **Component 5: Operational Support (US\$3 million).** This component will support project implementation, including the project's monitoring and evaluation system, communication strategy, application of environmental and social instruments, training, and financing of incremental operating costs of the PIE.

C. Project Beneficiaries

42. The primary beneficiaries for this Project are the residents of the Batken Region and its municipalities (both urban and rural) benefiting from infrastructure and services to be delivered under the Project, SMEs from the agricultural and service sectors, agricultural producers, and agri-businesses who will benefit directly from improved accessibility, connectivity and infrastructure and services. Special focus will be given to the distribution of benefits by gender.

43. **Citizen engagement.** During preparation, the Project activities were identified through a participatory process engaging local, regional and national level stakeholders. The PIE and local municipalities engaged relevant stakeholders (including women and youth, the public and private sector, and representatives from local communities) to prepare a long list of proposed investments and key preparatory documents were presented at public consultations, and citizens' inputs have been incorporated in the Project design.

44. During implementation, the Project will continue to pro-actively involve local citizens and all categories of the project beneficiaries (especially women and youth groups) across project activities and ensure their engagement in the finalization of detailed designs. Under the Project's first component, the preparation of the design packages will remain participatory and will be finalized only based on in-depth stakeholder engagement. The project's second component

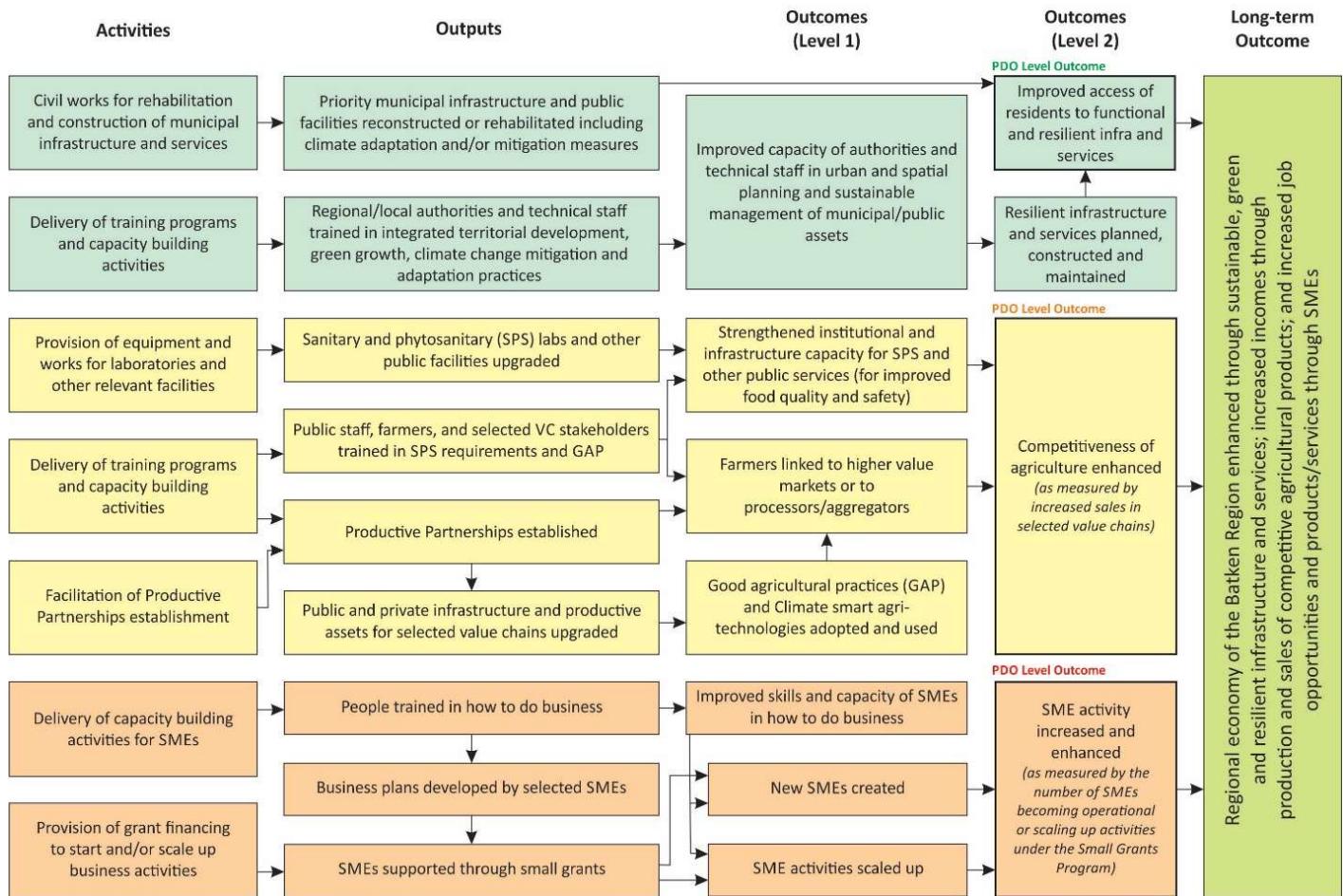


investments in productive partnerships will be demand driven and involve extensive awareness raising. For Citizen Engagement purposes, the Project will utilize the following mechanisms: (i) participatory urban designs through place-making, which is a collaborative, community-driven approach including citizens and the local community into urban design activities, (ii) participatory monitoring of ongoing construction works, which will include community representatives to evaluate the implementation of the investments, (iii) periodic “Open Door” days, organized like consultative workshops inviting local citizens and SMEs interested in implementing grant activities and providing guidance and information on the small grants program (tailored to applicant needs). These events will aim to also involve vulnerable local citizens and ensure that dialogues are established to assess needs and gaps and further improve grant programs, and (iii) a dedicated and already institutionalized Grievance Redress and Beneficiary Feedback Mechanism for the targeted investments subprojects and small grant program, which will be actively promoted in the Project. This mechanism will ensure that various avenues of contact and information are utilized (including telephone and widely used web apps such as Facebook, WhatsApp, and Viber). Information with contact phone numbers, the PIE website, and a QR code will be displayed at the respective city halls and at all construction sites. For the small grants program, information for interested applicants will be offered through the announcements (posters) in public places and at easy-to-access information boards.

45. Finally, all citizen engagement activities will include detailed discussions of climate change and sustainability issues relevant to the respective communities and explanations on how the proposed activities and investments will address the issues of climate change adaptation (and, where possible, mitigation).

D. Results Chain

46. The figure below illustrates the Theory of Change or results chain which explains the link between the problem statement, project activities, outputs, and outcomes.



E. Rationale for Bank Involvement and Role of Partners

47. **The Bank:** The Bank has been an active partner with the Government in the development agenda through numerous projects over the past decades, delivering both infrastructure projects as well as policy reforms in multiple sectors with the latest being RED-1, approved by the Board in March 2020. This Project builds on the success of RED-1 and adopts a cross-sectoral and integrated approach to address regional and economic challenges through technical assistance activities and infrastructure improvements. The Bank can offer solid experience and expertise to first identify the key issues and bottlenecks and then propose relevant interventions to tackle these in an integrated manner.

48. Furthermore, the Project will continue benefitting from the Bank's demonstrated international expertise and experience in adopting similar integrated approaches to regional development in the ECA region, where the Bank has worked with the Governments of Romania, Poland, Slovakia, Georgia, Armenia, Uzbekistan, Azerbaijan and Russia to develop similar integrated projects.

49. **Other development partners:** A number of other donors are active in this sector in the Kyrgyz Republic and the Project will provide a unique opportunity for collaboration and leveraging of resources in support of sustainable regional



development of the Batken region. Some donors who are active in the infrastructure sector and have already expressed interest to coordinate and contribute to the urban agenda are the Asian Development Bank, the Asian Infrastructure Investment Bank, and the Islamic Development Bank. The European Bank for Reconstruction and Development also actively works with business entities and potential collaboration discussions on technical assistance have taken place with the Swiss State Secretariat for Economic Affairs (SECO), German Development Agency (GIZ), KfW, United States Agency for International Development (USAID), International Fund for Agricultural Development (IFAD), and others.

F. Lessons Learned and Reflected in the Project Design

50. While still at the early stages of implementation, the Bank-financed RED-1 project in Osh region has already produced good lessons which will be taken into consideration during the implementation of this Project in Batken region.

51. ***Allow flexibility and adjustments in the Project design and implementation to respond to complex local realities and context.*** The Project design will allow for refinements by adopting a phased approach to implementation. As a framework project, not all investments have yet been identified. Therefore, the Project team will continue working closely with the local and regional governments to finalize the investment list and, if needed, well-justified changes shall be applied in due course to avoid delays with implementation. Also, large investments requiring substantial time for preparation and implementation will be given a priority.

52. ***Project design incorporates recommendations to avoid conflict drivers.*** Project design includes measures to reduce the risk of escalating conflict and is based on feedback provided from a Security Assessment commissioned during preparation. In particular, the Project will assess investments to ensure that they do not create any unequal or asymmetric access to water resources; undertake ex ante assessment of specific investments under Component 1 and 2 to apply a conflict filter to selection of final investments; and invest in awareness building and citizen engagement activities to mitigate any conflicts. This latter effort would include working with existing community and government platforms to equitably manage water and land resources such as water user associations, pasture user associations and municipal and oblast level government bodies.

53. ***The Project will build on and further benefit from the resources developed under RED-1.*** Project design will build on the implementation experience of RED-1, which although still in its early stages has developed a number of implementation tools. For example, a Small Grants Handbook and Productive Partnerships Manual can be used as the foundation to replicate these initiatives under RED-2. As both of these initiatives were new for the Kyrgyz Republic, the preparation of the above-mentioned documents was a long journey of the Bank and the PIE together to help the Recipient build their capacity in the subject matter.

54. ***Adopting an evidence-based approach to inform Project design.*** Past project experience has shown that effective project designs should be informed by and based on evidence and a high level of citizen engagement in the process. The Project will hold to this principle by applying a Regional and Spatial Analysis¹⁷ as a first step in understanding regional characteristics in addition to consulting other available information and studies from relevant projects, development partners and inputs provided by the communities during the preparation of this Project.

¹⁷ The Bank team undertook analytical work to understand regional disparities and characteristics, by adopting a framework comprised of four pillars: (i) urbanization and demographic; (ii) economy and labor force; (iii) connectivity and living standards; and (iv) natural disaster risks and resilience. This was done to better understand the strengths, weaknesses, opportunities, and risks associated with each region and thereby determine the region most in need of development support to be considered under the Project.



55. ***Productive alliances and programs for SME development require appropriate targeting and selection criteria.*** Such supply initiatives have used grants and technical assistance (TA) to facilitate linkages between small-scale producers and buyers in the agriculture sector and investment programs, and more generally, have also been used in many countries to finance knowledge and business development-related services for SMEs. Assessments of productive alliances and investment programs have identified a number of lessons, including the need to: utilize grants to address a well-identified market failure; direct grants to a clearly defined beneficiary group with a verified demand; allow beneficiaries to select service providers; utilize cost-sharing to retain ownership by beneficiaries; and ensure transparency and clear criteria in how grants are awarded.¹⁸ The Project has designed mechanisms to incorporate these lessons into the selection of grants for cluster development through the use of a transparent process to select and support targeted investments subprojects.

III. IMPLEMENTATION ARRANGEMENTS

A. Institutional and Implementation Arrangements

56. The project's implementation arrangements are as follows:

- (a) To ensure coordination and flow of information and timely decision making on strategic and programmatic aspects at the highest level, the Project will build on the current structure of RED-1 and will be overseen by a **Steering Committee (SC)**, formed with the participation of the Deputy Minister or director-level representatives from various relevant line ministries and government agencies (e.g. Cabinet of Ministers, President's Office, MoF, Ministry of Economy and Commerce (MoEC), MoA, State Agency for Architecture, Construction and Communal Services, and the Plenipotentiary Representative of the Government in the Batken region). The MoEC will chair the SC.
- (b) **MoEC** will be the **Project Coordination Ministry** responsible for overall project coordination. MoEC will also coordinate effective implementation of the Project, with the Deputy Minister having the overall responsibility for facilitating smooth and high-quality project implementation. As such, MoEC's responsibilities will include reviewing annual work plans (prepared by PIE), providing relevant technical inputs, especially those at a strategic and policy level or on issues related to economic promotion.
- (c) **MoA** will be responsible for setting priorities and objectives for the agricultural activities under the Project, and for identification and endorsement of investments under Component 2. MOA will participate in the selection, evaluation and monitoring of investments under Component 2.
- (d) **Community Development and Investment Agency (ARIS)**, currently the PIE under RED-1, will be the **PIE** responsible for all fiduciary (e.g. procurement, financial management, preparation of annual reports, budgets, etc.) and environmental and social (e.g., assessments, document preparation and embedding safeguard specialists in local and regional government to carry out supervision, monitoring and compliance) functions for RED-2. ARIS will also be responsible for key technical aspects of the Project (e.g. preparation of technical assessments and ESF documents, design and tender documents, organization of evaluation, consultations). ARIS will have a core team based in Bishkek, consisting of key technical personnel required for the Project implementation. With their technical, environmental and social staff in Batken, ARIS will closely coordinate

¹⁸ "How to Make Grants a Better Match for Private Sector Development" World Bank 2016 and "Linking Farmers to Markets through Productive Alliances", World Bank 2016.



with the state authorities and local self-governments and ensure smooth implementation of the Project in terms of technical, environmental, social aspects.

- (e) MoA, MoEC and ARIS will sign the Cooperation Agreement in form and substance satisfactory to the Bank.
- (f) **State Authorities and Local Self-Governments** in the Batken Region will actively participate in project implementation. Representatives of ARIS, located in their regional offices, will ensure effective coordination with the state authorities and local self-governments for project-specific activities. *Inter alia*, the local municipalities will be in charge of monitoring implementation of the Project activities, public safety and public health by appointing a representative. The representative will facilitate civic engagement and communication with the citizens and project affected people, conduct community meetings, participate in tender evaluation committees, facilitate local inputs to proposals and ensure both horizontal and vertical coordination for cross-sector activities. Finally, the representatives of the state authorities and local self-governments will be presented in the Productive Partnerships Selection and Small Grants Selection Committees, established under the Project. In addition, the Regional Government will provide office space in Batken to promote good coordination with and implementation of the Project by the PIE staff, as needed.
- (g) **The Productive Partnerships Selection Committee**, under Component 2, will be established through a MoA decree and chaired by MoA. The committee will comprise representatives of MoEC, MoF, representatives of the state authorities and local self-governments and members of the civil society, as further detailed in the Productive Partnerships Manual. The Committee for Productive Partnerships shall be responsible for evaluating and approving the applications for the Targeted Investments Subprojects program based on recommendations from a technical team that serves as Secretariat to the Committee and includes independent evaluation of proposals and overseeing the implementation of the Targeted Investment Subprojects program under Component 2. The adoption of the manual by MoA, and ARIS will be a disbursement condition for Component 2.
- (h) Similarly, **the Small Grants Program Committee**, established under Component 3 through a MoEC decree will be responsible for evaluating and approving the applications for the Small Grants Program and overseeing the implementation of the Small Grants Program. It will comprise members from MoF, MoEC, MoA, ARIS, members of the CSO sector from the Batken region, the Representative of Presidential Envoy to the Batken Region, and city-level representatives from the region. The Committee's mandate, roles and responsibilities, as well as the grants screening, selection, awarding, reporting and all other details will be described in the Small Grants Handbook. The adoption of the handbook by MoEC, prepared by ARIS, acceptable to the Bank will be a disbursement condition under Component 3.
- (i) The specific roles and responsibilities of all the parties set out above shall be described in detail in POM, which shall be developed by the PIE and provided to the Bank for no objection. The approved POM will be an effectiveness condition for the Project.

B. Results Monitoring and Evaluation Arrangements

57. ARIS will be responsible for day-to-day project implementation and oversight of results monitoring and day-to-day Monitoring and Evaluation (M&E) responsibilities. ARIS may need to hire a consultant to collect M&E data and coordinate with line agencies to ensure data consistency in line with the agreed indicators under the results framework. ARIS will design and implement an integrated M&E system as part of Component 5, which will cover the costs aimed at designing and managing M&E systems for the Project implementation period. This system will build upon the existing M&E systems already in place under RED-1. ARIS will remain responsible for monitoring the progress of work on the



ground with timely identification of bottlenecks during implementation and also the performance of the Project in achieving the Project development indicators. In addition, ARIS will also work in close collaboration with the local authorities and keep track of the data at the local level and will prepare and submit semi-annual reports to MoF, MoEC, MoA, other relevant stakeholders and to the Bank for endorsement. M&E Framework will be an integral part of the POM.

C. Sustainability

58. Recognizing the long-term sustainability risk, the Project has been designed in close consultation with national agencies, state authorities and local self-governments and potential project beneficiaries and builds on the lessons learned from RED-1. The investments will be identified following a demand-driven approach and in close consultation with local governments and project partner agencies.

59. Moreover, considering the multi-sectoral nature of these investments, MoEC is coordinating directly with relevant line ministries and agencies to ensure that what is delivered under the Project (i) is fully consistent with other ongoing and/or upcoming larger sectoral programs and/or projects financed by both the Government and other International Finance Institutions and development partners, (ii) follows relevant national sector guidelines and design criteria, and (iii) is consistent with ongoing sector reform programs. Relevant line agencies or regional/local administrations, under the leadership of the subnational governments, will also be involved in various stages of implementation, from tendering to commissioning, and will be responsible for operation and maintenance after handover. For those assets that will remain under the responsibility of the municipalities, the Project will assist them to enhance future sustainability through capacity-building support.

IV. PROJECT APPRAISAL SUMMARY

A. Technical, Economic and Financial Analysis

Technical

60. **Project readiness.** The Batken region was selected for the Project as the second lagging region in the country, as determined by the analytical study conducted by the Bank in 2019 and in response to the Government's request. The Project will build on RED-1 in the neighboring Region of Osh and will expand to the west. It will benefit from the practices and resources developed under RED-1. For example, investment screening and selection criteria identified as part of RED-1 will be further enhanced and used for the identification, prioritization and selection of investments under Component 1. The Productive Partnership Manual and Small Grants Handbook developed through a long preparatory process under RED-1 will serve as a foundation for the similar manuals under RED-2. Social and Environmental Framework documents and tools prepared under RED-1 will be also beneficial for the PIU to adopt them under RED-2.

61. For infrastructure works under Component 1, a long list of indicative investments was identified at Appraisal. These investments have been nominated by the participating municipalities and regional authorities and were screened, assessed and prioritized taking into consideration their relevance to the Project development objectives and the screening and selection criteria, described in Annex 2. The Bank's initial screening showed that most of the proposed activities under Component 1 are consistent with the existing and future municipal investment plans and underwent extensive consultative processes for endorsement by local government and communities. The selection of investments to be financed under the Project will continue during the effectiveness period and a list with Year 1 activities will be



finalized at that point. Subsequently, tenders to procure detailed designs for the selected investments will be launched in Year 1 of project implementation. Investments requiring further consultations and determination due to their complex nature on the technical side will be prioritized for Year 2-5 and additional feasibility studies will be conducted starting Year 1 of project implementation. Additional investments beyond the long list to be financed under the Project will be identified during project implementation and appraised thereafter.

62. In the context of the COVID-19 pandemic, a robust and sustainable recovery will require a much greater focus on diversification and private sector investment. The Kyrgyz Republic's reliance on a few export commodities has intensified the economy's vulnerability to shocks and a key recommendation emerging from Country Private Sector Diagnostic (CPSD) is for greater focus on diversification. Agriculture is seen as an important part of the diversification effort, given its importance to the economy and employment. The proposed project is expected to increase opportunities for leveraging new investment in sub-sectors that have shown significant potential such as horticulture. A recent assessment of export competitiveness showed strong export potential for Kyrgyz Republic cherries, walnuts, fresh apricots, and plums (fresh and dried) to China. To diversify export commodities, the private sector and the Cabinet of Ministers have identified the need for improved trade and logistics infrastructure to efficiently and hygienically aggregate, store and prepare greater varieties of horticultural or other perishable products for export.

63. **Analytical foundation.** The design of the Project was based on various analytical works conducted specifically for RED-1, in addition to information collected through broad consultations both internally within the Bank's various Global Practices and externally with government entities, development partners, community-based organizations and selected private enterprises. The key original analytical work undertaken is detailed below.

64. *Regional and Spatial Analysis:* The analysis was undertaken in 2019 to understand the current trend of regional and spatial development across all seven regions in the Kyrgyz Republic to underpin the selection of the region that would benefit the most from the interventions under the Project. The recommendations helped to identify each region's unique economic potential and binding constraints for development. This included: (i) urbanization and demography; (ii) economic composition and workforce; (iii) connectivity and living standards; and (iv) disaster and climate resilience. Based on the results of these analyses, the recommendation was to concentrate resources on supporting the development of the Osh Region under RED-1 and the Batken Region under RED-2 due to their highly underdeveloped economic potential. RED-1 focuses on enhancing Tourism and Agriculture sectors, as the main drivers for economic growth, while RED-2 will place a higher emphasis on addressing basic municipal needs to create favorable conditions for local economic development and help improve agricultural competitiveness through targeted investments in the sector.

65. **Climate change:** Mitigation and adaptation measures to address the country's vulnerability to climate change and respond to the increasing risks of extreme weather events in Kyrgyz Republic, as described in paragraph 4, are considered in the Project design and are based on the results of the Project screening for short and long-term climate change and disaster risks. The project areas are vulnerable to increasing temperatures, floods, droughts as well as earthquakes, landslides and mudflows. The Project design aims to address the country's vulnerabilities to climate change for adaptation and mitigation through several activities described below.

66. Climate and disaster risks have been considered in the design of Component 1, which concerns infrastructure improvements of selected municipal assets and capacity building at the central and local levels. For investments in all types of physical infrastructure under this component, climate and disaster vulnerability will be considered in the design parameters of the investments to adapt to climate change in the long term. Project investments will address the increasing risks of extreme weather events, such as more frequent and intense flooding often causing landslides and



mudflows in and around the Project cities (particularly through investments in storm-water drainage and stabilizing embankments), and will improve infrastructure resistance to extreme droughts, as well as ensure seismic resistance standards of urban infrastructure. Technical designs for the selected investments under this component will consider anticipated impacts of climate change and apply required and targeted adaptation measures to ensure climate resilience. Besides engaging in climate change adaptation activities, the component also includes long-term climate change mitigation measures. The mitigation measures will comprise investments in energy efficiency of streetlighting as well as administrative and cultural buildings in the selected locations. The capacity-building activities will address how climate change and disasters can affect cities, how to build resilience into urban planning practices and asset design processes, how to ensure a plan for preparedness and response activities, etc. As part of this component, it is envisaged that (i) all infrastructure investments will be screened for climate change; and (ii) the awareness and capacity to understand urban resilience and energy efficiency practices of both national government and local government officials will be strengthened. A set of indicators to address the climate change considerations in infrastructure investments and capacity building activities to be supported under the Project have been added to the results framework to ensure consistent monitoring and reporting.

Climate change-related indicators under Component 1	Baseline	Target
Proposed investments and project activities screened for climate change (percentage)	0	100
Public buildings with reduced vulnerability to seismic hazards and improved energy efficiency (number)	0	10
Key stakeholders trained in integrated urban flood risk management, climate change resilience, and territorial planning (number)	0	100
Public sector staff and technical professionals trained in the design and implementation of retrofitting and renovation of buildings to improve energy efficiency	0	100

67. In the agriculture investments under Component 2, climate-smart solutions such as water-saving technologies, energy-efficient processing, use of drought-resistant and climate-induced disease-resistant varieties, responsible pest management, and waste management practices will be encouraged and incentivized through the Targeted Investments Subprojects mechanism. While specific value chains will be selected only during implementation, it is expected that a large share of investments will support the fruit and vegetable sector, and finance improvements in water use considering climate-related risks on water scarcity and energy efficiency in addition to improved productivity and quality. Estimates of net Greenhouse gas emissions under the second component are - 20,234 tCO₂ equivalent per year.

Climate change related indicators under Component 2	Baseline	Target
Area under new climate smart technology (water saving, climate adapted variety, or energy efficient technology) (ha)	0	500
Percent of operational productive partnerships that include climate resilient technology investments	0	75
Percent of farmers adopting technology that is climate smart	0	75

68. **Gender.** The Project design includes measures to specifically target participation of women in the project financed activities to help narrow the identified gap. A detailed description of measures to be supported under the project is provided in Annex 2, paragraphs 18 and 30.



69. **Conflict Filter.** Following the revolution and civil unrest in 2010, the Bank introduced a Conflict Filter for its Kyrgyz Republic operations in 2011 as a screening tool to ensure that the Bank-financed projects do not exacerbate conflict risks. The screening tool will be incorporated into the Productive Partnerships Manual and Small Grants Handbook under Components 2 and 3 and will focus on mechanisms to ensure fairness and inclusion when it comes to the selection of the communities and SMEs. The Conflict Filter has been already applied to the selection of the indicative long-list of the proposed investments under Component 1. The screening criteria were applied to ensure that the proposed investments (parks, playgrounds, roads, street lighting, etc.) do not benefit specific ethnic groups and interventions are beneficial to a diverse group of users. The conflict filter will also be used as a tool in the evaluation and selection of sub-projects under Component 2. Where possible, the selected contractors for works under Components 1 and 2 will be tasked to provide equal employment opportunities to the workforce of all ethnic groups and maintain equality. Recognizing the importance of this element, the Project will include satisfaction surveys (see Citizen Engagement section) to be conducted annually over the course of the Project. ARIS will promote broad representation of ethnic groups at the meetings and ensure that the various ethnic groups' voices and concerns are addressed during the selection and implementation of various activities under the Project.

Economic analysis

70. The Project is expected to yield a positive development impact. Project activities are expected to generate local employment opportunities and increased private sector activity which will bring in additional local tax revenues and income to direct project beneficiaries.

71. The Project has a clear rationale for public sector provision and financing as it targets the improvement of local and regional public goods, such as basic infrastructure, municipal services and regulatory functions. The project also contributes to private sector development through catalytic investments in agricultural value chains. Most infrastructure activities are expected to focus on the direct responsibilities of local and regional governments which have limited fiscal capacity to finance capital investments and in areas where private sector financing is absent or not readily accessible. Investments in the agriculture sector and in agro-enterprises will fill market and coordination failures.

72. Economic analysis was performed for: construction of public buildings (schools, kindergartens, health and sport facilities, etc.); rehabilitation of roads; and investments in the agriculture sector. These are the main types of interventions to be supported under the project.

73. In the economic analysis, the financial costs, as well as the capital and operational costs, were adjusted in order to precisely assess all expenses associated with alternative options of project implementation globally. As such, the payment of taxes was excluded from the financial, capital and operational costs as tax payments represent just a transfer of funds from the point of view of the country. Shadow prices have also been considered along with the inefficiency characteristic for a transitional economy. The conversion factor used for this calculation was 0.85.

74. The public buildings component is expected to deliver substantial benefits in the following ways: (i) avoided fatalities in case of the earthquakes, (ii) avoided damage to buildings, (iii) functional upgrades, such as water, sanitation and hygiene (WASH) facilities and improved energy efficiency, (iv) temporary job generation during project implementation and (v) additional benefits.

75. Avoided fatalities can be estimated using a value of statistical life (VSL) approach to express the benefits of lives saved in monetary terms. The benefits of avoided damage of buildings can be quantified by estimating replacement and repair values based on market prices. Similarly, the benefits of energy efficiency improvements can be estimated by



comparing the status quo energy consumption and its reduction after the safer school intervention based on average energy prices. As the impact of WASH is often relatively small compared to the other benefits, it was not included in our cost-benefit analysis.

76. The estimated NPV for the public buildings (schools, kindergartens, health facilities, etc.) construction component under RED-2 is US\$6.7 million. The benefit-cost ratio is 1.57 and the ERR is 16.36 percent. All three indicators highlight the economic viability of these investments.

77. For the road rehabilitation component, software developed by the World Bank for economic analysis of road section modernization options – Roads Economic Decision Model (REDM) version 3.2 – was used to produce the EFA for this section. The model considers only the economic part. The Net Present Value (NPV) and Economic Internal Rate of Return (EIRR) were calculated for each project.

78. Detailed analysis shows that at present traffic levels and all other related assumptions the Batken-Toktogul Oluya-Karabak road corridor investment results in a negative NPV (US\$ -0.655 million) and IRR (-3.47 percent). On the other hand, the Batken and Isfana Street rehabilitation shows a positive NPV and IRR – US\$0.051 million in NPV and IRR of 5.44 percent in Batken and US\$0.202 million and IRR of 6.83 percent in Isfana.

79. The analysis of agricultural investments focused on a number of indicative economic activities such as: (i) fruit orchards (cherry, apricot, plum), (ii) vegetable production (tomato, cucumber), (ii) greenhouse production; and (iii) livestock production. Project investments will be expected to result in an increase of agricultural productivity and promote the introduction of resource-efficient technologies and energy-efficient technologies. All investments show positive financial results and a significant increase in gross and net returns. A relevant TA package was attached to each investment to ensure specific capacity building of beneficiaries to uptake innovative technologies. Given the aggregated benefit and cost streams at economic prices, the economic rate of return (ERR) is estimated at 13.6 percent and the net present value of the project's net benefit stream in economic terms is US\$4.5 million. Detailed calculations of aggregated economic IRR and NPV are presented in the detailed analysis that is summarized in Annex 3.

80. The Economic and Financial Analysis also estimated GHG emission reductions from the agriculture investments under the project, which are generated by the anticipated establishment of fruit orchards and through improved agricultural productivity and use of improved agricultural practices and energy-efficient technologies. It is estimated that the Project will contribute to capturing 63,000 tons of CO₂ equivalent via establishing fruit orchards in 600 ha of degraded lands and will additionally reduce GHG emissions by 36,000 tons of CO₂ equivalent through introduction of improved breeds and feeding practices as well as energy-efficient technologies.

B. Fiduciary

Project Financing

81. The table below provides the summary of eligible expenditures in the amount allocated and the percentage set forth against each Category:

Category	Amount (inclusive of taxes)	% to be financed under the project	IDA Credit Financing	IDA Grant Financing
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(1) Goods, works, non-consulting services, and consulting services; Training and Operating Costs for Parts 1, 2.1, 2.2(a), 3(a), and 5 of the Project	US\$ 32.5 mil	100%	US\$ 9 mil	US\$ 23.5 mil
(2) Goods, works, non-consulting services, and consulting services; Trainings for Investment Subprojects under Part 2.2(b) of the Project	US\$ 16.0 mil	100%	US\$ 16 mil	US\$ 0 mil
(3) Goods, works, non-consulting services, consulting services and trainings for the Small Grants under Part 3(b) of the Project	US\$ 1.5 mil	100%	US\$ 0 mil	US\$ 1.5 mil
(4) Emergency Expenditures under Part 4 of the Project	US\$ 0 mil	100%	US\$ 0 mil	US\$ 0 mil
Total	US\$ 50.0 mil		US\$ 25.0 mil	US\$ 25.0 mil

Financial Management

82. The financial management assessment of the Project was done in October 2021, in accordance with the Financial Management Manual for the Bank's Investment Project Financing Operations that became effective on March 1, 2010 and was revised on February 10, 2017. Overall, the FM arrangements at ARIS are adequate to implement the Project and meet the minimum requirements of the Bank's Policy and Directive on Investment Project Financing subject to ARIS fulfilling the following conditions: (i) develop and adopt the POM, acceptable to the Bank, which will include the Project's financial management arrangements (effectiveness condition); (ii) hire, within 60 days of the Financing Agreement's effectiveness, a project related disbursement specialist, with relevant knowledge and experience in the Bank FM/Disbursement policies and procedures; (iii) develop a Productive Partnerships Manual and a Small Grants Handbook (for productive partnerships and Small Grants Program under Components 2 and 3, respectively), acceptable to the Bank, which will be a disbursement condition for funds under the respective components.

83. Project management-oriented Interim un-audited Financial Reports (IFRs) will be used for the Project monitoring and supervision. The format of the IFRs will include: (i) Project Sources and Uses of Funds; (ii) Uses of Funds by Project Activity; (iii) Designated Account Statements; (iv) A Statement of the Financial Position; and (v) SOE Withdrawal Schedule. ARIS will be producing IFRs every calendar quarter throughout the life of the project. These financial reports will be submitted to the Bank within 45 days of the end of each calendar quarter. The first IFRs will be submitted after the end of the first calendar quarter following the initial disbursement.

84. The Project FM assessment confirmed that, in particular:(i) ARIS has a long and successful history of implementing projects funded by the Bank and other donors; (ii) the auditors issued unmodified (clean) opinions on the financial statements of the on-going projects implemented by ARIS, with no critical recommendations in the management letters; and (iii) the IFRs of both ongoing and closed projects implemented by ARIS were received on time and found to be acceptable to the Bank.

85. The audit of the Project annual financial statements will be conducted: (i) by independent private auditors acceptable to the Bank following terms of reference (TOR) acceptable to the Bank and procured by ARIS, and (ii) according to the International Standards on Auditing (ISA) issued by the International Auditing and Assurance Standards Board. The annual audits of the Project financial statements will be provided to the Bank within six months of the end of each fiscal year and at the Project closing. The cost of the Project audit will be financed from the proceeds of the Project.



86. The Recipient has agreed to disclose the audit reports for the Project within one month of their receipt from the auditors and acceptance by the Bank by posting the reports on the ARIS website or other official websites of the Recipient. Following the Bank's formal receipt of these reports from the Borrower, the Bank will make them publicly available according to the Bank Policy on Access to Information.

87. According to 2020 Transparency International's Corruption Perception Index, the Kyrgyz Republic was ranked 124th¹⁹ in the list of 180 countries. The latest PEFA report (conducted in 2021) found that while some performance improvements in internal controls were noted, critical Public Financial Management (PFM) elements including, external audit (Supreme Audit Institution - SAI), and financial reporting remain weak. While some elements of the country PFM, such as the country's budget system, will be used for the Project, for other PFM elements (accounting, financial reporting, internal controls, funds flow under the Project), the Project specific systems at ARIS will be used. The Project's Designated Accounts (DAs) will be opened in a commercial bank acceptable to the Bank.

88. Cash basis will be applied to the Project accounting, and IPSAS "Financial Reporting Under the Cash Basis of Accounting" issued by the International Public Sector Accounting Standards Board (the IPSASB) of the International Federation of Accountants (IFAC) will be used for the Project financial reporting. ARIS will update its accounting systems to generate the Project financial reports and SOEs.

89. There are overall adequate planning and budgeting capacity and overall adequate internal control systems in place at ARIS, which will be described in the Project Operations Manual for this Project. ARIS has an internal audit function that oversees the Project's internal control systems.

90. The overall FM risk for the Project is assessed as Substantial, with the Inherent Risk and Control Risk also assessed as Substantial, given the complex implementation arrangements, including productive partnership and small grants activities under the project.

91. **Disbursement Arrangements.** Two Designated Accounts (DA) (one for IDA Grant and another for IDA Credit) will be opened for the Project to be managed by ARIS for activities to be implemented under the Project. The DAs will be opened in US\$, in a commercial bank acceptable for the Bank. The SOE-based disbursement method will be applied for the Project. Project funds will flow from the Bank, either: (i) via the DA, which will be replenished on the basis of SOEs or full documentation; or (ii) on the basis of direct payment withdrawal applications and/or special commitments, received from ARIS. Withdrawal applications documenting funds utilized from the DAs will be sent to the Bank at least every three months. The following disbursement methods may be used under the Project: Reimbursement, Advance, Direct payment and Special Commitment. The DAs' ceilings for each DA as well as the detailed instructions on withdrawal of Project proceeds will be provided in the Disbursement and Financial Information Letter. The details of funds flow under the productive partnership and small grants' activities will be described in the Productive Partnerships Manual and Small Grants Handbook which must be acceptable to the Bank, and their adoption by MoA and MoEC respectively will be a disbursement condition for funds under the productive partnership and small grants' activities under Components 2 and 3.

¹⁹ <https://www.transparency.org/cpi2020>



Procurement

92. Procurement activities will be carried out by ARIS. The Bank team conducted procurement capacity and risks assessment using the Procurement Risk Assessment and Management System (PRAMS). The review identified a number of risks related to the procurement policy and institutional arrangements which need to be mitigated.

93. Summary of Risks and Risk Mitigation Measures. The Procurement Capacity Assessment Report, covering the risks and risk mitigation plan, has been filed in PRAMS. The key issues and risks concerning procurement include: (i) state agencies have limited capacity to prepare detailed designs and technical specifications for the defined investments. This increases the risk for accountability of procurement decisions, especially at the local level; (ii) Possible delays with procurement: on-going and completed projects show frequent delays caused by poor planning; (iii) Low level of competition in the civil works sector: past experience suggests that the country suffers from limited competition due to low capacity of local contractors; (iv) Perceived high level of corruption, as measured by Transparency International; (v) For national bidding, ARIS will follow the public procurement legislation and national procurement procedures, which may increase risks due to the (technical) issues related to the e-Government Procurement (e-GP) system; (vi) insufficient contract management and lower-than-required quality of procured works, goods and services. Given the findings of the assessments, the initial overall procurement risk under the Project is assessed as High.

94. To align procurement arrangements with the Bank's requirements, ARIS will implement the following mitigation measures: i) With additional support from consultants, ARIS will be responsible for the preparation of technical documents; ii) Realistic procurement planning and scheduling, including timely preparation of the technical specifications or terms of references with Bank's close supervision and monitoring, particularly from the country office; iii) consider analysis for bidder's capacity in the procurement timeline. Early engagement with the market and business outreach will be required; iv) Apply the World Bank's Anti-Corruption Guidelines; v) Register as a Purchaser in state procurement portal. vi) More emphasis on and training in contract management; regular physical inspections by Bank supervision missions.

95. The activities under the project will be subject to the World Bank's new Procurement Framework. All procurement of contracts will be conducted through the procedures as specified in the World Bank's Procurement Regulations for IPF Recipients-Procurement in Investment Project Financing Goods, Works, Non-Consulting and Consulting Services, dated November 2020 (Procurement Regulations). The Project will also be subject to the World Bank's Anti-Corruption Guidelines, dated July 1, 2016. The procurement and contract management processes will be tracked through the Systematic Tracking of Exchange in Procurement (STEP) system. As required by the Procurement Regulations, a Project Procurement Strategy for Development is outlined, on the basis of which, the Procurement Plan is formed (to be agreed at negotiation), detailing the selection methods to be followed by the Borrower during the Project implementation in the procurement of goods, works, non-consulting and consulting services financed by the World Bank. Specific procurement procedures to be followed for managing project resources will be documented in the POM. A detailed description of procurement arrangements and a summary Procurement Plan are provided in Annex 4.

C. Legal Operational Policies

	Triggered?
Projects on International Waterways OP 7.50	Yes
Projects in Disputed Areas OP 7.60	No



96. **OP 7.50.** OP 7.50 is applicable to the proposed Project as some of the proposed interventions may impact water resources of the Syr Darya River Basin, shared by Kazakhstan, Kyrgyz Republic, Tajikistan, and Uzbekistan and which is an international waterway under the Policy. The potential transboundary water impacts under the Project are related to investments under Component 1: Supporting Municipal Infrastructure and Basic Public Services; and Component 2: Strengthening Agricultural Competitiveness. Under Component 1, specific investments for water supply and sanitation will be limited to the rehabilitation of the existing water supply pipes and networks in the selected areas, and/or rehabilitation of water reservoirs, all of which are small-scale works, therefore there will be no additional water abstraction under this component. Under Component 2, the Project is expected to make investments to rehabilitate existing irrigation systems and promote adoption of drip irrigation technology in newly irrigated areas. Rehabilitation of existing irrigation schemes is expected to be small-scale and would improve water use efficiency. Due to the limited scope of the Project area and the relative efficiency of drip irrigation technologies in contrast to traditional furrow irrigation, the Project is expected to result in net water savings.

97. To adhere to the commitments made under existing riparian agreements, the Project will ensure: (i) sharing of relevant environmental and water source information from the initial assessment and sub-project sites once it becomes available. Information will be made publicly available on the Project website and this disclosure obligation will be included as part of the Environment and Social Commitment Plan (ESCP); and (ii) that overall water abstraction under of the Project (both additional water abstractions due to new investments as well as reduction in abstractions because of conversion to drip irrigation in existing schemes) will not negatively impact the agreed water allocations between riparians through the use of selection criteria that would ensure that the currently calculated net water savings will indeed materialize or that savings and abstractions will at minimum balance each other out. This will be monitored as part of the World Bank's implementation support and prior review process.

98. Following the requirements of the OP7.50, notifications on behalf of the Kyrgyz Republic were sent by the World Bank (at the request of the Kyrgyz Republic) to all riparian countries during the project preparation stage.

D. Environmental and Social

99. The Project will have mostly positive environmental and social benefits as the interventions for rehabilitation of urban and public infrastructures will substantially improve living conditions, water supply, sanitation, solid waste management, and reduce pollution, which will have significant effects on the health of the population and environment of cities in the region. Moreover, agri-food-related activities would create new jobs and, respectively, more employment and increased income, improving the business environment, introducing advanced agricultural technologies and techniques, and contributing to poverty reduction and food safety.

100. The Project recognizes the following standards as relevant: ESS1, 2, 3, 4, 5, 6, 8, and 10. The project's environmental and social risks are both Substantial, resulting in an overall risk rating of Substantial. Small-medium scale and localized risks and impacts are expected from the rehabilitation/upgrading of municipal infrastructure and basic public services as well as the development of agri-food clusters among small agricultural producers, which will include on-farm irrigation rehabilitation and expansion of drip irrigation technology into newly cultivated lands. Such risks and impacts include: (i) increased pollution due to generation of waste; (ii) generation of dust, noise, and vibration due to the movement of construction vehicles and machinery; (iii) associated risks due to improper disposal of construction waste and asbestos; (iv) operational or accidental spills of fuel and lubricants from the construction machinery; (v) disturbance and pollution of the natural ecosystem and biodiversity; (vi) an increase in traffic; (vii) occupational and community health



and safety issues; (viii) temporary/permanent physical and/or economic displacement; (ix) exclusion of vulnerable groups; (x) impact on physical, cultural heritage; (xi) soil pollution, erosion, compaction, and loss of production capacity; (xii) surface and groundwater pollution; (xiii) health hazard due to increased exposure to dangerous agrochemicals; (xiv) security risks due to tensions with neighboring countries. Apart from the above, a key challenge/risk relates to the exclusion and marginalization of vulnerable groups – small-scale farmers, youth, and women. Ensuring inclusion and that there will be no elite capture, in general, and in particular, under the third component – Small Grants Program – is a significant challenge for the project. Managing the land acquisition process and ‘ensuring inclusion’ depends upon the institutional capacity and the implementation of the Environmental and Social instruments. The PIE has limited experience with the ESF requirements from implementing RED-1, which became effective in December 2020. The PIE will establish a new team to implement RED-2. The team will include an environmental specialist, a social specialist, and an OHS specialist at the Bishkek office, and an environmental specialist and a social specialist at a satellite office in Batken. The PIE team will receive a full ESF training session after recruitment.

101. Due to the diverse range of activities financed under the Project, most of which will not be identified until after implementation begins, the Project is taking a framework approach. The following instruments and actions were prepared/completed before Appraisal: (i) Environmental and Social Management Framework (ESMF) that includes a template for the development of site-specific Pest Management Plans (PMP) and a specific section on CERC; (ii) Resettlement Policy Framework (RPF); (iii) Stakeholder Engagement Plan (SEP); (iv) Labor Management Procedures (LMP); (v) ESCP. Other instruments to be prepared during project implementation include site-specific Environmental and Social Impact Assessments (ESIA)/ Environmental and Social Management Plans (ESMP); Security Management Plan (SMP) if needed based on the results of Security Assessment.

102. The Borrower’s Environmental and Social Commitment Plan specifies the main responsibilities and actions to be undertaken by PIE to ensure project compliance with the Bank’s ESSs and in particular: (a) conducting environmental and social screening for all project activities via ESMP/ESMP Checklist covering the above aspects; (b) applying the ESMF and RPF to all project activities, including the need to prepare site specific ESMPs and Resettlement Action Plans; (c) reporting on environmental and social performance of all activities on a biannual reports; (d) ensuring transparency in providing project environmental, social actions and ensuring all ESIA and/or ESMPs are disclosed and publicly consulted with all interested parties; (e) maintaining through the whole period of project implementation human capacity to ensure project activities ESIA and ESMP supervision and monitoring and providing adequate reporting to the implementing entity and to the Bank; (f) preparing and adhering to the Environment, Social, Health and Safety Code of Conduct by contractors; and (g) implementing and reporting on (i) Stakeholders Engagement Plan; (j) Labor Management Plans (LMP); and (k) Grievance Mechanism.

V. GRIEVANCE REDRESS SERVICES

103. Communities and individuals who believe that they are adversely affected by a World Bank (WB) supported project may submit complaints to existing project-level grievance redress mechanisms or the WB’s Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project affected communities and individuals may submit their complaint to the WB’s independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB 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 to respond. For information on how to submit complaints to the World Bank's corporate Grievance Redress Service (GRS), please 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, please visit www.inspectionpanel.org.

VI. KEY RISKS

104. **The overall project risk rating is Substantial.** Institutional capacity for implementation is one of the key risks due to the frequent changes in the Government and lack of a dedicated Ministry or agency²⁰ responsible for regional development and multiple government agencies (both vertically from national to regional/local levels and horizontally across sectors) that will take part in the preparation and implementation of the Project.

105. **Political and Governance risk is identified as Substantial.** The Kyrgyz parliamentary elections held on November 28, 2021 and expected changes in the ministerial positions and structure of the Government may have an impact on the Project implementation. To mitigate this risk, the preparation phase included a number of meetings and briefings with the relevant stakeholders of the government at different levels and agreement on the Project design was reached. This practice will continue as part of the parliamentary ratification process with the members of the Parliament once the Project is approved by the Board.

106. To ensure proper coordination within the Government, the Steering Committee, chaired by the MoEC and including members from all relevant Ministries and regional representatives, will ensure multi-agency coordination at a higher level. To promote collaboration between the region and the center, the PIE will strengthen its regional office in Batken with the required skillset, which will result in improved coordination and flow of information and communication between the region and the center.

107. **The risk related to institutional capacity for implementation is Substantial.** Lack of coordination at the technical level could negatively affect efficiency of Project implementation and, consequently, the achievement of the development objectives. However, this risk is mitigated by the fact that PIE, which has a successful record with the Association in coordinating and implementing the Bank financed projects, including RED-1, will lead Project implementation and the coordination efforts among the various stakeholders at the technical level.

108. The implementation arrangements for RED-1 and RED-2 remain similar. While the agriculture component under RED-1 is being implemented by the PIE through the technical support from another agency, a similar component under RED-2 will be carried out solely by the PIE without external assistance. To ensure the technical readiness of the PIE for the adequate performance required for agricultural activities envisaged under the respective component, the PIE will hire technical specialists according to the ToRs agreed upon with the Bank. The Bank will provide hands-on support to the PIE through regular meetings and implementation support missions to ensure that all agriculture-related activities are adequately planned and executed.

²⁰ The Ministry of Economy and Finance was recently split into two - MoF and MoEC. While the MoEC is currently responsible for the regional development agenda, there is limited capacity at this ministry for enhanced planning and implementation of regional development efforts.



109. **The overall Fiduciary Risk is assessed as High due to the High Procurement risk**, which is due to potential procurement delays experienced under the on-going RED-1. These delays are often triggered due to poor procurement planning. Moreover, project beneficiaries do not have capacity to prepare detailed designs and technical specifications for the agreed investments. This increases the risk of accountability of procurement decisions, especially at the local level. The suggested Small Grants Program brings additional risk related to complexity, procurement capacity and market readiness. Project procurement may also be affected by low level of competition in the civil works sector: past experience shows that the procurement in the country has not attracted adequate competition due to limited capacity of local contractors.

110. To mitigate these risks ARIS will implement the following measures: i) With additional consultants' support, ARIS will be responsible for the preparation of technical documents; ii) Realistic procurement planning and scheduling, including timely preparation of the technical specifications or terms of references with Bank's close supervision and monitoring, particularly from the country office; iii) conduct analysis for bidder's capacity and adjust procurement timeline. Early engagement with the market and business outreach will be required; iv) Apply the World Bank's Anti-Corruption Guidelines; v) training in contract management and regular physical inspections by Bank supervision missions.

111. The project's environmental and social risks are both Substantial, resulting in an overall risk rating of Substantial. Small-medium scale and localized risks and impacts are expected from the rehabilitation/upgrading of municipal infrastructure and basic public services as well as the development of agri-food clusters among small agricultural producers, which will include on-farm irrigation rehabilitation and expansion of drip irrigation technology into newly cultivated lands. The PIE has limited experience with the ESF requirements from implementing RED-1, which became effective in December 2020. To mitigate the risk, the PIE will establish a new team to implement RED-2 and will include an environmental specialist, a social specialist, and an OHS specialist at the Bishkek office, and an environmental specialist and a social specialist at a satellite office in Batken. The PIE team will receive a full ESF training session after recruitment.

**VII. RESULTS FRAMEWORK AND MONITORING****Results Framework**

COUNTRY: Kyrgyz Republic
Second Regional Economic Development Project

Project Development Objectives(s)

To improve access to basic municipal services, strengthen competitiveness of selected agriculture value chains, and increase SME activities in the Batken Region.

Project Development Objective Indicators

Indicator Name	PBC	Baseline	End Target
Improved municipal services			
People provided with improved urban living conditions (CRI, Number)		0.00	35,000.00
People provided with improved urban living conditions - Female (RMS requirement) (CRI, Number)		0.00	17,500.00
Strengthened Agri-Food Clusters			
Increase in the sale of agricultural products by project beneficiaries (Percentage) (Percentage)		0.00	10.00
Increased SME activities			
Number of SMEs becoming operational or scaling up activities under the Small Grants Program (Number)		0.00	100.00

**Intermediate Results Indicators by Components**

Indicator Name	PBC	Baseline	End Target
Component 1: Supporting municipal infrastructure, basic public services and capacity building			
Proposed investments and project activities screened for climate change (Percentage)	0.00		100.00
Public buildings with reduced vulnerability to seismic hazards and improve energy efficiency (Number)	0.00		10.00
Roads rehabilitated (Kilometers)	0.00		30.00
New or rehabilitated urban public spaces (Square Meter(m2))	0.00		10,000.00
Key stakeholders trained in integrated urban flood risk management, climate change resilience, and territorial planning (Number)	0.00		100.00
Public sector staff and technical professionals trained in the design and implementation of retrofitting and renovation of buildings to improve energy efficiency (Number)	0.00		100.00
Beneficiaries who report effective engagement processes (Percentage)	0.00		70.00
Of which, females (Percentage)	0.00		50.00
Component 2: Strengthening Agriculture Competitiveness			
Number of laboratories and facilities supported under the project (Number) (Number)	0.00		4.00
Farmers reached with agricultural assets or services (CRI, Number)	0.00		2,500.00
Farmers reached with agricultural assets or services - Female (CRI, Number)	0.00		1,250.00
Number of operational productive partnership initiatives (Number)	0.00		15.00
Percent of operational productive partnerships that include	0.00		75.00



Indicator Name	PBC	Baseline	End Target
climate resilient technology investments (Percentage)			
Farmers adopting improved agricultural technology (CRI, Number)	0.00		1,500.00
Farmers adopting improved agricultural technology - Female (CRI, Number)	0.00		750.00
Farmers adopting improved agricultural technology - male (CRI, Number)	0.00		750.00
Percent of Farmers adopting improved agricultural technology that is climate smart (Percentage)	0.00		75.00
Area under new climate smart technology (water saving, climate adapted variety, or energy efficient technology) (Hectare(Ha))	0.00		500.00
Component 3: Promoting local economic development through the Small Grants Program			
Business plan approved for financing by the participants of the Small Grants Program (Number)	0.00		150.00
The share of female-led SMEs with the received financial support to start business (gender gap) (Percentage)	0.00		50.00
The share of females participating in the capacity building activities for improved business practices (gender gap) (Percentage)	0.00		50.00

Monitoring & Evaluation Plan: PDO Indicators

Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
People provided with improved urban		Bi-annually	Progress	ARIS (or a designated	ARIS (or a designated



living conditions			reports	firm) will collect data from the Municipalities by sending a request for data inputs	M&E firm)
People provided with improved urban living conditions - Female (RMS requirement)					
Increase in the sale of agricultural products by project beneficiaries (Percentage)	Measures the change in the production levels and access to new markets by participating beneficiaries.	Measured at mid term review stage and then annually thereafter.	Project progress reports and surveys	Targeted surveys and other M&E data collection tools	ARIS (or a designated M&E firm)
Number of SMEs becoming operational or scaling up activities under the Small Grants Program	This indicator will help to capture the number of SMEs supported under the project which have been established and started business operation or helped scale up their activities through SGP support	Bi-annually	Progress reports	ARIS (or a designated firm) will compile the data from the event reports.	ARIS (or a designated M&E firm)

**Monitoring & Evaluation Plan: Intermediate Results Indicators**

Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
Proposed investments and project activities screened for climate change	The indicator will capture the percentage of the total number of investments and activities screened for climate change	Bi-annually	Investment package reviews and progress reports	ARIS (or a designated firm) will collect the data from the data sources, measured in percentage	ARIS (or a designated M&E firm)
Public buildings with reduced vulnerability to seismic hazards and improve energy efficiency	The indicator will help capture the number of rehabilitated public buildings (schools, kindergartens, others) with reduced seismic vulnerability and increased energy efficiency under the Project.	Bi-annually	Design documentation and the progress reports	ARIS (or a designated firm) will collect the data from the data sources	ARIS (or a designated consultant)
Roads rehabilitated	The indicator will capture the length of rehabilitated roads under the Project.	Bi-annually	Design documentation and the progress reports	ARIS (or a designated firm) will collect the data from the data sources, measured in kilometers	ARIS (or a designated M&E firm)
New or rehabilitated urban public spaces	The indicator will capture square meters of rehabilitated public spaces under the Project. These may include public parks and spaces, streets and	Bi-annually	Design documentation and the progress reports	ARIS (or a designated firm) will collect the data from the data sources, measured in square meters	ARIS (or a designated consultant)



	sidewalks, etc.				
Key stakeholders trained in integrated urban flood risk management, climate change resilience, and territorial planning	This indicator will help capture the number of public stakeholders in integrated urban flood risk management, climate change resilience, and territorial planning	Bi-annually	Progress Reports	ARIS (or a designated consultant) will collect the required data from the training events	ARIS (or a designated consultant)
Public sector staff and technical professionals trained in the design and implementation of retrofitting and renovation of buildings to improve energy efficiency	The indicator will help capture the number of public/municipal staff being trained in the design and implementation of retrofitting and renovation of buildings to improve seismic resilience and energy efficiency.	Bi-annually	Progress reports summarizing training event reports and other relevant documents	ARIS (or a designated consultant) will collect the required data from the training events	ARIS (or a designated consultant)
Beneficiaries who report effective engagement processes	This indicator will help capture the percentage of beneficiaries under all components who report effective engagement processes through Open Door Days, scorecards, and the beneficiary feedback mechanism.	Bi-annually	Project progress reports	ARIS (or designated firm) will track the CE activities and the indicator will be measured through mini-surveys (feedback sheets or scorecards) after or during each meeting and through BFM.	ARIS (or a designated consultant)
Of which, females					



Number of laboratories and facilities supported under the project (Number)	The indicator will capture the number of laboratories and facilities with improved SPS control functions supported under the project	Bi-annual	Progress reports	Regular M&E reporting	ARIS (or a designated M&E firm)
Farmers reached with agricultural assets or services	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 "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),	Baseline, mid-term and final evaluation	Project reports	Regular project reporting	ARIS



	production-related services (e.g., soil testing, animal health/veterinary services), phytosanitary 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 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		Baseline, mid-term and final evaluation	Project reports	Regular progress reporting	ARIS
Number of operational productive partnership initiatives	Measures the extent to which productive partnerships have been launched and are functional	Bi-annual	Project reports	Regular project reporting	ARIS
Percent of operational productive partnerships that include climate resilient technology investments	Measures the extent to which productive partnerships have included climate smart	Bi-annual		Project reports	ARIS



	and climate resilient technology investments				
Farmers adopting improved agricultural technology	<p>This indicator measures the number of farmers (of agricultural products) who have adopted an improved agricultural technology promoted by operations supported by the World Bank.</p> <p>NB: "Agriculture" or "Agricultural" includes: crops, livestock, capture fisheries, aquaculture, agroforestry, timber and non-timber forest products.</p> <p>Adoption refers to a change of practice or change in use of a technology that was introduced or promoted by the project.</p> <p>Technology includes a change in practices compared to currently used practices or technologies (seed preparation, planting time, feeding schedule, feeding ingredients, postharvest storage/</p>	Baseline, mid-term and final evaluation	Dedicated surveys	Survey designed to capture data on producer adoption or utilization of technology	ARIS



	<p>processing, etc.). If the project introduces or promotes a technology package in which the benefit depends on the application of the entire package (e.g., a combination of inputs such as a new variety and advice on agronomic practices such as soil preparation, changes in seeding time, fertilizer schedule, plant protection, etc.), this counts as one technology.</p> <p>Farmers are people engaged in farming of agricultural products or members of an agriculture related business (disaggregated by men and women) targeted by the project.</p>				
Farmers adopting improved agricultural technology - Female		Baseline, mid-term and final evaluation	Dedicated surveys	Survey designed to capture data on producer adoption or utilization of technology	ARIS
Farmers adopting improved agricultural technology - male		Baseline, mid-term and final	Dedicated surveys	Survey designed to capture data on producer adoption or	ARIS



		evaluation		utilization of technology	
Percent of Farmers adopting improved agricultural technology that is climate smart	Measures level of adoption of climate smart technology	Baseline, mid and final survey	Survey, project reports	Surveys, project reports	ARIS
Area under new climate smart technology (water saving, climate adapted variety, or energy efficient technology)	Measures area where climate smart technologies are being applied.	Semi-annual	Project reports, baseline, mid-term and final survey	ARIS M&E and contracted data collection at mid-term and completion	ARIS
Business plan approved for financing by the participants of the Small Grants Program	This indicator will help capture the number of business plans prepared as a result of the delivered training program and submitted for financing under the Small Grants Program	Bi-annually	Progress reports	ARIS (or a designated firm) will compile the data from the event reports.	ARIS (or a designated consultant)
The share of female-led SMEs with the received financial support to start business (gender gap)	This indicator will help to capture how well the Project addresses the identified gender gap and how many of the program beneficiaries are women (percent).	Bi-annaully	Progress reports	ARIS (or a designated firm) will compile the data from the event reports.	ARIS (or a designated consultant)
The share of females participating in the capacity building activities for improved	This indicator will help capture the progress	Bi-annually	Event reports,	ARIS (or a designated consultant) will compile	ARIS (or a designated



business practices (gender gap)	towards decreasing the gender gap by counting the percentage of females participating in the training sessions and capacity building activities provided under the program		generated and submitted by the consultant.	the data from the event reports.	consultant)
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**ANNEX 1: Implementation Arrangements and Support Plan**

1. The project's implementation arrangements are as follows:
 - (a) To ensure coordination and flow of information and timely decision making on strategic and programmatic aspects at the highest level, the Project will build on the current structure of RED-1 and will be overseen by a **Steering Committee (SC)**, formed with participation of the Deputy Minister or director level representatives from various relevant line ministries and government agencies (e.g. Cabinet of Ministers, President's Office, MoF, MoEC, MoA, State Agency for Architecture, Construction and Communal Services, and the Plenipotentiary Representative of the Government in the Batken region). The MoEC will chair the SC.
 - (b) **MoEC** will be the **Project Coordination Ministry** responsible for overall project coordination. MoEC will also coordinate effective implementation of the Project, with the Deputy Minister having the overall responsibility for facilitating smooth and high-quality project implementation. As such, MoEC's responsibilities will include reviewing annual work plans (prepared by PIE), providing relevant technical inputs, especially those at a strategic and policy level or on issues related to economic promotion.
 - (c) **MoA** will be responsible for setting priorities and objectives for the agricultural activities under the Project, and for identification and endorsement of investments under Component 2. MOA will participate in the selection, evaluation and monitoring of investments under Component 2.
 - (d) **ARIS**, currently the PIE under RED-1, will be the **PIE** responsible for all fiduciary (e.g. procurement, financial management, preparation of annual reports, budgets etc.) and environmental and social (e.g., assessments, document preparation and embedding safeguard specialists in local and regional government to carry out supervision, monitoring and compliance) functions for RED-2. ARIS will also be responsible for key technical aspects of the Project (e.g. preparation of technical assessments and ESF documents, design and tender documents, organization of evaluation, consultations). ARIS will have a core team based in Bishkek, consisting of key technical personnel required for the Project implementation. With their technical, environmental and social staff in Batken, ARIS will closely coordinate with the state authorities and local self-governments and ensure smooth implementation of the Project in terms of technical, environmental, social aspects.
 - (e) MoA, MoEC, and ARIS will sign the Cooperation Agreement in form and substance satisfactory to the Bank.
 - (f) **State Authorities and Local Self-Governments** in the Batken Region will actively participate in project implementation. Representatives of ARIS, located in their regional offices, will ensure effective coordination with the state authorities and local self-governments for project specific activities. *Inter alia*, the local municipalities will be in charge of monitoring implementation of the Project activities, public safety and public health by appointing a representative. The representative will facilitate civic engagement and communication with the citizens and project affected people, conduct community meetings, participate in tender evaluation committees, facilitate local inputs to proposals and ensure both horizontal and vertical coordination for cross-sector activities. Finally, the representatives of the



local and regional governments will be presented in the Productive Partnerships Selection and Small Grants Selection Committees, established under the Project. In addition, the Regional Government will provide an office space in Batken to promote good coordination with and implementation of the Project by the PIE staff, as needed.

- (g) **The Productive Partnerships Selection Committee**, under Component 2, will be established through a MoA decree and chaired by MoA. The committee will comprise representatives of MoEC, MoF, representatives of the state authorities and local self-governments and members of the civil society, as further detailed in the Productive Partnerships Manual. The Committee for Productive Partnerships shall be responsible for evaluating and approving the applications for the Targeted Investments Subprojects program based on recommendations from a technical team that serves as Secretariat to the Committee and includes independent evaluation of proposals and overseeing the implementation of the Targeted Investment Subprojects program under Component 2. The adoption of the manual by MoA, and ARIS will be a disbursement condition for Component 2.
- (h) Similarly, **the Small Grants Program Committee**, established under Component 3 through a MoEC decree will be responsible for evaluating and approving the applications for the Small Grants Program and overseeing the implementation of the Small Grants Program. It will comprise members from MoF, MoEC, MoA, ARIS, members of the CSO sector from the Batken region, the Representative of Presidential Envoy to the Batken Region, and city-level representatives from the region. The Committee's mandate, roles and responsibilities, as well as the grants screening, selection, awarding, reporting and all other details will be described in the Small Grants Handbook. The adoption of the handbook by MoEC, prepared by ARIS, acceptable to the Bank will be a disbursement condition under Component 3.
- (i) The specific roles and responsibilities of all the parties set out above shall be described in detail in POM, which shall be developed by the PIE and furnished for the Bank for no objection. The approved POM will be an effectiveness condition for the Project.



ANNEX 2: Detailed Project Description

1. Consistent with the Government's priorities, the proposed project will build on the experience of the ongoing RED-1 and expand horizontally to the west from the Osh Region to the Batken Region. It will help the Government to support regional economic development through three key dimensions: (i) enhanced basic municipal infrastructure and services in Batken, Isfana and Kadamjai in support of local business and improved living conditions for the local communities, including support to recover infrastructure on undisputed lands damaged during the recent armed clashes in April 2021, and (ii) support residents and communities living in the rural areas to enhance their economic performance resulting in strengthened agriculture competitiveness; (iii) improved capacity in starting and executing business activities and incidental financial support for turning business ideas into business activities. Aligned with the PDO of the project, the proposed project components are detailed below.

2. **Component 1: Supporting municipal infrastructure, basic public services, and capacity building (US\$24 million).** This component will follow the GRID principles to identify critical constraints in an evidence-based manner as proposed by the RISE approach. Following the GRID principles will help prioritize investment packages to improve municipal infrastructure and associated municipal services to meet basic living standards in the selected towns and address the anticipated climate related risks and impacts; this will also include activities to help reconstruct public facilities and spaces affected by the recent armed clashes in April 2021 with a total anticipated cost of up to US\$5-10 million. The types of project-supported climate resilient infrastructure could include: (i) sewerage and water supply, stormwater and drainage systems, (ii) municipal and regional roads, sidewalks, and street lighting to improve access to key municipal services and markets; (iii) schools and kindergartens; (iv) other municipal assets such as parks and public spaces of high interest to the community. All intervention under this component will be led by climate related assessment to identify potential climate related impacts, risks and include relevant adaptation measures to make infrastructure climate resilient and, as a result, deliver reliable municipal services. This will be taken into account in the corresponding designs and further applied to execution of the civil work contracts through the use of corresponding construction technologies and climate resilient materials. The project investments will also look into the introduction of possible climate change mitigation measures, including through the use of energy saving technologies leading to reduced building emissions, nature-based solutions and promotion of green infrastructure. Furthermore, all public buildings and spaces supported under the project will integrate appropriate measures to make these facilities accessible for people with disabilities.

3. The project locations and participating towns (Batken, Isfana, and Kadamjay) while in line with the Government's strategy on regional development and the identified growth poles, were prioritized based on their municipal service provision gaps, growing population and poverty levels, and considering other donors' limited involvement in the sector. The regional study conducted by the Bank during the preparation of RED-1 showed that these regional cities - Isfana, Batken, and Kadamjay - are isolated from, rather than integrated with each other, and the majority of the urban population in these locations suffers from limited access to potable water supply, poorly organized streets, and dilapidated school and kindergarten infrastructure. To address the identified challenges during the project preparation, the team worked closely with the PIE and municipal governments to define a long list of investments. The identification, prioritization and selection process will continue during the first year of project implementation as well.



4. Screening and selection of investments under this component has followed a participatory process engaging national, regional and local stakeholders. A list of screening principles and the selection criteria were agreed upon at the preparation stage with all stakeholders and shall be applied to the long list of proposed investments for prioritization and to form a short list of investments. They are:

- a. Full alignment with the PDO and conformity with the strategic priorities of the region or the selected territories, as demonstrated through the relevant documents such as regional or municipal level development or investment plans.
- b. No significant social or environmental risks and negative impact shall be expected from the proposed investment.
- c. Economic impact. The proposed investment shall contribute to the local and regional economy and be able to generate permanent and temporary jobs.
- d. Prioritization. The proposed investment shall be a declared priority for the local community and this shall be documented in the minutes of the meeting as a result of a consultative process held between the local government, beneficiaries, and other related stakeholders. The selection of investments or key areas for intervention to be included in the project shall go through a consultative and participatory process and be documented in the relevant documents.
- e. Feasibility. The proposed investment shall be feasible and viable in terms of the required financial inputs, technical solutions and implementation timeline. This shall be demonstrated through a professional assessment and relevant site visits, as required.
- f. Operation and Maintenance. The proposed investment shall demonstrate feasibility for long-term sustainability. The beneficiary (municipality, for example) shall have sound operation and maintenance commitments and arrangements in place.
- g. Integrated Approach. Proposed investment(s) shall be considered in an integrated manner to view all assets as a coordinated whole (as opposed to a segregated approach), utilizing each for its highest and best use.²¹
- h. Availability of project documentation (design packages). Investments that meet the requirements listed above and are supported with satisfactory design packages shall be given priority.
- i. Safety filter. No investment shall take place on disputed land parcels or across the undefined borderline.

5. This component will also support the Public-Private Cooperation (PPC) initiative to promote private investment attraction in the targeted sectors and locations. This initiative was first introduced in the ongoing RED-1 and aims at creating an enabling environment for business development for medium and large-scale businesses. This initiative may finance public infrastructure to attract private investment across the region, where private sector entities are willing to invest but require complementary public infrastructure to make their investment viable (e.g., public infrastructure within vicinity of the

²¹ For example, instead of considering rehabilitating an asset partially (a part of the road, a part of the network), the project may support the asset's full rehabilitation to avoid a need for immediate future investments. Also, if a road is proposed for rehabilitation, underground utilities, storm water management, streetlighting, safe crossing, etc. shall also be included in the proposal. The same principle shall apply to the public buildings when in addition to seismic retrofits and energy efficiency, the proposal shall also cover their improved physical environment (furniture, technology as required, etc.). Where possible, synergies shall be seen in advance to address multiple needs/issues in one location, as opposed to covering multiple locations with fairly limited interventions in scope.



investments, road/sidewalk, water/sanitation, etc.). Investments under this initiative will be limited to the determined ratio (e.g., 1 to 4) of the investments provided by the private sector. The PPC initiative will build on the screening and selection process, which was identified as part of RED-1 and will be specified in the Project Operations Manual developed by the Project Implementing Entity (PIE) and acceptable to the Bank. The public infrastructure financed under the PPC initiative will be designed with due consideration of climate related impact and risks, and include related climate change adaptation measures, with use of the corresponding designs, technologies and materials, and application of the energy saving technologies, nature-based solutions, improved water management, etc., to contribute to climate change mitigation.

6. To address the issues of territorial and investment planning and development, seismic resiliency and energy efficiency, this component will also support the respective capacity-building activities and technical assistance that would strengthen the role of local, regional and central governments. Areas for possible support under this component would result in improved: (i) integrated and sustainable urban and spatial planning based on the GRID principles through the use of digitalization and global good practices and following best practices of climate change mitigation and adaptation; and (ii) capital investment planning, budgeting, asset management, operation and maintenance of local infrastructure and the local and regional levels, and inter- and intra-agency coordination. The scope will be further defined based on the discussions for needs identification with the local, regional and national stakeholders.

7. **Component 2: Strengthening Agriculture Competitiveness (US\$21 million).** This component seeks to address key constraints to agriculture sector development in Batken, which include a highly fragmented production system, a significant level of informality and limited market linkages. Like much of the country Batken agricultural producers are operating on a small scale – the average cultivated area is less than 2 ha and average livestock holdings are only 3-5 heads of cattle. In general smallholder dominated production models face challenges in reaching scale and maintaining the required quality and food safety standards needed to ensure quality production for local consumption and take advantage of export opportunities. This is even more true for Batken's agricultural producers, who are more isolated than other parts of the country due to their geographic location. Investments under the second component therefore seek to support a range of investment targeted at upgrading the capacity of Batken's agri-food service and regulatory functions that are necessary to meet market requirements (sub-component 2.1) and targeted investments in specific value chains to expand production and build linkages to agri-businesses (sub-component 2.2).

8. **Sub-Component 2.1: Improving basic agricultural services (US\$3.0 million).** This sub-component will improve the infrastructure and services that underpin agri-food marketing and trade in Batken with a focus on strengthening capacity for sanitary and phytosanitary (SPS) control, food quality, and basic services. Financing will be provided to upgrade facilities located in Batken city and the region relating to the functions of agri-food marketing and trade, food safety, and sanitary and phytosanitary control, within the mandate of MoA and other line ministries, and for training and capacity building around food safety requirements for domestic markets and export promotion. The project will complement ongoing investments that have been initiated to upgrade SPS capacity in line with the standards for the EEU and the WTO by financing remaining gaps. This will include financing for laboratory equipment and upgrading of facilities at border control points and expanding sampling capacity at the district/rayon level.



Investments will also finance upgrading food safety quality infrastructure in Batken city/region and could include Ministry of Agriculture laboratories providing organic certification, measurement of pesticide residues, standards and measurement (GosStandard), Food Laboratory (Sanepidnadzor), Veterinary Service and small food safety laboratories in local markets. Infrastructure investments will upgrade existing facilities and will be guided by a detailed feasibility assessment in the first year to refine technical specifications and design.

9. In order to build the long-term capacity to train professionals and future agricultural producers, targeted investment will also be provided for Batken State University to upgrade their equipment base and to incorporate agricultural export market requirements, food safety regulations, HACCP, and modern food processing technologies for short term and long-term training. Where possible, training activities will incorporate climate risk analysis and impacts on food safety and quality.

10. **Sub-component 2.2: Strengthening Agri-Food Clusters (US\$18.0 million).** This sub-component will facilitate the development of partnerships between value chain participants (agri-businesses, small agricultural producers, processors, exporters and other public or private service providers) to finance targeted investments subprojects that improve quality and expand production/processing volumes. The sub-component will utilize a value chain development or productive partnership approach that is based on facilitating and organizing producer groups to meet specific market requirements and link with buyers/aggregators or processing enterprises. The aim of investments will be to: (a) improve access to market as well as quality and consistency in the supply of relevant outputs; (b) stimulate alliances within the supply chain; and (c) reduce risk or transaction costs for value chain participants, including risks related to climate change, and where possible contribute to reduction in GHG emissions.

11. The project will facilitate the development of individual productive partnerships that will be selected on a demand-driven basis during implementation. A productive partnership is expected to cover multiple producer groups in one value chain and include potential beneficiaries across the value-chain - farmers, collectors, processors, traders, and exporters. Eligible productive partnerships would have the following characteristics:

- (a) *Target a specific market opportunity.* A productive partnership must involve actors in a particular agricultural value chain and respond to a *bona fide* commercial or market opportunity. A commercial or market opportunity is one where there is a commercial agreement that specifies the quality, quantity, timing, and delivery specification of the product generated by the producers and the payment and price determination methodology by the buyer.
- (b) *Be owned by a lead farmer group, producer organization or cooperative.* A productive partnership must include a group of farmers/producers on one side and a buyer, processor, exporter or service provider (input supplier, machinery services, storage and distribution, advisory or veterinary services) on the other side. Although the productive partnership would require both producer and buyers/processors, the owner of the overall proposal for financing would be the producer group. If more than one producer group is part of the partnership a lead producer group would be designated. Producer groups could be existing groups or clusters of producers who show willingness to coordinate together to meet the market opportunity.
- (c) *Identify an investment program targeting critical constraints.* Eligible investments would target key constraints to scaling up production and meeting market requirements.



(d) *Incorporate gender concerns and climate resilience.* Given that many farmers are women, productive partnerships are expected to generate positive impacts for women and the criteria for selection of productive partnerships will prioritize those demonstrating inclusion of youth, women and vulnerable groups.

12. Each partnership will be governed by a framework agreement and signed by the lead producer group and the buyer/aggregator or processing enterprise.

13. Financing for activities within a partnership will target two types of investment:

- a) Public services and infrastructure critical to improving the functioning of the value chain targeted in the partnership. This could be technical assistance and training for producers and other services around quality assurance, pest and disease control and food safety improvements and public infrastructure rehabilitation. Public infrastructure could include irrigation, access road repairs, electricity infrastructure, and other agriculture related infrastructure including trade and logistics related infrastructure developed under Public-Private Partnership arrangements.
- b) Investments for producers and processors that introduce the adoption of innovative technologies (particularly climate resilient or resource efficient technologies) including appropriate equipment, new crop or livestock varieties and farm inputs (including climate resilient crop varieties); and post-harvest facilities (such as facilities for storage, washing, grading, packing, pre-cooling, cold storage) for specific producer groups. On-farm investments for producers and investments for processors will be co-financed by beneficiaries and subject to MoF's requirements.

14. Both public and on-farm investments will prioritize where possible climate proofing and climate resilience through adaptation or mitigation technologies such as promotion of climate smart varieties (drought and heat tolerant varieties), improved water management and climate informed irrigation design, more optimal input use, livestock management practices that reduce emissions, and energy efficient equipment at both the production and post-harvest stages. Where possible, contributions to reduction in GHG emissions will be pursued in livestock production systems, which represent a major source of GHG emissions in the agriculture sector. The project anticipates that drip irrigation will be heavily promoted and could include expansion of new orchards using drip irrigation technology as well as conversion of traditional furrow irrigation to drip irrigation technology. In order to stimulate adoption of climate smart technologies, beneficiaries will be exposed and sensitized to new technologies as part of the sub-project proposal development process and feasibility studies will incorporate a climate lens where possible.

15. A partnership may define an investment program including both public services and infrastructure or on-farm investments or either alone. The sequence of implementation of activities within the partnership will be determined by the specific partnership proposal. Public services and infrastructure will be 100 percent financed by the project. On-farm investments will be governed by additional grant agreements signed with direct recipients and will be co-financed by farmers/producer groups. In the case of larger agri-business participants in the partnership (for example, processors or trade and logistic centers), cooperation will be in line with best practice principles for public-private partnerships and participants will be required to develop formal supply chain linkages to producers within the partnership.



16. The overall budget limit for each public partnership supported under the project would be the equivalent of up to US\$1,5 million. The ceilings for the Targeted Investments Subprojects for on-farm investments for individual producers may not exceed the equivalent of US\$10,000 per producer or, if awarded to the group and financing a group owned asset, may not exceed the equivalent of US\$200,000 per producer group.

17. The detailed criteria for selection of the value chain and the productive partnership will be defined in the Productive Partnerships Manual. Eligibility, selection, awards, co-financing mechanism, reporting and monitoring will be described in detail in the Productive Partnerships Manual, which will be developed by ARIS and approved by MoA. The manual shall be agreed with the Bank and constitutes a disbursement condition for this component.

18. Key criteria for selection of partnerships would include however potential for job creation or engagement of many small-scale farmers, sustainable comparative advantage or competitiveness, inclusion of women and youth, and climate resilience. The selection and award process will also include a feasibility study that will inform the development of business plans and detailed proposals. Given that many farmers are women, productive partnerships are expected to generate positive impacts for women and the criteria for selection will prioritize those demonstrating inclusion of youth, women and vulnerable groups. The project will target at least 50 percent participation by women in productive partnerships and technology adoption.

Summary of Identified Gender Gap, Actions, and Expected Results and Indicators		
Gap	Action	Indicator
Women's limited participation in value chain development	<ul style="list-style-type: none">Target 50% female participation in productive partnership sub-projectsIncorporate gender dimensions and priorities in selection of value chains.Provide training conducive to female participation	<ol style="list-style-type: none">Farmers reached with agricultural assets or services – Female – 50 percent targetFarmers adopting improved agricultural technology – Female – 50 percent target

19. *Expected value chain focus.* Available value chain analysis indicates a number of potential value chains including select fruit products (cherries, apricots, plums) and early season vegetables – both traditional products for Batken agricultural producers – as well as meat and dairy processing. High value niche products such as honey, wool or specialty livestock breeds also show potential. Based on analysis of the Osh region's comparative advantage and the current landscape of donor supported programs, however, the project would be likely to focus more on the fruit and vegetable sub-sector, and the selection of partnerships will be demand driven.

20. *Frequency of partnership selection cycles.* Given the length of the project implementation period it is envisioned that annual cycles of partnership proposal development and selection would take place in the initial years of the project – through year 1 and year 3 – and thereafter the focus would primarily be on implementation. It is expected that 25 partnerships would be formalized during the implementation period of the project.



21. *Initial assessments to guide development of sub-projects.* The project will commission a set of three feasibility studies or assessments that will inform the development of business plans and detailed sub-project proposals. These will provide greater technical and market information needed by potential beneficiaries and the Productive Partnership Committee to make a final decision in investment. The TORs for the three assessments will be drafted during project appraisal and commissioned immediately following effectiveness. The three assessments will cover: (i) a value chain assessment that will identify high potential value chain opportunities and potential agri-business linkages; (b) a drip irrigation/groundwater feasibility study to guide investments in drip irrigation and provide a technical assessment on where new drip irrigation shows the highest potential; and (c) a PPP feasibility assessment for potential trade and logistics centers on MoA owned sites in Batken region, including the site of the currently defunct tobacco fermentation plan in Kyzl Kia that could be transformed into a logistics or processing center. The drip irrigation study would be undertaken in close collaboration with the State Agency for Water Resources and the PPP feasibility study would be undertaken in collaboration with the PPP Agency.

22. **Component 2 implementation modalities.** Component 2 activities will utilize a demand driven process for the identification of and prioritization of investments. The Productive Partnerships Manual will contain details on the implementation modalities, but partnerships would be identified and selected according to the following principles:

23. *An initial prioritization process.* A public awareness campaign, conducted by **ARIS** and its mobilizers, would identify value chain actors and identify potential productive partnership leaders and primary beneficiaries in target locations. The first stage would work with district administration, private sector leaders, donor projects and other sources of information to identify actors. Public information campaign would be conducted in target locations to increase awareness about the project activities.

24. *Preparation of joint business plans.* Interested actors would participate in workshops on supply chain constraints, business opportunities, and potential productive partnership support. The key outputs of this process would be a joint business plan proposal by the lead producer group for each productive partnership. The workshops and business planning development will be facilitated by **ARIS** with additional support from a consultant on business development services as needed.

25. *Preliminary Feasibility Studies.* An independent feasibility study would be commissioned for the development of product groups to be supported under each productive partnership. This will include: (i) an indication of current product competitiveness without the project; (ii) key constraints to product competitiveness in the market and a general description of the investments required to address these constraints; (iii) potential competitiveness for the product groups post-project implementation; and (iv) key environmental and social issues to be addressed during sub-project designing. Any sub-project where the preliminary feasibility study indicates it is unlikely to become competitive will not proceed with full concept notes.

26. *Assessment of Business Plans.* A technical working group comprised of **ARIS** and **MoA** would review business plans and forward the ones that adhere to the criteria to be presented for review by Productive Partnerships Committee (members of the committee are defined above).



27. *Preparation of Productive Partnership Proposals.* A more detailed proposal will be prepared by the lead producer group with support of ARIS based on the approved business plan. This may involve a workshop with participants to fully detail the partnership activities and to identify additional potential implementing partners. The productive partnership proposal would include a detailed budget and procurement plan that identifies the portion of the activities that are classified as public investments and services and those that are classified as investments for processors, producers or producer groups. As needed, depending on the subprojects initial environmental and social screening, the productive partnership proposals will include an ESIA, and ESMP or a RAP, to be disclosed and consulted with all interested parties and the local population.

28. *Assessment of Proposals and Grant Award.* Proposals would be assessed on the basis of both desk assessment and field visits. The Productive Partnerships Selection Committee will make the final decision to accept or reject proposals. A productive partnership framework agreement will be signed and cover the full set of activities and implementation modalities with the lead producer organization and the market actor/buyer. Specific Targeting Investments Subproject agreements under the framework agreement will be signed with the direct recipients of the targeted investments subprojects –producer groups or individual producers.

29. **Component 3: Promoting local economic development through the Small Grants Program (US\$2 million).** To boost local economic development through improved business practices, the project will support SME development through a training and small grants program. The small grants program will aim at supporting the launching of new enterprise activities and diversification and expansion of services offered by SMEs. The program will follow a phased approach, where the selected participants will undergo a robust training program, among others, on how to start and execute a business, how to address climate related risks and incorporate energy efficient technical solutions and any other green infrastructure ideas in their business plans. Those who successfully complete the training program will be eligible to apply for grant financing. This component will build on the success of this initiative introduced under the ongoing RED-1 and will be built on its experience, including the application of a Small Grants Handbook developed and used for the corresponding component under RED-1.

30. To address the issues of women's low participation in the labor force and access to finance, the Small Grants Program will give preference to women, as follows: (1) In the training program, female applicants will be given a priority at the selection stage as well. This will give women an opportunity to gain practical knowledge and skills in doing business in the urban sector and entrepreneurship. (2) When evaluating business-plans for financing, women applicants will be given additional points. The same approach will be used for youth to promote young entrepreneurs at the local level and socially vulnerable groups, as defined by the Small Grants Handbook.

Summary of Identified Gender Gap, Actions, and Expected Results and Indicators		
Gap	Action	Indicator
Women's low participation in the labor force and access to finance.	Small Grants Program will give preference to women. a) In the training program, female applicants will be given a priority at the selection stage as well. This	1. Females participating in the capacity building activities for improved hospitality business practices (gender gap) (Percentage)



	<p>will give women an opportunity to gain practical knowledge and skills in doing business in the urban sector and entrepreneurship.</p> <p>b) When scoring business-plans for financing, women applicants will be given additional points.</p>	2. Female-led SMEs received financial support to start business in tourism or rural setting (gender gap) (Percentage)
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31. The Small Grants Program will be guided by a Small Grants Handbook. The adoption of the handbook by MoEC, prepared by PIE, acceptable to the Bank will be a disbursement condition under Component 3.

32. **Component 4: Contingent Emergency Response Component (CERC).** This zero-dollar component is to improve the Kyrgyz Republic's capacity to respond to disasters. Following an eligible crisis or emergency, including climate related disasters, the recipient may request the Bank to reallocate project funds to support emergency response and reconstruction. This component would draw from the uncommitted credit/grant resources under the project from other project components to cover emergency response. An emergency eligible for financing is an event that has caused or is likely imminently to cause, a major adverse economic and/or social impact to the Borrower, associated with disaster.

33. Across the Bank, the CERC has been recognized as a key instrument to ensure rapid response to disaster events and health crises, with activation and disbursements possible within weeks of the occurrence of an eligible emergency. This was evident for the COVID Emergency response, when CERC was triggered within the Enhancing Resilience in Kyrgyzstan (ERIK - P162635) in April 2020 and US\$9 million was allocated to the Emergency response within this Component.

34. The CERC will be guided by a CER Manual, which will be prepared by the PIE. Disbursement under this component will be subjected to the adoption of the Manual, acceptable to the Bank, by the MoF.

35. **Component 5: Operational Support (US\$3 million).** This component will support project implementation, including the project's monitoring and evaluation system, communication strategy, application of safeguard instruments, training, and financing of incremental operating costs of the project implementing agency (PIA).

**Summary of Project Costs**

Components	Estimated Costs (US\$)
Component 1: Supporting Municipal Infrastructure, Basic Public Services and Capacity Building	24,000,000
Component 2: Strengthening Agriculture Competitiveness	21,000,000
Component 3: Promoting Local Economic Development through the Small Grants Program	2,000,000
Component 4: Contingent Emergency Response Component (CERC)	0
Component 5: Implementation Support, and Monitoring and Evaluation	3,000,000
TOTAL	50,000,000

**ANNEX 3: Economic and Financing Analysis**

1. The economic and financial analysis (EFA) for the suggested project examines if the proposed interventions will contribute to the development of the participating cities, districts and region. That is, if expected benefits justify the expected costs of interventions.
2. The economic analysis for the urban sector was performed for public buildings (schools, kindergartens, health and sport facilities, etc.) and roads rehabilitation, as these are the main types of interventions to be supported under the project, and for the agriculture sector.
3. Below is the detailed analysis for each sector.

URBAN SECTOR

4. **EFA for PUBLIC BUILDINGS.** The Cost-Benefit Analysis (CBA) for the public buildings (schools, kindergartens, health and sport facilities, etc.) construction and rehabilitation projects is based on the technical note developed by Fernando Ramirez Cortes and Diana Katharina Mayrhofer for the Global Program for Safer Schools²².
5. CBA is generally based on three decisive indicators: (i) the net present value (NPV), economic rate of return (ERR) and the benefit-cost ratio. Combined they inform task teams on the economic benefits of the project and a project is viable as long as the NPV is above zero, the ERR is greater than the required rate of return and the benefit-cost ratio exceeds one. The higher the NPV and benefit-cost ratio, the higher the expected benefits from the construction of new public facilities. The chosen discount rate follows the World Bank guidelines and equals 5 percent²³. As 90 percent of the public facilities are newly constructed, the appropriate lifetime for the public facilities buildings can be assumed to be at least 40 years.
6. The two key components to consider are costs and benefits of the risk reduction intervention and functional benefits attained with the public building construction. The benefits are defined by the difference between pre- and post- intervention scenarios in case of an earthquake.
7. In order to estimate costs prior to the launch of the project, it was assumed that the cost of intervention for the construction of public buildings will be around 2 billion KGS.
8. **Economic Impact Analysis.** This project is expected to offer benefits in the following ways: (i) avoided fatalities, (ii) avoided damage to buildings, (iii) functional upgrades, such as of water, sanitation and hygiene (WASH) facilities and improved energy efficiency, (iv) temporary job generation during project implementation and (v) additional benefits.
9. Avoided fatalities can be estimated using a value of statistical life (VSL) approach to express the benefits of lives saved in monetary terms. The benefits of avoided damage of building can be quantified by estimating replacement and repair values based on market prices. Similarly, the benefits of energy efficiency improvements can be estimated by comparing the status quo energy consumption and its reduction after the safer school intervention based on average energy prices. As the impact of WASH is

²² Cost-Benefit Analysis - TECHNICAL NOTE by Fernando Ramirez Cortes and Diana Katharina Mayrhofer, October 2019
https://gpss.worldbank.org/sites/gpss/files/knowledge_products/2019/CBA%20Technical%20Note_IPF.pdf

²³ Technical Note on Discounting Costs and Benefits in Economic Analysis of World Bank Projects, 2015



often relatively small compared to the other benefits they are often disregarded in this type of cost-benefit analysis and so we did not include them here.

10. One of the key steps in the cost-benefit analysis involves establishing a monetary value for avoided fatalities. There are a number of different approaches utilized to identify the value of statistical life (VSL). The value of the Statistical Life (VSL) for the Kyrgyz Republic is calculated as US\$201,000²⁴.

11. The avoided loss of lives estimates under RED-2 were based on the World Bank study (Arup 2017)²⁵, where an investment of US\$60 million is estimated to save 535 lives in the education sector over a period of 50 years. Adjusting the ratio for RED-2, the public building construction component intervention of US\$24 million reflects the higher-than-average safety benefits of the intervention and the analysis estimated an average of 4.28 lives would be saved annually. Despite the fact that the selected schools are located in an area with one of the highest seismic risks in the country, we conservatively assumed that project would save the same number of lives, 4.28, annually. Utilizing the estimated VSL of US\$210,000 and the number of lives saved per year, a net present value of US\$11.97 million was calculated.

12. The benefits of the avoided economic damage were derived by taking the average of the benefit-cost ratios for the selected 12 rayons from the World Bank study on seismic risk in the Kyrgyz Republic conducted by Arup (2017)²⁶. In the analysis, the benefit-cost ratio is assumed to be 0.57 for retrofitted buildings and replaced school buildings. This ratio was then scaled to the total amount of public buildings (schools, kindergartens, health facilities, etc.) of the construction component under RED-2 to determine the actual benefit of avoided damage. In this case, it equaled US\$13.7 million.

13. To calculate economic benefits from temporary job generation, the following approach was used: activities during Project implementation will create temporary jobs and:

- a. It is assumed that the share of the labor component will be 30 percent;
- b. The PIT (10 percent) will be deducted from these payments to calculate economic benefits.

Overall, the public buildings (schools, kindergartens, health facilities, etc.) construction component under RED-2 has an estimated NPV of US\$6,700,320.13. The benefit-cost ratio is 1.57 and the ERR stands at 16.36 percent. All three indicators highlight the economic viability of the construction component for public buildings (schools, kindergartens, health facilities, etc.).

14. The detailed calculation of economic impact is provided below.

²⁴ https://law.vanderbilt.edu/phd/faculty/w-kip-viscusi/355_Income_Elasticities_and_Global_VSL.pdf

²⁵ Arup, 2017. "Measuring Risk in Kyrgyz Republic, Seismic Hazard Assessment Report", World Bank. Report Ref.: 240323HZ_HAZ002, Rev 1 dated 7 June 2017.

²⁶ ibid



Economic Impact (as of November 2021)							
Year	Economic Costs, USD		Economic Benefits, USD				Net Benefits
	Capital Expenditures (Public)	Total Expenses	Economic Benefits from Avoided Fatalities	Economic Benefits from Avoided Damage to Buildings	Economic Benefits from Temporary Job Generation	Total Economic Benefits	
2022	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2023	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
2024	-\$4,000,000.00	-\$4,000,000.00	\$0.00	\$2,280,000.00	\$1,080,000.00	\$3,360,000.00	-\$640,000.00
2025	-\$7,000,000.00	-\$7,000,000.00	\$0.00	\$3,990,000.00	\$1,890,000.00	\$5,880,000.00	-\$1,120,000.00
2026	-\$8,000,000.00	-\$8,000,000.00	\$0.00	\$4,560,000.00	\$2,160,000.00	\$6,720,000.00	-\$1,280,000.00
2027	-\$6,000,000.00	-\$6,000,000.00	\$0.00	\$3,420,000.00	\$1,620,000.00	\$5,040,000.00	-\$960,000.00
2028	-\$500,000.00	-\$500,000.00	\$898,800.00	\$285,000.00	\$135,000.00	\$1,318,800.00	\$818,800.00
2029	-\$500,000.00	-\$500,000.00	\$898,800.00	\$285,000.00	\$135,000.00	\$1,318,800.00	\$818,800.00
2030	-\$500,000.00	-\$500,000.00	\$898,800.00	\$285,000.00	\$135,000.00	\$1,318,800.00	\$818,800.00
2031	-\$500,000.00	-\$500,000.00	\$898,800.00	\$285,000.00	\$135,000.00	\$1,318,800.00	\$818,800.00
2032	-\$500,000.00	-\$500,000.00	\$898,800.00	\$285,000.00	\$135,000.00	\$1,318,800.00	\$818,800.00
2033	-\$500,000.00	-\$500,000.00	\$898,800.00	\$285,000.00	\$135,000.00	\$1,318,800.00	\$818,800.00
2034	-\$500,000.00	-\$500,000.00	\$898,800.00	\$285,000.00	\$135,000.00	\$1,318,800.00	\$818,800.00
2035	-\$500,000.00	-\$500,000.00	\$898,800.00	\$285,000.00	\$135,000.00	\$1,318,800.00	\$818,800.00
2036	-\$500,000.00	-\$500,000.00	\$898,800.00	\$285,000.00	\$135,000.00	\$1,318,800.00	\$818,800.00
2037	-\$500,000.00	-\$500,000.00	\$898,800.00	\$285,000.00	\$135,000.00	\$1,318,800.00	\$818,800.00
2038	-\$500,000.00	-\$500,000.00	\$898,800.00	\$285,000.00	\$135,000.00	\$1,318,800.00	\$818,800.00
2039	-\$500,000.00	-\$500,000.00	\$898,800.00	\$285,000.00	\$135,000.00	\$1,318,800.00	\$818,800.00
2040	-\$500,000.00	-\$500,000.00	\$898,800.00	\$285,000.00	\$135,000.00	\$1,318,800.00	\$818,800.00
2041	-\$500,000.00	-\$500,000.00	\$898,800.00	\$285,000.00	\$135,000.00	\$1,318,800.00	\$818,800.00
2042	-\$500,000.00	-\$500,000.00	\$898,800.00	\$285,000.00	\$135,000.00	\$1,318,800.00	\$818,800.00
2043	-\$500,000.00	-\$500,000.00	\$898,800.00	\$285,000.00	\$135,000.00	\$1,318,800.00	\$818,800.00
2044	-\$500,000.00	-\$500,000.00	\$898,800.00	\$285,000.00	\$135,000.00	\$1,318,800.00	\$818,800.00
2045	-\$500,000.00	-\$500,000.00	\$898,800.00	\$285,000.00	\$135,000.00	\$1,318,800.00	\$818,800.00
2046	-\$500,000.00	-\$500,000.00	\$898,800.00	\$285,000.00	\$135,000.00	\$1,318,800.00	\$818,800.00
2047	-\$500,000.00	-\$500,000.00	\$898,800.00	\$285,000.00	\$135,000.00	\$1,318,800.00	\$818,800.00
2048	-\$500,000.00	-\$500,000.00	\$898,800.00	\$285,000.00	\$135,000.00	\$1,318,800.00	\$818,800.00
2049	-\$500,000.00	-\$500,000.00	\$898,800.00	\$285,000.00	\$135,000.00	\$1,318,800.00	\$818,800.00
2050	-\$500,000.00	-\$500,000.00	\$898,800.00	\$285,000.00	\$135,000.00	\$1,318,800.00	\$818,800.00
2051	-\$500,000.00	-\$500,000.00	\$898,800.00	\$285,000.00	\$135,000.00	\$1,318,800.00	\$818,800.00
2052	-\$500,000.00	-\$500,000.00	\$898,800.00	\$285,000.00	\$135,000.00	\$1,318,800.00	\$818,800.00
2053	-\$500,000.00	-\$500,000.00	\$898,800.00	\$285,000.00	\$135,000.00	\$1,318,800.00	\$818,800.00
2054	-\$500,000.00	-\$500,000.00	\$898,800.00	\$285,000.00	\$135,000.00	\$1,318,800.00	\$818,800.00
2055	-\$500,000.00	-\$500,000.00	\$898,800.00	\$285,000.00	\$135,000.00	\$1,318,800.00	\$818,800.00
2056	-\$500,000.00	-\$500,000.00	\$898,800.00	\$285,000.00	\$135,000.00	\$1,318,800.00	\$818,800.00
2057	-\$500,000.00	-\$500,000.00	\$898,800.00	\$285,000.00	\$135,000.00	\$1,318,800.00	\$818,800.00
2058	-\$500,000.00	-\$500,000.00	\$898,800.00	\$285,000.00	\$135,000.00	\$1,318,800.00	\$818,800.00
2059	-\$500,000.00	-\$500,000.00	\$898,800.00	\$285,000.00	\$135,000.00	\$1,318,800.00	\$818,800.00
2060	-\$500,000.00	-\$500,000.00	\$898,800.00	\$285,000.00	\$135,000.00	\$1,318,800.00	\$818,800.00



2061	-\$500,000.00	-\$500,000.00	\$898,800.00	\$285,000.00	\$135,000.00	\$1,318,800.00	\$818,800.00
						ENPV	\$6,700,320.13
						EIRR	16.36%

15. **EFA for road rehabilitation-related activities.** A software developed by the World Bank for economic analysis of road section modernization options – Roads Economic Decision Model (REDM) version 3.2 – was used to produce the EFA for this section. The model considers only economic impact.

16. For the economic analysis financial costs, capital and operational costs were adjusted in order to precisely assess all expenses associated with alternative options of project implementation globally. To achieve this, the payment of taxes was excluded from the financial, capital and operation costs as tax payments represent only a transfer of funds from the point of view of the country. Shadow prices have also been considered along with the inefficiency characteristic for a transitional economy. For the above-mentioned, conversion factors have been used.

17. The Net Present Value (NPV) and Economic Internal Rate of Return (EIRR) were calculated for each project.

18. **Key Assumptions.** The following key assumptions have been used for the purposes of this analysis.

- a. Exchange rate at 85 KGS/USD.
- b. Discount Rate of 5 percent to assess the viability and robustness of investments.
- c. All models were analyzed for 15 years to show the financial prospects under market conditions.

19. **Economic Impact Analysis.** The following roads were used for the economic analysis:

- a. Municipal roads in Batken with a total length of 5.5 km.
- b. Batken-Toktogul Oluya-Karabakh (Jibek-Jolu Street) with a total length of 6.2 km.
- c. 10 km of the Isfana city roads.

20. **Assumptions for detailed Economic Analysis.** Economic analysis was prepared with REDM 3.2 software on the basis of the data presented in (Tables 1-3).

21. Estimates of motor road accidents used World Bank economic calculations and car accidents resulted in US\$210,000 per fatality and US\$50,000 for bodily injuries. The cost of car repairs due to accidents was US\$300.

22. A 15-year span average was used to estimate travel cost at a current rate of US\$2 an hour. It was estimated that travel cost will increase at a rate of 4.5% of GDP. US\$5 per hour was used to calculate cargo holding time.

23. An annual increase rate for traffic density from 2024-2038 is 5 percent, over a 15 year timeframe.

24. The roughness coefficient (IRI) will improve from 10.5 to average 3.3 (IRI) and will improve up to 2.0 after project implementation and in the case of maintenance will gradually decline to 4.4. Taking into consideration weather conditions, 5 percent of road pavement must be repaired annually. The Initial date for project analysis begins in 2024 over a 15 year period and uses US\$ as the currency.

25. Alternatives were as follows: The option of a major overhaul of road section (Alternative 1) was compared to the scenario without project implementation (basic alternative).



26. Rehabilitation costs were calculated as the average cost per km for similar roads in similar countries based on projects financed by major donor organizations (World Bank, ADB, etc.) and is assumed to equal to US\$ 250,000.

27. **Economic Analysis.** Detailed analysis of alternatives shown below that at present traffic levels and all other assumptions the Batken-Toktogul Oluya-Karabak road on its own shows negative NPV and IRR. On the other hand, Batken and Isfana Street rehabilitation shows positive NPV and IRR (Table below and Tables 4-6).

Road Name	NPV, million USD	IRR
Batken streets	0.051	5.44%
Batken-Toktogul Oluya-Karabakh road	-0.655	-3.47%
Isfana streets	0.202	6.83%

**Table 1. Basic Input Data for Batken Streets**

Country/Region: Kyrgyz Republic

Year: 2021

Currency Name: US\$

Exchange Rate Divider to US\$: 1.00

Terrain Types

Code	Description	Rise & Fall (m/km)	Horizontal Curvature (deg/km)	Number of Rises & Falls (#)	Super elevation (%)
A	Flat	10	50	1	2
B	Rolling	20	150	1	2
C	Mountainous	40	300	1	2

Road Characteristics

Altitude (m)	1047.0
Percent Time Driven on Water	25.0
Percent Time Driven on Snow	35.0
Paved Roads Texture Depth (mm)	0.3

Road Types

Co de	Descrip tion	Surface Type (1-Bituminous; 2-Concrete; 3-Unsealed)	Carriageway Width (m)	Speed Limit (km/hour)	Speed Limit Enforcement (#)	Roadside Friction (#)	NMT Friction (#)
X	Paved	1	7.0	100.0	1.1	1.0	1.0
Y	Gravel	3	6.0	80.0	1.1	1.0	1.0
Z	Earth	3	5.0	70.0	1.1	1.0	1.0

Vehicle Types

Code	Description	Number of Wheels	Number of Axles
1	Car Medium	4	2
2	Goods Vehicle	4	2
3	Bus Light	4	2
4	Bus Medium	6	2
5	Bus Heavy	10	3
6	Truck Light	4	2
7	Truck Medium	6	2
8	Truck Heavy	10	3
9	Truck Articulated	18	5

Vehicle Fleet Characteristics

	Car Medium	Goods Vehicle	Bus Light	Bus Medium	Bus Heavy	Truck Light	Truck Medium	Truck Heavy	Truck Articulated
Economic Unit Costs									
New Vehicle Cost (\$/vehicle)	10000	14000	20000	35000	50000	26000	42000	60000	89000
Fuel Cost (\$/liter for MT, \$/MJ for NMT)	1.30	1.30	1.40	1.40	1.40	1.40	1.40	1.40	1.40
Lubricant Cost (\$/liter)	15.00	15.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
New Tire Cost (\$/tire)	65.00	120.00	220.00	220.00	220.00	170.00	255.00	255.00	320.00
Maintenance Labor Cost (\$/hour)	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Crew Cost (\$/hour)	0.00	0.00	1.20	1.20	1.50	1.50	1.50	1.50	2.00
Interest Rate (%)	18.00	18.00	18.00	18.00	18.00	18.00	18.00	18.00	18.00
Utilization and Loading									
Kilometers Driven per Year (km)	18000	35000	80000	80000	80000	60000	60000	70000	80000
Hours Driven per Year (hr)	500	1100	2000	2000	2000	1300	1800	2000	2000
Service Life (years)	10	9	9	9	9	9	10	10	10
Percent of Time for Private Use (%)	100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Gross Vehicle Weight (tons)	1.20	2.00	3.00	6.00	11.00	6.00	12.00	20.00	30.00

Reference Vehicle Adopted to Estimate Roughness as a Function of Speed of Reference Vehicle

Car Medium

**Table 2. Basic Input Data for Batken-Toktogul Oluya-Karabakh Road**

Country/Region: Kyrgyz Republic

Year: 2021

Currency Name: US\$

Exchange Rate Divider to US\$: 1.00

Terrain Types

Code	Description	Rise & Fall (m/km)	Horizontal Curvature (deg/km)	Number of Rises & Falls (#)	Super elevation (%)
A	Flat	10	50	1	2
B	Rolling	20	150	1	2
C	Mountainous	40	300	1	2

Road Characteristics

Altitude (m)	1047.0
Percent Time Driven on Water	25.0
Percent Time Driven on Snow	35.0
Paved Roads Texture Depth (mm)	0.3

Road Types

Code	Description	Surface Type (1-Bituminous; 2-Concrete; 3-Unsealed)	Carriageway Width (m)	Speed Limit (km/hour)	Speed Limit Enforcement (#)	Roadside Friction (#)	NMT Friction (#)
X	Paved	1	7.0	100.0	1.1	1.0	1.0
Y	Gravel	3	6.0	80.0	1.1	1.0	1.0
Z	Earth	3	5.0	70.0	1.1	1.0	1.0

Vehicle Types

Code	Description	Number of Wheels	Number of Axles
1	Car Medium	4	2
2	Goods Vehicle	4	2
3	Bus Light	4	2
4	Bus Medium	6	2
5	Bus Heavy	10	3
6	Truck Light	4	2
7	Truck Medium	6	2
8	Truck Heavy	10	3
9	Truck Articulated	18	5

Vehicle Fleet Characteristics

	Car Medium	Goods Vehicle	Bus Light	Bus Medium	Bus Heavy	Truck Light	Truck Medium	Truck Heavy	Truck Articulated
Economic Unit Costs									
New Vehicle Cost (\$/vehicle)	10000	14000	20000	35000	50000	26000	42000	60000	89000
Fuel Cost (\$/liter for MT, \$/MJ for NMT)	1.30	1.30	1.40	1.40	1.40	1.40	1.40	1.40	1.40
Lubricant Cost (\$/liter)	15.00	15.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
New Tire Cost (\$/tire)	65.00	120.00	220.00	220.00	220.00	170.00	255.00	255.00	320.00
Maintenance Labor Cost (\$/hour)	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Crew Cost (\$/hour)	0.00	0.00	1.20	1.20	1.50	1.50	1.50	1.50	2.00
Interest Rate (%)	18.00	18.00	18.00	18.00	18.00	18.00	18.00	18.00	18.00
Utilization and Loading									
Kilometers Driven per Year (km)	18000	35000	80000	80000	80000	60000	60000	70000	80000
Hours Driven per Year (hr)	500	1100	2000	2000	2000	1300	1800	2000	2000
Service Life (years)	10	9	9	9	9	9	10	10	10
Percent of Time for Private Use (%)	100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Gross Vehicle Weight (tons)	1.20	2.00	3.00	6.00	11.00	6.00	12.00	20.00	30.00

Reference Vehicle Adopted to Estimate Roughness as a Function of Speed of Reference Vehicle

Car Medium

**Table 3. Basic Input Data for Isfana Streets**

Country/Region: Kyrgyz Republic

Year: 2021

Currency Name: US\$

Exchange Rate Divider to US\$: 1.00

Terrain Types

Code	Description	Rise & Fall (m/km)	Horizontal Curvature (deg/km)	Number of Rises & Falls (#)	Super elevation (%)
A	Flat	10	50	1	2
B	Rolling	20	150	1	2
C	Mountainous	40	300	1	2

Road Characteristics

Altitude (m)	1047.0
Percent Time Driven on Water	25.0
Percent Time Driven on Snow	35.0
Paved Roads Texture Depth (mm)	0.3

Road Types

Co de	Descrip tion	Surface Type (1-Bituminous; 2-Concrete; 3-Unsealed	Carriageway Wi dth (m)	Speed Limit (km/hour)	Speed Limit Enforcement (#)	Roadside Friction (#)	NMT Friction (#)
X	Paved	1	7.0	100.0	1.1	1.0	1.0
Y	Gravel	3	6.0	80.0	1.1	1.0	1.0
Z	Earth	3	5.0	70.0	1.1	1.0	1.0

Vehicle Types

Code	Description	Number of Wheels	Number of Axles
1	Car Medium	4	2
2	Goods Vehicle	4	2
3	Bus Light	4	2
4	Bus Medium	6	2
5	Bus Heavy	10	3
6	Truck Light	4	2
7	Truck Medium	6	2
8	Truck Heavy	10	3
9	Truck Articulated	18	5

Vehicle Fleet Characteristics

	Car Medium	Goods Vehicle	Bus Light	Bus Medium	Bus Heavy	Truck Light	Truck Medium	Truck Heavy	Truck Articulated
Economic Unit Costs									
New Vehicle Cost (\$/vehicle)	10000	14000	20000	35000	50000	26000	42000	60000	89000
Fuel Cost (\$/liter for MT, \$/MJ for NMT)	1.30	1.30	1.40	1.40	1.40	1.40	1.40	1.40	1.40
Lubricant Cost (\$/liter)	15.00	15.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
New Tire Cost (\$/tire)	65.00	120.00	220.00	220.00	220.00	170.00	255.00	255.00	320.00
Maintenance Labor Cost (\$/hour)	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Crew Cost (\$/hour)	0.00	0.00	1.20	1.20	1.50	1.50	1.50	1.50	2.00
Interest Rate (%)	18.00	18.00	18.00	18.00	18.00	18.00	18.00	18.00	18.00
Utilization and Loading									
Kilometers Driven per Year (km)	18000	35000	80000	80000	80000	60000	60000	70000	80000
Hours Driven per Year (hr)	500	1100	2000	2000	2000	1300	1800	2000	2000
Service Life (years)	10	9	9	9	9	9	10	10	10
Percent of Time for Private Use (%)	100.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Gross Vehicle Weight (tons)	1.20	2.00	3.00	6.00	11.00	6.00	12.00	20.00	30.00

Reference Vehicle Adopted to Estimate Roughness as a Function of Speed of Reference Vehicle

Car Medium

**Table 4. Project-Alternatives Main Features (Batken Streets)**

	Without Project Alternative	Project Alternatives
	Alternative 0	Alternative 1
Alternative Description	Patching Every 180 Days	Paving with asphalt
Terrain Type (A/B/C)	C	C
A: Flat		
B: Rolling		
C: Mountainous		
Road Type (X/Y/Z)	Y	X
X: Paved		
Y: Gravel		
Z: Earth		
<u>Dry Season</u>		
Road Length (km)	5.6	5.6
Roughness (IRI)	10.5	3.3
<u>Wet Season</u>		
Road Length (km)	5.6	5.6
Roughness (IRI)	10.5	3.3
Investment Duration in Years (0/1/2/3)	0	1
Percent of Investment Costs in Year 1 (%)	0%	100%
Percent of Investment Costs in Year 2 (%)	0%	0%
Percent of Investment Costs in Year 3 (%)	0%	0%
Financial Investment Costs ('000\$/km)	0.00	335.00
Fixed Financial Maintenance Costs ('000\$/km/year)	5.00	5.00
Variable Financial Maintenance Costs ('000\$/km/year/ADT)	0.003	0.004
Accidents Rate (Accidents per 100 million vehicle-km)	250.0	70.0
And Optionally		
Percent With Fatality (%)	11%	11%
Percent With Injury (%)	17%	17%
Percent Damage Only (%)	72%	72%
Diverted Traffic from Alternative Road (veh/day):		
Car Medium		
Goods Vehicle		
Bus Light		
Bus Medium		
Bus Heavy		
Truck Light		
Truck Medium		
Truck Heavy		
Truck Articulated		
Alternative Road Characteristics:		
Road Terrain Type (A/B/C)		C
Road Type (X/Y/Z)		X
Road Length (km)		5.6
Road Roughness (IRI)		3.3
Solution Summary		
Net Present Value (million \$) at 5% Discount Rate		0.051
Internal Rate of Return (%)		5.44%

**Table 5. Project-Alternatives Main Features (Batken-Toktogul Oluya-Karabak Road)**

	Without Project Alternative	Project Alternatives
	Alternative 0	Alternative 1
Alternative Description	Patching Every 180 Days	Paving with asphalt
Terrain Type (A/B/C)	C	C
A: Flat		
B: Rolling		
C: Mountainous		
Road Type (X/Y/Z)	Y	X
X: Paved		
Y: Gravel		
Z: Earth		
Dry Season		
Road Length (km)	6.2	6.2
Roughness (IRI)	10.5	3.3
Wet Season		
Road Length (km)	6.2	6.2
Roughness (IRI)	10.5	3.3
Investment Duration in Years (0/1/2/3)	0	1
Percent of Investment Costs in Year 1 (%)	0%	100%
Percent of Investment Costs in Year 2 (%)	0%	0%
Percent of Investment Costs in Year 3 (%)	0%	0%
Financial Investment Costs ('000\$/km)	0.00	250.00
Fixed Financial Maintenance Costs ('000\$/km/year)	5.00	5.00
Variable Financial Maintenance Costs ('000\$/km/year/ADT)	0.003	0.004
Accidents Rate (Accidents per 100 million vehicle-km)	250.0	70.0
And Optionally		
Percent With Fatality (%)	11%	11%
Percent With Injury (%)	17%	17%
Percent Damage Only (%)	72%	72%
Diverted Traffic from Alternative Road (veh/day):		
Car Medium		
Goods Vehicle		
Bus Light		
Bus Medium		
Bus Heavy		
Truck Light		
Truck Medium		
Truck Heavy		
Truck Articulated		
Alternative Road Characteristics:		
Road Terrain Type (A/B/C)		C
Road Type (X/Y/Z)		X
Road Length (km)		6.2
Road Roughness (IRI)		3.3
Solution Summary		
Net Present Value (million \$) at 5% Discount Rate		-0.655
Internal Rate of Return (%)		-3.47%

**Table 6. Project-Alternatives Main Features (Isfana Streets)**

	Without Project Alternative	Project Alternatives
	Alternative 0	Alternative 1
Alternative Description	Patching Every 180 Days	Paving with asphalt
Terrain Type (A/B/C)	C	C
A: Flat		
B: Rolling		
C: Mountainous		
Road Type (X/Y/Z)	Y	X
X: Paved		
Y: Gravel		
Z: Earth		
Dry Season		
Road Length (km)	10.0	10.0
Roughness (IRI)	10.5	3.3
Wet Season		
Road Length (km)	10.0	10.0
Roughness (IRI)	10.5	3.3
Investment Duration in Years (0/1/2/3)	0	1
Percent of Investment Costs in Year 1 (%)	0%	100%
Percent of Investment Costs in Year 2 (%)	0%	0%
Percent of Investment Costs in Year 3 (%)	0%	0%
Financial Investment Costs ('000\$/km)	0.00	175.00
Fixed Financial Maintenance Costs ('000\$/km/year)	5.00	5.00
Variable Financial Maintenance Costs ('000\$/km/year/ADT)	0.003	0.004
Accidents Rate (Accidents per 100 million vehicle-km)	200.0	70.0
And Optionally		
Percent With Fatality (%)	11%	11%
Percent With Injury (%)	17%	17%
Percent Damage Only (%)	72%	72%
Diverted Traffic from Alternative Road (veh/day):		
Car Medium		
Goods Vehicle		
Bus Light		
Bus Medium		
Bus Heavy		
Truck Light		
Truck Medium		
Truck Heavy		
Truck Articulated		
Alternative Road Characteristics:		
Road Terrain Type (A/B/C)		A
Road Type (X/Y/Z)		X
Road Length (km)		10.0
Road Roughness (IRI)		3.3
Solution Summary		
Net Present Value (million \$) at 5% Discount Rate		0.202
Internal Rate of Return (%)		6.83%



AGRICULTURAL SECTOR

28. Investments in agricultural value chains will be funded under *Component 2. Strengthening Agri-Food Clusters* to increase the competitiveness of agricultural enterprises with targeted interventions to address constraints within highly fragmented and small-scale supply chains and facilitate the development of SMEs to meet new market opportunities and promote export.

29. The economic and financial analysis of agricultural investments focuses on a selected number of indicative economic activities in crop and livestock production identified during the Project design and that would be potentially supported by RED-2. The following illustrative models were revised and prepared to demonstrate the financial and economic viability of potential investments in Batken Region:

- (a) Fruit orchard (cherry, apricot, plum)
- (b) Vegetable (tomato, cucumber)
- (c) Greenhouse
- (d) Cattle breeding

30. All the above mentioned models aimed to identify incremental costs and revenues related to the introduction of intensive new technologies or practices and associated with the investments implemented in the first year of the project. However, due to assumptions that the introduction of some activities in the Project area will be completely new, the without project values for some models are set at null. In most cases, the result of the investment translates into additional demand from primary producers and new permanent jobs.

31. The analysis attempted to identify quantifiable benefits that relate directly to the activities undertaken following implementation of the agricultural components, or that can be attributed to the Project's implementation. The incremental net benefits of illustrative models were then used in the calculation of the overall benefit stream. Climate benefits in terms of GHG sequestration or reduction were also calculated and utilized for the estimation of the economic benefit stream. The analysis also considered the shadow price of carbon and used a base rate of US\$40/tCO₂eq as the social value of carbon in line with World Bank standards established in 2017.²⁷

32. The parameters for the models are based on information gathered during the project preparation including information provided by farmers and entrepreneurs from Batken Region and other areas and information from the project appraisal team's own estimates. Information on labor and input requirements for various operations, capital costs, prevailing wages, yields, farm gate and market prices of commodities, input and farm-to-market transport costs were collected. Conservative assumptions were made both for inputs and outputs and take account of possible risks.

Key Assumptions

33. The following key assumptions were utilized in the analysis:

- **Prices.** Financial prices for commodities/inputs reflect farm-gate prices and those actually paid/received by the farmer/entrepreneur, and imply potential risks. Economic prices were calculated by the removal of price contingencies and taxes/duties.
- **Exchange rate.** The financial exchange rate at 85 KGS/US\$ was used for the analysis. The economic exchange rate estimated at 91 KGS/US\$ was used for the economic analysis.

²⁷ World Bank, 2017. Guidance note on shadow price of carbon in economic analysis.



- **Adoption rate.** Aggregated benefit cash flows are calculated considering a 90 percent adoption rate.²⁸ This represents conservative benefits projections assuming that at least 90 percent of Project investments will succeed.
- **Discount Rate.** The Financial Discount Rate of 7 percent is used in this analysis to assess the viability and robustness of investments. The discount rate of 7 percent is used in economic analysis as well.
- **Analysis period.** All models were analyzed for 15 years to show the financial prospects under market conditions. At an aggregated level, the costs and benefits streams are presented for a 15-year period as well.
- **Scope of investment:** The total investment costs for the four illustrative models presented here is approximately US\$11.7 million. Given that the final budget for productive partnerships is almost twice this amount, benefits in terms of jobs should be adjusted.

Financial Impact Analysis

34. Given the above assumptions, the FIRR is 15 percent and the net present value (NPV) of the project's net benefit stream is US\$6 million. Detailed calculations of aggregated financial IRR and NPV are presented in the "Aggregated Summary" spreadsheet of the RED-2 Financial Analysis.

35. The main result of the financial analysis demonstrates: (i) positive financial results for all investments and (ii) a significant increase in gross and net returns from all models compared with and without project situation illustrating the worthiness of the investments.

36. By implementing innovative agricultural technologies, added value will be achieved using resource-efficient technologies such as drip irrigation and energy efficient equipment for greenhouses. The Project will also support an increase in agricultural productivity mainly through improved seeds for crop production and improved breeds and feeding practices for livestock management.

37. The models shall be regarded as a potential set of project investments and this set can be flexibly adapted within the Project implementation. The summary of the possible production models is presented in Table 1. The table summarizes the hypothetical cases of individual households/enterprises, but may not represent the final portfolio of investment.

38. **Fruit orchards.** For the purpose of the analysis, an area of about 600 ha of fruit orchards was considered as a potential investment with project support. In this analysis the investment cost includes seedlings, fertilizers, fencing, drip irrigation equipment and reservoirs. The without project scenario is set at null since the proposed orchards are assumed to be established in new areas. The rotation period of fruit orchards is well above 15 years, i.e., the analyzed period. Unlike local practices, the potential project interventions focus on high density orchards. Despite the short period of analysis, the models for fruit orchards show very positive results: IRR ranges from 8 percent to 29 percent. The number of beneficiaries was estimated at 600 households assuming households who own small scale orchards (1 ha).

39. Investments in **vegetables** aim at expanding production of tomatoes and cucumbers in the Project area for commercial purposes (the without project scenario is set at null). The investment package includes productive seedlings and seeds, fertilizers, drip irrigation equipment and reservoirs. IRRs at 30% for cucumbers and for tomatoes show the financial attractiveness of these agribusinesses when they have improved access to markets: 1,200 beneficiaries are expected to benefit from these activities.

²⁸ Aggregated benefits are reduced by 10%, while aggregated costs are the same.



40. **Green houses:** A 1 ha energy efficient greenhouse model for vegetable production was analyzed. The without project scenario assumes a 1 ha greenhouse with a relatively high consumption of coal to grow tomatoes and cucumbers. The project scenario significantly reduces coal consumption (from 3,500 kg/day to 2,380 kg/day per greenhouse) and increases production by 3 percent due to improved climate control in the greenhouse through investments not only to greenhouse construction, drip irrigation equipment, reservoir, seeds and fertilizers but also for energy efficient equipment such as heater and thermo cover. The IRR for greenhouses is 111 percent which shows the financial viability of potential Project investments in energy efficient technologies taking into account increased prices of coal.

41. The cattle breeding model shows economic incentives to improved livestock productivity. The analysis considers a household with a more productive cow purchased on the domestic market which produces one calf annually. The cow produces milk while calves are kept for 2 years only for meat production. Under both the without project and the with project scenarios the cow is replaced after 8 and 6 years respectively. Investments in genetically improved cows, high quality veterinary services, artificial insemination and improved feeding practices can increase meat production from 280 kg/cattle to 450 kg/cattle for a 2-year cattle and increase annual milk production from 1,750 l/cow to 2,800 l/cow. Incremental revenues provide the IRR at 22% due to increased prices of milk and meat.

42. All the above investments were blended with a relevant TA package to ensure specific capacity building of beneficiaries to use more innovative intensive technologies.

Table 1. Summary of financial results for agricultural investments for a 15-year period.

	Adoption	Investments per unit of adoption	IRR	NPV	Number of beneficiaries
<i>Unit</i>	<i>Area, ha</i>	<i>US\$/ha</i>	<i>%</i>	<i>US\$/ha</i>	<i>Households / Entrepreneurs</i>
Fruit orchards					
Apricot	200	7,321	15%	10,704	200
Cherry	200	9,036	14%	9,980	200
Plum	200	7,747	29%	38,082	200
Vegetables					
Tomato	300	5,284	30%	4,858	300
Cucumber	300	4,838	30%	4,738	300
Greenhouse	2	1,134,019	111%	317,698	2
<i>Unit</i>	<i># of households</i>	<i>US\$/household</i>	<i>%</i>	<i>US\$/household</i>	<i>Households</i>
Cattle breeding	900	1,403	22%	1,442	900
TOTAL					2,102



Economic Impact Analysis

43. Given the aggregated benefit and cost streams at economic prices, the economic rate of return (ERR) is estimated at 13.6 percent and net present value of the project's net benefit stream in economic terms is US\$4.5 million. Detailed calculations of aggregated economic IRR and NPV are presented in the "Aggregated Results" spreadsheet of the RED-2 Economic Analysis.

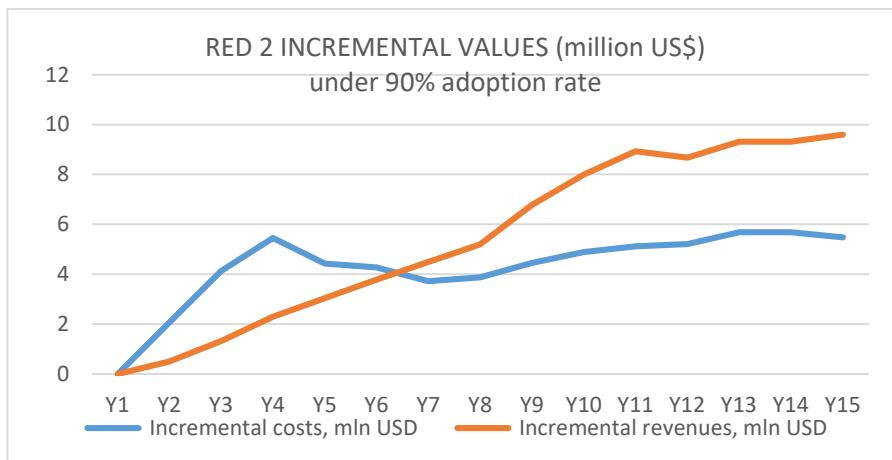
44. The results are sensitive to the further reduction in adoption rate of benefits, delay in Project implementation and fluctuations in Project revenues and cost. An 80 percent adoption rate and 1-year delay in Project implementation decrease economic NPV to negative US\$0.1 million and negative US\$1.5 million respectively. A 10 percent increase in aggregated costs and 10 percent decrease in aggregated revenues lead to economic NPV of US\$0.8 million and US\$0.4 million respectively.

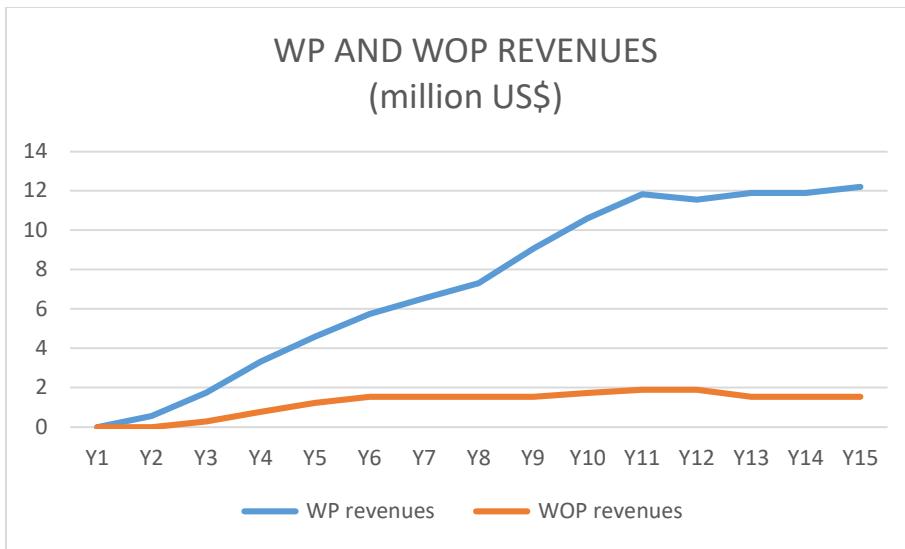
45. Considering the presented models as representative, it is estimated that in terms of proposed investments the Project would reach 2,102 beneficiaries. In terms of labor, it is expected that Project investments will generate about 1,815 full-time equivalent jobs at full capacity of the provided investments. In addition, establishment of fruit orchards will generate an additional 376 full-time equivalent jobs in the first years of interventions.

46. Increased local economic activities will generate additional taxes of US\$1.6 million for 15 years through increased cashflows from land, labor and income taxes, if there are no changes in the tax rate and/or tax regimes.

47. Investments will provide substantially high and positive economic net incremental revenues starting from Year 6. Compared to the WOP scenario, Project interventions are able to increase revenues by around 2.5 times starting from Year 10 (Chart 1).

Chart 1. Economic Revenues



***GHG Analysis***

48. The Project will contribute to capturing 63,000 tons of CO₂ equivalent by establishing fruit orchards in 600 ha of degraded lands (excluding GHG emissions related to use of mineral fertilizers). It will additionally reduce GHG emissions by 36,000 tons of CO₂ equivalent through introduction of improved cattle breeds and feeding practices as well as energy efficient technologies.



ANNEX 4: Procurement

1. **Applicable Procurement Framework:** Activities under the project will be subject to the Bank's New Procurement Framework. Procurement of all contracts will follow the procedures specified in the Bank's Procurement Regulations for IPF Recipients-Procurement in Investment Project Financing Goods, Works, Non-Consulting and Consulting Services, dated November 2020 (Procurement Regulations). The project will also be subject to the World Bank's Anti-Corruption Guidelines, dated July 1, 2016. The procurement and contract management processes will be tracked through the Systematic Tracking of Exchange in Procurement (STEP) system.
2. **Summary of Project Procurement Strategy for Development:** As required by the Procurement Regulations, Project Procurement Strategy for Development (PPSD) is developed, based on which a Procurement Plan is prepared setting out the selection methods to be followed by the borrower during the project implementation when procuring goods, works, non-consulting and consulting services, financed by the Bank. The procurement approaches for key packages have been determined in the PPSD as described in the following paragraphs.
3. **Procurement approach for key goods, works and non-consulting services contracts:** Special and laboratory equipment will be procured through Request for Bids using the international market approach. Civil works for construction of social infrastructure, rehabilitation of the water supply system, repair work on the restoration of sewerage and sewage treatment plants and construction of roads, pedestrian bridges, street lighting and other facilities for Batken, Kadamzhai, Isfana will be procured through Request for Bids using the international/national market approach.
4. **Procurement approach for key consultancy contracts:** Consulting firms will be used for feasibility studies for SPS investments and design of technical specifications for equipment of laboratories and centers. Consulting firms will be used to identify specific supply chain actors for participation and the competitive selection of sub-projects. Consulting firms will provide training and advice to members of productive partnerships for productivity, quality, marketing and sales and a consulting firm for conducting a public information campaign, social mobilization and diagnostic study in order to build value chains and create productive partnerships in Osh oblast and Osh city and their further development will be procured through Quality and Costs based selection using an international market approach.
5. **Key conclusions from the conducted market analysis:** The current state of the construction market has sufficient competition to offer the best value under all equal conditions, even taking into account the regionality, so that the construction market is quite competitive. There is also a need for an adequate and safe system of transferring the facility to the contractor and vice versa with the participation of third parties, possibly various public associations and active social groups. Laboratory and other equipment, although specific, is not unique, and is manufactured in different countries by different manufacturers.
6. **Procurement risks analysis.** A procurement capacity assessment was performed by the Bank using the Procurement Risk Assessment and Management System. Based on the assessment the project procurement risk is rated as "High".

Procurement risks
Project beneficiaries do not have capacity to prepare detailed designs and technical specifications for defined investments. This increases the risk of accountability of procurement decisions, especially at the local level. A large grant component brings additional risk related to complexity, procurement



capacity and market readiness.

Potential procurement delays: experience suggests that procurement delays should be expected due to the lack of procurement capacity and limitations of the market

Low level of competition in civil works sector: Past experience indicates that the procurement in the country has not attracted adequate competition, especially in the remote regions, due to the limited capacity of the local contractors.

Perceived high level of corruption as measured by Transparency International.

ARIS will follow public procurement law and national procurement procedures when procuring at the national level, which may hold increased risks due to the (technical) issues related to the e-Government Procurement (e-GP) system.

Inadequate contract management and lower-than-required quality of procured works, goods and services.

To mitigate the risks, the following actions have been identified:

Preliminary risk mitigation measures

With the support from additional consultants, ARIS will be responsible for preparation of technical documents.

Productive Partnerships Manual and Small Grants Handbook will cover procurement procedures, acceptable to the Bank.

Realistic procurement planning and scheduling, including timely preparation of the technical specifications or terms of references with Bank's close supervision and monitoring, particularly from the country office.

ARIS shall consider analysis for bidder's capacity in the procurement timeline. Early engagement with the market and business outreach will be required.

Application of World Bank's Anti-Corruption Guidelines.

ARIS shall register as a Purchaser in the state procurement portal. The Bidding process shall not be cancelled solely due to the reason that the minimum bid price is larger than the amount allocated by procuring entity for this procurement.

More emphasis on and training in appropriate contract management is required, supplemented by regular physical inspections during the Bank's supervision missions.

Close supervision by the Bank staff.

Use of National Procurement Procedures.

7. In accordance with paragraph 5.3 of the Procurement Regulations, when approaching the national market, procurement under World Bank financed operations may be carried out in accordance with "Single-Stage Bidding" (one envelope, two envelopes) set forth in the Public Procurement Law of the Kyrgyz Republic dated April 3, 2015 № 72 (the "PPL") with amendments dated November 18, 2016 - N182; December 10, 2016 - N195; February 14, 2017 - N25; May 30, 2017 - N93; March 29, 2018 - N32; January 11, 2019 - N4; June 26, 2019 - N76; April 20, 2020 - N 48; and December 18, 2020 - N8; provided that such arrangements continue to meet requirements of the paragraph 5.4 of the Procurement Regulations and the following conditions:

- The request for bids/request for proposals document shall require that bidders/proposers submitting bids/proposals present a signed acceptance at the time of bidding, to be incorporated



in any resulting contracts, confirming application of, and compliance with, Bank Anti-Corruption Guidelines, including without limitation the Bank's right to sanction and the Bank's inspection and audit rights.

- Bidding documents, including contract forms, acceptable to the Bank shall be used. Bidding documents shall include provisions, as agreed with the Bank, intended to adequately mitigate against environmental, social (including sexual exploitation and abuse and gender-based violence), health and safety ("ESHS") risks and impacts. The request for bids/request for proposals document for civil works shall require that Bidders/Proposers submitting Bids/Proposals present a signed Code of conduct form, Environmental and Social Performance Declaration (when required) and Management Strategies and Implementation Plans. For procurement of civil works Standard Bidding Documents for works (Request for Bids, Small works) developed by the World Bank shall be used. Relevant conditions from the Bank's SPD for Goods to be incorporated in the Borrower's bidding document for procurement of goods. Contract forms should include appropriate requirements for insurance and contract termination.
- The Bidding process shall not be cancelled solely on the reason that the minimum bid price is larger than the amount allocated by procuring entity for this procurement.
- There shall be no preference applied during procurement of goods and works.
- The Implementing agency shall have an option to publish the procurement notice without disclosing cost estimate.

8. When other national procurement arrangements other than national open competitive procurement arrangements are applied by the Borrower, such arrangements shall be subject to paragraph 5.5 of the Procurement Regulations. Other national procurement arrangements such as "Simplified Method" (Request for Quotation) may be applied on the same conditions stated above for procuring limited quantities of readily available off-the-shelf goods or simple civil works of small value. In addition, not less than three quotations shall be requested to ensure competition.

9. *Procurement for Productive Partnerships under Component 2, and Small Grants Program under Component 3:* Procurement within these components will follow the guidelines set out in the Productive Partnerships Manual and Small Grants Handbook.

10. *Training and Operating Costs:* The project will finance operating costs for ARIS. When required, ARIS personnel will be selected on the basis of experience, qualifications, and capability to carry out the assignment. The selection shall be carried out through the comparison of the relevant overall capacity of at least three qualified candidates among those who have expressed interest in the assignment. Detailed procedures will be outlined in the POM. ARIS will develop a detailed training plan and prepare an annual operational budget for the Bank team's review and clearance. Operating costs and training will be financed as per annual budget approved by the Bank.

11. *Record keeping:* All records pertaining to award of tenders, including bid notification, register pertaining to sale and receipt of bids, bid opening minutes, bid evaluation reports and all correspondence pertaining to bid evaluation, communication sent to/with the Bank in the process, bid securities, and approval of invitation/evaluation of bids would be retained by respective agencies and uploaded in the STEP.

12. *Disclosure of procurement information:* The following documents shall be disclosed: (a)



Procurement Plan and updates; (b) an invitation for bids for goods and works for all contracts; (c) request for expression of interest for selection/hiring of consulting services; (d) contract awards for goods, works, non-consulting and consulting services.

13. The following details shall also be published in the United Nations Development Business and Bank's external website: (a) an invitation for bids for procurement of goods and works following open international market approaches; (b) Request for Expression of Interest for selection of consulting services following open international market approaches; and (c) contract award details of all procurement of goods and works and selection of consultants using open international market approaches.

14. *Fiduciary oversight by the Bank and procurement supervision:* The Bank shall prior review contracts as per prior review thresholds set out in the PSD/Procurement Plan. All contracts not covered under prior review by the Bank shall be subject to post review during implementation support missions and/or special post review missions, including missions by consultants hired by the Bank. Two half-yearly missions are envisaged for procurement support and supervision of the proposed project.

Table: Summary Procurement Plan

Contract Description	Estimated Cost (US\$ equivalent)	Proc. Method	Procurement Approach	WB Review (prior/post)
Goods/Works under Targeted Investments Subprojects	17,000,000	RFB	Open international/Open national	Prior/Post
Goods				
Procurement of special equipment and waste containers for Kadamjai, Isfana, Batken cities	572,590	RFB	Open international	Post
Purchase of laboratory equipment and other material and technical means necessary for the laboratory (Soil and Agrochemical stations, Department of Crop Expertise, Department of Plant Protection and Chemicalization, Veterinary and Phytosanitary Safety Inspection, etc.)	2,390,000	RFB	Open international	Prior
Works				
Construction of social infrastructure (schools, kindergartens, FAPs, etc. facilities for the cities of Batken, Kadamzhai, Isfana)	6,500,000	RFB	Open international	Prior



Construction of roads, pedestrian bridges, street lighting and other facilities for Batken,Kadamzhai, Isfana)	7,000,000	RFB	Open international	Prior
Rehabilitation of the water supply system in Batken, Isfana, Kadamzhai	5,000,000	RFB	Open international	Prior
Repair work on the restoration of sewerage and sewage treatment plants in Batken, Isfana,Kadamzhai	3,521,765	RFB	Open international	Post
Consulting services				
Consulting services for Development of design and estimate documentation for Batken,Kadamjai,Isfana cities (Multiple contracts)	480,000	QCBS	Open international	Post
Consulting services for technical supervision for Batken,Kadamjai,Isfana cities (Multiple contracts)	480,000	QCBS	Open international	Post
Consulting services for Author supervision for Batken,Kadamjai,Isfana cities (Multiple contracts)	445,645	QCBS	Open international	Post
Consulting company providing training and advice to members of productive partnerships for productivity, quality, marketing and sales	310,000	QCBS	Open international	Post
Conducting an information campaign, social mobilization and diagnostic study in order to build value chains and create productive partnerships in Osh oblast and Osh city and their further development	400,000	QCBS	Open international	Post
Consulting company for feasiblty studies for SPS investments and design of technical specifications for equipment of laboratories, centers and points	340,000	QCBS	Open international	Post



Low-value packages				
Other low-value goods	0			
Other low-value works	0			
Other low-value consulting services	660,000	LCS, CQS, IC		
Other trainings	50,000	AP		
Project Management	2,850,000			
Small Grants for Promoting local economic development	2,000,000			



ANNEX 5: Map

