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Report No: PAD5416

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

PROJECT APPRAISAL DOCUMENT

ON A
FRAMEWORK APPROACH PROJECT OF
US$700 MILLION

OF WHICH A
PROPOSED LOAN
IN THE AMOUNT OF US$230 MILLION

AND

UKRAINE RELIEF, RECOVERY, RECONSTRUCTION AND REFORM MULTI-DONOR TRUST FUND (URTF) GRANT
IN THE AMOUNT OF US$320 MILLION
TO

UKRAINE

FOR THE

UKRAINE AGRICULTURE RECOVERY INCLUSIVE SUPPORT EMERGENCY (ARISE) PROJECT

October 17, 2023

Agriculture and Food Global Practice
Europe And Central Asia Region

CURRENCY EQUIVALENTS

(Exchange Rate Effective September 30, 2023)

Currency Unit =	Ukrainian Hryvnia (UAH)
36.75 UAH =	US$1

FISCAL YEAR

January 1 - December 31

Regional Vice President:	Antonella Bassani
Country Director:	Arup Banerji
Regional Directors:	Sameh Naguib Wahba Tadros
Practice Managers:	Frauke Jungbluth, Mario Guadamillas
Task Team Leaders:	Sergiy Zorya, Johanna Jaeger

ABBREVIATIONS AND ACRONYMS

AM	Accountability Mechanism
Bank	IBRD/IDA
BDF	Business Development Fund
BP	Bank Procedure
BSGI	Black Sea Grain Initiative
CE	Citizens Engagement
CERC	Contingent Emergency Response Component
CMU	Cabinet of Ministers of Ukraine
CPF	Country Partnership Framework
CSA	Climate-Smart Agriculture
DA	Designated Account
DFIL	Disbursement and Financial Information Letter
DP	Development Partner
ECA	Europe and Central Asia
ENPV	Economic Net Present Value
EC	European Commission
ESCP	Environmental and Social Commitment Plan
ESF	Environmental and Social Framework
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
ESRS	Environment and Social Review Summary
EU	European Union
EX-ACT	Ex-Ante Carbon-balance Tool
FAO	Food and Agriculture Organization of the United Nations
FCV	Fragility, Conflict, and Violence
FM	Financial Management
FNS	Food and Nutrition Security
GDP	Gross Domestic Product
GHG	Greenhouse Gas
GoU	Government of Ukraine
GRM	Grievance Redress Mechanism
GRS	Grievance Redress Service
Ha	Hectare
HEAL	Health Enhancement and Lifesaving
IBRD	International Bank for Reconstruction and Development
IDA	International Development Association
IFC	International Finance Corporation
IFR	Interim Financial Unaudited Report
IPF	Investment Project Financing
KfW	KfW Development Bank (Germany)
M&E	Monitoring and Evaluation
MAPF	Ministry of Agrarian Policy and Food of Ukraine
MOF	Ministry of Finance of Ukraine

NBU	National Bank of Ukraine
NDC	National Determined Contribution
NPL	Nonperforming loan
OP	Operations Policy
PCGF	Partial Credit Guarantee Fund
PCM	Private Capital Mobilization
PDO	Project Development Objective
PEACE	Public Expenditures for Administrative Capacity Endurance in Ukraine
PFI	Participating Financial Institution
PIU	Project Implementation Unit
PMU	Project Management Unit
POM	Project Operations Manual
PP	Procurement Plan
PPSD	Project Procurement Strategy for Development
RDNA	Rapid Damage, Loss, and Needs Assessment
RELINC	Repairing Essential Logistics Infrastructure and Network Connectivity
Re-PoWER	Restoration Project of Winterization and Energy Resources
RVP	Regional Vice President
SAR	State Agrarian Registry
SEP	Stakeholder Engagement Plan
SFFS	State Fund for Farmers Support
SME	Small and medium enterprises
STEP	Systematic Tracking of Exchanges in Procurement
TA	Technical Assistance
Ton	Metric ton
TOR	Term of Reference
UAH	Ukrainian Hryvnia
UIRD	Ukrainian Index of Retail Deposit Rates
UN	United Nations
US$	United States Dollar
USAID	United States Agency for International Development
URTF	Ukraine Relief, Recovery, Reconstruction, and Reform Trust Fund
WB	World Bank
WFP	World Food Program

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DATASHEET

BASIC INFORMATION

Country(ies)	Project Name		
Ukraine	Ukraine Agriculture Recovery Inclusive Support Emergency (ARISE) Project		
Project ID	**Financing Instrument**	**Environmental and Social Risk Classification**	**Process**
P180732	Investment Project Financing	Substantial	Urgent Need or Capacity Constraints (FCC)

Financing & Implementation Modalities

[ ] Multiphase Programmatic Approach (MPA)	[√] Contingent Emergency Response Component (CERC)
[ ] Series of Projects (SOP)	[√] Fragile State(s)
[ ] Performance-Based Conditions (PBCs)	[ ] Small State(s)
[√] Financial Intermediaries (FI)	[ ] Fragile within a non-fragile Country
[ ] Project-Based Guarantee	[√] Conflict
[ ] Deferred Drawdown	[√] Responding to Natural or Man-made Disaster
[ ] Alternate Procurement Arrangements (APA)	[ ] Hands-on Enhanced Implementation Support (HEIS)

Expected Approval Date	Expected Closing Date
30-Oct-2023	30-Sep-2025
Bank/IFC Collaboration	**Joint Level**
Yes	Complementary or Interdependent project requiring active coordination

Proposed Development Objective(s)

The Project Development Objective is to maintain inclusive agricultural production and provide immediate and effective response to an eligible crisis or emergency.

Components

Component Name	Cost (US$, millions)
1. Supporting access to finance for farms through affordable credit	500.00
2. Supporting access to finance for small farms through grants	199.20
3. Project management	0.80
4. Contingent Emergency Response	0.00

Organizations

Borrower:	Ukraine
Implementing Agency:	Business Development Fund Ministry of Agrarian Policy and Food

PROJECT FINANCING DATA (US$, Millions)

SUMMARY

Total Project Cost	2,200.00
Total Financing	2,050.00
of which IBRD/IDA	230.00
Financing Gap	150.00

DETAILS

World Bank Group Financing

International Bank for Reconstruction and Development (IBRD)	230.00

Non-World Bank Group Financing

Trust Funds	320.00
Trust Funds	320.00
Commercial Financing	1,500.00
Unguaranteed Commercial Financing	1,500.00

Expected Disbursements (in US$, Millions)

WB Fiscal Year	2024	2025
Annual	550.00	150.00
Cumulative	550.00	700.00

INSTITUTIONAL DATA

Practice Area (Lead)

Agriculture and Food

Contributing Practice Areas

Environment, Natural Resources & the Blue Economy, Finance, Competitiveness and Innovation, Social Sustainability and Inclusion

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	High
2. Macroeconomic	High
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	High

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	Not Currently 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	Not Currently Relevant
Financial Intermediaries	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

Conditions

Type	Financing source	Description
Effectiveness	Trust Funds, IBRD/IDA	The Borrower, through the Ministry of Finance (MOF), has caused the Business Development Fund (BDF) to establish a BDF Project Implementation Unit, with adequate resources and with staff in numbers, qualifications and with responsibilities acceptable to the Bank.
Effectiveness	IBRD/IDA	The Subsidiary Agreement has been executed on behalf of the Borrower and BDF on terms and conditions satisfactory to the Bank.
Effectiveness	IBRD/IDA	The Borrower, through the MOF, has caused BDF to adopt the BDF Project Operations Manual.
Disbursement	Trust Funds	The Recipient has caused BDF to adopt the BDF Project Operations Manual.
Disbursement	Trust Funds	The Agreement with Ukrainian State Fund for Farmers Support (SFFS) has been executed on behalf of the Recipient and SFFS on terms and conditions satisfactory to the Bank.
Disbursement	Trust Funds	The Bank has received adequate evidence that the Recipient has amended the Agricultural Grants Legislation to include a verification mechanism for the use of Agricultural Grants of in form and substance satisfactory to the Bank.
Disbursement	Trust Funds	The Recipient has established a MAPF PMU with adequate resources and with staff in numbers, qualifications and with responsibilities acceptable to the Bank.
Disbursement	Trust Funds	The Recipient has caused the MAPF to adopt the MAPF Project Operations Manual.
Disbursement	Trust Funds	The Subsidiary Agreement has been executed on behalf of the Recipient and BDF on terms and conditions satisfactory to the Bank.

I. STRATEGIC CONTEXT

1. **The Ukraine Agriculture Recovery Inclusive Support Emergency (ARISE) Project supports the Government of Ukraine (GoU) to maintain agricultural production**. The Project addresses two challenges faced by Ukraine's agriculture since Russia's invasion of Ukraine – (i) how to support uninterrupted food crop plantings and harvestings and (ii) how to make agricultural recovery inclusive by providing more opportunities for smaller farms. By addressing these challenges, the Project will not only make a positive contribution to the future of agriculture and food security in Ukraine, but also to the future outlook for global food and nutrition security (FNS) over the next years. The Project considers the Fragility, Conflict, and Violence (FCV) country experiences but notes that unlike in some other countries at war, the GoU continues to play a crucial role in making policy choices in providing services to farmers. The Project builds on the discussions of the Global Alliance for Food Security jointly convened by the G7 and the World Bank (WB) as a coordinated and solidarity response to the global FNS challenges ahead.[1]

2. **The Project is designed as a US$700 million "framework project" that will use an Investment Project Financing (IPF) instrument under the policy framework provided by the WB Policy BP 10.0 IPF and OP 8.0 Rapid Response to Crises and Emergencies**.[2] The Project has been designed and appraised for the full US$700 million, including the results that match this envelope. The design outlines Project activities that will be implemented with an initial funding of a US$230 million IBRD loan through credit enhancement from the Advancing Needed Credit Enhancement for Ukraine (ADVANCE Ukraine) Trust Fund, supported by the Government of Japan, and a US$320 million grant from the Ukraine Relief, Recovery, Reconstruction, and Reform Trust Fund (URTF), with additional resources of US$150 million expected to be provided as subsequent Bank and donor funding materializes. The Project is anticipated to leverage about US$1.5 billion of commercial financing, i.e., private capital mobilization (PCM).

A. Country Context

3. **Russia's invasion of Ukraine has had substantial economic, human, and poverty consequences**.[3] It has significantly disrupted economic activities in a number of ways, causing damage to productive assets and infrastructure, logistics problems, labor force losses, supply and demand chains disruptions, increased uncertainty, and elevated risks. The contraction in gross domestic product (GDP) in 2022 was 29.2 percent year-on-year. The GDP growth for 2023 is projected at 0.5 percent. The downside risks are high, related to the unpredictability of the war and high potential for further large-scale damage of infrastructure and negative social and poverty impacts. Based on the global poverty line of US$6.85 per day, poverty was estimated to increase from 5.5 percent in 2021 to 25 percent in 2022 with income below US$6.5 per day.[4] Headline inflation reached 26.6 percent in 2022, with high food price inflation hurting the poor in particular. The National Bank of Ukraine (NBU) intervened in the currency market to establish an exchange rate peg and mopped up domestic liquidity to control demand, preventing further inflation growth. Yet, despite Russia's invasion of Ukraine, the GoU has continued to deliver key public services and the financial sector is functioning normally, stabilizing the foreign exchange market. However, the damage to energy infrastructure since mid-September 2022 has further challenged the ability of the GoU to keep providing energy and water supply in many regions, putting millions of lives at risk, and substantially hindering economic activities in most of the country. Russia's invasion of Ukraine has also exacerbated vulnerabilities and heightened economic, social, and health risks for the people, especially women and

[1] https://www.bmz.de/en/issues/food-security/global-alliance-for-food-security

[2] The proposed Project will be the fourth in a series of the approved framework projects for Ukraine, i.e., Health Enhancement and Lifesaving Ukraine Project (P180245), Repairing Essential Logistics Infrastructure and Network Connectivity Project (P180318), and Restoration Project of Winterization and Energy Resources (P180332).

[3] All statistics in this and subsequent sections are estimated by the Bank staff based on official statistics of Ukraine's authorities.

[4] In 2017 purchasing power parity.

girls.[5]

4. **Public revenues are under stress, while expenditures have increased significantly**. The consolidated budget deficit, excluding grants, amounted to 26.5 percent of GDP in 2022. Tax revenue declined by 8 percent in nominal terms (30 percent in real terms) as indirect taxes suffered contractions. Since February 2022, the GoU has decided to reduce the tax burden on the population (both individuals and businesses) during a time of crisis, resulting in a sharp decline in tax revenues. In addition, overall declines in economic activity (including due to out-migration) and the inability to collect taxes in the war areas also contribute to constrained tax revenues. Expenditure grew by 65 percent, with the spending on essential public and social services prioritized. By contrast, capital expenditure declined by 37 percent.

5. **The fiscal deficit (excluding grants) is expected to grow to US$42 billion in 2023 (from US$40 billion in 2022)**. Amortization payments for Ukraine's existing debt also add to financing needs, mostly for domestic debt, as commercial debt and official external public and publicly guaranteed debt are subject to a two-year moratorium (agreed to after the invasion). With the help of the international community, Ukraine has been able to maintain macroeconomic stability and to deliver key social services. The Bank has been in the forefront of supporting the GoU's ability to deliver basic services, repair critical infrastructure, and implement reforms for economic recovery.

6. **The funding needs for recovery and reconstruction are enormous**. Just taking into account the damages and losses till February 2023, funding needs for the country were estimated at US$411 billion, which is about two times Ukraine's 2021 GDP.[6] About one-third of this amount was estimated to be needed in the immediate- and short-term to address the most urgent needs, including social infrastructure (such as schools and hospitals), restoration of heating and energy to homes, urgent repairs, gas purchases, support to agriculture and social protection, and restoration of vital transport routes. Ukraine's reconstruction will require a close coordination with the process of the EU accession.[7]

7. **Recovery and reconstruction investments will support economic activity and consolidate its development path towards a lower-carbon, climate resilient, and inclusive country that is aligned with European standards**. Before Russia's invasion, Ukraine had made impressive commitments on mitigation measures to addressing climate change. It ratified the Paris Agreement in 2016 and submitted an ambitious updated National Determined Contribution (NDC2) in July 2021 with the target of an economy-wide net greenhouse gas (GHG) emission reduction of 65 percent by 2030 compared to the 1990 level. The country also committed to reaching carbon neutrality by 2060. In January 2020, the GoU published a draft concept of Ukraine's Green Energy Transition until 2050, which aimed at increasing renewable energy share in the national energy balance up to 70 percent. The country has recently confirmed these commitments despite Russia's invasion. Beyond mitigation, reconstruction investments will also need to consider Ukraine's vulnerability to the impact of climate change. This includes vulnerability to wildfire, droughts, high temperatures, heatwaves, heavy precipitation, mudslides, and floods. The ongoing war significantly exacerbates the climate risks in the country and weakens the capacity to manage climate-related vulnerabilities, including in the agriculture sector.

B. Sectoral and Institutional Context

8. **The agrifood sector has been a crucial backbone of Ukrainian's economy and society**. In 2021, the agriculture sector accounted for 10 percent of GDP and together with input supply, food processing, and trade, the agrifood sector generated 20 percent of GDP. Agriculture alone employed 22 percent of the labor force. Over the last 15 years, Ukraine established itself as one of the world's top exporters of wheat, corn, barley, maize, and sunflower products. In 2021, Ukraine's value of export of agrifood products reached US$28 billion, accounting for 41 percent of total export. Grain crops accounted for 35 percent of the total volume in Ukraine's export, and this number has been steadily increasing

[5] https://data.unhcr.org/situations/ukraine.
[6] GoU, Bank, EU, and UN. 2023. *Ukraine: Second Rapid Damage and Needs Assessment: February 2022-February 2023.* March 2023.
[7] EconPol. 2023. *How to Reconstruct Ukraine? Challenges, Plans, and Role of the EU*. Volume 2, March 2023, CesIfo Institute, Munich.

every year.[8] In 2021, Ukraine represented the world's fifth largest wheat exporter, exporting 20 million tons of wheat and meslin with a 10 percent global market share. For corn and barley, the country accounted for about 15 percent of global trade, primarily exporting to European Union (EU), China and the Middle East.[9] For maize, the Food and Agriculture Organization (FAO) estimated that Ukraine's expected exports between 2021 and 2022 would represent up to 18 percent of global maize trade, thereby theoretically being the third largest exporter worldwide had it not been for Russia's invasion. On top of this, Ukraine was providing up to 46 percent of global sunflower seed and sunflower oil production, making it the largest exporter of sunflower oil in the world.

9. **Ukraine's agriculture is affected by climate change**. Between 2000 and 2020, growth volatility for Ukraine's agriculture was 35 percent, compared to 21 percent in Poland and 14 percent in the EU.[10] Both climatic means and weather extremes are significant factors explaining agricultural output variance in Ukraine, with weather extremes accounting for 36 percent of variance countrywide and 40 percent in the northwest.[11] Such variance will increase further with climate change, even though climate change may bring some longer-term advantages to Ukraine's agriculture. Warming temperature and changing precipitation patterns is expected to help increase yields of key crops in Ukraine (e.g., wheat) and increase the area that can cultivate crops suitable for warmer climates (e.g., soybeans and corn), while reducing the risk of freezing of winter crops. These improvements can be large – yield increases of 50 percent are projected for some crops by 2050.[12] At the same time, climate change will have negative impacts on yields of some crops in some locations – for example, corn and sunflower in the south. Climate change impacts in Ukraine are forecasted to also result in increases in the number and area of pests and diseases impacting crops, prolonged heatwaves affecting commodities in fields and storage, and increase irrigation requirements in many locations leading to higher production costs. Higher temperatures and heat stress will reduce feed intake by livestock and increase their mortality, while decreasing forage quality due to more frequent invasions of pests and diseases. During Russia's invasion, additional climate change vulnerabilities in the agriculture and food sector include the risk of high food damages, waste, and losses, contributing to extra GHG emissions required to replace these losses with new agricultural production.

10. **Prior to Russia's invasion of Ukraine, agriculture accounted for 13 percent of Ukraine's GHG emissions**. Compared to 1990s, when agriculture accounted for 10 percent of the overall GHG emissions, the share of agriculture slightly increased over time.[13] Yet, this increase was moderate compared to agricultural growth, pointing to a relative decoupling of emissions from the recent agricultural growth. Between 2000 and 2021, for example, the arable land area hardly changed, while the agricultural productivity increased by 24 percent, helping to reduce the emission elasticity of agricultural growth. Although the majority of GHG reduction is expected from the energy sector and Ukraine's NDC2 in regard to agriculture focuses on adaptation, supporting climate-smart agriculture technologies and practices to contribute to the climate mitigation is still highly needed to increase the sector's resiliency, while also helping the country move towards achieving its commitments under Paris Agreement and aligning with the EU Green Deal as part of the EU accession. Russia's invasion, however, has made it difficult to focus on climate mitigation and even adaptation, shifting attention to survival of Ukraine's farms, maintenance of agricultural production, and feeding the world. Reconstruction and recovery of Ukraine will, however, follow a "rebuilding back better" approach that takes a development path towards a more low-carbon, resilient, and inclusive country that is aligned with EU standards.

11. **Ukraine's agriculture has been severely impacted by Russia's invasion, requiring significant support**. The cost

[8] State Statistics Service of Ukraine. 2020. *2019 Agriculture of Ukraine*. Kyiv.
[9] USDA. 2022. *The Ukraine Conflict and Other Factors Contributing to High Commodity Prices and Food Insecurity*. Washington DC.
[10] The Bank estimates using the data from the World Development Indicators.
[11] Schiehorn, F. et al. 2021. *Machine Learning Reveals Complex Effects of Climatic Means and Weather Extremes on Wheat Yields during Different Plant Development Stages*. Climate Change 169, 39. www.doi.org/10.1007/s10584-021-03272-0
[12] The Bank. 2021. *Building Climate Resilience in Agriculture and Forestry*. November 2021, Washington, DC.
[13] Ministry of Environment of Ukraine. 2021. *Analytical Review of the Updated NDC of Ukraine to the Paris Agreement*. Kyiv, July 2021.

on the agriculture sector from the start of Russia's invasion until February 2023 was estimated at US$40.2 billion.[14] Of this, the damages to the sector amounted to US$8.7 billion, while the losses incurred from lower production, lower farmgate prices, and higher production costs were US$31.5 billion. This excludes decontamination of landmines and unexploded ordinances on agricultural land, as well damages of irrigation, agrilogistics, and food processing. As Russia's invasion continues, the cost increases each month, negatively affecting the cost of FNS in Ukraine and worldwide.

12. **Ukraine's agriculture is hit by triple burden (as depicted in Figure 1), with the first negative effect being a decline in agricultural exports**. Ukraine's agriculture is export oriented, i.e., on average two-third of agricultural products are exported, while only one-third are consumed domestically. The blockade of the Black Sea during the first months of Russia's invasion required rerouting of agrifood exports to ground and river alternative routes to and through Poland, the Republic of Moldova, and Romania. At that time, the grain and oilseed exports were slightly above 1 million tons, reaching 2.7 million tons in July 2022. These new alternatives were not able to cover the pre-invasion monthly export volumes (Figure 1a). The blockade and loss of government control over Black Sea ports has cost Ukraine approximately US$3.0 billion in additional transport costs between February 24 - June 1, 2022.

13. **The Black Sea Grain Initiative (BSGI) helped increase export, but it was suspended by Russia in July 2023**. The initiative was launched by Türkiye, Ukraine, Russia, and the United Nations (UN) on August 22, 2022, to enable the resumption of export from Ukraine of grain and other foodstuff through a safe marine humanitarian corridor from key Ukrainian ports of Odesa in the Black Sea to the rest of the world. BSGI helped export about 33 million tons of grains and oilseeds, accounting for 41 percent of total export since its launch. Although the Black Sea exports have been challenged by high freight insurance cost, logistical challenges, and the exclusion of Mykolaiv ports from the initiative,[15] it helped Ukraine's agriculture and global FNS. In early November 2022, BSGI was extended by four months, and in March 2023 by another four months. In July 2023 the BSGI was suspended by Russia, creating a significant challenge for Ukraine's agrifood exports.

14. **The EU Solidarity Lanes and other export routes also helped with exports, supporting monthly shipments of about 2.5 million tons.** But these routes still face many challenges.[16] The routes through the Danube ports (22 percent), Poland (22 percent), and other Central European countries (14 percent) accounted for about 60 percent of the recent total agrifood export until July 2023. The alternative routes will not be able to replace BSGI in full by accommodating the export volumes prevailed in 2022/23 marketing year. But they can accommodate the reduced grain export volume, projected at 31 million for 2023/24 marketing year *vis-a-vis* 45 million tons in 2022/23 marketing year, especially if the EU facilitates transit of Ukrainian produce to the EU ports.[17] Moreover, Ukraine's farmers planted more oilseeds in 2023, which the EU is more willing to import than grains, adding a cautious optimism on the export opportunities using the EU Solidarity Lanes. Yet, the recent attacks at Danube ports, following the BSGI suspension, adds more uncertainty. It seems that Ukraine's farmers will need to store grains longer to wait for export opportunity. The current storage capacity in Ukraine is sufficient to address this challenge, given the anticipated decrease in the 2023 production and low stocks from 2022 production.

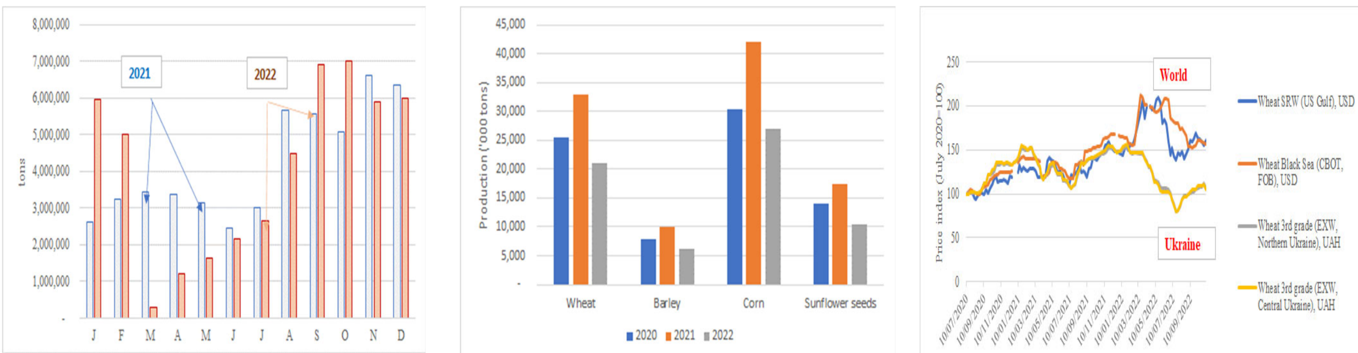
15. **The second negative effect is the lower agricultural production. Total grain and oilseed production in 2022 was estimated to be 70 million tons, which represents a 35 percent decline from 107 million tons produced in 2021** (Figure 1b). It means that the world will get 37 million tons less of Ukraine's grain and oilseeds in the 2022/23 marketing year. Wheat production declined by 41 percent. The production of sunflower seeds also decreased significantly, by 34

[14] GoU, Bank, EU, and UN. 2023. *Ukraine: Second Rapid Damage and Needs Assessment: February 2022-February 2023.* March 2023.
[15] In 2021/22, the ports of Mykolaiv handled more than 30 percent of Ukraine's agricultural export.
[16] The Bank. 2022. *Improving Dry Bulk Logistics in Ukraine and* the Bank. 2023. *Perspectives for Ukraine's Transport Network Development*. Papers for internal use only; and AMIS. 2023. Grain Market Situation amid Black Sea Trade Disruptions. July 27, 2023, Rome.
[17] Reuters. 2023. *EU looks to cover transport costs for Ukraine grain exports by land*. Published July 25, 2023.

percent. While production of other oilseeds (e.g., rapeseed and soybeans) increased slightly, the impact on most farmers' bottom line is small due to the low shares of these oilseeds in the overall crop planting area. Furthermore, in 2022 Ukraine produced 16 percent less of sugar beets, 11 percent less of meat, 12 percent less of milk, and 18 percent less of eggs, which added to food price inflation and food insecurity. The decline in agricultural production was a result of lower yields due to less intensive farming, lack of fertilizer, and the reduced area planted during the war.

Figure 1: Triple burden of Ukraine's agriculture

a. **Decline in agricultural exports** b. **Decline in agricultural production** **c. Decline in farmgate prices**



Source: The Bank staff based on APK Inform and US Department of Agriculture.

16. **Ukraine's agriculture production is projected to decline further in 2023**. The planting areas for the 2022 winter and the 2023 spring crops declined by 17 percent compared to the last season. Farmers have grown less grains and more oilseeds. As farmers lacked cash to buy inputs for the 2022 winter wheat planting, the area under grains (wheat) declined by 28 percent (39 percent) and under corn by 18 percent. On the other hand, the planting area under sunflower seeds is projected to grow by 9 percent, as they offer a higher financial return and require less drying. The slightly higher average yields are projected to mitigate the planting area's reduction, so the production of grains and oilseeds in 2023 could reach 67 million tons, an equivalent of 7 percent reduction from the last year.

17. **The third negative effect are the lower farmgate prices**. Prior to Russia's invasion, Ukraine's grain farmgate prices followed the prices on international markets. Since February 2022, however, the grain prices in Ukraine and globally have diverged. While global wheat prices spiked in the weeks following Russia's invasion, the wheat farmgate prices in Ukraine fell (Figure 1c). In July 2022, the divergence between Ukrainian and global wheat prices reached 60 percent, with Ukrainian prices falling by 46 percent and global prices increasing by 15 percent since February 2022. Prices started to converge in August 2022 due to the Black Sea grain initiative, but a significant gap remained, at about 50 percent, with the current trend being downwards again. On average, Ukraine's farmgate prices for major grains and oilseeds fell by 45 percent in 2022. They will remain low in 2023 as the cost of logistics will increase following the BSGI suspension.

18. **Key inputs for major crops are available on the market, but their affordability and ability to buy on credit have decreased**. There are some localized deficits, but overall input suppliers continue selling seeds, fertilizers, and chemicals. Many input prices doubled or even tripled, pushing up the cost of crop planting, currently estimated at UAH 30,000 per ha compared to UAH 15,000 per ha in 2021. Moreover, input suppliers increasingly sell inputs only when paid on spot, while in the past most inputs were sold on credit.[18] Furthermore, local production of some inputs is being replaced by imports. In 2021, the production of nitrogen fertilizers, for example, exceeded import by 70 percent, while in 2022 the import exceeded local production threefold, adding costs and higher risks related to access and price stability for

[18] The IFC's surveys of *Agriculture Finance* conducted in February 2023.

Ukraine's farmers. In addition, the cost of commercial borrowing has more than doubled, since the NBU policy rate was raised to 25 percent in mid-2022 (from 10 percent), which led to the hike in market rates to around 20 percent for loans.

19. **Smaller farms face more risks and higher input costs than larger farms in Ukraine**.[19] They also have a poorer access to finance, due to the lack of collateral, and when they access credit, they pay higher interest rates. Smaller farms are less likely to adopt climate-smart technologies such as precision agriculture or no till.[20] During Russia's invasion of Ukraine, the situation for smaller farms has further worsened, despite the increased efforts of several development partners (DPs) such as FAO and USAID to distribute inputs to these farms. The Bank's 2022 survey of 1,714 farms in Ukraine found that a share of small farms (with less than 500 ha) with negative cash flow almost doubled in 2022 compared to 2021, from 5.7 percent to 10.3 percent, especially in the east of the country where this share reached 12.4 percent.[21]

20. **Agricultural production is also affected by mines and pollution caused by the invasion**. The second Rapid Damage and Needs Assessment (RDNA2) estimates the agricultural land area that requires demining and restoration to be 835 thousand ha as of February 2023.[22] This problem is especially severe in the areas of Kherson, Mykolaiv, Kharkiv, and Zaporizhzhya regions that are back under government control, exacerbated by the destruction of Kakhovka dam in June 2023. Demining of these territories has already started, with most progress achieved in Mykolaiv region, where 15 percent of the planned area already demined. In Kherson region, 10 percent of the farmland is reported to be demined. Demining is implemented by the State Emergency Service, with the support of donors such as FAO and the World Food Program (WFP). Demining of agricultural fields is expected to accelerate in the upcoming months, enabling more and more farmers in the areas where government control was restored to return to their production activities.

21. **Without a scaled-up state support, Ukraine's agricultural production is projected to recover to the 2021 level only by 2040**. The Kyiv School of Economics projected the production of main grains and oilseeds by 2030 to lag the production in 2021 by 35 percent.[23] The largest drop in production is expected for wheat and corn, two crops critical for global FSN. With no end in sight to Russia's invasion of Ukraine and threats of further escalation, uncertainty continues to hang over global agricultural markets. Supplies are tight. Reduced plantings in Ukraine mean that other countries will need to produce additional grains and oilseeds to help rebuild global stocks and moderate price levels.[24] The world has so far been relatively fortunate: a combination of good weather and strong producer supply response has kept market prices from rebounding back to the high levels of early 2022. However, tight stocks will mean increased price volatility, particularly during periods of uncertainty such as planting times and the Northern Hemisphere growing seasons.

22. **Addressing liquidity constraints is the highest priority for all farms, from smallest to largest, identified in many recent surveys**.[25] While the reduction in production would not be dramatic for Ukraine's FNS, as Ukraine would likely have sufficient food stocks for itself, this would exacerbate the global FNS situation, triggering a move from the crisis of

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[19] In Ukraine, average farm sizes are much larger than the world average. Small-sized farms are considered the farms with up to 500 ha of the arable land. Medium-sized farms are the farms with up to 1,000 ha of arable land.

[20] Ukrainian Agribusiness Club. 2021. *Precision Farming Technologies in the Ukrainian Agriculture Sector*. Commissioned by the Netherlands Enterprise Agency, and FAO. 2021. *Digital Technologies in the Grain Sector of Ukraine*. FAO Investment Center, Rome.

[21] Deininger, K. and D. Ali. 2023. *Impact of Russia's Invasion on Ukraine's Farmers Productivity, Rural Welfare, and Food Security*. The Bank Research Paper, Washington, DC.

[22] According to Ukraine's Ministry of Economy, the priority agricultural land area that requires surveying for demining in 9 regions (Dnipropetrovsk, Zaporizhzhya, Kyiv, Sumy, Kherson, Mykolaiv, Cherkasy, Kharkiv, and Chernihiv) is estimated 470,854 ha.

[23] Kyiv School of Economics. 2023. *Agricultural Outlook Ukraine: 2050 Projections for Crops*. Center for Food & Land Use Research.

[24] *Agricultural Market Information System Outlook*, March 2023.

[25] IFC's surveys of *Agriculture Finance* conducted in February 2023 and *the Needs of Large Farms in 2022,* FAO. 2023. *Damages and Losses in the Aquaculture and Fishery Sector.* January 2023 and FAO. 2022. *Impacts of the War on Agriculture and Rural Livelihoods*. December 2022; Deininger, K. and D. Ali. 2023. *Impact of Russia's Invasion on Ukraine's Farmers Productivity, Rural Welfare, and Food Security*. The Bank Research Paper, Washington, DC.

food access experienced now to a crisis of food availability. It will, however, have a huge negative impact on incomes of Ukrainian farmers and stifle the important role of the sector in the country's economic recovery path. Reasonably 'normal' planting seasons will also serve as a signal for the global wheat prices and their trajectory, and the 2024 harvesting season in Ukraine, which is expected to be 'normal' again, will be easier to manage and make grain cheaper and faster available for global consumers, especially due to the fact that the global grain stocks are currently at its lowest in the last decade.[26] Any further reduction in global production, therefore, bears increasing risks to the global FNS.

23. **Addressing liquidity constraints should take into account lessons learned from and build on the mechanisms for supporting agriculture during Russia's invasion in 2022**. The main support has been provided through the existing credit program "5-7-9", which was essential to enable the 2022 spring and winter crop plantings by facilitating agricultural lending through interest rate compensation. In 2022, about 7,000 producers were able to attract UAH 46.8 billion, an equivalent of US$1.5 billion, in agricultural loans for short-term working capital from commercial and state-owned banks, with at least 60 percent of the loan beneficiaries being small- and medium-sized farms (Annex 2). In addition, the MAPF provided a tailored grant support to small farms, in the amount of 51 million euro, through the State Agrarian Registry (SAR), and matching grants for job creating horticulture investments, while donors such as FAO and USAID focused on supporting small farms through input distribution, storage bags, and advisory services. These programs have delivered good results, and the mechanisms for their continued implementation in 2023 and 2024 already exist.

C. Relevance to Higher Level Objectives

24. **The Project continues the Bank's flexible approach to Ukraine by supporting short-term recovery measures.** The Bank's engagement to support Ukraine is guided by the WB's Strategy for FCV 2020-2025 that highlights the importance of remaining engaged during the war and crisis situations to preserve hard-won development gains, protect essential institutional capacity, build resilience, and ensure readiness for a future recovery. The Project complements the Bank's support already provided through the Public Expenditures for Administrative Capacity Endurance in Ukraine (PEACE) Project (P178946), approved by the Board on June 7, 2022, and the Relief and Recovery Development Policy Loan (P181023), approved by the Board on June 29, 2023, which, along with additional donor commitments and financing, provide the GoU with US$37.9 billion as of June 29, 2023.[27]

25. **The Project is Paris aligned**. The Project activities are part of the emergency food security response in a situation with urgent needs.[28] The assessment and reduction of mitigation and adaptation risks concluded that all Project activities are universally aligned and with low risks. The residual risk is mitigated by a widespread use of soil nutrient management maps by Ukraine's farmers, who update them with professional help each year. These maps help optimize the use of fertilizers and chemicals and avoid their excessive use. The residual risk is also mitigated by the fact that the overall application of fertilizers and chemicals has significantly decreased in Ukraine as a result of higher fertilizer prices and the lower farmgate output prices due to Russia's invasion of Ukraine. The application of these inputs is estimated to have declined by threefold compared to 2021.

26. **The Project supports the priority themes under the WB's Strategy for FCV 2020-2025 (Report No. 146551, February 27, 2020)**. In line with the WB's FCV Strategy, the Project focuses on Pillar II "Remaining engaged during conflicts and crisis situations" to build resilience, protect essential institutions, and deliver critical services. In line with the WB's Framework paper, the Project will enhance local and global FNS through supporting agrifood production and producers (Pillar I) and strengthening policies, institutions, and investments for rebuilding better (Pillar IV).

[26] The Bank. 2023. *Food Security Update*. March 9, 2023. Washington, DC.
[27] htpps://www.worldbank.org/en/Ukraine/brief/world-bank-emegency-financing-package-for-ukraine.
[28] Agriculture and Food: Sector Note on Applying the WBG Paris Alignment Assessment Methods, May 12, 2023.

27. **The Project is aligned with the needs and response assessment for agriculture under the RDNA2 for Ukraine**.[29] The RDNA2 estimates the urgent needs to support agriculture, including through activities for improving access to finance as part of this Project, in the amount of US$600 million for 2023 and US$10 billion for 2023-2026. The proposed Project activities are also aligned with the framework for Ukraine's reconstruction set by the experts, with contribution of the Bank, in the publication of Munich CES Ifo Institute.[30]

28. **The Project supports the outcomes of URTF,** which are to provide a coordinated financing and support mechanism to assist the GoU to: (i) sustain its administrative and service delivery capacity and conduct relief efforts; and (ii) plan and implement Ukraine's recovery, resilient reconstruction, and reform agenda.[31] The Project will contribute to the achievement of the Outcome 1.2 "GoU supported and able to execute critical relief efforts" and the Outcome 2.2 "GoU has financial and implementation support to execute critical recovery and reconstruction operations."

29. **The Project is aligned with the Global Alliance for Food Security jointly convened by the G7 and the WB as a coordinated and solidarity response to the global FNS challenges ahead**. In Elmau, Germany, on June 28, 2022, the Leaders of the G7 committed to spare no effort to increasing FNS and protect the most vulnerable, whom the food crisis threatens to hit the hardest. They also committed to help Ukraine keep producing agricultural products in view of the next harvest seasons and resume its agricultural exports to world markets, including through establishment of alternative logistics routes building on the already implemented EU "Solidarity Lanes" initiative.

II. PROJECT DESCRIPTION

30. **The Project is designed as a US$700 million "framework project" that will use an IPF instrument under the policy framework provided by BP 10.0 IPF and OP 8.0 Rapid Response to Crises and Emergencies**. The Project is designed and appraised for the full US$700 million, including the envisaged results indicator targets that match this envelope. The design outlines Project activities that will be implemented with an initial funding of US$230 million IBRD loan (credit enhanced by Japan, through the new Credit Enhancement Trust Fund) and US$320 million grant from URTF, with additional resource mobilization of US$150 million to be filled as subsequent Bank and donor funding materializes.[32] The Project will leverage about US$1.5 billion of commercial financing from participating financial institutions (PFIs).

31. **This "framework" approach provides a clear line of sight for the GoU, the WB, and other DPs on the urgent needs in the agrifood sector, as well as a simplified process to move from the available financing to the US$700 million financing target**. It also reflects the importance of acting with the agility and speed of delivery required in the context of a wartime emergency. With this in mind, project components are designed for achieving sustainable results within the available financing, while also being sufficiently flexible and scalable enough to easily absorb additional resources. As more financing becomes available within the appraised envelope, incorporation of such additional funds will follow a simplified process. Any further increase beyond US$700 million will entail Additional Financing and restructuring to scale-up the project. Furthermore, should mobilization of anticipated resources provide more difficult than anticipated, efforts to identify additional resources will be intensified or, alternatively, the project will be restructured to adjust indicator targets.

32. **The Project follows an analogous framework approach to the Health Enhancement and Lifesaving (HEAL) Project**

[29] GoU, Bank, EU, and UN. 2023. *Ukraine: Second Rapid Damage and Needs Assessment: February 2022-February 2023.* March 2023.
[30] Bjerde, A. 2023. *Laying Foundations for Building Back Better – Policy Actions and Principles for a Strong Transition and Recovery Process* and von Cramon-Taubadel, S. and O. Nivievskyi. 2023. *Rebuilding Ukraine – the Agricultural Perspective* in "How to Reconstruct Ukraine? Challenges, Plans and Role of the EU." EconPol Forum, March 2023, Munich CES Ifo Institute.
[31] URTF is established by WBG to channel grant resources from partners to finance project and critical ASA. This is in coordination with international partners and in line with the WBG's Approach Paper to support Ukraine during the relief, recovery, and reconstruction.
[32] Should the full US$700 million financing not become available, the Project will be restructured to scale-back total financing, the scope of activities, and the results framework, among other things and as needed.

(P180245), the Repairing Essential Logistics Infrastructure and Network Connectivity (RELINC) Project (P180318), and Restoration Project of Winterization and Energy Resources (Re-PoWER, P180332). For example, the Board's approval of the HEAL project[33] authorized the Regional Vice President (ECA RVP) to approve incremental financial commitments up to the Board-authorized envelope (with notification to the Board and after coordinating with relevant internal stakeholders, including Operations Policy and Country Services and Credit Risk department). This authorization is valid for duration of the project as approved by the Board. The Project is designed similarly and will use the same processing steps as the preceding framework projects. The Bank management will update the Board as appropriate when approved framework projects secure additional funds and achieve critical development objectives. The last update of currently approved framework projects was distributed to the Board with the WB Ukraine Country Program Update on June 6, 2023.

A. Project Development Objective

PDO Statement

33. The Project Development Objective is to maintain inclusive agricultural production and provide immediate and effective response to an eligible crisis or emergency.

PDO Level Indicators

34. The PDO indicators will include the following:

a. Crop area maintained for agricultural production due to the support of the Project (hectares).
b. Farmers reached with agricultural assets or services (disaggregated by gender).[34]
c. Small-sized agricultural producers, who accessed loans and grants under the Project, as a share of total direct Project beneficiaries (disaggregated by gender).[35]
d. Percentage of project-related grievances received that have been addressed within 15 working days (disaggregated by gender).

B. Project Components

35. The Project will have four components, two of which are technical, one for project management, and one for contingent emergency response component. It is designed to provide urgent relief to Ukraine's agriculture sector based on the needs estimates of the RDNA2.

36. **Component 1: Supporting access to finance for farms through affordable credit (US$230.0 million IBRD and US$270 million grants funded; estimated funding need of US$500.0 million fully funded)**. This component aims to maintain access to short-term finance for farms and reduce the cost of borrowing against the headwinds of the war, so that farmers could continue agricultural production in 2023 and 2024. Higher production will directly strengthen domestic and global FNS, increase farm incomes, and reduce the risk of food trade restrictions, which could be used by Ukraine (and other countries) in case of very low 2023 and 2024 production. The component will be implemented by Business Development Fund (BDF).[36]

37. **The spring and winter crop plantings in 2022 took place largely as a result of the credit program 5-7-9**. Under this program, the Ministry of Finance (MOF), through BDF, provided compensation of the interest rate to make short-

[33] As RELINC project is financed by grant only, it was approved by the ECA Regional Vice President.
[34] This Bank's core results indicator measures the number of farmers benefiting from financial services under the Project, allowing aggregation at the corporate level.
[35] Farms with less than 500 ha of agricultural land. The denominator for this indicator is the indicator #2.
[36] An assessment of the BDF as a financial intermediary is presented in Annex 4.

term agricultural loans more affordable.[37] This interest rate subsidy has encouraged loans from 45 private and state banks (i.e., PFIs), which are accredited to participate in the credit program 5-7-9. In July 2022, the repayment of agricultural loans was prolonged by six months, while a maximum loan amount per beneficiary increased from UAH 60 million to UAH 90 million.[38] In March 2023, the amendments to the credit program 5-7-9[39] prioritized loans for agriculture and areas brought back under Government control, increased the duration for loan repayment, required beneficiaries to repay 25 percent of previous loans to benefit from the interest rate subsidy for the 5-7-9 program, and reduced the interest rate subsidy from full coverage to covering about 55 percent of the market interest rate.[40]

38. **The credit program 5-7-9 has crowded in capital for agriculture during Russia's invasion of Ukraine**. Public expenditures for this program in 2022 were UAH 6.5 billion, an equivalent of US$194 million, which mobilized agricultural loans in the amount of US$1.5 billion.[41] Loans were received by 6,964 agricultural producers, a large majority of which were owners of small and medium farms, with a size of less than 1,000 ha (see Annex 2 for more details). The MAPF estimates that the loan beneficiaries paid UAH 15.6 billion in taxes to the national budget, far exceeding the public spending on interest rate compensation.

39. **Many PFIs are anticipated to continue issuing agricultural loans in 2023 and 2024, provided that the state support under the credit program 5-7-9 continues**. The February 2023 IFC survey of the agricultural finance market revealed the interest from both state and private PFIs to continue agricultural lending, but it also pointed to a restrained lending strategy by many PFIs depending on the proximity to the combat zone and availability of the interest rate compensation and credit guarantees. The same survey also showed that input suppliers, which were used to cover about half of total financing needs of Ukraine's farmers for crop planting prior to Russia's invasion of Ukraine, are no longer providing inputs on credit and switched to spot input sales, thereby increasing the need for larger agricultural credit. Moreover, the average crop production cost almost doubled in 2023 compared to 2022, from UAH 15,000 to UAH 30,000 per ha, further increasing the need for more agricultural lending.

40. **The Project will support agricultural production in 2023 and 2024 by financing the interest rate compensation under the credit program 5-7-9 in line with national legislation**. It will cover the cost of the interest rate subsidy for agricultural loans included in Ukraine's general budget in 2023 and 2024. BDF needs for agriculture in 2023 are estimated at about UAH 10.0 billion, an equivalent of US$270 million. Approximately the same amount will be required for 2024. By the end of 2024, the Project is anticipated to leverage about US$1.5 billion of commercial financing, i.e., PCM. About 40 percent of that PCM ($ 600 million) is expected from majority privately owned commercial banks (less than 50 percent government ownership) while 60 percent of that PCM ($900 million) is expected from five state-owned banks[42], which are established for business purposes and financially, managerially autonomous from national and local governments, and registered to operate primarily on commercial basis. The Project will not finance any procurement under this Component. PFIs are required to monitor the use of credit funds and compliance with eligibility criteria.[43] Monitoring is carried out in accordance with the PFIs' internal procedures and rules, taking into account the requirements established by the BDF, with regular reporting submitted to BDF. BDF also has the right to carry out select checks of enterprises and

[37] Cabinet of Ministers of Ukraine (CMU) Resolution No. 438 dated April 12, 2022, and CMU Resolution No. 28 dated January 24, 2020. Agricultural loans include loans for agricultural production, processing and sales of agricultural products.

[38] CMU Resolution No. 916 dated July 29, 2022.

[39] CMU Resolution No. 229 dated March 14, 2023.

[40] Before March 2023, the BDF/MOF covered interest rate fully. After March, the BDF/MOF compensates 11 percentage points of the working capital loans, while the gap with market interest rate, estimated at 9 percentage points, is covered by farmers themselves.

[41] This is estimated using the average exchange rate for 2022 at UAH 32 per US$.

[42] Privatbank, Oschadbank, Ukreximbank and Sense Bank (recently nationalized) are fully state owned while 95 percent of Ukrgazbank's shares belong to the state (see Annex 4 for further detail).

[43] In accordance with the CMU Resolution No. 28 dated January 24, 2020.

loans granted to them. The implementation arrangements such as flow of funds,[44] eligible expenditures,[45] and other procedures will be detailed in the Project Operations Manual (POM), the approval of which will be a disbursement condition.

41. **Uptakes of the loans supported under this component will be facilitated by other initiatives, not financed by the Project**. Small farms with less than 500 ha will have access to partial (50 percent) credit guarantees from the Partial Credit Guarantee Fund (PCGF) under MAPF. The PCGF will be capitalized by about US$20 million, with the funds provided by the EU[46] and the WB[47], and it will benefit from capacity building support from USAID, German Development Bank (KfW), and the WB. The PCGF is anticipated to become operational in the fall of 2023. USAID will also support farmers and agribusiness to prepare business plans to improve their access to finance. The grant support to small farms under Component 2 of the Project will also help leverage their access to loans to cover some part of their needs.

42. **Component 2: Supporting access to finance for small farms through grants (US$49.2 million grant funded; estimated funding need is US$199.2 million).** This component aims to support agricultural production by small-sized farms, recognizing their unique challenges to access sufficient commercial finance under Component 1 and/or secure inputs on credit from the input suppliers. It will be implemented by MAPF.

43. **This component will build on the implementation mechanisms developed in 2022**. It will use the MAPF's SAR[48] established in August 2022 with the support of the EU and the WB.[49] The first program, financed by the EU and executed through SAR, was the grant support to farms cultivating from 1 to 120 ha or owning from 3 to 100 cows.[50] These farms usually work informally and are not registered with the tax authorities. But the incentives provided through SAR encouraged them to register. More than 52 thousand farms signed up in the first few months after the program's launch, supported by the large outreach and awareness raising campaign, including through legal aid call centers.[51] Due to budget constraints, however, only 31,081 farms eventually received grants in the total amount of UAH 1.6 billion. About 21 thousand farmers received per hectare payments (UAH 3,100 per ha) in a total amount of UAH 1.3 billion covering 413,221 ha, while about 10 thousand farmers received per cow payments (UAH 5,300 per cow) in a total amount of UAH 300 million for 61,132 cows. The average size of beneficiaries was 23 ha[52] and up to 5 cows[53], and most of them were from Central, Southern, and Western parts of the country. About 30 percent of all program beneficiaries were women. The State Fund for Farmers Support (SFFS), subordinated to the MAPF, handled receipt, processing, and consolidation of registers of applications, and it also made payments of grants to farmer beneficiaries. The MAPF has started monitoring and evaluation (M&E) of the grant support for a sample of 2,500 farms through surveys. They also started to use satellite data to assess crop production for 50,000 parcels of selected beneficiaries to verify that funds were used

[44] The flow of funds will also be described in the Disbursement and Financing Information Letter (DFIL).

[45] Activities that use or risk of polluting waters of international waterways will not be eligible for financing.

[46] The Bank's Strengthening the Partial Credit Guarantee Fund for Small Farmers in Ukraine Project (P180242), financed out of the trust fund with contribution by the EU.

[47] The restructured Bank's Accelerating the Private Sector Investments in Ukraine's Agriculture Program (P166941).

[48] The SAR is a digital platform designed to increase transparency, targeting, and simplicity of the state agricultural support. The SAR's establishment was one of the achieved disbursement-linked results under the Bank's Accelerating the Private Sector Investments in Ukraine's Agriculture Program (P166941).

[49] The support to SAR's establishment and operation has been provided by the Bank's ASA Support Transparent Land Governance in Ukraine (P165404), which is financially supported by the EU.

[50] CMU Resolution No. 918 dated August 16, 2022, and the MAPF Order No. 630 dated August 29, 2022.

[51] As of March 2023, the number of farmers registered in SAR reached 95 thousand.

[52] Fifty nine percent of the beneficiaries for crop production had less than 10 ha; 28 percent were with the size between 10 and 50 ha; and 13 percent with the size between 50 and 120 ha.

[53] Eighty one percent of the beneficiaries for livestock production had up to 5 cows; 16 percent had between 6 and 25 cows; 2 percent had between 26 and 50 cows; and 1 percent had between 51 and 100 cows.

for agricultural production purposes and evaluate its impact on crop production. The Bank and the EU have been assisting the MAPF in these initiatives to strengthen its M&E capacity.[54]

44. **The Project will provide grant support to beneficiaries with small-sized farms to enable more inclusive agricultural production recovery, using the framework established by the GoU program implemented in 2022**.[55] It will support farms with a size 1-120 ha, 3-100 cows, and 5-500 breeding goats or sheep, with direct grant transfers per hectare and animal.[56] With all planned funds available, the Project will be provide financing for about 600 thousand ha of agricultural land, more than 90 thousand cows and 300 thousand small ruminants each year of the Project implementation. Eligible beneficiaries will need to register and apply for grants in SAR. The Project will provide increased support to farmers in the areas of the country where the GoU control was restored. SFFS will handle receipt, consolidation of registers of applications, and payment of grants to farmer beneficiaries. Beneficiaries will be required to collect and keep invoices and receipts for goods and services purchased for agricultural production with the grant support. Verification of the use of funds for agricultural production purposes will be carried out through desk audits, on-site checks, third-party monitoring recruited by the bank, and SAR inbuilt tool for innovative satellite data analyses on crop production on land parcels that benefited from the Project support. The evaluation of project results will be done by MAPF by assessing crop production on the parcels of selected beneficiaries using the satellite crop data. The Project will not finance any procurement under this Component. The implementation arrangements for this grant such as flow of funds, eligible expenditures,[57] selection criteria, amount of funds per beneficiary, and other procedures will be detailed in the POM, the approval of which will be a disbursement condition.

45. **The SAR will host a repository of information and knowledge materials on climate-smart agriculture (CSA)**. This CSA knowledge database is an integral part of the SAR support package to small-sized farms. It will include manuals with information suitable for and accessible by farmers developed by Ukrainian research and academic institutions as well as donor projects. Famers that receive project support will be informed about the database and encouraged to use it to introduce CSA technologies and practices. The database will be updated with new information as it becomes available. The Project will partner with FAO, USAID, EU, German-Ukrainian Cooperation on Organic Agriculture project, other donors, and input and technology suppliers to provide as much relevant CSA information as possible through SAR.

46. **Component 3: Project management (US$0.8 million grant funded; estimated funding need of US$0.8 million fully funded)**. This component will support project management, coordination, M&E, and implementation of environmental and social measures under the WB Environmental and Social Framework (ESF). Two project implementation units (PIU) will be established to manage implementation, including fiduciary aspects; knowledge management/communication; grievance redress mechanism (GRM); citizen engagement; and monitoring the implementation of ESF related issues. One PIU will be hosted by BDF, covering the activities under Components 1 and 3. Another PIU will be established by MAPF, covering the activities under Components 2 and 3. The project will cover PIU staff related costs (training etc.), goods, equipment, impact evaluations, audits, incremental operating costs, and other eligible expenses associated with project implementation. The breakdown of the project costs by component and the source of funds is presented in Table 1.

47. **Component 4: Contingent Emergency Response Component (CERC) (US$0 of the IBRD loan and grants)**. This is

[54] This support is being provided through the Bank's ASA Support Transparent Land Governance (P165404) supported by the EU and the Bank's ASA Reviving Agriculture as an Engine of Ukraine's Growth (P180198) supported by the Global Fund for Disaster Recovery and Reconstruction.

[55] The CMU Resolution No. 918 dated August 16, 2022, and the MAPF Order No. 630 dated August 29, 2022, which provided a legal framework to implement the program in 2022 will be amended for the purpose of the proposed Project.

[56] Crop area payment is planned at UAH 4,000 per ha, while the cattle payment at UAH 7,000 per animal. These amounts could be slightly adjusted, and the final figures will be included in POM.

[57] Activities that use or risk of polluting waters of international waterways will not be eligible for financing.

an unfunded contingency component that can be activated in case of an eligible emergency event as a result of Russia's invasion of Ukraine. The provisional zero-cost for this component will provide more flexibility to respond to potential additional emergencies within the Project and allow for the reallocation of funds to other Project's activities. Following such an event, the GoU may request the Bank to reallocate uncommitted Project funds to support an emergency response. Eligible emergency and/or crisis is any natural or man-made event that has caused, or is likely to cause imminently, a major adverse economic and/or social impact to the country. The definition of eligible emergency will be included in the Project's Legal Agreement and a positive list of activities will be reflected in the CERC Manual as part of the POM.

Table 1: Project costs by the source of finance (US$ million)

Components	IBRD loan		Grants		Unguaranteed commercial financing	Total funding needed
	Funding available	Estimated financing needed	Funding available	Estimated financing needed		
Component 1: Supporting access to finance for farms through affordable credit	230.0	0	270.0	0	1,500.0	2,000.0
Component 2: Supporting access to finance for small farms through grants	0	0	49.2	150.0	0	199.2
Component 3: Project management	0	0	0.8	0	0	0.8
Component 4: Contingent Emergency Response	0	0	0	0	0	0
TOTAL	**230.0**	**0**	**320.0**	**150.0**	**1,500.0**	**2,200.0**

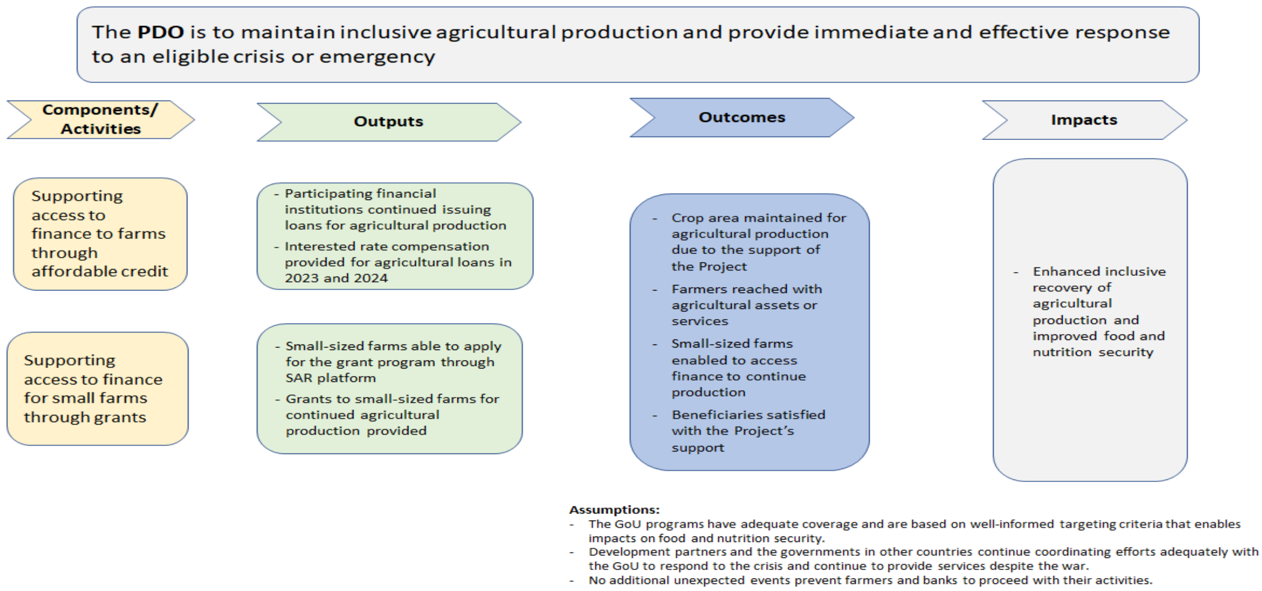
C. Project Beneficiaries

48. **The primary Project beneficiaries are Ukraine's agricultural producers**. They will benefit from the support for the next production seasons, which would allow them to maintain or increase their incomes. The secondary Project beneficiaries are banks, input suppliers, and traders. They will benefit from more liquid farmers, who can purchase more inputs, borrow, and request other services. Another group of secondary beneficiaries are local and global food consumers. They will benefit from the increased availability of food, which is expected to impact the global market price and to eventually contribute to a return to lower food prices.

D. Results Chain

49. **The Project's Theory of Change** (Figure 2) is built on the problem statement that Ukrainian agriculture and local and global FNS are vulnerable to Russia's invasion of Ukraine; local farmers and agribusinesses operate in the risky and unpredictable environment facing liquidity constraints, especially smaller ones; agrifood export is unpredictable, but likely to be maintained, allowing the agricultural production to be exported and farmers to earn income. The Project focuses on two main areas of support: (i) access to finance to farms through credit program, and (ii) access to finance to smaller farms through grants. These main areas of support are for the purpose of this Project, the foundations for a more resilient agriculture sector in Ukraine, as well as global and local FNS.

Figure 2: The Project's Theory of Change



E. Rationale for Bank Involvement and Role of Partners

50. **Constrained access to finance - which has been further exacerbated by Russia's invasion of Ukraine – calls for additional support for farmers.** Since the start of the Russia's invasion of Ukraine the credit program 5-7-9 has become the main engine of lending accounting for one third of the net hryvnia corporate portfolio (compared to 5 percent in 2020) and loans to farmers making up more than half of the overall portfolio. After the surge in agricultural lending in spring 2022, which was supported by the program, commercial banks have slowed down their lending activity in the second half of 2022.[58] At the same time farmers' demand for additional financing has increased with high interest rates being the main factor deterring them from taking out new loans.[59] Since the policy rate was raised to 25 percent in mid-2022 (from 10 percent) market rates hiked considerably to around 20 percent for UAH loans.[60] Time-bound intermediate financial intervention to support temporary financing of the program during these extraordinary circumstances is well-justified as it is the most expedient way to help eliminate above-mentioned market failures. Recent amendments to the credit program 5-7-9 adopted in March 2023 aimed at strengthening and facilitating enhanced uptake of the credit program 5-7-9 are also supported by the Bank's Relief and Recovery Development Policy Loan (P181023) approved by the Bank on June 29, 2023.

51. **The WB is providing other support to Ukraine's agriculture through other projects and instruments and leveraging this for new financing from DPs**. In March 2022, the Bank provided an advance in the amount of US$31 million under the Accelerating Private Sector Investment Program (P166941), which was used to support agricultural lending under the credit program 5-7-9 in 2022. In March 2023, this Program was restructured to add the development objective of providing a support to agricultural recovery and to contribute US$132 million for four agricultural support programs such as interest rate compensation for agricultural loans under the credit program 5-7-9; grants for

[58] From its peak in June 2022, the net UAH corporate loan portfolio fell by 19 percent due to additional loan loss provisions and loan repayments generally exceeding new loans.
[59] A recent NBU survey (NBU Business Outlook Survey, Q3) found that more than half of agricultural companies stated that their borrowing needs will increase in the near future. High interest rates on loans remain the main factor deterring businesses from taking new loans, as indicated by 40 percent of agricultural companies participating in the survey.
[60] As of February 2023.

horticulture development; grants and other support for efficient irrigation management through water user associations; and capitalization of the PCGF in 2022 and 2023.[61] The Strengthening the Partial Credit Guarantee Fund for Small Farmers in Ukraine (P180242) will provide an additional 10 million euro to capitalize the PCGF. The Repairing Essential Logistics Infrastructure and Network Connectivity Project (P180318) will enhance road/rail infrastructure and agrilogistics to stimulate agricultural exports.

52. **The Project will crowd in and complement private sector investments, including those leveraged by IFC**. The IFC Board approved the US$2 billion Economic Resilience Action Program for Ukraine FY23-24 in December 2022 and the US$6 billion Global Food Security Platform in October 2022. Under the *Economic Resilience Action Program*, the key strategic priority areas include sustaining economic activity and supply of essential goods; supporting vital economic infrastructure; and addressing the needs of displaced people and affected municipalities. Agribusiness is one of the strategic pillars of this program with a focus on: (i) enabling alternative routes for exporting agricultural commodities; (ii) improving farmers' access to finance via financing programs with agribusiness companies and banks; (iii) identifying opportunities and supporting agri-companies in entering new food value chains and in creating value-added food processing in Ukraine; (iv) supporting agri/food waste-to-energy projects; and (v) engaging with the Ukrainian government and with the private sector on debottlenecking exports of agri commodities through custom improvements. Under the *Global Food Security Platform*, proposed interventions include increasing efficient and sustainable crop production; improving farmer access to fertilizers; greening fertilizer production and use; reducing crop loss and food waste and improving supply chain efficiency; and mitigating infrastructure bottlenecks critical to efficient food supplies.

53. **In parallel to this proposed Project, several DPs support agriculture and FNS**. In 2022, the DPs provided veterinary drugs, feed, seeds, and other inputs on a grant basis to the MAPF for distribution or directly to farmers. FAO and USAID have also provided funds for purchasing and distributing grain bags for small farms to expand their storage options. They are scaling up their support in 2023. USAID launched the Agricultural Resilience Initiative for Ukraine in early August 2022, which seeks to mobilize US$250 million financing for agricultural recovery.[62] FAO has put in place the Response Program for restoring Ukraine's food systems and protecting rural food security in 2023. The EU financed a 51 million euro grant program for small farms in 2022. The overall DP support for agriculture, however, meets a small fraction of the total needs, making the proposed Project highly relevant and timely.

F. Lessons Learned and Reflected in the Project Design

54. **Several lessons learned from the previous food crises[63] are reflected in the Project design**. One of the most important lessons is that it is critical to support countries affected by food security crises to meet their urgent needs in ways that do not derail long-term development goals. Approaches that lead to tradeoffs in long-term development goals for short-term expediency should be avoided where possible but a decision on this trade-off is country and situation specific. One example is government procurement and direct distribution of fertilizers or seeds or direct provision of credit when private sector alternatives are available. The proposed Project seeks to support Ukraine's private sector, who supplies inputs and credit to agriculture, by reducing the costs of doing business and risks for these investments.

55. **Maintaining access to finance during a crisis is one of the key instruments to ensure food supply response**. The private sector lending is preferred, which could be facilitated by guarantees and temporary interest rate compensation. The financing needs for seed and fertilizers buyers during this crisis could increase by 3-4 times given escalating prices

[61] The disbursement for the four programs' support in 2023 was US$19.5 million. The amount of the interest rate compensation to be financed under the Project will be decreased for the amount of interest rate compensation for 2023, estimated at US$4.8 million, financed under the Program (P166941).
[62] https://www.usaid.gov/ukraine/agriculture-resilience-initiative-agri-ukraine
[63] More on lessons from previous food crises see in WBG. 2022. "Framework Paper - Navigating Multiple Crises, Staying the Course on Long-Term Development: the WBG Response to the Crises Affecting Developing Countries." June 20, 2022, Washington, DC.

in the past years and the damages to the fertilizer manufacturing capacity in Ukraine, compounding the general scarcity of local bank financing in many of these markets.

56. **Another lesson is that short-term responses should seek to contribute to operations that can be scaled up or down while retaining institutional memory**. Building a new mechanism for short-term relief may be difficult to sustain fiscally when the situation returns to normal. Short-term response policies should not remove the incentives, resources, or public goods support for sustainable supply response. Such responses are the ultimate pathways our of food crises, especially ones involving shortfalls in product availability. The proposed project will build on the existing institutions and programs to scale them up during the crisis and then down when Russia's invasion of Ukraine ends. The proposed approaches under the project further allow for flexibility in finding the most appropriate and available solution through private sector engagement.

57. **The lesson learned from the recent economic crisis triggered by the COVID pandemic[64] is that any combination of short-term responses should be consistent with the government's overall objective to protect businesses, farmers, financial institutions, other productive units, and households**. If the objective is to get liquidity into the system immediately, then lines of credit and partial guarantee systems are sound tools. If the objective is to preserve farms and firms and enable rehiring of workers quickly, then grants, subsidies to defray labor costs, and repayment holidays may be a useful combination. If the objective is to help financial institutions to survive and recover rapidly, then temporary regulatory forbearance on some ratios and reserve requirements can be the key to success. Given the importance of the small and medium enterprise sector to the emerging and developing countries, national policy emergency assistance schemes can be effective by focusing on providing debt financing, guarantee schemes, tax holidays, tax cuts liquidity and working capital financing. National authorities should be encouraged to move towards risk sharing equity instruments rather than debt instruments when there is adequate liquidity in the system. The ultimate objective is to help to preserve financial institutions, markets, and businesses during the emergency stage – and return, when possible, to normal market-driven commercial approaches to financial intermediation.

58. **If the project explicitly addresses the effects of the natural or man-made disaster, which the proposed Project does, the subsidization of short-term interest rates is acceptable, assuming that there is not likely to be any long-term damage to the financial sector**. The operational approaches consistent with the policy for sound financial intermediation should seek, among other things, to: (i) promote *competition*: subsidies should avoid giving an unfair advantage to some financial intermediaries vis-à-vis other competing institutions not to create undesirable effects; (ii) *risk sharing*: subsidies to develop or reform a credit guarantee scheme (or risk sharing facility) can be more effective in sustainably increasing the availability of finance for micro, small and medium enterprises, as compared to subsidies applied through a credit line, in particular where there is ample or excess liquidity on the balance sheets of potential participating financial institutions. Key technical issues include leveraging factors, institutional arrangements, and the risk sharing structure; (iii) *technical assistance*: technical assistance to participating financial institutions can be important in ensuring positive sustainable impacts, so that participating financial institutions develop new products, processes and systems which are better suited to micro, small and medium enterprise finance; and (iv) *monitoring*: subsidies should be explicitly subject to control and regular review to ensure a periodic evaluation of the costs, benefits, and fiscal impact, and the justification for its continuation. All the above-mentioned elements are reflected in the proposed project design.

III. IMPLEMENTATION ARRANGEMENTS

A. Institutional and Implementation Arrangements

59. **The Implementing Agencies for the Project are BDF and MAPF**. Each of them will establish and maintain its own

[64] World Bank. 2020. "Projects in Situations of Urgent Need or Capacity Constraints." Guidance Note. *https://spappscsec.worldbank.org/sites/ppf3/PPFDocuments/Forms/DispPage.aspx?docid=4030&ver=current*

Project Implementation Unit (PIU), the expenses of which will be financed by the GoU budget and Component 3. The establishment of PIUs, with the following core staff - the Project coordinator, financial management (FM) specialist, environment and social specialists, and M&E specialist – will be an effectiveness condition for BDF and disbursement condition for MAPF. Keeping in view the limited procurement activities under Component 3 only, necessary support will be obtained by hiring a short-term procurement consultant. In case, the implementing agencies decide to seek procurement's Hands-on Enhanced Implementation Support from the Bank, it will be provided.

60. **The PIU in BDF will cover the activities under Component 1**. The BDF was first established as a fund in 1996 by NBU and KfW to support microlending program for micro and small enterprises. In 1999, it was transformed into the German-Ukrainian Fund, with contributions from the GoU represented by MOF, and from the NBU. In 2020, the German-Ukrainian Fund was transformed into the state-owned BDF for providing support to small and medium enterprises (SME)[65] and since then it manages the credit program 5-7-9 and other SME finance programs. The Deputy Minister of Finance is the chair of the oversight board of BDF. BDF has the experience of managing the credit lines from KfW (1996-2022), the grants from the EU Commission (2019-2021), and the credit lines and Technical Assistance (TA) from the Bank (2009-2012). Consultants will be recruited as needed to help with the scaled-up load of work and meeting the Bank's requirements, especially on meeting the ESF standards. See Annex 4 for further detail.

61. **The PIU in MAPF will cover the activities under Component 2**. Implementation will be done through SFFS, which is subordinated to MAPF, with the use of MAPF's SAR, a digital platform for state agricultural support. SAR was established with the support of the Bank and the EU, and it provides a wide range of functions that were reviewed during project preparation and will be used during implementation of this component. SFFS and its regional network of offices throughout Ukraine will handle receipt, processing, and consolidation of registers of applications as well as transfer of funds on the basis of approved registers of applications to farmer beneficiaries. The PIU will include a mix of technical staff from SFFS and MAPF with selected short-term consultants to help meet ESF standards of the Bank, which the MAPF staff are not familiar with, and maintain the SAR platform operational.

62. **The POMs will be prepared for all components as it will guide the implementation**. One POM will be prepared by BDF for implementation of Component 1 and another by MAPF for implementation of Component 2. The approval of two POMs will be disbursement conditions in the relevant agreements. POMs will describe in detail the implementation arrangements, roles and responsibilities of BDF and MAPF and their PIUs, agreed fiduciary and ESF procedures, implementation plans, progress reporting requirements, and M&E arrangements.

B. Results Monitoring and Evaluation Arrangements

63. **The two PIUs will be responsible for M&E system**. They will have M&E staff, monitor the Project indicators, and report on Project results, which the Bank will review as part of its Project monitoring. Flexible tools for monitoring and evaluation will be deployed to account for the war situation and will be detailed in the POM.

64. **Data will be collected using already existing and new channels**. Under the existing credit program 5-7-9 the PFIs report to BDF on the number of beneficiaries, their size (i.e., micro, small, medium, and large), amount of loans, the amount of interest rate compensation paid, and other information by subproject. The Project will carry out impact evaluation and beneficiary satisfaction surveys. Additional information for the Project will be added to the existing M&E system of BDF. The MAPF will collect data through the information about farmers in SAR as well as additional desk audits, on-site visits, surveys, satellite data and shapefiles of the parcel boundaries.

C. Sustainability

65. **The Project will contribute to the needs for recovery of the agriculture sector**. GoU's National Recovery Plan

[65] The Order of the CMU No. 1273-R from December 11, 2019, and the Order of MOF No. 5 from January 11, 2020.

stipulates the support for facilitation of agricultural lending for upcoming production seasons and export facilitation as priorities for agriculture recovery and reconstruction phase. Thus, the Project is fully aligned with the GoU vision, which strengthens its sustainability.

66. **The Project will be based on the existing mechanisms, such as credit program 5-7-9 and SAR**, **which were successfully tested during 2022**. The Project will strengthen these mechanisms, making them ready to provide a scaled-up support during recovery and reconstruction. This will ensure sustainability as well as strong ownership from the client. The Project will mobilize private capital, ensuring strong interest of beneficiaries in effectiveness of their investments. The support under the Project will be complemented by other projects such as PCGF and support for access to finance and inputs executed by other DPs, increasing the impact and leverage of the Project.

67. **Support to continuity of core government functions during Russia's invasion of Ukraine is fundamental to the sustainability of the state**. As experience has shown in many war-affected countries, on the preventative side, it is more cost effective to sustain governments than to restore discontinued or failed government functions due to loss of human capital and the concomitant reduced capacity and expertise. Through this Project, the GoU will receive the support necessary to maintain support for agriculture and export during Russia's invasion of Ukraine.

IV. PROJECT APPRAISAL SUMMARY

A. Technical, Economic and Financial Analysis

68. **Technical**: Technical design of Project activities reflects the need for rapid, impactful, and implementable measures within a short period of time. It builds on existing programs and relies on the existing public institutions, which are experienced in implementing the proposed activities. The design is supported by international experience from the previous food security crises, COVID-19 pandemic, the FCV context, and consultations with the private sector in Ukraine.

69. **Economic and financial analyses**: Economic benefits of the project are assessed as a result of the increased farm incomes due to the maintained agricultural production. The emergency nature of the Project does not permit to estimate the project benefits for 15 or 20 years of investment horizon, a standard period for investment operations. Instead, a 5-year time frame and a discount rate of 6 percent are used for the analyses. The Economic Net Present Value (ENPV) of the Project investments in maintained agricultural production is projected to reach US$193 million. The benefits of the Project, therefore, are projected to exceed the project investment costs (see Annex 3).

70. **Shadow price of carbon**. The net balance from all GHG expressed in CO_2-equivalent that would be emitted or sequestrated within the potential sub-projects was estimated, and a social price of carbon was included in the economic analysis. According to the FAO EX-ACT tool, the Project will generate additional 0.97 million tons of CO_2-equivalent over the 5-year lifespan. The NPV from the additional GHG emission is estimated to range between US$46 million in the low shadow price of carbon scenario to US$94 million in the high shadow price of carbon scenario (see Annex 3).

71. **Climate co-benefits**. The Project will directly enhance farmers' resilience to climate change impacts and reduce their vulnerability in the short term. Providing small and medium farms with access to affordable credit, especially during Russia's invasion of Ukraine, which has impacted continuity of agricultural production (with higher input costs and lower farm gate prices) and diminished access to finance for farmers to continue crop production – access to credit directly improves farmer's economic resilience and ability to withstand economic and climate shocks. Farms in Ukraine are particularly vulnerable (and more so during the current war) to droughts, high temperatures, and heavy and volatile precipitation patterns, all of which will have a near and long-term impact on agricultural production. Increasing access to finance will increase farmers' capacities to adopt CSA technologies and practices such as drought and heat resilient seed varieties, drip irrigation and water conservation practices. This is further supported by knowledge materials amd

information on CSA technologies and practices through the SAR platform under Component 2, which is integral part of supporting production recovery.

72. **Paris alignment:** The operation is part of the emergency food security response in a situation with urgent needs, financing temporary and timebound activities. The assessment and reduction of mitigation and adaptation risks concluded that all project activities are universally aligned and with low risks. The residual risk is mitigated by a widespread use of soil nutrient management maps by Ukraine's farmers, who update them with professional help each year even during the war.[66] These maps help optimize the use of fertilizers and chemicals and avoid any excessive use. The residual risk is also mitigated by the fact that overall application of fertilizers and chemicals has significantly (threefold) decreased in Ukraine as a result of higher fertilizer prices and lower output prices due to the war.

73. **Nutrition**. The Project will support the recovery of agricultural production. While most planting area in Ukraine is under grains and oilseeds, during Russia's invasion of Ukraine many farmers are switching to produce other foods, which are often more nutritious and diverse. These include buckwheat, beans, and vegetables, especially by small farms. The support provided under the Project will be available for all kinds of agricultural production, including more nutritious-rich and diverse foods that are part of a high-quality diet. Small farms will also produce more of nutritious milk and meat with the support of the Project. Higher local production of more diverse food will reduce prices for food in Ukraine and also globally, partially compensating the declining purchasing power of especially poor consumers due to multiple crises.

74. **Gender**: Women are a critical part of the agriculture and food sector in Ukraine and although no direct exclusion is identified as an issue in Ukraine,[67]gender issues are still evident. Prior to Russia's invasion of Ukraine, about 20 percent of farms in Ukraine was estimated of being headed by women.[68] In general, compared to male-headed rural households, female-headed households tended to amongst others: have a smaller proportion of arable land; sell less of agricultural products; and take on more manual (such as cultivation, weeding and other) rather than mechanical work (such as tilling, ploughing, using combine harvesters and other) in crop production. Even though men tend to be more active across the entire agricultural crop value chain, women were engaged in production and storage management.[69] Russia's invasion of Ukraine has pronounced this role as women are particularly hard hit – often being the ones that need to maintain the household and the business with men being engaged in the country's response to the invasion.[70] This is coupled with the fact that even before the invasion, both male and female managers identified access to finance as a "highly or somewhat" obstacle to doing business in Ukraine.[71] Rural women in particular had cited amongst others lack of trust in credit institutions, lack of collateral and high interest rates, as reasons for not applying for credit. These reasons have only been amplified in the context of the war and are even more urgent to be addressed.

75. The Project will concentrate on assuring broad and gap-closing outreach to women in accessing grant finance for agricultural production. As highlighted in the 2021 gender profile, the access to finance gender gap is in part due to necessary collateral and interest rates; these specific issues will be addressed in Component 1. These are in line with the WBG Gender Strategy (2016–2023) objectives of Removing Constraints for More and Better Jobs, Removing Barriers to Women's Ownership of and Control over Assets and Enhancing Women's Voice and Agency and Engaging Men and

[66] According to the environmental and social audit of agricultural production practices in 2022 prepared by the World Bank for monitoring of the restructured Program for Results in Ukraine dated June 15, 2023, about 71 percent of farmers used the soil maps on a regular basis.
[67] This is also the case for land ownership. The State Service of Ukraine for Geodesy, Cartography, and Cadastre, using a tax identifier number that indicates sex, shows that women represent 51.6 percent of registered landowners and that the average land plot registered to women is 1.7 ha compared to 1.6 ha for land plots registered to men (Bashlyk and Nizalov, 2018).
[68] FAO. 2021. *National Gender Profile of Agriculture and Rural Livelihoods: Ukraine*. Budapest.
[69] In 2019, about 48 percent of low-skilled work in Ukraine's agriculture was estimated by the State Statistics Committee to be carried out by women. A share of women in higher-skilled agricultural jobs was estimated at 42 percent.
[70] The Bank. 2022. *Ukraine: Women's Economic Empowerment: Gender Assessment*. June 2022, Washington, DC.
[71] FAO. 2021. *National Gender Profile of Agriculture and Rural Livelihoods: Ukraine*. Budapest.

Boys.[72] The Project will ensure that the information mechanisms on all project activities are provided in means and tools that assure the outreach to women, verified by the PIU and through Citizen Engagement. This will be achieved through existing communication channels of BDF and MAPF, including the MAPF SAR's call centers and websites. Critically, the Project will set a figure for at least 35 percent of all grants under Component 2 to be received by women-headed farms, to close the gender gap (measurement of this figure is captured by the indicator "Female-headed farms supported by the Project with grants for agricultural production (Percentage)" in the Results Framework). Given the demand expected, this target will guarantee prioritization by the MAPF for female-headed farms during the review and selection of applications for grant financing. As part of the M&E system, the Project will also develop feedback loops (through Citizen Engagement) that allow to check if adequate outreach and support are achieved. The M&E system will track the Project's impact and effects on women. Sex-disaggregated data collected by the Project and assessment reports commissioned by the Project will contribute to understanding gender-specific constraints and will inform opportunities for continuing to design gender-centered policy interventions. Furthermore, the Project will organize participatory discussions that will be planned around women's schedules and care responsibilities to ensure maximum participation, and women's feedback will be collected to inform Project outreach methods as well as services particularly related to Component 2.

76. **Citizen Engagement (CE)** will take place through multiple channels. The Project will support CE through assuring wide availability of information on the Project activities and localized information events or dissemination tools; the use of surveys and consultation results as well as feedback generated through the Project outcome indicator that measure client satisfaction with services provided to improve implementation and have room for feedback incorporation; and the grievance redress mechanism (GRM) to be established by the Project. Specifically, under Component 2, the SAR platform will be utilized for beneficiaries (small farms) to provide feedback to the design, accessibility, and application processes of the grants scheme (particularly women). Other relevant value chain stakeholders, including service and technology providers will also be consulted. A beneficiary feedback survey for all Project activities will be implemented annually and its results will inform the Project adjustments as relevant. The Stakeholder Engagement Plan (SEP) will reflect all CE mechanisms and outline actions for enhancing multistakeholder dialogue and inclusion throughout the project cycle.

77. The Project results framework includes two indicators to measure improvement in CE process - *Beneficiaries with rating 'Satisfied' or above with Citizen Engagement process, disaggregated by gender* and *Percentage of project-related grievances received that have been addressed within 15 working days*. The first indicator will be measured through application of representative survey to the beneficiaries of the Project's components annually. The level of satisfaction will be estimated using a standard Likert scale based on a set of questions established in the frame of criteria considered to evaluate the CE. The second indicator will be measured through monitoring of implementation of the GRM activities. In addition, the Project will apply simple survey questionnaires distributed after every meeting of farmers and grain elevators (collecting feedback on the CE process after each event) that will be reported in the project progress reports.

78. **Private capital mobilization (PCM)**. The Component 1 of the Project will mobilize private capital. The component will leverage commercial financing for agricultural production by reducing the cost of borrowing (i.e., partial interest rate compensation). Commercial financing will be provided by about 45 PFIs,[73] which are registered commercial banks operating primarily on commercial basis. The PCM estimate is projected to reach about US$1.5 billion during 2023 and 2024. About 40 percent of that PCM ($600 million) is expected from majority privately owned commercial banks (less than 50 percent government ownership) while 60 percent of that PCM ($900 million) is expected from five state-owned

[72] WBG. 2015. *WBG Gender Strategy (FY16-23): Gender Equality, Poverty Reduction, and Inclusive Growth.* Available at: *https://openknowledge.worldbank.org/handle/10986/23425*

[73] Annex 2 shows a list of 28 PFIs, which supported the 2022 spring planting campaign under the credit program 5-7-9. The state-owned banks that lend to agriculture are all included in that Annex. The remaining 17 PFIs, not shown in Annex 2 but which provide agricultural lending under the credit program 5-7-9, are private commercial banks.

banks[74]. This share is expected to stay the same during the wartime. Banks are established for business purposes and financially and managerially autonomous from national and local governments, including the state-owned commercial banks. They are subject to the same regulatory requirements as private banks. The Project's results framework includes an indicator to monitor the progress and ensure timely reporting on the PCM leveraged by the Project.

B. Fiduciary

(i) Financial Management

79. **The assessment of the Project's Financial Management (FM) arrangements was carried out and was focused on the assessment of capacity of MAPF and BDF**, the two implementing agencies. Assessment was conducted taking into consideration: (i) the Bank's Operational Policy 8.00 on Rapid Response to Crises and Emergencies; and (ii) Guidance Note on Financial Management in Rapid Response to Crises and Emergencies. The Project was appraised for the full US$700 million scope, although the currently available financing is in the amount of US$550 million. Given that this Project follows a "framework" approach and the size of the operation, continuous capacity of the implementing agencies will be monitored on an ongoing basis, and existing capacity matched to the changing scope of the operation. FM performance and risk ratings will then be updated accordingly. While implementation support will be provided throughout project implementation, it is anticipated that more intense support will be needed in the first 12 months after project approval, with monitoring taking place every four months.

80. **The risk associated with the Project's FM structure is assessed as High.** This is substantially due to increased inherent risks created by Russia's invasion of Ukraine, such as MAPF and BDF potentially being affected in a way that would prevent them from carrying out FM and disbursement functions. In addition, the emergency nature of the Project and time pressures to process payments for delivery of urgent Project interventions increase incremental risk. Other factors contributing to the Project's high-risk rating are the inability of the Bank staff to carry out on-site supervision under Ukraine's present security situation. This will be partially mitigated through more frequent and comprehensive missions and engagement by the Bank of a third-party monitoring consultant for in-situ verifications.

81. **FM arrangements were confirmed to be adequate and will be further strengthened.** Both MAPF and BDF have prior experience with other international organizations, as well as with the Bank. The PIUs, to be established in MAPF and BDF by the Project's effectiveness, will have dedicated FM/disbursement staff assigned to the Project and receive additional training as may be necessary. This designated FM staff, in coordination with other MAPF/BDF colleagues and their PIUs, would be responsible for project disbursements, contract management and payments, keeping project records, preparation of periodic reports and organization of project audits. Specific FM and disbursement arrangements, as well as internal controls and processes for project implementation will be detailed in POMs for each PIU, the adoption of which will be a disbursement condition. Given the Project's framework structure, the emergency nature of the operation, and the need to work closely with MAPF and BDF, additional Bank's implementation support will be provided.

82. **Project quarterly reports and annual audits will be required.** Such Interim Financial Unaudited (IFRs) reports would be submitted quarterly by both MAPF and BDF, without need for consolidation. Due date for such reports would be 45 days after the end of each quarter, and such reports would be produced with the use of automated accounting systems that both MAPF and BDF have in place. Annual audit of project financial statements will be required, and it is expected that an independent auditor acceptable to the Bank would carry out separate audits of MAPF and BDF project financial statements. The audits will be carried out on basis of agreed Terms of Reference (TORs) and will be due 6 months after the end of each year. Annual audit reports and financial statements will be subject to public disclosure by MAPF and BDF as well as the Bank. Component 3 of the Project provides funding for these audits.

[74] Privatbank, Oschadbank, Ukreximbank and Sense Bank (recently nationalized) are fully state owned while 95 percent of Ukrgazbank's shares belong to the state.

83. **Disbursements.** MAPF and BDF will execute project disbursements for their respective components, including submission of withdrawal applications and reporting to the Bank. Disbursements for MAPF and BDF will run in parallel. Both MAPF and BDF will open and maintain two separate Designated Accounts (DAs), denominated in United States Dollars and Transit accounts in local currency (if necessary). The minimum application size for direct payment, reimbursement, and special commitment will be specified in the Disbursement and Financial Information Letter (DFIL). Regular disbursement mechanisms will be available during project implementation, including: (i) direct payments; (ii) reimbursement; (iii) advance; and (v) special commitments.

84. **For Component 1 implemented by BDF,** it is foreseen that part of the financing (approximately US$250 million) will be provided retroactively, for eligible expenditures already incurred from January 2023 to the Project signing. Further, a portion of project expenditures will be financed by the GoU from October 2023 to February 2024 and then reimbursed by the Bank (approximately US$100 million) by March 2024. Both retroactive financing and reimbursement would be processed on the basis of reports on eligible project expenditures, accepted by the Bank. Finally, the rest of expenditures (approximately US$150 million) will be advanced for the use in the forthcoming periods, for the projected eligible expenditures to be incurred in the future during the remaining months of 2024. For the retroactive and reimbursement part of the financing, funds will be credited to an account indicated by the GoU, directly to the general fund of the budget. For the final portion of financing to be paid as advance, disbursements will be made by the Bank to a segregated US Dollar denominated account of the State Treasury in the NBU that would be indicated by GoU, and then converted and credited to the government State Treasury account in UAH. The GoU, with inputs from BDF, would provide reports on the project eligible expenditures financed from the project advance, after such expenditures are incurred. Further detail on this Component will be laid out in the POM, acceptable to the Bank, that would be developed and approved by GoU.

85. **For Component 2 implemented by MAPF,** implementation will be done through the SFFS subordinated to MAPF with the use of MAPF’s SAR, a digital platform for state agricultural support. SAR was established with the support of the Bank and the EU, and it provides a wide range of functions that were reviewed during project preparation and will be used during implementation of this component. SFFS and its regional network of offices throughout Ukraine will handle receipt, processing, and consolidation of registers of applications as well as transfer of funds on the basis of approved registers of applications to farmer beneficiaries. Such consolidated register of approved applications will be prepared by SFFS on a monthly basis and submitted to MAPF for final review and authorization. MAPF will then prepare and submit a withdrawal application to the Bank to credit the DA of MAPF in the State Treasury of Ukraine in the amount of such approved monthly register. MAPF would transfer received funds to the account of SFFS in the State Treasury for further payment to farmer beneficiaries. Finally, SFFS through its regional network of offices will carry out verification of the use of funds through desk audits, on-site checks, and SAR inbuilt tool for satellite data analysis. Third-party monitoring recruited by the Bank will carry out further verifications, including invoices for goods and services purchased for agricultural production with the support of the Project’s grants. Corresponding procedure on the use of Project funds under this budget program of the special fund of the budget will be developed and approved by the MAPF. Further detail on this Component will be laid out in the POM, acceptable to the Bank, that would be developed and adopted by MAPF.

86. **Component 3 will be implemented by both BDF and MAPF** in their respective parts. Specific processes and procedures to be used for implementation of this Component will be laid out in the POMs to be prepared by both BDF and MAPF, as a separate section in those documents.

(ii) Procurement

87. **Applicable Regulations**. The Project will follow “WB Procurement Regulations for IPF Borrowers” (dated July 2016, revised November 2017, August 2018, November 2020), hereafter referred to as the Bank’s “Procurement Regulations”. The WB's “Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants”, (revised as of July 01, 2016) (“Anticorruption Guidelines”) will apply to the Project. A General

Procurement Notice will be published on the Bank's external website and UN Development Business online. Given the emergency nature of this project, simplified procurement procedures for works and goods and selection procedures for consultant services may apply in accordance with the Bank Guidance: Procurement in Situations of Urgent need of Assistance or Capacity Constraints, dated March 7, 2019. The Project will use the Systematic Tracking of Exchanges in Procurement (STEP) to plan, record, and track procurement transactions for all contracts.

88. **Preparation of the Project's Procurement Strategy for Development (PPSD) and Procurement Plan (PP):** Only Component 3 involves minor procurement of goods and services to support adequate staffing and functioning of the PIUs as well project audits, impact evaluation, training and other eligible expenses. Therefore, a simplified PPSD form will be used. The PPSD and PP will be part of the negotiation package. The PPSD includes a PP for the entire duration of the Project and only covers the above-referenced procurement for PIUs. All the selection methods defined in the Procurement Regulations can be used; however, priority will be given to streamlined and simple procedures and to those that ensure expedited delivery, such as Direct Selection, Request for Quotations with enhanced threshold limit as appropriate, and Consultant's Qualifications-based Selection.

89. **Selection of consultants**. The methods defined in the PP will be followed for the selection of the consultants, such as Qualification in line with sections 7.3 and 7.12 of the Procurement Regulations and Direct Selection, for justified reasons. For the employment of experts, Selection of Individual Consultants may be used. Subject to justification, the Direct Selection method for consultant firms and individuals may be used.

90. **Procurement supervision frequency**. Due to emergency, the Bank's oversight of procurement will be done through implementation support and increased procurement post-review. The Bank will not carry out prior review in this project. The details of the implementation support and post-review arrangements will be elaborated in the PPSD.

91. **Complaint handling mechanism**. To address procurement complaints received under the Project, the PIUs will implement a complaint handling mechanism. The project is required to ensure recording of procurement-related complaints in the STEP system. Both the Bank and PIUs will use STEP to track complaints. The PIUs will be responsible for performing the following actions in STEP: (a) promptly record all complaints relating to procurement process in IPF operation; (b) for procurement process complaints received on contracts subject to the Bank's prior review, submit the borrower's proposed response to each complaint before issuing it to the complainant(s); (c) record the PIU's response to the procurement process complaints upon issuance to the complainant(s); and (d) promptly register requests for debriefings and update STEP with the record of the debriefings to interested parties.

C. Legal Operational Policies

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

92. **The Policy on Projects on International Waterways does not apply** because the Project will not invest in irrigation, and project investments will not cause any additional risk of pollution. The irrigated area accounted for only 1.5 percent of arable land in 2021 and it more than halved after the destruction of Kakhovka dam on June 6, 2023.

D. Environmental and Social

93. **Russia's invasion of Ukraine poses significant contextual risks that are beyond the control of the Project such as risks associated with aerial bombardment, combat fighting or further displacement of refugees**. Project activities associated with reducing the cost of agricultural loans and providing grants for working capital, equipment and minor

construction works for small-scale agricultural activities are likely to involve some site-specific adverse risks and potential adverse impacts on workers and communities. In most situations, these risks will be manageable but are rendered unpredictable by the contextual risks associated with the war. Workforces participating in activities enabled by loans and grants are typically small due to high mechanization in the sector. There is an inclusion risk that provision of credit financing and grants may benefit those enterprises with existing financial capacity, and not reach rural new starters, cultural minorities and/or the elderly without access to information or awareness of the program. A comprehensive outreach program will be set up to ensure access to the program information among different stakeholders' groups, in particular small entrepreneurs that may be reluctant to apply and take on debt during the war.

94. **Potential environmental impacts are connected to purchase and use of agrochemicals and include impact on biodiversity, surface and ground water sources, soil quality, occupational health and safety and community health and safety impacts, as well as invasion-related hazards such as land contamination and explosive remnants of war**. Environmental risks are expected to be site-specific, temporary and can be readily addressed through standard mitigation measures and compliance with national laws. However, these risks may be exasperated by ongoing war-related hazards and aerial attacks. An emergency response plan, including measures to protect safety and security of project personnel and nearby communities, will be prepared as part of subproject Environmental and Social Management Plans (ESMPs) and include information on a warning system/designated shelters. While most environmental and social risks are site specific and manageable with existing mitigation, there is risk of cumulative impact associated with agricultural production. The risks associated with continued combat fighting are also significant.

95. **The Project has been prepared rapidly with two PIUs and financial intermediation with dozens of commercial banks without a track record of implementing the Environmental and Social Framework (ESF)**. It will be important that trained environmental and social specialists are identified for the PIUs to screen, assess, and manage impacts associated with grants and loans for agricultural production. The Project has prepared an Environmental and Social Commitment Plan (ESCP) and SEP, which describe measures to disclose and consult on the Project activities and describe procedures for grievance handling. A GRM will be readily accessible to all project-affected parties, at no cost and without retribution, including concerns and grievances filed anonymously, in a manner consistent with ESS10. The grievance mechanism will also be able to receive, register and address concerns and grievances related to sexual exploitation and abuse and sexual harassment in a safe and confidential manner, including through the referral of survivors to gender-based violence service providers. The Project will prepare an Environmental and Social Management Framework (ESMF), including Labor Management Procedures and template ESMP, for management of possible minor civil works (to be adapted in the event of CERC activation). The Project will review and rely on PFIs' Environmental and Social Management Systems (ESMS) to screen for risks associated with issuing loans for production.

V. GRIEVANCE REDRESS SERVICES

Grievance Redress. Communities and individuals who believe that they are adversely affected by a project supported by the World Bank may submit complaints to existing project-level grievance mechanisms or the Bank'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 Bank's independent Accountability Mechanism (AM). The AM houses the Inspection Panel, which determines whether harm occurred, or could occur, as a result of Bank non-compliance with its policies and procedures, and the Dispute Resolution Service, which provides communities and borrowers with the opportunity to address complaints through dispute resolution. Complaints may be submitted to the AM at any time after concerns have been brought directly to the attention of Bank Management and after Management has been given an opportunity to respond. For information on how to submit complaints to the Bank's GRS, please visit *http://www.worldbank.org/GRS*. For information on how to submit complaints to the Bank's AM, please visit *https://accountability.worldbank.org*.

VI. KEY RISKS

96. **The overall risk to achieving the PDO is rated High**, due to Russia's invasion of Ukraine, with widespread and unpredictable security, social, and macroeconomic instability. To account for this, Project design is kept lean to help mitigate some of the risks. However, the main risk remains related to the duration and severity of Russia's invasion of Ukraine and its human, economic and macro impacts.

97. **Political and Governance risk is High**. Russia's invasion of Ukraine and the declaration of state of emergency on February 24, 2022, pose a huge risk to the political and governance landscape. At the time of preparing the Project, the war has moved towards the eastern and southern parts of the country, but its evolution and the potential impact on the ability of the GoU to continue to perform core functions remains uncertain as Russia's invasion of Ukraine continues.

98. **Macroeconomic risk is High**. Rising geopolitical tensions and the ongoing invasion have led to a severe deterioration of the macroeconomic situation. Disruptions to economic activity and the resulting decline in tax revenue are constraining fiscal space at a time when the spending pressure on GoU to provide essential services and repair damaged infrastructure is increasing. Even with significant WB financing and the DP's pledge to continue supporting Ukraine, the country's financial needs are enormous and will remain so in the foreseeable future.

99. **Sector Strategies and Policies and Technical Design of Project risks are Moderate**. The Project will mostly use the existing state programs and support mechanisms, which are in place and have already demonstrated their success in 2022. The GoU is also focusing on increasing agrifood exports, committing to domestic investments, and coordinating investment and policy decisions with other countries and partners.

100. **Institutional Capacity for Implementation and Sustainability risks are Substantial**, despite the simple design and scale up of the existing activities in the existing public institutions. In case of Russia's invasion of Ukraine being still ongoing over the next planting and harvest seasons, some damages to planting areas and farm equipment may occur. This could mean a slower then hoped returns to liquidity of farmers and traders and reductions in the harvestable area in 2023 and 2024. The risks will be mitigated by investments in locations that are considered 'less risky'.

101. **The fiduciary risk is rated as High due to high FM risk.** This is due to increased inherent risks resulting from the war, such as MAPF and BDF potentially being affected in a way that would prevent them from carrying out FM and disbursement functions. In addition, the emergency nature of the Project and time pressures to process payments for delivery of urgent Project interventions also contribute to incremental risk. Other factors contributing to the Project's high-risk rating are the inability of the WB staff to carry out on-site supervision under Ukraine's present security situation. This will be partially mitigated through more frequent virtual missions.

102. **Environmental and Social Risks are Substantial**. The activities supported by the Project could involve some site-specific adverse social and environmental risks and impacts and take place within a highly volatile context beyond the immediate control of the implementing agencies. Most risks are, however, manageable with existing mitigation measures. It will be important for the Project to screen and address any risks to local communities, especially those with internally displaced persons, who are more sensitive to disruption of agricultural livelihoods or interactions with project workers and equipment and deploy relevant environmental and social management plans and resources to address these. The contextual risks associated with continued Russia's invasion of Ukraine are significant and unpredictable.

103. **Stakeholders Risk is Moderate**. The Project has the stakeholder engagement plan to encourage two-way information flow with beneficiaries. The residual stakeholder risk facing the Project is, however, considered moderate due to the situation in Ukraine.

VII. RESULTS FRAMEWORK AND MONITORING

Results Framework

COUNTRY: Ukraine

Ukraine Agriculture Recovery Inclusive Support Emergency (ARISE) Project

Project Development Objectives(s)

The Project Development Objective is to maintain inclusive agricultural production and provide immediate and effective response to an eligible crisis or emergency.

Project Development Objective Indicators

Indicator Name	PBC	Baseline	End Target
Supporting access to finance for farms through affordable credit and grants			
Crop area maintained for agricultural production due to the support of the Project (Hectare(Ha))		0.00	8,000,000.00
Farmers reached with agricultural assets or services (CRI, Number)		0.00	92,000.00
Farmers reached with agricultural assets or services - Female (CRI, Number)		0.00	28,000.00
Small-sized agricultural producers, who accessed loans and grants under the Project, as a share of total direct Project beneficiaries (Percentage)		0.00	80.00
Women-headed farms as a share of small-sized agricultural producers, who accessed loans and grants under the Project (Percentage)		0.00	20.00
Percentage of project-related grievances received that have		0.00	90.00

Indicator Name	PBC	Baseline	End Target
been addressed within 15 working days (Percentage)			

Intermediate Results Indicators by Components

Indicator Name	PBC	Baseline	End Target
1. Supporting access to finance for farms through affordable credit			
Private capital mobilization leveraged with the support of the Project (Amount(USD))		0.00	1,500,000,000.00
Agricultural producers, who were able to access loans with the support of the Project (Number)		0.00	12,000.00
Small-sized agricultural producers, who were able to access loans with the support of the Project (Number)		0.00	2,400.00
Volume of agricultural lending accessed by small-sized agricultural producers (in percent of total volume of lending) (Percentage)		0.00	10.00
2. Supporting access to finance for small farms through grants			
Small-sized agricultural producers receiving grant support from the Project (Number)		0.00	80,000.00
Female-headed small-sized agricultural producers supported by the Project with grants for agricultural production (Percentage)		0.00	35.00
Crop area for agricultural production that received grant support from the Project (Hectare(Ha))		0.00	1,200,000.00
Animals for which the grant support was provided by the Project (Number)		0.00	780,000.00
Value of the support provided to agricultural producers through grants under the Project (Amount(USD))		0.00	199,000,000.00

Indicator Name	PBC	Baseline	End Target
Beneficiaries satisfied with citizens engagement process under the Project (Percentage)		0.00	80.00

Monitoring & Evaluation Plan: PDO Indicators					
Indicator Name	**Definition/Description**	**Frequency**	**Datasource**	**Methodology for Data Collection**	**Responsibility for Data Collection**
Crop area maintained for agricultural production due to the support of the Project	This is the crop area planted by beneficiaries of the Project, consisting of: (i) crop area reported by agricultural producers in loan applications under the credit program 5-7-9; and (ii) crop area that received per hectare grant support.	Semi-annual	BDF and MAPF	Regular reporting	MAPF and BDF PIUs
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,	Every six months	BDF to report on the number of loan recipients and the MAPF to report on the number of grant	BDF to receive the data from the PFIs, while the MAPF to collect information from the SAR platform	MAPF and BDF PIUs

	agroforestry, timber, and non-timber forest products. Assets include property, biological assets, and farm and processing equipment. Biological assets may include animal agriculture breeds (e.g., livestock, fisheries) and genetic material of livestock, crops, trees, and shrubs (including fiber and fuel crops). Services include research, extension, training, education, ICTs, inputs (e.g., fertilizers, pesticides, labor), production-related services (e.g., soil testing, animal health/veterinary services), phyto-sanitary and food safety services, agricultural marketing support services (e.g., price monitoring, export promotion), access to farm and post-harvest machinery and storage facilities, employment, irrigation and drainage, and finance. Farmers are people engaged in agricultural activities or members of an agriculture-related business		recipients		

	(disaggregated by men and women) targeted by the project.				
Farmers reached with agricultural assets or services - Female		Every six months	The MAPF to collect data on the women-headed farms recipients of the grants for agricultural production	The MAPF to collect data from the SAR platform	MAPF PIU
Small-sized agricultural producers, who accessed loans and grants under the Project, as a share of total direct Project beneficiaries	"Small-sized agricultural producers" are defined as agricultural producers with less than 500 ha of arable land.	Every six months	BDF and MAPF/SAR databases	BDF to collect information on the loan beneficiaries by farm size. The beneficiaries eligible for the grant support under MAPF program are automatically "small farms."	MAPF and BDF PIUs
Women-headed farms as a share of small-sized agricultural producers, who accessed loans and grants under the Project					
Percentage of project-related grievances received that have been addressed within 15 working days	"Addressed" grievances mean responded by the PIUs in a timely manner within 15 days from the	Every six months	The logs of the grievance redress mechanism	The logs of the grievance redress mechanism (GRM)	BDF and MAPF PIUs

	grievance receipt.		(GRM)		

Monitoring & Evaluation Plan: Intermediate Results Indicators

Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
Private capital mobilization leveraged with the support of the Project	Volume of agricultural loans, supported by the interest rate compensation, and issued by participating financial institutions under the credit program 5-7-9.	Every six months	PFIs	BDF to receive the quarterly updates from the PFIs	BDF PIU
Agricultural producers, who were able to access loans with the support of the Project	Beneficiaries of the interest rate subsidy under the credit program 5-7-9	Every six months	PFIs	BDF to correct quarterly updates from the PFIs	BDF PIU
Small-sized agricultural producers, who were able to access loans with the support of the Project	"Small size agricultural producers" are agricultural producers with less than 500 ha of arable land.	Every six months	PFIs	BDF to receive the quarterly updates from the PFIs	BDF PIU
Volume of agricultural lending accessed by small-sized agricultural producers (in percent of total volume of lending)		Every six months	PFIs	BDF to receive the quarterly updates from the PFIs	BDF PIU
Small-sized agricultural producers receiving grant support from the Project	Small-sized farms eligible for grant support are farms with less than 500 ha registered in the State Agrarian Registry.	Every six months	SAR platform	SAR platform	MAPF PIU

Female-headed small-sized agricultural producers supported by the Project with grants for agricultural production		Every six months	SAR platform	SAR platform	MAPF PIU
Crop area for agricultural production that received grant support from the Project		Every six months	SAR platform	SAR platform	MAPF PIU
Animals for which the grant support was provided by the Project		Every six months	SAR platform	SAR platform	MAPF PIU
Value of the support provided to agricultural producers through grants under the Project		Every six months	SAR platform	SAR platform	MAPF PIU
Beneficiaries satisfied with citizens engagement process under the Project		Every six months	SAR platform	Survey of the grant beneficiaries	MAPF PIU

ANNEX 1: Implementation Arrangements and Support Plan

COUNTRY: Ukraine
Ukraine Agriculture Recovery Emergency Project

1. **The Bank's implementation support for the Project takes into account the specific risks for the achievement of the PDO, the extraordinary challenges faced by Ukraine's farmers, agribusinesses, PFIs, and the GoU, as well as the fragility, conflict, and violence context.** In the current emergency situation, the Bank's support will focus on: (i) ensuring compliance across fiduciary, social, and environmental domains; (ii) application of innovative tools for M&E to enhance results and accountabilities; and (iii) leveraging the support of DPs.

2. **In terms of strengthening compliance, the Bank will proactively support the implementing agencies with trainings and technical back-up**. To help the GoU manage environmental and social risks, the WB will monitor compliance through the reports submitted by the PIU and take remedial and supportive action as needed. Special attention will be paid to strengthen the BDF's ESMS, while supporting establishment or enhancement of the well-functioning ESMS in each PFI. The PIUs in both BDF and MAPF will recruit short-term consultants for further support as needed.

3. **The Project will use the innovative tools to strengthen project monitoring and accountability**. The Bank will also engage services of a third-party monitoring consultant to complement the Bank's supervision, including verification of the project activities and monitoring of the FM, procurement, and disbursement performance, compliance with ESF requirements, etc. In addition, under Component 2, the Project will use satellite data to assess crop production of selected small farmer beneficiaries to verify that funds were used for agricultural production purpose and evaluate its impact on crop production. This satellite data monitoring and analyses will be technically supported by the Support Transparent Land Governance in Ukraine (P165404) financed by the EU and the Global Fund for Disaster Recovery and Reconstruction as part of the ASA Reviving Agriculture as an Engine of Ukraine's Growth (P180198).

4. **Key DPs, including FAO, WFP, other UN organizations, USAID, EU, JICA, and others, are expected to contribute to agricultural recovery in Ukraine**. Many of these partners, for example, use the SAR as a platform to identify farmers and supporting them. The Project will coordinate with these DPs and, where relevant, leverage their activities for achieving better cumulative results.

5. **While implementation support will be provided throughout project implementation, it is anticipated that more intense support will be needed in the first 12 months after Project approval**. Because of Russia's invasion of Ukraine, it is envisioned that intensive support (including missions) from approval through effectiveness and the first stages of implementation will be provided remotely, with selective support by on-the-ground consultants. If the situation changes and the security situation permit, the implementation support in-person will also be provided.

Table 1.1: Type of implementation support

Timeline	Focus	Skills Needed	Resource Estimate
0-12months	• Training and other capacity strengthening on financial management. • Training and other capacity strengthening on environmental and social standards. • Support to M&E • Stakeholder engagement to	Project management, operational, technical (including M&E), FM, environment, and social, digital solutions/ICT	At minimum, 2 formal implementation support missions; just-in-time technical assistance

	receive feedbacks for the emerging challenges and if needed the activities' adjustment.		
Mid-term Review	Mid-term review and identification of mid-course adjustments	Project management, operational, technical (including M&E), fiduciary, environment, social	Mid-term review mission
12-24 months	• Adjustments to the design of the activities as needed.	Project management, operational, technical (incl. M&E), fiduciary, environment, and social, digital solutions/ICT	2 formal implementation support missions; just in-time technical assistance
Completion phase	ICR and final payments	Project management; fiduciary	ICR mission

Table 1.2: Team skills and time allocation

Skills Needed	Weeks	Comments
Project Management	24	Remote, with select missions
Technical Specialists	24	Remote, with select missions
FM Specialist	6	Remote, with select missions
Procurement Specialist	1	Remote
Environmental Specialist	10	Remote, with select missions
Social Specialist	10	Remote, with select missions
Administrative Support	12	Remote, with select missions

ANNEX 2: Support to Agriculture through Credit Program 5-7-9 in 2022

COUNTRY: Ukraine
Ukraine Agriculture Recovery Emergency Project

6. **This annex presents the key data on the support provided to agriculture under the credit program 5-7-9 in 2022**. The value of agricultural loans facilitated by the interest rate compensation reached UAH 46.8 billion (Table 2-1). Fifty six percent of the loans were issued to finance the spring planting campaign. The total number of the beneficiaries was 6,964 farms. The GoU spent UAH 6.5 billion on the interest rate compensation for agriculture sector loans in 2022.

Table 2-1: Key facts of the agricultural lending under the credit program 5-7-9 in 2022

Value of agricultural loans, million UAH	inc. for Spring Planting Support Program, million UAH	% of Spring Planting Support in Total Value of agricultural support programs, %	No. of agricultural producers benefitted from all programs	No. of ag producers benefitted from the Spring Planting Support Program	Inc. ag producers with up to 1,000 ha	Estimated budget expenditure for agricultural programs in 2022, million UAH
46,797	26,262	56%	6,964	2,035	5,482	6,552

Source: BDF.

7. **The value of loans supporting the spring crop planting accounted for more than a half of all agricultural loan value in 2022**. More than 2 thousand farmers could access finance for spring planting, with the average loan per farm UAH 12.9 million UAH (Table 2-1). About 80 percent of all beneficiaries were small and medium-sized farms with less than 1,000 ha. This group of farmers were able to attract 37 percent of all loans issued for agriculture production. Table 2-2 presents the volumes of agricultural loans for supporting the spring planting by PFI.

Table 2-2: Agricultural lending for the 2022 spring crop planting by PFI, preliminary data

	Bank name	Loan amount, UAH million	Loan amount, US$ million	Share in total agricultural loans, %
1	Privatbank*	8 541,90	233,64	32,53
2	Ukrgazbank*	3 544,91	96,96	13,50
3	Oschadbank*	3 497,03	95,65	13,32
4	Pumb	2 667,77	72,97	10,16
5	Ukrexeimbank*	2 114,57	57,84	8,05
6	Raiffeisen Bank Aval	1 843,79	50,43	7,02
7	Procredit bank	1 417,59	38,77	5,40
8	Credit Agricole Bank	932,93	25,52	3,55
9	OTP Bank	291,32	7,97	1,11
10	Pivdenyy bank	240,48	6,58	0,92
11	Kredobank	238,77	6,53	0,91
12	Bank Alliance	233,97	6,40	0,89
13	Bank Vostok	229,17	6,27	0,87

14	International Investment Bank	96,70	2,64	0,37
15	Poltava Bank	87,60	2,40	0,33
16	Bank Lviv	50,10	1,37	0,19
17	Agprosperis bank	37,55	1,03	0,14
18	Motorbank	30,00	0,82	0,11
19	KIB	28,30	0,77	0,11
20	Asviobank	27,00	0,74	0,10
21	Piresus Bank MKB	25,80	0,71	0,10
22	Meta bank	20,00	0,55	0,08
23	Taskombank	18,00	0,49	0,07
24	MTB Bank	16,50	0,45	0,06
25	Polikombank	10,00	0,27	0,04
26	Bank Credit Dnipro	11,85	0,32	0,05
27	Radabank	5,00	0,14	0,02
28	Bank of Investments and Savings	3,40	0,09	0,01
	Total	**26 262,00**	**718,33**	**100.00**

*Note: * State-owned banks. Exchange rate used for conversion is 36.5 UAH/US$.*

Source: BDF.

ANNEX 3: Economic and Financial Analysis

COUNTRY: Ukraine
Ukraine Agriculture Recovery Emergency Project

I. Introduction

1. **The financial and economic gains of the Project will arise from maintaining agricultural production by supporting it through reducing the cost of loans and production grants for small farms**. A temporary and timebound nature of this emergency Project assumes a relatively short (5-year) life span of investments.

II. Financial Analysis

2. **The Project will help maintain agricultural production in the planting area of 4.2 million ha through reducing the cost of borrowing for farmers and helping the smaller farms with grants for agricultural production**. Per hectare profit in 2023 is projected at US$10, which a fraction of US$70-100/ha profit observed prior to Russia's invasion of Ukraine. The reduction in the farm profits in 2023 is a result of lower farm-gate prices and higher input prices. In 2024, per hectare farm profit is projected to increase to US$20, returning to its US$50/ha level in 2026-2027. The **financial Net Present Value (NPV) is US$543.4 million**, at 6 percent discount rate and with the 5-year lifespan of investment.

III. Economic Analysis

3. **The total economic NPV (ENPV) of the Project is estimated at US$193.2 million and the economic rate of return (ERR) is 39 percent**, from the project investment at US$700 million. The conservative scenario is presented in the analysis, and it represents the scope of profitability originated from the conditions prevailing at the time of the project preparation.

IV. GHG Emission Assessment

Background and Methodology

4. **In its 2012 Environment Strategy, the Bank adopted a corporate mandate to conduct Greenhouse Gas (GHG) emissions accounting for investment lending**. The quantification of GHG emissions is an important step in managing and ultimately reducing emissions and is becoming common practice for many international financial institutions. To assess a project's net carbon balance, the WB has adopted the Ex-Ante Carbon-balance Tool (EX-ACT) developed by FAO in 2010 and updated in 2021.[75] The EX-ACT is a land-based appraisal system that allows the assessment of a project's net carbon-balance, defined as the net balance of CO2 equivalent (tCO_2-eq) GHGs that were emitted or sequestered as a result of project implementation compared to a business-as-usual scenario. EX-ACT estimates the carbon stock changes (i.e., emissions or sinks of CO_2) as well as GHG emissions per unit of land, expressed in equivalent tons of CO_2 per hectare and year. EX-ACT can be applied for a wide range of agriculture and forestry development projects as it covers a wide range of activities (e.g., afforestation, agroforestry, improved crop and livestock production practices, improved water management, use of inputs, building of infrastructure, etc.) and aims to support project designers in identifying project activities with high potential for climate change mitigation and can thus support planning and decision-making.

Application of EX-ACT for the Project

5. *Project areas relevant for analysis*. The project finances a continued agricultural production, including the inputs use. The Component 1's GHG accounting are estimated using the EX-ACT, which considers changes in "Crop Production" and "Inputs Investments" modules. The Component 2's GHG accounting is carried out using the excel sheet estimates.

[75] http://www.fao.org/in-action/epic/ex-act-tool/suite-of-tools/login/

6. *Assumptions*. Ukraine has a cold temperature climate and moist climate. The dominate soil type is High Activity Clay soil. The project implementation phase is 2 years and the capitalization phase 3 years. This amounts to 5 years total duration, which is different from the standard range for the use of EX-ACT (15 years) and in line with the project's economic and financial analysis assumptions for this emergency operation. For the analysis on storage, the "Business as usual scenario" is expected not to differ from the "Baseline scenario." This default scenario is deemed reasonable as changes in agricultural activity depend on the technology available, which is a contribution of the project at hand. The GHG analysis further assumes that the dynamics of change are linear over the duration of the project. Information for the GHG accounting is drawn from sources generated for the preparation of the project.

7. The table below provides data inputs for the current/ without and with project scenario.

Activities	**Without project scenario**	**With project scenario**
Increased agricultural production/avoiding food loss	The production of grains and oilseeds continues on 4.2 million ha, but with lower input use	Improved access to finance increases the input use, resulting in higher crop yields
Farm inputs use	A reduced use of inputs on 4.2 million ha	Due to the improved access to finance, the use of fertilizers is increased as follows: 5 kg of urea per ha per year 5 kg of phosphorous per ha per year 4 kg of potassium per ha per year

Results

8. *Net carbon balance*. The net carbon balance indicates tons of CO2 equivalent (tCO2-eq) GHGs sequestered as a result of project implementation compared to a business-as-usual scenario. Over the project duration, the Project generates an additional 970,760 tCO2-eq. On a per year basis, the project will lead to a sink of 194,152 tCO2-eq. Details of the results are shown in Table A3.1.

Table A3.1: Results of the Ex-Ante GHG Analysis

Project activities	**Over the economic project lifetime (tCO2 eq)**			**Annual average (tCO2 eq/year)**		
	GHG emissions of "without project" scenario (1)	**Gross emissions of "with project scenario (2)**	**Net GHG emissions (2–1)**	**GHG emissions of "without project" scenario (3)**	**Gross emissions of "with project" scenario (4)**	**Net GHG emissions (4–3)**
Cropping systems	400,173	432,149	31,976	80,035	86,430	6,395
Increased farm input use	2,235,306	3,174,089	938,782	447,061	634,818	187,756
TOTAL	2,635,479	938,780	970,782	527,096	187,756	194,152

V. Shadow Price of Carbon

9. The estimation of the net balance from all greenhouse gases expressed in CO2-equivalent that would be emitted or sequestrated within the potential sub-projects was made and the social price of carbon was included in the economic analysis.[76] According to the calculations in EX-ACT, the project showed a total balance of 970,760 tCO2-eq, which means that the Project will have a negative carbon sequestration balance (Table A3.1). The overall GHG emission (NPV) is estimated to range between US$45.5 million in the low shadow price of carbon scenario to US$90.4 million in the high

[76] World Bank. 2017. Guidance Note on Shadow Price of Carbon in Economic Analysis. September 2017.

shadow price of carbon scenario (Table A3.2).

Table A3.2: Cost of Carbon at Shadow Prices (2023 US$)

Year	Net GHG emissions, tCO2 eq/year	Shadow price of carbon, US$/tCO2 eq		Total net losses, US$	
		Low	High	Low	High
2023	194,152	53	107	10,290,056	20,774,264
2024	194,152	55	108	10,678,360	20,968,416
2025	194,152	56	110	10,872,512	21,356,720
2026	194,152	57	113	11,066,664	21,939,176
2027	194,152	58	116	11,260,816	22,521,632
Total	**970,760**			**54,168,408**	**107,560,208**
NPV				**$45,520,644**	**$90,399,048**

ANNEX 4: Assessment of Financial Sector and Financial Intermediaries

COUNTRY: Ukraine
Ukraine Agriculture Recovery Emergency Project

1. **The Project is a new US$700 million 24 month-project supporting agricultural recovery during Russia's invasion of Ukraine and a related global food crisis**. There are important extenuating circumstances for this emergency operation to be undertaken during Russia's invasion of Ukraine and difficult national logistical challenges contributing to a global food shortage. After the surge in agricultural lending in spring 2022, which was supported by the program, commercial banks have slowed down their lending activity in the second half of 2022. At the same time farmers' demand for additional financing has increased with high interest rates being the main factor deterring them from taking out new loans. Since the policy rate was raised to 25 percent in mid-2022 (from 10 percent) market rates hiked considerably to around 20 percent for UAH loans. Time-bound intermediate financial intervention to support temporary financing of the program during these extraordinary circumstances is well-justified as it is the most expedient way to help eliminate above-mentioned market failures.

Financial Sector Overview

2. **The Ukrainian banking sector remains operational and liquid while being significantly impacted by Russia's invasion of Ukraine**. The banking system entered the invasion in relatively good condition and banks remain operational and very liquid.[77] Banks have generally remained profitable, with the system's return on equity amounting to 11 percent in 2022. At the same time, loss of assets and collateral due to war has impacted banks' profitability and solvency. During March-December 2022, the banking sector accounted for US$2.9 billion of loan loss provisions for expected invasion-related credit losses with the non-performing loans (NPL) ratio rising from 30 at the end of 2021 to 38 at end 2022 and further to 39.3 at end-April 2023.[78] Most banks continue to be well capitalized with the capital adequacy ratio standing at 21.0 percent as of end April 2023. However, banks are likely to recognize more losses.[79] An ongoing bank resilience assessment by the NBU will provide an indication of the largest 20 banks' health by end 2023 as well as a first quantification of capital needs. It will be followed by an independent valuation of banks' assets when conditions allow.

3. **Moreover, the sovereign-bank nexus has increased, with state-owned banks accounting for 53 percent of net banking sector assets as of end-September 2023 compared to 46.7 at the end of 2021**. At the same time, investments in domestic government debt securities decreased throughout 2022[80] with demand increasing again in early 2023 stimulated by regulatory measures. Bank lending has been subdued as a result of Russia's invasion of Ukraine as banks' risk averseness rose and demand lowered. About a third of the loan portfolio and deposit liabilities are denominated in foreign exchange, a key source of vulnerability in case of sustained currency depreciation and/or economic contraction.

4. **Policy actions were taken by the authorities to increase access to finance and maintaining the functionality of the financial sector**. Far-reaching emergency measures have been introduced under martial law to help preserve financial stability with preparations underway to gradually unwind them. To maintain trust in the financial system,

[77] According to NBU, around 93 percent of bank branches were operational as of mid-March 2023. The liquidity-capital reserve ratio for all banks in the system remains well above the required 100 percent. The liquidity position was helped by policies that generated substantial interest earnings, monetization of maturing government bonds held by the banking system and increased deposit base as external donors helped to maintain stable public sector wages, social transfers, and military wage.

[78] This amounts to around 15 percent of the net loan portfolio the banks held at the end of February 2022 while NBU states that losses might reach 20 percent (1H 2023 Financial Stability Report).

[79] RDNA2 estimates that credit losses as a result of Russia's invasion of Ukraine may rise up to US$6.8 billion. Since Russia invaded Ukraine, six small banks were declared insolvent – two subsidiaries of Russian state-owned banks, three local private banks, one private bank with Russian shareholders.

[80] GoU bond holdings decreased to 22 percent of banking sector assets at end 2022, from 29 percent at the end of 2021, but then grew to 23 percent at end-April 2023.

deposit guarantee coverage was increased to full coverage for eligible insured retail deposits for the period of the martial law plus three months. NBU is updating its financial sector strategy and has also taken important steps to respond to excess liquidity in the banking system, increase the term structure of liquidity and incentivize roll-over of government bonds by raising mandatory reserve requirements and lowering rates on overnight Certificates of Deposits. To maintain access to finance for the private sector during Russia's invasion of Ukraine, the credit program 5–7–9 providing interest rate compensation and a portfolio-based program of public guarantees were further adjusted. A new state-owned bank strategy adopted in May 2022 requires state-owned banks to re-orient activities towards priority sectors and abandons targets set in the pre-invasion state-owned bank strategy.

State-owned banks (SOBs)

5. **Ukraine's financial sector is dominated by state-owned banks (SOBs).** The Ukrainian banking sector is composed of 63 banks – 58 banks are either private domestic banks or part of a foreign-owned banking group, five banks are predominantly state-owned. Four SOBs are 100 percent state-owned: Oschadbank, Privatbank, Ukreximbank and Sense Bank which was nationalized on grounds of sanctions in July 2023. In case of Ukrgazbank, 95 percent of the capital belongs to the state. Collectively, the five SOBs hold approximately 53 percent of total banking sector assets and nearly 65 percent of retail deposits. All banks, including SOBs, are incorporated as joint-stock companies.

6. **SOBs are established for business purposes and financially, managerially autonomous from national and local governments, and registered to operate primarily on commercial basis**. In line with the Banking Law and guided by the updated 2020 general strategy for SOBs, each SOB and the Cabinet of Ministers of Ukraine (CMU) entered into a framework agreement, stipulating that the CMU recognizes the SOB as a separate corporate entity possessing its own commercial interests and objectives, will ensure operational autonomy of the SOB and will not interfere with the decision-making of the SOB's governing bodies.

7. **SOBs are regulated and supervised by the NBU as all other banks in the system.** NBU's 'Law of Ukraine on Banks and Banking' adopted on December 7, 2000 and relevant regulations all applicable to all banks operating in Ukraine. All five SOBs (amongst other banks) have been classified as systemically important banks by the NBU.

8. **Article 44 of the Banking Law governs all banks must operate with a comprehensive and adequate risk management system specific to bank's business and in line with the requirements for risk management set by the NBU.** It states that the risk management system should ensure detection, identification, assessment, monitoring and control over all types of risks at all organizational levels and estimate capital adequacy to cover all types of risks. All SOBs comply with the required risk management practices as stated by the NBU and each bank has been continuously refining their systems to manage risks.

9. **Moreover, corporate governance at SOBs has been significantly strengthened over the last few years**. Amendments of Article 7 of the Banking Law introduced two-third majority independent supervisory boards at SOBs, strict standards on board members' independence and conflicts of interest, as well as appointments to be based on a competitive selection procedure. The authorities have appointed a fresh slate of independent supervisory board members to the SOBs in the first half of 2023 that involved the NBU applying its fit and proper assessment framework to the selected candidates. The updated 2020 general strategy for SOBs articulated the necessary steps involve in decreasing the SOB's exposure to the State and increase its relevance, by improving its business models and operational platforms, further corporate governance improvements, and tackling NPL resolutions. Once conditions allow, authorities plan to update the general strategy which has been suspended during the war and subsequently, strategies for individual state-owned banks.

Access to Finance

10. **While the financial sector is an essential building block for fostering private-sector-led sustainable growth, it was not fully equipped to play that role even prior to Russia's invasion of Ukraine.** The Ukrainian banking sector lacks depth and makes only a relatively small contribution to private sector development with a private sector loan-to-GDP ratio of 23.6 percent in 2021 compared to a 53.3 percent average in ECA region (excluding high-income countries). A large share of state-owned banks with a high percentage of NPL ratio and elevated exposure to government bonds continues to undermine the efficiency of financial intermediation and credit growth to the private sector. Among the challenges to firm performance in Ukraine, access to finance has historically been one of the biggest growth obstacles and particularly problematic for smaller enterprises.

11. **Constrained access to finance for farmers has been further exacerbated by Russia's invasion of Ukraine.** In the 2019 Enterprise Survey, more than half of enterprises operating in agrifood related sectors identified access to finance as a major constraint to business operation. Banks mostly work with larger farmers perceived as less risky. Pre-invasion constraints – in particular for smaller farmers - relate to lack of collateral, credit history, and reliable financial accounts that would mitigate asymmetric information risks and enable financial institutions to better assess their creditworthiness. As a result of Russia's invasion of Ukraine, commercial banks have been cautious in intensifying their lending activity to enterprises while farmers' demand for additional financing has increased. High interest rates as well as collateral requirements remain the main factors deterring businesses from taking new loans.[81]

12. **Since the start of Russia's invasion of Ukraine, state programs have become the main engine of lending.** The credit program 5-7-9, first launched in 2020, has been playing a key role in lending in crisis conditions.[82] The program was initially launched to stimulate investment lending, but then shifted to anti-crisis lending to support businesses, first during the quarantine and then during the Russia's invasion of Ukraine. As of June 2023, the 5-7-9 program accounted for one-third of the net UAH corporate portfolio (compared to 5 percent in 2020). A total of 29,663 loan agreements amounting to UAH 119.13 billion were concluded during martial law period (64,485 loan agreements and UAH 208.76 billion since the launch of the program).[83] Partial credit guarantees by the state portfolio guarantee program form an important and complementary support vehicle to the 5-7-9 program. As part of the state guarantees on a portfolio basis, 6,810 loans worth UAH 34.41 billion were issued to agribusinesses.[84]

13. **The 5-7-9 credit program is based on a mechanism of (partial) compensation of interest rates.** The interest rate on a loan provided by a bank is determined by market conditions but capped by a pre-determined spread that is added to the cost of deposits. The latter is measured by the Ukrainian Index of Retail Deposit Rates (UIRD), an index of rates on three-month deposits[85]. The banks are compensated at a floating rate that is revised quarterly as the UIRD index changes while the borrower has to pay only a fixed low rate (5 to 9 percent at the start of the program). BDF – as an agent to GoU - uses budget funds to compensate the difference to banks. As of end 2022, 45 banks were taking part in the program out of which 27 supported the 2022 spring planting. All banks have passed the standard due diligence review

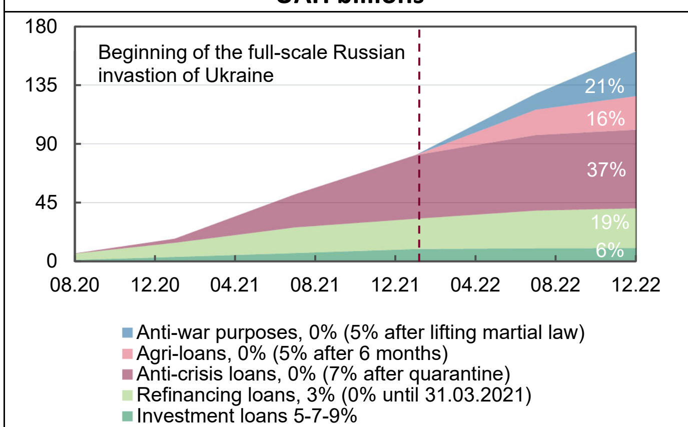
[81] A recent NBU survey (NBU Business Outlook Survey, Q12023) found that about half of agricultural companies stated that their borrowing needs will increase in the near future. High interest rates on loans remain the main factor deterring businesses from taking new loans, as indicated by about half of the survey respondents, and 44 percent of agricultural companies participating in the survey. Collateral requirements are another constraint for a quarter of respondents and one-fifth of agricultural companies that consider applying for a loan.
[82] The conditions, criteria and mechanism of program implementation are determined by the Provision for state financial support to small and medium-sized enterprises, approved by the CMU decree No. 28 dated 24.01.2020 (hereinafter – the Provision), and the mechanism for the use of funds provided for in the state budget under the program «Ensuring the functioning of the Business Development Fund», regulated by the corresponding provision, which was approved by the CMU decree No. 29 dated 24.01.2020.
[83] As of end June 2023.
[84] For agriculture companies, the state guarantee cannot exceed 80 percent of the individual loan compared to 70 percent for other SMEs.
[85] 14.05 percent as of end-June 2023.

process.

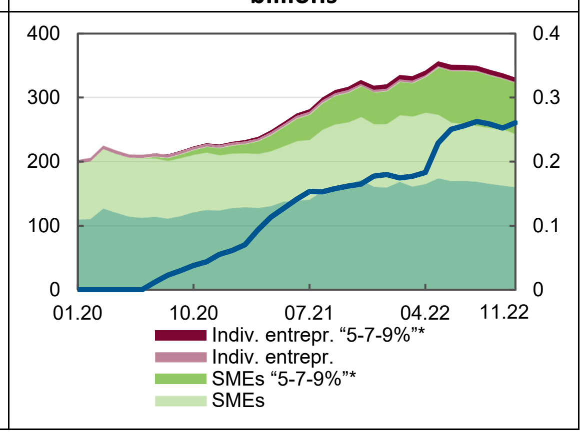
14. **The program's terms changed several times to adjust to emerging market failures**. Two new areas were added in April 2020: anti-crisis loans (first at 3 percent, then at 0 percent from December 2020) and loans to refinance existing debt (0 percent until the end of March 2021, then 3 percent). The maximum loan size was raised to UAH 3 million for the first time (this cap was subsequently revised several times). After Russia's invasion of Ukraine, the program was expanded by two new areas in March 2022: support for the crop sowing campaign, and loans to overcome the consequences of Russia's invasion of Ukraine. Initially, borrowers paid 0 percent interest on loans in these areas. Further changes removed the restrictions on the size of businesses participating in the program. In October, a mechanism with a 9 percent interest rate was added to restore production capacities destroyed by the war.

15. **Recent amendments to the Cabinet of Ministers of Ukraine's resolution regulating the 5-7-9 program in March 2023 revised the scope and adjusted program and interest rate modalities further.** The program's focus shifted away from anti-covid and refinancing loans to increasing demand (agri-loans and business support during Russia's invasion of Ukraine). Loans are separated into working capital (up to 3 years maturity) and investment loans (up to 5 years maturity), with 5 priority areas: (i) agriculture companies, (ii) food processing, (iii) rebuilding due to Russia's invasion's destructions, (iv) extension of 12 month working capital loans, which were issued under the program to companies situated in the invasion-affected territories; and (v) support of large trade companies. Full interest rate compensation was ended to account for fiscal constraints and moral hazard implications due the prevalence of zero-rate loans, rising market interest rates, and rapid portfolio growth. In case of investment loans interest rates for the end-borrower amount to 5 to 9 percent (depending on the size of the company) while its 7 to 9 percent for working capital loans. Expenses under the program are accounted for in the state budget, but their disbursement has run into delays. This debt has slowed down usage of the program by banks and GoU is actively working on addressing this issue. Finally, agriculture loans received in 2022 can be prolonged until March 2024 in case of redemption of up to 25 percent of the principal (by medium and large enterprises).

Total amount of signed contracts (by support area), UAH billions



Net hryvnia loans to business entities, UAH billions



Source: NBU, BDF.

Assessment of BDF

16. **BDF is a state-owned non-bank financial institution focused on improving access to finance for micro, small, and medium enterprises**. BDF was founded in 1999 as the German-Ukrainian Fund with a mandate to intermediate German development funds provided by KfW. The initial ownership of BDF was split between Germany, MOF, and NBU.

NBU exited the ownership of BDF and in 2022 Germany (KfW) also exited, leaving BDF wholly owned and controlled by MOF. BDF is a nonprofit legal entity formed under a charter approved by MOF. It is licensed by NBU as a non-bank financial institution and subject to its regulation and supervision. BDF's business model is comprised of two main wholesale banking activities: (a) making wholesale loans and giving credit guarantees for on-lending to SMEs by commercial banks; and (b) acting as an agent for the MOF and regional authorities for the payment of interest subsidies on SME loans, chiefly the 5-7-9 Program.

17. **An assessment of BDF took place at the pre-appraisal stage based on eligibility criteria in accordance with FIF technical guidance**.[86] BDF is evaluated as acceptable for the purpose of acting: (i) as a provider of wholesale funding and guarantees; and (ii) as an agent for the distribution of interest rate subsidies. Under the Project, the Bank will finance only the function (ii), i.e., the distribution of interest rate subsidies. It will not provide any line of credit or guarantees either to BDF or PFIs. As of 31 December 2022, BDF was very well-capitalized, with an equity to total assets ratio of 83.66 percent (Table 4-1). BDF's asset quality was good, which is consistent with BDF's wholesale lending business model.[87] At the same time, weaknesses remain in BDF's governance and risk management framework that GoU is planning to address while considering expanding BDF's role. This includes strengthening the capacity and independence of the Council (Supervisory Board) as well as the internal risks management function. A MOF order[88] approved the new development strategy for the BDF which aims to implement these changes in the Charter and organizational structure followed by the adoption of a comprehensive legal framework for BDF by the end of 2023. This is complemented by the authorities' commitment under the IMF EFF to take stock of BDF governance and risk management structure to identify shortcomings that represent a material risk to public finances. The review will also assess the 5-7-9 program to develop a concept note with proposals to enhance the targeting of the program for SMEs and phasing out the eligibility of large companies and enhance monitoring and maintain adequate safeguards (Proposed Structural Benchmark, end-September 2023).

[86] A detailed confidential appraisal report has been internally filed. The appraisal is based on the following sources of information: (i) audited financial statements as of December 31, 2022; (ii) written information provided by BDF; (iii) interviews with BDF senior management and staff.
[87] Two bank counterparties are identified as nonperforming (both small private banks) and the exposures are fully provisioned pending conclusion of the bank liquidation procedure, at which point the exposures will be written off.
[88] Order of the MOF "On the approval of the Development Strategy of the Business Development Fund" No.358 dated July 03,2023.

Table 4-1: BDF Audited Summary Balance and Income Statement

Summary Balance Sheet (EUR)

Item	**31/12/2022**	**31/12/2021**
<u>Assets</u>		
Cash & Cash Equivalents	27,247,796	63,077,243
Loans to Banks	37,576,021	38,865,932
Non-Current Assets	12,558	14,069
FV of Leases	35,558	77,428
Commitment Fee Receivable	0	378
Guarantee Fee	15,817	35,600
Derivative Financial Instrument[89]	3,840,254	2,386,257
Grants & Cost Recovery Receivables	119,778	33,140
Exchange Rate Loss Compensation Receivable	149,663	1,400,488
Prepayments, Deferred Expenses & Other	4,784	2,971
Total Assets	**68,942,340**	**105,893,506**
<u>Liabilities, Equity & Translation Differences</u>		
Loans Received	19,518,000	15,746,000
Fees & Commissions Payable	6,542	0
Grants Received but Not Disbursed	7,873,758	43,477,594
Provision for Vacation Pay	45,280	21,271
Lease Obligations	45,878	72,725
Other	213	256
Total Liabilities	27,489,671	59,317,846
Total Equity	57,675,343	53,264,414
Translation Differences	-16222674	-6,688,754
Total Liabilities, Equity & Translation Differences	**68,942,340**	**105,893,506**

Summary Income Statement (EUR)

Item	**31/12/2022**	**31/12/2021**

[89] KfW Currency Loss Compensation Facility

Interest Income	1,733,081	1,624,488
Interest Expense	-160,640	-159,170
Net Interest Income	1,572,441	1,465,318
Loan Loss Provision	-120,120	662
Provision for Guarantees Provided	-60,620	-211775
Net Interest Income After Provisions	1,391,701	1,254,205
Commission Income	115,334	152,455
Commission Expense	-2,792	0
Other Operating Income	5,067	6,024
Foreign Currency Revaluation	2,423,288	-1,310,356
Revaluation of Grant due to Currency Movements	-15,518	22,104
Income from Change in FV of Derivative Instrument[90]	1,629,703	261,295
Operating Expenses	-713,230	-614,548
Net Grant Implementation Revenues	-422,624	33,092
Net Profit	4,410,929	-195,729
Total Annual Comprehensive Income	4,410,929	-195,729

[90] KfW Currency Loss Compensation Facility.