

FOR OFFICIAL USE ONLY

Report No: PAD5435

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

PROJECT APPRAISAL DOCUMENT ON A PROPOSED LOAN

IN THE AMOUNT OF EUR 910.5 MILLION (US\$1.0 BILLION EQUIVALENT)

TO THE

REPUBLIC OF TÜRKİYE

FOR A

TÜRKİYE EARTHQUAKE RECOVERY AND RECONSTRUCTION PROJECT

June 11, 2023

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

This document has a restricted distribution and may be used by recipients only in the performance of their official duties. Its contents may not otherwise be disclosed without World Bank authorization.

CURRENCY EQUIVALENTS

(Exchange Rates Effective Apr 30, 2023)

Currency Unit =	Turkish Lira
TRY 19.45 =	US\$1
US\$ 0.05 =	TRY 1
EUR 0.91 =	US\$ 1
US\$ 1.10 =	EUR 1

FISCAL YEAR January 1 - December 31

Regional Vice President: Antonella Bassani

Country Director: J. Humberto Lopez

Regional Director: Sameh Naguib Wahba Tadros

Practice Manager: Christoph Pusch

Task Team Leaders: Bontje Marie Zaengerling, Salih Bugra Erdurmus, Nadwa

Rafeh

ABBREVIATIONS AND ACRONYMS

AAL	Average Annual Loss	LA	Loan Agreement
AFAD	Disaster and Emergency Management Presidency	LMP	Labor Management Procedures
AM	Accountability mechanism	МСН	Mother and Child Health
ANC	Antenatal Care	M&E	Monitoring and Evaluation
CCDR	Climate Change and Development Report	MEER	Marmara Earthquake Emergency Reconstruction
CE	Citizen Engagement	MoEUCC	Ministry of Environment, Urbanization, and
			Climate Change
CEB	Council of Europe Development Bank	МоН	Ministry of Health
CERC	Contingent Emergency Response Component	MoTF	Ministry of Treasury and Finance
CPF	Country Partnership Framework	MSME	Micro small-medium enterprises
DRM	Disaster Risk Management	MTR	Mid-term Review
ERR	Economic Rate of Return	NDC	Nationally Determined Contributions
E&S	Environmental and Social	NDP	National Development Plan
ESCP	Environmental and Social Commitment Plan	NGO	Non-governmental Organization
ESF	Environmental and Social Framework	NPV	Net Present Value
ESMF	Environmental and Social Management	OHS	Occupational Health and Safety
	Framework		,
ESMP	Environmental and Social Management Plan	OP	Operational Policy
ESS	Environmental and Social Standards	PAD	Project Appraisal Document
EU	European Union	PDO	Project Development Objective
EUR	Euro	PHC	Primary Health Care
FI	Financial Intermediary	PIU	Project Implementation Unit
FM	Financial Management	PMSU	Project Management Support Unit
GBV	Gender Based Violence	PMU	Project Management Unit
GDCA	General Directorate of Construction Affairs	POM	Project Operations Manual
GDP	Gross Domestic Product	PPSD	Project Procurement Strategy for Development
GFDRR	Global Facility for Disaster Reduction and Recovery		Physical therapy and rehabilitation
GHG	Greenhouse Gas	RFB	Request for bids
GoT	Government of Türkiye	RFQ	Request for quotations
GRADE	Global Rapid Post-Disaster Damage Estimation	SBO	Presidency of Strategy and Budget Office
GRM	Grievance Redress Mechanism	SEA	Sexual Exploitation and Abuse
GRS	Grievance Redress Service	SEP	Stakeholder Engagement Plan
HEIS	Hands-on Enhanced Implementation Support	SH	Sexual Harassment
HSSSP	Health System Strengthening and Support Project	SREEP	Seismic Resilience and Energy Efficiency in Public
			Buildings Project
IBRD	International Bank for Reconstruction and	STEP	Systematic Tracking and Exchanges in
	Development		Procurement
ICR	Implementation Completion and Results	SUTP	Syrians Under Temporary Protection
IDA	International Development Association	TBEC	Turkish Building Earthquake Code
IEG	Independent Evaluation Group	TCIP	Turkish Catastrophic Insurance Pool
IFI	International Finance Institutions	токі	Housing Development Administration
IFR	Interim Unaudited Financial Reports	ToR	Terms of Reference
İLBANK	iller Bankası Anonim Şirketi	TRY	Turkish Lira
IPF	Investment Project Financing	UN	United Nations
IRR	Internal Rate of Return	UNDP	United Nations Development Program
ISMEP	İstanbul Seismic Risk Mitigation and Emergency	UNFCCC	United Nations Framework Convention on Climate
	Preparedness Project		Change
JICA	Japan International Cooperation Agency	WBG	World Bank Group
			i e e e e e e e e e e e e e e e e e e e

TABLE OF CONTENTS

DA	TASHEET	1
I.	STRATEGIC CONTEXT	9
	A. Country Context	9
	B. Sectoral and Institutional Context	12
	C. Relevance to Higher Level Objectives	16
II.	PROJECT DESCRIPTION	20
	A. Project Development Objective	20
	B. Project Components	20
	C. Project Beneficiaries	29
	D. Results Chain	30
	E. Rationale for Bank Involvement and Role of Partners	31
	F. Lessons Learned and Reflected in the Project Design	32
III.	IMPLEMENTATION ARRANGEMENTS	34
	A. Institutional and Implementation Arrangements	34
	B. Results Monitoring and Evaluation Arrangements	38
	C. Sustainability	38
IV.	PROJECT APPRAISAL SUMMARY	39
	A. Technical and Economic Analysis	39
	B. Fiduciary	41
	C. Legal Operational Policies	44
	D. Environmental and Social	44
	E. Gender, Citizen Engagement, and Climate Change	45
V.	GRIEVANCE REDRESS SERVICES	48
VI.	KEY RISKS	48
VII.	RESULTS FRAMEWORK AND MONITORING	50
ANI	NEX 1: Implementation Arrangements and Support Plan	61
ANI	NEX 2: Eligibility and Selection Framework for Component 1	75
	NEX 3: Guiding Principles for Reconstruction	
	NEX 4: Anticipated Climate Co-benefit Adaptation and Mitigation Measures	
	NEX 5: Map of Earthquake-Affected Provinces	
	NEX 6: Team List	
		03

DATASHEET

BASIC INFORMATION				
Country(ies)	Project Name			
Turkiye	ye Türkiye Earthquake Recovery and Reconstruction Project			
Project ID	Financing Instrument	Financing Instrument Environmental and Social Risk Classification Proce		
P180849	Investment Project Financing	Substantial	Urgent Need or Capacity Constraints (FCC)	
Financing & Implementa	tion Modalities			
[] Multiphase Programn	[] Multiphase Programmatic Approach (MPA) [] Contingent Emergency Response Component (CERC)			
[] Series of Projects (SO	P)	[] Fragile State(s)		
[] Performance-Based C	Conditions (PBCs) [] Small State(s)			
[] Financial Intermediar] Financial Intermediaries (FI) [] Fragile within a non-fragile Country			
[] Project-Based Guarar	[] Project-Based Guarantee [] Conflict			
[] Deferred Drawdown] Deferred Drawdown [√] Responding to Natural or Man-made Disaster			
[] Alternate Procuremen	nt Arrangements (APA)	[√] Hands-on Enhanced Implen	nentation Support (HEIS)	
Expected Approval Date	Expected Closing Date			
27-Jun-2023	30-Jun-2028			
Bank/IFC Collaboration				
No				

Proposed Development Objective(s)

The Project Development Objective is to restore access to essential municipal and health services and resilient housing in selected provinces affected by the February 2023 earthquakes in Türkiye.

Components		
Component Name		Cost (US\$, millions)
Component 1: Restoration o	f Municipal Infrastructure and Services	420.00
Component 2: Restoration o	f Health Services	270.00
Component 3: Rural Housing	g Reconstruction and Recovery	290.00
Component 4: Project Mana	gement, Monitoring and Evaluation	20.00
Organizations		
Borrower:	Republic of Türkiye	
Implementing Agency:	Iller Bankasi Anonim Sirketi Ministry of Environment, Urbanization, and Climat Ministry of Health	e Change
PROJECT FINANCING DATA	(US\$, Millions)	
SUMMARY		
Total Project Cost		1,000.0
	Total Financing	
		1,000.0
		1,000.0

World Bank Group Financing

International Bank for Reconstruction and Development (IBRD)	1,000.00
Expected Disbursements (in US\$, Millions)	

WB Fiscal Year	2023	2024	2025	2026	2027	2028
Annual	0.00	290.00	250.00	250.00	150.00	60.00
Cumulative	0.00	290.00	540.00	790.00	940.00	1,000.0

1,000.00

1,000.00

1,000.00

0.00

0 **INSTITUTIONAL DATA Practice Area (Lead) Contributing Practice Areas** Urban, Resilience and Land Health, Nutrition & Population, Water **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 Moderate 2. Macroeconomic Substantial 3. Sector Strategies and Policies Moderate 4. Technical Design of Project or Program Moderate 5. Institutional Capacity for Implementation and Sustainability Moderate Substantial 6. Fiduciary 7. Environment and Social Substantial 8. Stakeholders Low 9. Other 10. Overall Substantial **COMPLIANCE Policy** Does the project depart from the CPF in content or in other significant respects? [] Yes [√] No

Does the project require any waivers of Bank policies?	
[] Yes [√] No	
Environmental and Social Standards Relevance Given its Context at the Time of	f Appraisal
E & S Standards	Relevance
Assessment and Management of Environmental and Social Risks and Impacts	Relevant
Stakeholder Engagement and Information Disclosure	Relevant
Labor and Working Conditions	Relevant
Resource Efficiency and Pollution Prevention and Management	Relevant
Community Health and Safety	Relevant
Land Acquisition, Restrictions on Land Use and Involuntary Resettlement	Relevant
Biodiversity Conservation and Sustainable Management of Living Natural Resources	Relevant
Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional	Not Currently Relevant

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

Relevant

Not Currently Relevant

Legal Covenants

Local Communities

Financial Intermediaries

Cultural Heritage

Sections and Description

Loan Agreement (LA), Schedule 2, Section I.A.1 (c). For the implementation of Parts 1 and 4.A of the Project, the Borrower, through ILBANK, shall by no later than thirty (30) days following the Effective Date, establish, and thereafter maintain throughout Project implementation, a Project Implementation Unit, with functions and responsibilities, qualified staffing, budgetary resources, and authority necessary and appropriate, in the opinion of the Bank, for the satisfactory implementation of the said Parts of the Project, with the involvement of ILBANK's other relevant departments.

Sections and Description

LA, Schedule 2, Section I.A.2 (b). For the implementation of Parts 2 and 4.B of the Project, the Borrower, through MoH, shall by no later than thirty (30) days after Effective Date, finalize and adopt an MoH Project Operations Manual (POM), satisfactory to the Bank.

Sections and Description

LA, Schedule 2, Section I.A.3 (c). For the implementation of Parts 3 and 4.C of the Project, the Borrower, through MoEUCC, shall by no later than thirty (30) days following the Effective Date, establish, and thereafter maintain throughout Project implementation, a Project implementation unit, with functions and responsibilities, qualified staffing, budgetary resources, and authority necessaryand appropriate, in the opinion of the Bank, for the satisfactory implementation of the said Parts of the Project.

Sections and Description

LA, Schedule 2, Section I.A.4 (a) and (b). For Parts 1 and 4.A of the Project, the Borrower, through ILBANK, shall execute with each beneficiary municipality (or affiliated utility, as relevant), and maintain throughout Project implementation, a formal written agreement ("ILBANK-Municipality Protocol") that sets forth the terms and conditions, acceptable to the Bank, governing the relationship between the beneficiary municipality (or affiliated utility) and ILBANK for the implementation of Part 1 and, as relevant, Part 4.A of the Project, and shall execute the ILBANK-Municipality Protocols with each beneficiary municipality (or affiliated utility) prior to ILBANK's launch of bids for the related works contracts in the respective beneficiary municipality (or for an affiliated utility).

Sections and Description

LA, Schedule 2, Section I.A.5 (a). For Part 3 of the Project, the Borrower, through MoEUCC, shall execute with AFAD, and maintain throughout Project implementation, a formal written agreement ("MoEUCC-AFAD Protocol"), defining their respective roles and responsibilities for the implementation of Part 3 of the Project, in form and substance acceptable to the Bank.

Sections and Description

LA, Schedule 2, Section I.B.1. The Borrower, through each Project Implementing Agency, shall maintain throughout Project implementation, a respective ILBANK POM (for Parts 1 and 4.A of the Project), MoH POM (for Parts 2 and 4.B of the Project), and MoEUCC POM (for Parts 3 and 4.C of the Project) (collectively, "POMs"), in substance and manner acceptable to the Bank, to carry out the Project.

Sections and Description

LA, Schedule 2, Section I.C.1 and 2. In carrying out Part 1 of the Project, the Borrower, through ILBANK, shall ensure that, unless otherwise agreed to by the Bank in writing and thereafter incorporated into the ILBANK POM all selected investments are appraised, selected and prioritized in accordance with the eligibility requirements and standards and procedures acceptable to the Bank, as setforth in the LA, and as may be further detailed in the ILBANK POM.

Sections and Description

LA, Schedule 2, Section I.C.1 and 3. In carrying out Part 2 of the Project, the Borrower, through MoH, shall ensure that, unless otherwise agreed to by the Bank in writing and thereafter incorporated into the MoH POM, all selected investments are appraised, selected (including determination of the geographical distribution) and prioritized in accordance with the eligibility requirements and standards and procedures acceptable to the Bank, as set forth in

the LA, and as may be further detailed in the MoH POM.

Sections and Description

LA, Schedule 2, Section I.C.1, 5, 6, and 8. In carrying out Part 3 of the Project, the Borrower, through MoEUCC, shall ensure that, unless otherwise agreed to by the Bank in writing and thereafter incorporated into the MoEUCC POM, all selected investments are appraised, selected and prioritized in accordance with the eligibility requirements and standards and procedures acceptable to the Bank, as set forth in the LA, and as may be further detailed in the MoEUCC POM.

Sections and Description

LA, Schedule 2, Section I.C.7. The Borrower, through MoEUCC, shall furnish to the Bank for prior review and approval the proposed sets of damaged villages and relocation sites (where applicable), ensuring that the rural housing to be reconstructed is compliant with the Bank's Environmental and Social Standards and has clear title.

Sections and Description

LA, Schedule 2, Section I.C.9. In carrying out Part 3.A(i) of the Project: (a) the Borrower, through MoEUCC, shall ensure that affected communities have been consulted and eligible Property Owners are informed of their options under the housing reconstruction program; (b) for resilient reconstruction of rural houses and/or Livelihood Buildings assessed as collapsed, severely or moderately damaged, preference shall be given for in-situ reconstruction to the extent possible under the Project; where relocation is inevitable due to geotechnical and/or climate hazards, resettlement plots for reconstruction shall be on government-owned land and any resettlement shall be in full compliance with the Bank's Environment and Social Standards; and (c) the Borrower, through MoEUCC, shall reconstruct rural housing and/or Livelihood Buildings in accordance with the latest seismic building codes, incorporate energy reduction measures through siting, orientation, and design with Turkish Class C (or better) Energy Performance Certification.

Sections and Description

LA, Schedule 2, Section I.C.10. For Part 3.A(ii) of the Project, eligible investments, including, inter alia, water, sanitation, roads, street lighting, and social facilities, shall consider both seismic and climate risks to ensure adaptation to climate change and contribute to climate change mitigation.

Sections and Description

LA, Schedule 2, Section I.C.11. In carrying out Part 3.A of the Project, the Borrower, through MoEUCC, shall, on behalf of AFAD: (a) procure, contract, and supervise all required civil works, including the hiring of the related contractors and supervision consultants; (b) inspect and certify the civil works meet the relevant requirements set forth in this Agreement prior to allowing the occupancy of said buildings and facilities; and (c) ensure that the responsible contractors have obtained the occupancy permits confirming compliance of the construction with the approved designs, latest seismic building codes, and other legal requirements in coordination with MoEUCC and the local authorities.

Sections and Description

LA, Schedule 2, Section I.C.12. In carrying out Part 3 of the Project, the Borrower, through MoEUCC, shall ensure that: (a) the eligible Property Owners who opt to participate in the housing program financed under Part 3 of the Project shall submit a letter of request and undertaking and subsequently enter into a lending agreement, for the purpose of participating as a beneficiary under Part 3 of the Project; said agreement shall be on terms and

conditions acceptable to the Bank, including with reasonable terms and conditions relating to maturity and repayment of the concessional loans taken by the beneficiaries for the repayment of the reconstruction works under the housing reconstruction program; and (b) obtain, through the said letter of request and undertaking and lending agreement, rights adequate to protect the interests of the Borrower and the Bank.

Sections and Description

LA, Schedule 2, Section I.C.13 (a). Without prejudice to any review requirements set forth in the ESCP and the Procurement Regulations, in carrying out Part 1 of the Project, the Borrower, through ILBANK, shall submit proposed priority investments to the Bank for prior review and approval before launching the bids for the related works contract(s) (unless otherwise agreed to by the Bank and thereafter incorporated in the ILBANK POM).

Sections and Description

LA, Schedule 2, Section I.C.13 (b). Without prejudice to any review requirements set forth in the ESCP and the Procurement Regulations, in carrying out Part 3 of the Project, the Borrower, through MoEUCC, shall submit to the Bank, for prior review and approval, the proposed sets of damaged villages and relocation sites, where applicable, confirming the rural housing to be reconstructed is in line with the Bank's Environmental Social Standards before launching the bids for the related works contract(s) (unless otherwise agreed to by the Bank and thereafter incorporated into the MoEUCC POM).

Sections and Description

LA, Schedule 2, Section I.D.2. The Borrower, through the Project Implementing Agencies, shall ensure that the respective parts of the Project are implemented in accordance with the Environmental and Social Commitment Plan, in a manner acceptable to the Bank.

Sections and Description

LA, Schedule 2, Section I.E.1(a) and (b). The Borrower, through the Project Implementing Agencies, shall (a) prepare and furnish to the Bank not later than August 1st of each year (as such date may be revised with the prior agreement of the Bank and incorporated in the POMs) during the implementation of the Project, a proposed Annual Work Plan and Budget, afford the Bank a reasonable opportunity to exchange views on each such proposed Annual Work Plan and Budget, and shall thereafter ensure that the Project is implemented with due diligence during said following year, in accordance with such Annual Work Plan and Budget as shall have been approved by the Bank.

Conditions

Туре	Financing source	Description
Disbursement	IBRD/IDA	LA, Schedule 2, Section III.B.1(b). No withdrawal shall be made for
		expenditures under Category 1 of the Project, unless and until: (i)
		the Bank and ILBANK have executed a Project Agreement for Parts 1
		and 4.A of the Project in form and substance acceptable to the
		Bank; and (ii) the Borrower, through ILBANK, shall have prepared
		and adopted the ILBANK POM for Parts 1 and 4.A of the Project.

Туре	Financing source	Description
Disbursement	IBRD/IDA	LA, Schedule 2, Section III.B.1(c). No withdrawal shall be made for
		expenditures under Category 3 of the Project, unless and until: (i)
		the Borrower, through MoEUCC, shall have prepared and adopted
		the MoEUCC POM for Parts 3 and 4.C of the Project; and (ii) the
		Borrower, through MoEUCC, shall have executed the MoEUCC-
		AFAD Protocol with AFAD for the implementation of activities under
		Part 3 of the Project.

I. STRATEGIC CONTEXT

A. Country Context

- 1. On February 6, 2023, two earthquakes of magnitude 7.8 and 7.5¹ hit southeast Türkiye and Syria; these were followed by thousands of aftershocks, and another earthquake of magnitude 6.7² on February 20, 2023. The epicenters of the first two earthquakes were in Kahramanmaraş Province with neighboring provinces of Adana, Adıyaman, Diyarbakır, Elazığ, Gaziantep, Hatay, Kilis, Malatya, Osmaniye, and Şanlıurfa³ (the earthquake-affected provinces) all suffering damages. The epicenter of the third earthquake was in Hatay causing further damage to the region. According to official statistics, the earthquakes resulted in over 50,000 casualties, 107,000 people injured including many disabled, 1.9 million housing units damaged or destroyed, 3.3 million people displaced, and almost 2 million in need of shelter in camps and container settlements. The eleven affected provinces have an area of about 110,000 square kilometers (equivalent in size to the Republic of Korea and larger than many European countries), was home to 14 million Turkish citizens (16.4 percent of the country's population) and 1.8 million Syrians under Temporary Protection (SuTPs)⁴, and accounted for 9.4 percent of Turkish gross domestic product (GDP) and 8.6 percent of exports in 2022. Income per capita in these provinces lags behind the rest of the country, and poverty rates are higher.⁵
- 2. The earthquakes have caused massive damage and the macroeconomic impacts are still unfolding. A World Bank Global Rapid Post-Disaster Damage Estimation (GRADE)⁶, prepared within two weeks of the disaster, estimated initial direct physical damages of the earthquakes at US\$34.2 billion, the equivalent of 4 percent of Türkiye's 2021 GDP. The report highlighted that recovery and reconstruction costs would be much higher, potentially twice as high, as more detailed assessments were required, and GDP losses associated with economic disruptions would also add to the cost of the earthquakes. The Government of Türkiye (GoT) conducted a more in-depth needs and loss assessment⁷ with support from the European Union (EU), United Nations Development Program (UNDP), and World Bank Group (WBG) that was presented at a donor conference on March 20, 2023. This assessment estimated recovery and reconstruction needs at US\$81.5 billion.⁸ The impact on macro-financial conditions of the February 2023 earthquakes is still unfolding, with further implications expected for growth, labour markets and poverty, the financial sector, and fiscal and external balances. The net effects of the earthquakes on economic activity are expected to be mildly negative in 2023, and positive in 2024 as reconstruction activity offsets the disruption to productive sectors in the affected region.
- 3. The earthquakes have struck Türkiye at a time when the country is facing significant macroeconomic pressures. Türkiye enjoyed high economic growth rates between 2002-20 (5.2 percent on average) that supported rapid poverty

¹ Based on figures from the United States Geological Survey Earthquake Catalog (https://earthquake.usgs.gov/earthquakes/search/). Boğaziçi University Kandilli Observatory and Earthquake Research Institute estimated magnitudes as 7.7 and 7.6

² Based on figures from the United States Geological Survey Earthquake Catalog (https://earthquake.usgs.gov/earthquakes/search/).

³ Ten of these provinces were declared as "disaster areas affecting normal life" on February 7, 2023, and Elazığ Province was declared as "disaster area affecting normal life" on February 15, 2023, by AFAD. In addition, AFAD declared Gürün District of Sivas Province and neighboring districts in Bingöl, Kayseri, Mardin, Tunceli, Niğde and Batman Provinces that contain damaged buildings due to the February earthquakes as "disaster areas affecting normal life" on February 21 and April 3, 2023, respectively.

⁴ https://www.goc.gov.tr/gecici-koruma5638, February 2, 2023

⁵ Türkiye's Future Transitions, Systematic Country Diagnostic, World Bank. 2016

 $^{^{6}\,}GRADE\,\,report\,\,is\,\,available\,\,at:\,\,https://documents.worldbank.org/en/publication/documents-reports/documentdetail/099022723021250141/p1788430ae\,\,b62f08009b2302bd4074030fb$

⁷ 2023 Kahramanmaraş and Hatay Earthquakes Assessment Report, Strategy and Budget Office, Government of Türkiye (available at: https://www.sbb.gov.tr/wp-content/uploads/2023/03/2023-Kahramanmaraş-and-Hatay-Earthquakes-Report.pdf)

⁸ This estimate is broadly consistent with the initial GRADE estimates, especially considering that the GoT assessment uses data collected until March 3, 2023, including additional damage caused by the February 20 earthquake in Hatay. The GoT assessment refers to a financial burden of US\$ 103.6 billion which comprises losses (such as emergency expenditures, debris management, GDP losses, insurance) in addition to the recovery and reconstruction needs.

reduction with the poverty rate nearly halving from above 20 percent in 2007 to 12.9 percent⁹ in 2020 (Upper-Middle Income poverty rate of US\$6.85 in 2017 Purchasing Power Parity). As in other countries, the COVID-19 pandemic had a negative impact on growth in 2020, but the country was one of the few that did not register a GDP contraction that year (1.9 percent). This performance was due to a large extent to the GoT's economic policy response to the pandemic focusing on loosening monetary policy and rapid credit expansion. Moreover, supported by domestic and external demand, Türkiye achieved double-digit GDP growth in 2021 (11.4 percent) and maintained significant momentum in 2022 (5.6 percent). However, the policy framework that ensured a strong economic performance during and in the aftermath of the pandemic compounded by the effects of Russia's invasion of Ukraine also heightened macroeconomic risks, including rising inflation (with annual inflation reaching 43.7 percent in April 2023 after having peaked at 85.5 percent in October 2022), currency depreciation (69 percent against the US\$ between January 2020 and April 2023), and a decline in reserve buffers.

4. Beyond Türkiye's vulnerability to earthquakes, the country is also vulnerable to climate-related disasters, which have significant social and economic impacts and hamper the country's ability to recover from recent multiple crises. About 70 percent of Türkiye's population live in first- and second-degree seismic zones. According to the United Nations (UN), Türkiye ranks 9th globally with regards to human losses due to earthquakes.¹⁰ Not including the February 2023 earthquakes, Türkiye has experienced 39 earthquakes with a magnitude of 5 and above since 1990 resulting in approximately 20,000 fatalities, a total affected population of 4.4 million, and direct damages exceeding US\$43 billion. 11 The country's exposure to climate-related hazards like flooding and wildfires is also considered high and further contributes to the country's vulnerability. Climate-related disasters have been striking with greater frequency and intensity over the last two decades. In 2019 alone, 935 extreme events occurred, caused mainly by heavy rains/floods, windstorms, snow, and hail. 12 Climate models predict worsening of this trend with anomalies in precipitation patterns and temperature increases leading to more frequent extreme rain and flooding on one hand, and extreme heat, protracted drought, and wildfires on the other.13 This can create compound risks; for example, on March 15, 2023, torrential rains caused flooding and further damage in regions affected by the February 2023 earthquakes. Increased disaster frequency and intensity also has a range of implications for health, such as the spread of water and/or vectorborne diseases, and the increase of heat-related illnesses and mortality. Average Annual Losses (AAL) to GDP from earthquakes in Türkiye are estimated at US\$10 billion, and impact 1 million people on average annually. Floods result in an AAL to GDP of US\$5 billion and impact an estimated 600,000 people on average annually14. Disasters also disproportionally affect women and other vulnerable groups in terms of labor force participation, unemployment, relative asset losses, among other outcomes.¹⁵ In Türkiye, women's low economic participation, access to finance, emergency funds and supplies, and gender-based violence have been assessed as ongoing challenges. 16

Situation of Urgent Need or Capacity Constraints

5. The February 2023 earthquakes had a catastrophic impact on critical infrastructure, social facilities, housing, and livelihoods. Critical sectors such as housing, municipal services, transportation, healthcare, education, agriculture, and energy were greatly affected in the impacted provinces. The impacts of the earthquakes are particularly detrimental

⁹ World Bank staff estimates

¹⁰ Turkey's Future Transitions, Systematic Country Diagnostic. World Bank, 2016

¹¹ EM-DAT, CRED / UC Louvain, Brussels, Belgium – www.emdat.be

¹² 2019 recorded the highest number of hydrometeorological disasters and floods that occurred between 1944-2019. Turkish State Meteorological Service (2020). State of the Climate in Türkiye in 2019 (https://www.mgm.gov.tr/FILES/genel/kitaplar/2019MeteorologikAfetlerDegerlendirmesi.pdf)

¹³ Republic of Türkiye. Ministry of Environment and Urbanization, 2018. Seventh National Communication to the UNFCCC.

¹⁴ Europe and Central Asia Risk Profiles: Turkey. World Bank. April 17, 2017. Available at https://www.gfdrr.org/en/publication/disaster-risk-profile-turkey

¹⁵ Erman, A. et al. 2021. Gender Dimensions of Disaster Risk and Resilience: Existing Evidence. World Bank, Washington, DC. https://openknowledge.worldbank.org/handle/10986/35202

¹⁶ World Bank. 2018. Turkey Country Gender Assessment 2017. https://elibrary.worldbank.org/doi/epdf/10.1596/35974

given that, as mentioned above, the most affected provinces also have some of the highest poverty rates in Türkiye¹⁷ and host almost half of all SuTPs in the country.¹⁸ In fact, fatalities include at least 6,600 SuTPs and the number of SuTPs residing in temporary accommodation facilities in the eleven earthquake-affected provinces increased from around 47,000 to about 88,000 in the wake of the earthquakes¹⁹, while nearly 146,000 SuTPs were granted travel permits allowing them to temporarily relocate to other provinces.²⁰ In this context, downward income mobility has become a concern, especially for low-income families, including SuTPs. Furthermore, a significant portion of the population is now at risk of falling further into poverty due to financial difficulties from loss of assets paired with a rise in unemployment and under-employment as a result of the earthquakes.

- 6. The GoT has been engaged in emergency response efforts since the immediate aftermath of the earthquakes. The Disaster and Emergency Management Presidency (AFAD), different levels of government, and international partners assisted with the immediate response efforts focused on search and rescue and addressing the needs for shelter, basic hygiene, and health of the earthquake survivors. The Government also established an initial fund of US\$4.5 billion (TRY 87 billion)²¹ to support emergency expenditures for a range of activities including urgent repairs to lifeline infrastructure, setting up tent camps to shelter displaced people, providing cash payments to affected households²², conducting damage assessments across the region, initiating debris removal, and launching emergency civil works to construct 100,000 new housing units²³, mostly in new urban settlements with the associated public infrastructure. In addition, the GoT has been providing additional social assistance to eligible families among the affected population under programs administered by the Ministry of Family and Social Services.
- 7. The GoT March 2023 needs assessment highlights that the housing, public infrastructure and buildings, and health sectors have the greatest and most urgent needs. The report estimates the recovery and reconstruction needs for housing at US\$56.9 billion, for public infrastructure and buildings at US\$12.9 billion, and for health at US\$4.3 billion. The Government has initiated recovery and reconstruction planning by utilizing the Turkish Post-Disaster Recovery Plan. This plan envisages the participation of various government agencies, multilateral and bilateral development partners, non-governmental organizations (NGOs), community organizations, and the private sector.
- 8. In this context, the GoT has requested support from the World Bank to fill a critical financing gap for the restoration of critical health and municipal services and to strengthen the second stage of rural housing reconstruction. It is important for the GoT to fill the financing gap for recovery and reconstruction associated with the February 2023 earthquakes. As part of a broader package of WBG support to the GoT after the earthquakes (see more in Section C. Relevance to Higher Level Objectives), the proposed Project will provide a portion of the massive financing needed to support recovery and reconstruction efforts in priority areas identified in the GoT needs assessment (i.e., health, municipal services, housing), complemented with capacity building and technical assistance. The Project will support both activities addressing urgent health needs that will have almost immediate positive impacts on people affected by the earthquakes (such as provision of temporary health care facilities) as well as activities tackling equally critical municipal services needs but whose delivery will take longer due to their complexity and scale (such as reconstruction of municipal

¹⁷ Defined as below US\$6.85 per day, Source: Survey of Income and Living conditions 2020 (SILC 2020).

¹⁸ https://en.goc.gov.tr/temporary-protection27

^{19 2023} Kahramanmaraş and Hatay Earthquakes Assessment Report, Strategy and Budget Office, Government of Türkiye

²⁰ Türkiye Earthquake, Humanitarian Needs and Response Overview, 11 April 2023

²¹ 2023 Kahramanmaraş and Hatay Earthquakes Assessment Report, Strategy and Budget Office, Government of Türkiye

²² AFAD made one-time emergency aid payments of US\$ 527 to approximately 1.7 million affected households, totaling nearly US\$ 896 million. Moving and rental assistance payments to households whose homes were destroyed, heavily or moderately damaged have also started. To date, AFAD made payments totaling over US\$134 million to 175,262 households among this group who will not be housed in government-provided container cities

²³ https://csb.gov.tr/bakan-kurum-bugun-sanliurfa-mizda-100-bininci-yuvamizin-sozlesmesini-yapiyoruz-temellerini-atiyoruz-bakanlik-faaliyetleri-38545

²⁴ 2023 Kahramanmaraş and Hatay Earthquakes Assessment Report, Strategy and Budget Office, Government of Türkiye

water and sanitation infrastructure). It will also support the second stage of housing reconstruction in affected rural areas, bringing in global expertise.²⁵ Moreover, the proposed Project has the potential to be a framework to crowd in additional financing for resilient recovery of disaster-affected areas from other development partners and international financial institutions (IFIs) (see also Section II.E. Rationale for Bank Involvement and Role of Partners).

9. Due to the magnitude and impact of the earthquakes as well as the urgent need of financing and assistance, the Project is being processed under Condensed Procedures as per the World Bank Procedure on Preparation of Investment Project Financing (IPF) for Projects in Situations of Urgent Need of Assistance or Capacity Constraints. The Project is being prepared and implemented according to Paragraph 12, IPF Policy, which allows for certain exceptions to the IPF policy requirements if the Bank deems the Borrower to be in urgent need of assistance because of a disaster or experience capacity constraints because of fragility or specific vulnerabilities.

B. Sectoral and Institutional Context

- 10. Türkiye has enacted significant regulatory and institutional reforms in the last decades to strengthen its emergency response, recovery, and disaster risk management (DRM) system. Building on lessons from the 1999 Marmara Earthquake, Law No.5902 on the Establishment and Duties of the Disaster and Emergency Management Authority (AFAD) was adopted in 2009, shifting focus from a disaster response-focused approach to also covering disaster risk reduction and preparedness, involving multi-sectoral coordination and participation at the local level. The Law provided the legal and institutional basis to cover disaster risk from a holistic perspective and compelled the country to establish a single government institution (AFAD) to coordinate in cases of disaster and emergencies. Various DRM strategies have also been adopted to facilitate disaster response planning as well as disaster risk reduction across the country, which are aligned with the strategic priorities defined in the Sendai Framework (2015-2030).
- Similarly, Türkiye has implemented important reforms to reduce seismic risk in the built environment, often in 11. response to major disaster events, but challenges remain regarding enforcement and the legacy of millions of premodern code buildings. Türkiye's building codes have been successively improved with a major revision following the 1999 Marmara earthquakes that introduced modern seismic construction standards, integrated construction considerations for snow and wind loading, and prohibited construction of public buildings in flood zones. The latest revision to the seismic building code came into force in January 2019 (known as TBEC-2018) replacing the 2007 code revision and largely reflects international good practice.²⁶ Other important reforms were the introduction of a building inspection system through Law No. 4708 in 2001 to improve code compliance, the establishment of the Turkish Catastrophic Insurance Pool (TCIP) in 2000 to provide earthquake insurance for urban housing and support financial recovery after disasters, and the enactment of the Law on the Transformation of Areas under Natural Disaster Risk (Law 6306) in 2012 introducing a systematic approach to enhance the seismic and climate resilience of housing and critical infrastructure. Yet, much of the building stock in Türkiye was built prior to 2001, when modern seismic codes and building inspection were rolled out into construction practices, and, as such, is considered to be vulnerable with higher chance of serious damage or collapse in an earthquake but also extreme weather events such as snow or wind loading. In contrast, buildings constructed with strong adherence to the 2007 or 2019 codes are generally considered by engineers as

²⁵ Reconstruction of urban housing is already underway in the form of mass housing developments in new locations implemented through Türkiye's Housing Development Administration (TOKİ). More time is needed for assessments, planning, and debris removal in affected cities to start in-situ reconstruction of urban housing as well. The GoT and Bank therefore agreed to initially focus on rural housing under this Project.

²⁶ The TBEC-2018 code has similar features to the Eurocode 8 for Design of Structures for Earthquake Resistance and the American Society of Civil Engineers' Minimum Design Loads and Associated Criteria for Buildings and Other Structures (ASCE 7-16). In addition, energy efficiency standards were also increased considerably in Türkiye over the last decades. The building sector in Türkiye was responsible for about 11 percent of total emissions in 2019 and is less energy efficient than the EU average. Incorporating energy efficiency in the residential building stock is a priority for the GoT under its 2007 Energy Efficiency Law (Law No. 5627) and the latest code requires new buildings to meet at a minimum Class C Energy Performance Certification standard.

sufficiently resistant to earthquakes to ensure life safety, even if some damage is sustained. However, code compliance has reportedly been mixed, particularly on design aspects, despite the inspection system. Amnesties granted for informal settlements to secure land tenure and access to municipal services for their residents may have also contributed to the continuation of irregular housing construction practices vulnerable to disasters. In addition, despite being mandatory for urban housing, TCIP insurance coverage is only 58.7 percent across the country.²⁷

- 12. The impacts of the February 2023 earthquakes on the municipal infrastructure and services sector are significant, both in the short and medium- to long-term. Preliminary government assessments estimate the damage to municipal water and sanitation facilities and utilities (including water and sewage networks, water treatment plants, and wastewater treatment plants) at US\$705 million, while at least 1,188 kilometers of municipal roads were damaged at an estimated cost of about US\$177 million.²⁸ However, the figures for municipal infrastructure damage will likely be much larger once ongoing field damage assessments are completed, especially for underground infrastructure. In addition, many municipal service buildings were destroyed or heavily damaged, many of which were built before the introduction of modern seismic and energy efficiency standards. Furthermore, about 20 percent of municipal service vehicles (including ambulances, firetrucks, garbage trucks, street sweeping vehicles, sewage trucks, funeral vehicles, etc.) suffered damages that rendered them unusable. The combined damages have significantly impacted the capacity of municipalities to deliver critical services, including basic sanitation and emergency response. The initial estimate of additional needs in the context of rehabilitation and reconstruction of municipal buildings and facilities (including fire stations) and solid waste infrastructure is about US\$125.5 million.
- 13. The earthquakes have had a major impact on the financial and technical capacity of the affected municipalities to restore municipal services. The carrying capacity of municipalities in the affected region was already stretched before the earthquakes with ongoing efforts to scale up municipal infrastructure and services to meet increased demand of both Turkish citizens and SuTPs in the region.²⁹ The effects of the earthquakes have exacerbated this challenge. As a result of their focusing on the ongoing emergency response, affected municipalities currently have limited capacity to finance infrastructure investments, including limited ability to borrow. Municipalities, particularly those close to the epicenters, also suffered human losses due to the earthquakes,³⁰ impacting their staff capacity to execute and manage extensive reconstruction efforts, which also involve coordination across central and municipal government agencies. In recognition of these limitations, the GoT has recently introduced legislation change enabling the Ministry of Treasury and Finance (MoTF) to allocate external financing to iller Bankası A.S. (İLBANK), the government's municipal development and investment bank, to support rehabilitation and/or reconstruction of municipal investments on a grant-basis for the municipalities affected by the earthquakes. Given the limited capacity of several municipalities resulting from the earthquakes, the GoT has designated İLBANK to take on implementation responsibilities for reconstruction investments on behalf of affected municipalities.
- 14. Immediate health needs in the affected areas are also significant due to disruptions to health care delivery, increased demand for health care services, and healthcare supply shortages. Prior to the earthquakes, the health sector in the earthquake-affected provinces was well developed, constituting 12.5 percent of public hospitals in Türkiye (116 out of 927³¹) and 17.5 percent of primary-level health care (PHC) centers in the country through a network of Family Medicine Centers (2,454 out of 14,031). Family Medicine Centers provided essential health services including preventive

²⁷ https://dask.gov.tr/tr/yururlukteki-policeler, retrieved on April 26, 2023.

²⁸ 2023 Kahramanmaraş and Hatay Earthquakes Assessment Report, Strategy and Budget Office, Government of Türkiye

²⁹ European Union's ongoing Facility for Refugees in Türkiye program covers six densely SuTP populated provinces in the earthquake-affected provinces, focusing on humanitarian assistance, education, migration management, health, municipal infrastructure, and socio-economic support.

³⁰ At least 406 municipal staff died in the earthquakes, many more were injured or unable to resume work as their houses were destroyed.

³¹ The number of hospital beds per 10,000 (32.3) was higher than the national rate at 31.3 beds per 10,000 population.

care, reproductive health, maternal and childcare, immunization, as well as screening and treatment of chronic conditions. PHC service provision in the region was in line with the national performance for both Turkish citizens and SuTPs, with a particular emphasis on women's health. To illustrate, antenatal care (ANC) coverage³² in the Southeastern Anatolia was 95.7 percent for Turkish citizens and 92.9 percent for SuTPs (compared to the national average of 96.4 percent).33 Similarly, percentage of births assisted by a skilled provider was 98.9 percent for Turkish citizens and 97.5 percent for SuTPs³⁴, implying equity in PHC service provision. Damage to healthcare facilities and health worker shortages significantly hindered health service delivery in the aftermath of the earthquakes. About 31 percent of hospitals (including public, private, and university hospitals) sustained severe or moderate damages, and most of the remaining ones suffered slight damages. Similarly, PHC facilities and public health laboratories, imaging centers and vaccine warehouses were severely damaged. In addition, at least 448 health workers died, 528 were injured, and many were unable to resume work as their homes were destroyed. Health services have been limited not only for patients injured by the earthquake, but also for patients with chronic illnesses such as diabetes, pulmonary and cardiovascular disease and patients requiring advanced treatments such as chemotherapy and dialysis.

- 15. Disruption in health services increased access barriers to routine care such as vaccination and maternal and child health services, while demand for disability and mental health care increased drastically. An estimated 130,000 pregnant women are among the population directly affected by the earthquakes with about 14,400 births per month (estimated under normal circumstances) requiring medical attention.³⁵ There is a radical increase in demand for disability care and mental health services in the aftermath of the earthquake, alongside the depletion of medical supplies and medicines needed for those with existing health conditions. There is also a risk for the infectious diseases in the earthquake-affected region, especially in the tented settlements, where crowded shelters and limited access to water, hygiene products and cleaning supplies increase health risks. Women in the earthquake-affected provinces also experience greater difficulty in accessing basic supplies and services, including baby formula and diapers. In addition, globally, disasters are often associated with an increase in gender-based violence, with women and children being particularly vulnerable.36
- 16. The large displacement of population affected by the earthquakes, between and within provinces, creates additional challenges for the restoration of health service delivery in the short- and medium term. The two million displaced people who have been sheltered in tented camps, especially in the more severely affected provinces like Hatay, Adiyaman, Kahramanmaras, and Malatya, are expected to move to prefabricated container homes and other transitional housing until permanent housing reconstruction is completed. Many affected people also live in rural settlements scattered across the earthquake-affected provinces. Mobile health care provision is required in the short term to respond to the health care needs of these groups. In addition, millions of affected people moved, and patients were transferred, to other cities that were less or not affected by the earthquakes, such as Antalya, Ankara, Mersin, Sivas, Kayseri, İstanbul, İzmir, Kocaeli and Kütahya, where additional medical equipment and goods will also be needed to meet the surge in demand for health services.
- Over 34 percent of the existing housing stock across the earthquake-affected provinces (about 1.9 million urban 17. and rural units) has sustained damage from the February 2023 earthquakes. Of these, the Ministry of Environment,

³² ANC coverage refers to the percentage of women with a live birth in the five years preceding the survey who received ANC from a skilled health provider.

³³ Turkey Demographic Health Survey 2018 and Turkey Demographic Health Survey 2018 for Syrian Migrant Sample, Hacettepe University Institute of Population Studies.

³⁴ Ibid.

³⁵ United Nations Population Fund, "Türkiye/Syria Earthquake. Joint Situation Report #1", updated March 20, 2023, https://eeca.unfpa.org/sites/default/files/pub-pdf/earthquake_joint_sitrep_1_-_f5.pdf

³⁶ Erman, A. et al. 2021. Gender Dimensions of Disaster Risk and Resilience: Existing Evidence. World Bank, Washington, DC https://openknowledge.worldbank.org/server/api/core/bitstreams/80f2e78e-f04f-5a59-86a6-9cfe6bcd7b87/content

Urbanization, and Climate Change (MoEUCC) assessed 27 percent (518,000) as collapsed or severely damaged, 7 percent (132,000) as moderately damaged, and about 66 percent (1,300,000) as lightly damaged requiring minor repairs. Damage was compounded by the age of buildings in the affected provinces, with as much as 38 percent³⁷ of the building stock in the earthquake-affected provinces constructed prior to 2000, i.e., prior to the roll-out of modern seismic building codes, energy efficiency and thermal insulation standards. Preliminary cost estimates for reconstruction of collapsed or severely and moderately damaged housing is US\$54.7 billion, while the repair of lightly damaged housing is estimated at US\$0.7 billion.³⁸ Average TCIP coverage for urban housing in the earthquake-affected provinces was only about 53 percent.³⁹

- 18. According to Turkish legislation, 40 AFAD has the overall responsibility for coordinating post-disaster housing reconstruction and has a range of programs and implementing partners at its disposal, including MoEUCC. Typically, various programs support both urban and rural post-disaster housing reconstruction in Türkiye, which are tailored according to the scale and impact of the disaster with a focus on beneficiary preferences and consultation. Implementation of the government-led housing reconstruction modality is normally carried out by MoEUCC and its affiliated institutions, such as the Housing Development Administration (TOKI), at the request of AFAD. In response to this disaster, reconstruction of urban housing units is largely being carried out through TOKI considering its extensive experience and capacity. For rural housing, given the large area affected by the earthquakes, AFAD has also activated the state-led post-disaster housing reconstruction program with MoEUCC⁴¹ that rebuilds rural housing and livelihood structures (barns and workplaces) on behalf of eligible property owners at their request (see Box 1).
- 19. Over the years, both AFAD and MoEUCC have amassed extensive experience in rural housing reconstruction and continuously improved the state-led reconstruction program based on lessons learned. Between 1960 and 2022, MoEUCC has managed the post-disaster reconstruction of about 154,000 rural houses through tenders in partnership with AFAD. House designs and options for post-disaster reconstruction have evolved over time, incorporating beneficiary feedback, and adjusting for regional and cultural preferences. For the reconstruction following the February 2023 earthquakes, MoEUCC has developed five design options for single-family rural houses that are resilient to seismic and other hazards as well as energy efficient in compliance with the latest building codes in Türkiye.
- 20. To meet immediate rural shelter needs after the February 2023 earthquakes, AFAD has tasked MoEUCC's General Directorate of Construction Affairs to reconstruct 50 percent of collapsed rural houses immediately. Further reconstruction will advance in a second stage as the verification process of eligible property owners for the rural housing reconstruction program is being completed. As part of the proposed Project, the GoT has requested World Bank support for the second stage of rural housing reconstruction. It is in this second stage that the GoT expects the World Bank to add significant value by: (i) leveraging its global housing reconstruction expertise, (ii) providing technical assistance to further improve how well the program maximizes the inclusion of lower income households, (iii) supporting the GoT to enhance the overall economic efficiency of the rural housing reconstruction program.

³⁷ Ibid.

^{38 2023} Kahramanmaraş and Hatay Earthquakes Assessment Report, Strategy and Budget Office, Government of Türkiye

³⁹ Rural housing is not eligible for TCIP coverage. Specifically, TCIP coverage was as follows: 68.1 percent in Gaziantep, 66 percent in Elazig, 63.5 percent in Kilis, 55.5 percent in Malatya, 54 percent in Kahramanmaraş, 52.6 percent in Şanlıurfa, 52.2 percent in Adana; 48.8 percent in Osmaniye, 43.3 percent in Adıyaman, 39.8 percent in Hatay, and 37.3 percent in Diyarbakır. (https://dask.gov.tr/tr/yururlukteki-policeler, retrieved on April 26, 2023.)

⁴⁰ Law No. 7269 on Measures to be Taken and Aids to be Provided Due to Disasters Affecting Public Life, Presidential Decree No. 4, Law No. 6306 on the Transformation of Areas at Risk of Disaster (often applied jointly with Law 7269), and Law No. 7452 regarding the Adoption of the Presidential Decree Concerning Settlement and Construction in the Event of State of Emergency.

⁴¹ This program is called, "Provision of Ready-Made Housing". AFAD also has in place a beneficiary-led program to assist rural homeowners to reconstruct their housing, but this is typically used in response to small-scale disasters and has not been activated for this disaster.

Box 1. Türkiye's State-led Post-Disaster Rural Housing Reconstruction Program

The state-led post-disaster rural housing reconstruction program in Türkiye includes the reconstruction of housing, livelihood buildings (barns, workplaces), and associated basic infrastructure in villages. It has clear eligibility criteria that have been further refined for the February 2023 earthquakes by Presidential Decision No. 6785 (dated February 8, 2023), Decree No. 126 (dated February 23, 2023), and Decree No. 142 (dated April 12, 2023). To be eligible, the property owner must own a house and/or livelihood facility located in a province declared as "disaster area affecting normal life" that was assessed as collapsed, severely or moderately damaged by MoEUCC. Property owners (or their spouses) who own another undamaged home in the same province are not eligible to benefit from this program. The eligibility determination process is well-established and managed by AFAD, in coordination with MoEUCC, using both the egovernment system and AFAD's local offices. Both the results of MoEUCC's technical damage assessment and the lists of eligible property owners identified by AFAD are publicly disclosed, and citizens can register objections or complaints within determined periods in the event there is a disagreement. The results of the objection process are also disclosed.

Property owners confirmed as eligible have a choice to participate in the post-disaster housing reconstruction program. AFAD and MoEUCC conduct various consultations and information sharing meetings in affected communities, including on the program's benefits, housing options, and costs, to enable eligible property owners to make free and informed decisions. To opt into the program, eligible property owners need to sign letters of request and undertaking with AFAD, indicating their housing siting and design choice and their commitment to repay a soft loan extended by AFAD for the reconstructed house. If the original locations of the collapsed or damaged buildings are deemed as unsafe based on multi-hazard risk assessments carried out by MoEUCC on behalf of AFAD, eligible property owners cannot choose in-situ reconstruction but will be consulted on available safe relocation sites on government land. If relocation is required, MoEUCC and AFAD strive to identify relocation sites as close as possible to the existing village.

Under the state-led modality for post-disaster rural housing reconstruction in Türkiye, the civil works and construction supervision are managed by MoEUCC (on behalf of AFAD), which contracts and pays the contractors and construction supervision consultants directly. Under this modality, the GoT does not provide any funds to eligible property owners to reconstruct housing. MoEUCC oversees the construction process, manages the contractors to ensure quality of construction, and obtains the occupancy permit that confirms compliance of the construction with the approved designs, latest seismic building codes, and other legal requirements in coordination with its Provincial Directorates. Upon completion of permitting, MoEUCC transfers the reconstructed residential and livelihood buildings to AFAD, which in turn transfers them and the title to the eligible property owners. Eligible property owners can register any grievances about their reconstructed home with MoEUCC and AFAD through existing grievance mechanisms.

The reconstructed housing is repayable by eligible property owners in the form of soft loans. The GoT has a lien on the property during the loan repayment period. The repayment terms for housing, as set in AFAD's regulation, include a 2-year grace period and then repayment at zero interest in equal installments over 18 years for the cost of the house itself (excluding any cost incurred by the GoT for infrastructure provision). Similarly for workplaces, repayment is in the form of soft loans including a 2-year grace period and then repayment at an interest rate of 4 percent over 8 years. The GoT has various assistance packages and discounts that eligible property owners can benefit from, including early loan settlement. In the event no repayments are made for three consecutive years, all debts of the eligible property owner become due and the GoT may initiate legal proceedings to sell the property. However, in practice, the GoT refrains from taking such measures and may instead renegotiate repayment terms with such eligible property owners given the post-disaster context.

C. Relevance to Higher Level Objectives

21. The Project is part of an overall package of support from the WBG that is structured around (a) the reconstruction of infrastructure, (b) the provision of public services, and (c) economic recovery and livelihood restoration in the earthquake-affected provinces The overall package includes mobilizing support through the ongoing projects that were already active before the February 2023 earthquakes, adjusting projects already under preparation, and delivering new projects on a fast-track basis to provide quick response, as well as analytical work and technical assistance. Specifically, the package encompasses the following:

• Mobilization of targeted support through the Bank's existing portfolio in the country comprised of 24 operations for US\$8.5 billion, including through the activation of Contingent Emergency Response Components (CERC) and Project Restructurings. Within this portfolio, the GoT can activate the CERCs under the Climate and Disaster Resilient Cities Project (P173025, US\$512.15 million) and the Earthquakes, Floods, and Wildfire Emergency Reconstruction Project (P176608, US\$449.25 million) to support urgent infrastructure repairs and the provision of basic services, and the Disaster Risk Management in Safe Schools Project (P157683, US\$300 million) and the Health System Strengthening and Support Project (HSSSP, P152799, US\$134.3 million) are being repurposed or rebalanced to support the provision of urgent human development services. The Safe Schooling and Distance Education Project (P173997, US\$160 million) was restructured in March 2023 to support the online education learning management system in providing digital instruction and e-content (including technology support to up to 1,700 temporary learning facilities in the earthquake-affected provinces benefiting up to 2 million students⁴²), and training and professional development for all teachers with special focus on teachers and counselors in the earthquake-affected provinces. The EU Facility for Refugees in Turkey-funded World Bank Education Infrastructure for Resilience Project (P162004, US\$150 million) has supported the construction of 62 new schools, including schools in the earthquake-affected provinces.

Furthermore, the ongoing Support for Transition to Labor Market Project (P171471, US\$84.89 million), the Agricultural Employment Support for Refugees and Turkish Citizens Through Enhanced Market Linkages Project (P171543, US\$54.7 million), the Social Entrepreneurship Empowerment and Inclusion Project (P171456, US\$48.04 million), and the Formal Employment Creation Project (P171766, US\$347.35 million) support social protection and labor activities contributing to livelihood restoration for both Turkish citizens and SuTPs in the earthquake-affected provinces. These projects target vulnerable/low-skilled workers, women, and youth in selected provinces with a high concentration of SuTPs and vulnerable Turkish citizens, including those in the earthquake-affected provinces, with interventions such as on-the-job training, skills development, job counseling and matching, loans and grants to firms creating jobs for vulnerable workers, and wage subsidies to vulnerable farm workers and grants to farm cooperatives to increase labor demand and improve worker conditions. This package complements the GoT's emergency support package to households and workers affected by the earthquakes.⁴³

• Revision of the FY23 lending pipeline through adding new operations and adapting already planned operations to provide more targeted support to earthquake recovery. In terms of new fast track lending, this includes the proposed Project (US\$1 billion) and the Post-Earthquake Micro, Small, and Medium Enterprises (MSME) Recovery Project (P181068, US\$450 million) which will support the business continuity and recovery of viable MSMEs that have been negatively affected by the February 2023 earthquakes. This support will be in the form of reimbursable financing to cover urgent liquidity needs, such as costs for salaries, rent, utilities, on condition that beneficiaries restore or increase employment relative to pre-earthquake levels. Notably, the project is expected to support the livelihoods of about 346,000 employees⁴⁴ in MSMEs, the majority of which are micro and small ones.

In terms of previously planned lending operations, the Green Industry Project (P179255, US\$450 million) was adapted to provide financing to eligible firms located in the earthquake-affected provinces to support a greener economy; the Public and Municipal Renewable Energy Project (P179867, US\$500 million) includes a component that can finance renewable energy installations in affected municipalities as part of the reconstruction of public

⁴² Out of 3.5 million students in the earthquake-affected provinces, of which over 240,000 students have been evacuated to other provinces.

⁴³ The GoT's measures in the earthquake-affected provinces include but are not limited to: (i) a temporary ban on layoffs in the earthquake zone among formal sector employer firms; (ii) advances in unemployment benefits, household cash transfers to poor and low-income households, pension benefits and housing subsidies; and (iii) health insurance exemptions.

⁴⁴ If seasonal and temporary employees of MSMEs are added, the Post-Earthquake MSME Recovery Project will help maintain the livelihood and source of income for over 500,000 people. Assuming an average household size of 4, this implies that 1.4 million people in households that have at least one member working in a MSME will benefit from the Project's financing.

buildings; and the Climate Resilient Forests Project (P179345, US\$400 million) now includes a larger financing amount to cover earthquake-impacted provinces, including with livelihood support services for vulnerable households in forest villages, as well as a bigger budget allocation for search and rescue/response capacity and the introduction of a CERC. These operations are all planned for consideration by the World Bank's Board of Directors around the same time.

- Analytical work and technical assistance: Immediately following the earthquakes, the World Bank mobilized its knowledge and convening power through the delivery of the GRADE report, followed by support to the GoT's assessment report in coordination with the EU and UNDP in preparation for the March 2023 donors conference held in Brussels and convened by the EU. The Bank secured US\$1 million in grant resources from the Global Facility for Disaster Reduction and Recovery (GFDRR), from its partnership with the United States Agency for International Development, for technical assistance to support the post-earthquake assessments informing the design of this Project as well as planning, prioritization, and implementation of post-disaster reconstruction investments, with a focus on mainstreaming resilience, building-back-better principles, and good practices related to social inclusion and citizen engagement. In addition, the Bank has an existing technical assistance program aimed at supporting policy and regulatory reforms and strengthening institutional capacity to enhance the resilience of the built environment in Türkiye, including with regards to compliance with building codes and design standards, which is supported by two grants from GFDRR under the Japan-World Bank Program for Mainstreaming Disaster Risk Management in Developing Countries. 45
- 22. The Project is aligned with the WBG Country Partnership Framework (CPF) for Türkiye for FY18-21 (Report No. 110906-TR, discussed by the Board of Directors on August 29, 2017), which was extended to cover the FY22-23 period through the Performance and Learning Review (Report No. 142353-TR, March 13, 2020). The CPF sets out the overall objective of supporting Türkiye in achieving more sustainable and inclusive development by focusing on growth, inclusion, and sustainability dimensions. The Project contributes to CPF Focus Area 3: Sustainability, with significant contributions to CPF Objectives 8 Improved Sustainability and Resilience of Cities and 9 Increased Sustainability of Infrastructure Assets and Natural Capital, and to CPF Focus Area 2: Inclusion, with some contribution to CPF Objectives 6 Strengthened performance of the education and health sectors and 7 Improved reliability of energy supply and generation of green energy. In particular, the Project will improve the seismic and climate resilience of municipal infrastructure and rural housing using build-back-better principles and contribute to restoration of health service coverage. Reconstruction led by the government will ensure that the high standards regarding seismic and climaterelevant building code requirements will be fully complied with and even exceeded to ensure seismic and climate-resilient as well as energy efficient buildings, substantially contributing to mitigation and adaptation efforts. The projects investments contribute to life safety, continuity of critical public services (including health, water, sanitation), improve the multi-hazard resilience and energy efficiency of infrastructure and housing in design and construction.
- 23. The Project will also contribute to the Bank's goals of ending poverty and boosting prosperity for the poorest and the WBG Climate Change Action Plan 2021-2025 on "Supporting Green, Resilient, and Inclusive Development". In pursuing these goals, the Bank has three priorities, which include helping create sustainable economic growth, investing in people, and buildings resilience to shocks and threats that can roll back decades of progress. Globally, the impact of disasters is equivalent to US\$520 billion losses in annual consumption and pushes some 26 million people into poverty each year. Activities that quickly restore access to services for all people, including vulnerable groups, and build back better after disasters contribute to building resilience in the long term and help avoid vulnerable people from falling into or becoming trapped in cycles of poverty. Likewise, efforts to improve climate resilience and energy efficiency as

⁴⁵ These include: (i) US\$825,000 for activities related to building urban resilience; and (ii) US\$825,000 for optimizing energy efficiency and seismic resilience in public building renovation and reconstruction, of which US\$750,000 is executed by the MoEUCC GDCA.

part of post-disaster reconstruction contribute to the WBG's commitments to support and scale up climate actions and financing to deliver on Paris Agreement goals. In line with the WBG's Europe and Central Asia Climate Roadmap 2021-2025, the Project will support climate adaptation and mitigation through investments in resilient and low-carbon infrastructure and mainstreaming energy efficiency and climate risk considerations into post-disaster recovery investments to the extent possible.

- 24. The Project will contribute to goals set out in Türkiye's National Development Plan (NDP) and is aligned with the government's post-earthquake recovery strategy set forth in the Government's earthquake assessment report. 46 The 2019-2023 NDP lists "Livable cities and sustainable environment" and "Qualified people, strong society" as focus areas, including objectives on housing, rural development, municipal infrastructure, DRM, and provision of health services. This Project is designed in line with the targets and objectives under these NDP focus areas. The Government's earthquake assessment report includes a recovery vision for the earthquake-affected provinces that adopts cross-cutting key principles to ensure that the recovery is resilient, inclusive, green, and sustainable and identifies preliminary priority interventions for each sector. The Project will support short and medium-term priorities identified for the municipal, health, and housing sectors, including activities to restore water, sanitation, and solid waste collection services, deliver primary health care services to all affected people, and build permanent rural houses that can withstand future disaster events. The key principles of building back better, leaving no one behind, and employing green solutions adopted by the government for the earthquake recovery will be put into practice across the Project activities.
- 25. The Project will also contribute to Türkiye's climate adaptation and mitigation targets per its commitment under the Paris Agreement and builds on the recommendations of Türkiye's Climate Change and Development Report (CCDR), prepared by the WBG in dialogue with the government. In the *Nationally Determined Contribution* (NDC) submitted to the UN Framework Convention on Climate Change (UNFCCC), Türkiye commits to reducing its greenhouse gas (GHG) emissions by 41 percent by 2030 compared to the business-as-usual scenario by 2030, including through mitigation and adaptation in the building, health, water, sanitation, and waste management sectors. The CCDR focuses on ways Türkiye can leverage synergies between economic, environmental, and resilience goals to achieve a more comprehensive, sustainable recovery from recent macroeconomic turbulence. This Project will build on the CCDR's recommendations to ensure that both climate mitigation and adaptation measures are integrated across investments to contribute to Türkiye's NDC for example, integrating both energy efficiency standards and resilience to climate and seismic risks in building and infrastructure design and construction.
- 26. The Project is underpinned by the World Bank's Green, Resilient and Inclusive Development approach and aligned with the WBG's Global Crisis Response Framework "Navigating multiple crises, staying the course on long-term development." The Project focuses on Pillar 4, Strengthening Policies, Institutions and Investments for Rebuilding Better, to utilize the opportunities that crises provide to improve long-term development outcomes. Project components will (a) rehabilitate key municipal infrastructure, including water and wastewater treatment, solid waste, transport networks and fire stations and emergency services damaged by the February 2023 earthquakes (supported under Component 1); (b) restore access to critical health services for the affected population (supported under Component 2); and (c) provide families with access to resilient, reconstructed rural housing and infrastructure (supported under Component 3). Project activities under all components are also aligned with Pillar 3: Strengthening Resilience, as they will strengthen institutions' capacity for building back better and enhancing resilience in the health, municipal infrastructure, and housing sectors through technical assistance (such as improved designs solutions) that consider both seismic resilience and long-term climate change impacts.

⁴⁶ 2023 Kahramanmaraş and Hatay Earthquakes Assessment Report, Strategy and Budget Office, Government of Türkiye.

⁴⁷ https://unfccc.int/sites/default/files/NDC/2023-04/T%C3%9CRK%C4%B0YE_UPDATED%201st%20NDC_EN.pdf (published in April 2023)

II. PROJECT DESCRIPTION

A. Project Development Objective

PDO Statement

27. The proposed Project Development Objective (PDO) is to restore access to essential municipal and health services and resilient housing in selected provinces affected by the February 2023 earthquakes in Türkiye.

PDO Level Indicators

- 28. Indicative indicators for tracking progress toward the PDO are as follows:
 - a) People provided with restored access to municipal infrastructure and services with improved disaster and climate resilience under the Project (number, gender disaggregated)
 - b) People provided with access to restored essential health services under the Project (number, gender disaggregated)
 - c) People benefitting from disaster and climate resilient, and energy efficient rural housing and village infrastructure reconstructed under the Project (number, gender disaggregated)

B. Project Components

- 29. The Project will support the GoT's recovery efforts to restore access to essential municipal and health services and provide resilient rural housing for people affected by the February 2023 earthquakes. It will support the provision of temporary facilities and equipment, and rehabilitation and reconstruction of damaged infrastructure and buildings required for the restoration and continued operation of essential services, including health, water, sanitation, and emergency services. It will also support the GoT's post-disaster rural housing reconstruction program (outlined in Box 1) covering reconstruction of damaged houses, along with associated basic infrastructure and livelihood facilities, in villages.⁴⁸
- 30. Investments under the Project will be made using a build-back-better approach to the extent possible that promotes resilience to future seismic and climate hazards, sustainability, inclusion, and significant energy efficiency improvements. This approach will ensure full compliance with the TBEC-2018 seismic codes or upgrading from its provisions where needed to achieve resilience to seismic and climate hazards. Investments will also adopt universal design principles, promote green solutions, and other design elements aimed at increasing climate change adaptation and contributing to climate change mitigation. Particularly, any building to be reconstructed under the Project will follow Turkish Class C (or better) Energy Performance Certification standards⁴⁹, i.e. structural strengthening will be combined with integration of thermal insulation, water and energy efficiency measures in building design.⁵⁰ Where feasible, buildings will also incorporate passive solar design principles (e.g., orienting the building to take advantage of the sun's path and using natural ventilation to reduce the need for heating/cooling) and integrate opportunities to harness renewable energy. Similarly, municipal infrastructure investments under this Project will combine seismic and climate resilient measures with energy efficient improvements as feasible. Finally, the purchase of any equipment and vehicles

⁴⁸ The term village in this document refers to both rural settlements/ neighborhoods within Metropolitan Municipalities (considering the relevant provision of Law 6360) and villages in other Provincial Municipalities. Livelihood facilities include barns and workplaces (such as small workshops, bakeries, etc.).

⁴⁹ Under which a building must achieve an energy performance index with an energy consumption of 80-99 kWh/m² per year and GHG emission of 80-99 kg eq. CO2/m² per year.

⁵⁰ Examples include the use of more efficient plumbing and water-saving devices, adequate thermal insulation of walls, floors, windows, and roofs to prevent heat loss during winter (typically in the region of 20 percent) and heat gain during summer without a commensurate increase in energy consumption, efficient lighting, rainwater harvesting and grey water systems, and the use of more efficient building materials.

under the Project will include provisions for high energy efficiency standards and the use of alternative, clean and low-carbon fuel options as technically and financially viable. See Annex 3 for details on Guiding Principles for Building-Back Better and Annex 4 on Anticipated Climate Co-benefit Adaptation and Mitigation Measures.

- athquakes; in addition, provinces outside the earthquake-affected region that have received a high influx of displaced population and transferred hospital patients will be eligible for targeted support under the health component. The eleven provinces declared as disaster zones in February 2023 are Adana, Adıyaman, Diyarbakır, Elazığ, Gaziantep, Hatay, Kahramanmaraş, Kilis, Malatya, Osmaniye, and Şanlıurfa. Given that the identified needs far exceed the financing available under this Project, investments under this Project are expected to be prioritized geographically considering the damage level and size of the affected population, socio-economic development indicators, complementarities with financing available from other development partners, and practical considerations related to implementation readiness (such as, e.g., the status of verification of eligible property owners for rural housing reconstruction program, or environmental and social considerations). In addition, provinces that experience a strain on health service provision due to the influx of displaced population and patients transferred from the earthquake-affected provinces, such as Antalya, Ankara, Mersin, Sivas, İstanbul, Kayseri, İzmir, Kocaeli and Kütahya, will benefit from provision of additional medical equipment and goods to address critical health needs.
- 32. **The Project includes four components as described below**: (i) Restoration of Municipal Infrastructure and Services; (ii) Restoration of Health Services; (iii) Rural Housing Reconstruction and Recovery; and (iv) Project Management, Monitoring and Evaluation.

Component 1: Restoration of Municipal Infrastructure and Services (EUR 382,410,000)

- 33. This component will finance civil works (including demolition as applicable), goods, consulting, and non-consulting services needed to restore access to critical municipal services of affected people while enhancing disaster and climate resilience. This will include the medium-term rehabilitation and reconstruction of critical municipal infrastructure and facilities such as water, sanitation, stormwater drainage, municipal transport infrastructure, municipal solid waste management facilities, and fire and emergency response services. The component will also finance purchasing of equipment and vehicles in the short-term to restore municipal capacity for the provision of essential services. The component will also finance the preparation and/or review of related studies and construction supervision, which will include carrying out of local soil surveys, assessing climate-related hazards (e.g., flooding), and identifying options as needed/feasible for site selection and materials to ensure long-term resilience of the reconstructed municipal infrastructure to both seismic and climate risks.
- 34. Based on preliminary assessments, İLBANK has established an initial longlist of potential needs and investments under Component 1 in consultation with affected municipalities. Further detailed damage assessments and engineering evaluations are necessary (especially of underground municipal infrastructure) and are already underway in some municipalities to determine the exact scope and costing of potential investments. The prioritization of the municipal investments under this component will target the most urgent and demand-driven needs in accordance with agreed eligibility and selection criteria, including relevance to the PDO, alignment with recovery and zoning plans, readiness for implementation, and sustainability. The prioritization will also consider complementarities with municipal investments that are expected to be financed through potential parallel co-financing from other IFIs, such as the Japan International Cooperation Agency (JICA) and the European Investment Bank. İLBANK will submit proposed priority investments to the

⁵¹ Ten of these provinces were declared as disaster zones on February 7, 2023 (Presidential Decree no 6785) and Elazığ Province was declared as disaster zone on February 16, 2023 (Announcement of Government spokesman as per President Order).

World Bank for review and no-objection and will hire supervision construction firms to supervise the works. Annex 2 presents the detailed investment eligibility and selection framework for Component 1.

Subcomponent 1.1: Resilient rehabilitation and reconstruction of municipal infrastructure (EUR 291,360,000)

- This subcomponent will finance disaster and climate resilient rehabilitation and reconstruction of existing 35. municipal water, sanitation, wastewater, drainage, and solid waste management infrastructure damaged by the earthquakes. This may include the repair and reconstruction of damaged water and sewage networks, water treatment plants, water transmission lines, wastewater treatment plants, stormwater drainage, and solid waste management facilities. In addition to seismic risks, the studies and designs for the rehabilitation and reconstruction will also consider future climate risks. As such, the rehabilitated infrastructure is expected to be also better adapted to climate change and/or integrate, to the extent feasible, climate-smart/nature-based technologies and solutions contributing to climate change mitigation. For example, reconstructed water networks will significantly reduce non-revenue water, which in turn will help reduce energy consumption of municipal utilities, and improved wastewater treatment plants will be more energy efficient, contributing to GHG reductions.⁵² As this subcomponent uses a framework approach, the exact details on interventions are not yet known at this stage, so GHG accounting cannot be conducted. However, based on the knowledge from earlier projects in some locations affected by the earthquakes, including Kahramanmaraş, Adana, and Osmaniye, this subcomponent expects to finance investments that provide energy efficiency improvement in water supply and sanitation through deployment of low-energy-consumption technologies or pumping equipment and reduction of water losses. In addition to project savings of estimated baseline energy consumption of approximately 20 percent, this would lead to GHG sequestration through rehabilitated and expanded resilient piped utility water system that replace tanker use or other coping mechanisms. For the emissions timeline of 30 years, it is reasonable to estimate that the interventions would result in a substantial reduction of GHG emissions of approximately 20 percent. Further, the creation of permeable and green public spaces along stormwater drainage infrastructure will also absorb water and heat, reducing the urban heat island effect and energy demand for cooling. Technical measures will also be deployed to avoid potential service interruption in the future due to local site amplification effects and liquefaction impacts. The restoration of municipal water and sanitation services will also contribute to mitigating public health risks that have emerged in some municipalities in the wake of the earthquake. In earthquake-affected areas that are within the basins of waterways as defined in the World Bank's Operational Policy 7.50,53 the rehabilitation and reconstruction of existing water and sanitation schemes will be limited to those that will not (i) exceed the original scheme, change its nature, or so alter or expand its scope and extent as to make it appear a new or different scheme; (ii) adversely change the quality or quantity of water flows to the other riparians; and (iii) be adversely affected by the other riparians' possible water use. The subcomponent may also support the installation of temporary water and sanitation facilities for people living in prefabricated container homes, such as package wastewater treatment plants, solar thermal hot water collectors, portable rainwater storages, etc., if needed.
- 36. Disaster and climate resilient rehabilitation and reconstruction of municipal roads, bridges, underpasses, and associated infrastructure damaged by the earthquakes will also be eligible for financing under this subcomponent. The studies and designs for the repair and reconstruction of the damaged roads and associated infrastructure will consider both disaster as well as future climate risks to ensure that reconstructed bridges and roads will be resilient to both soil deformation and seismic activity as well as climate change. In addition, the municipal bridges, roads, and underpasses to

⁵² Non-revenue water is high for municipal water utilities in Türkiye with an average of over 40 percent (Comparative Performance Assessment of Metropolitan Water and Sewerage Administrations, June 2022, https://www.suen.gov.tr/Suen/catdty.aspx?val=5525). These significant system inefficiencies are reflected in high energy use; the average energy consumption of municipal water and wastewater utilities in Türkiye per 1,000 subscribers is 212,126 kWh/year and the average share of energy expenditures in their total budgets is 20 percent, ranging between 7 and 43 percent.

⁵³ The Asi (Orontes) River, shared by Lebanon, Syria, and Türkiye; the Firat (Euphrates) River, shared by Iraq, Syria and Türkiye; and the Dicle (Tigris) River, shared by Iran, Iraq, Syria and Türkiye are considered waterways as defined in the World Bank Operational Policy 7.50.

be reconstructed under this subcomponent are expected to pilot the use of ultra-high-performance concrete or similar water and weather-resistant materials. To improve accessibility and mobility, the reconstruction efforts will also seek to incorporate dedicated spaces/laneways for pedestrians and cyclists to travel safely. These will serve as evacuation routes as well in the event of future emergencies and disaster events. Streetscapes will also consider using local and light-colored materials for roads and sidewalks that help to reflect heat and reduce urban heat island. The incorporation of nature-based solutions like green public spaces alongside the roads will help absorb heat and an increased tree canopy can absorb air pollution and GHGs.

- 37. The subcomponent will also finance consulting services for studies and construction supervision of the civil works. This will include: (i) carrying out of detailed damage and needs assessment, including of the below-ground water and sewage infrastructure, to facilitate the selection and prioritization of investments, especially for those municipalities with limited resources and/or technical capacities to complete such assessments; (ii) preparation and/or review of feasibility and technical design studies for the municipal infrastructure works, including local soil surveys and proposing options as needed/feasible for site selection, taking into consideration climate hazards, and resilient materials; (iii) preparation and/or review of E&S studies as needed for the municipal infrastructure works; and (iv) construction supervision.
- 38. Most municipal infrastructure reconstruction works are expected to be in-situ, but this may not always be feasible due to, for example, identified seismic or other hazards. If municipal infrastructure cannot be reconstructed insitu, the proposed new locations need to be in alignment with the GoT's recovery development planning and zoning plans adopted for the affected municipalities. Any municipal investment that may have high-risk environmental or social impacts as per the E&S Risk Classification under the World Bank's ESF will not be eligible for financing under the Project. Each activity under this subcomponent will consider site-specific climate risks (e.g., flooding) and design strengthening for extreme weather-related events, including extreme rain, snow, wind, heat, and fire, which are the risks connected with the impacts of climate change in the earthquake-affected provinces.

Subcomponent 1.2: Resilient recovery of municipal service facilities (EUR 91,050,000)

- 39. This subcomponent will finance the rehabilitation and reconstruction of municipal service buildings damaged by the earthquakes and purchase of equipment required to restore the provision of firefighting, emergency response, solid waste management, and other critical municipal services. Eligible activities will include *inter alia*: (i) installation of prefabricated facilities to provide critical municipal services, such as fire and emergency services, during transition periods and ensure continuity of services, as needed; (ii) repair and strengthening of lightly damaged municipal service buildings, such as municipal fire stations and municipal utilities buildings; (iii) resilient and energy efficient reconstruction of destroyed, heavily and moderately damaged municipal service buildings, such as municipal fire stations or municipal utilities buildings, in-situ or in new safe locations with lower exposure to geological and climate-related hazards (such as flooding, landslides, etc.); and (v) the acquisition of emergency response and municipal services equipment and vehicles (e.g. firefighting and rescue vehicles and equipment, solid waste collection vehicles, buses, street sweeping vehicles, etc.) to restore municipal capacity for essential service provision impacted by the February 2023 earthquakes. Municipal services like police, law enforcement, or related areas are not eligible for support under this subcomponent.
- 40. In addition to integrating improved structural design elements to ensure seismic and climate resilience, rehabilitation and reconstruction of municipal service buildings will also support climate change mitigation. Energy efficiency will be increased to at least Turkish Class C Energy Performance Certification standards and functional upgrades like energy-efficient insulation and rooftop solar will be introduced to reduce gas, electricity, and water consumption, thereby also reducing the carbon footprint of the buildings subject to repair and reconstruction. The energy efficiency gains are expected to be significant in the case of reconstruction of collapsed, heavily, and moderately damaged

municipal service buildings, which were likely constructed prior to 2000. The rehabilitated and/or reconstructed municipal service buildings will have a service life between 30 to 50 years. On the other hand, the procurement of emergency response and municipal services vehicles and equipment will include provisions for the latest energy efficiency standards and the use of alternative, clean and low-carbon fuel options considering technical and financial viability. All activities financed under this subcomponent will also contribute to strengthening the capacity and preparedness of the affected municipalities to respond to future emergencies and disasters, including extreme weather and climate events (e.g., floods, wildfires, storms).

Component 2: Restoration of Health Services (EUR 245,835,000)

- 41. This component will finance goods, consulting, and non-consulting services to restore access to health services for the people affected by the February 2023 earthquakes in the short-term. This will include establishing a network of fully equipped prefabricated primary health care (PHC) facilities complemented by mobile PHC and diagnostic services, provision of medical equipment and furnishings for hospitals, restoring depleted medical supplies, improving access to vaccination, supporting access to mental health services and disability support, and supporting public health measures as well as water, sanitation, and hygiene measures in health facilities to prevent the spread of infectious diseases. The activities to be financed under this component will be complementary to the initial purchase of immediate and urgent medical goods and supplies supported under the ongoing HSSSP.⁵⁴ This component will also aim to strengthen the adaptive capacity to respond to climate-related health risks that may be exacerbated by climate change, e.g., thermal stress during heat waves and water-borne diseases in the event of flooding.
- 42. The geographical distribution and prioritization of activities under this Component is determined according to the following criteria: Fixed prefabricated facilities will be installed in cities in the earthquake-affected provinces with a high level of destruction and high concentration of remaining population. The distribution of mobile clinics and vehicles will aim to reach dispersed settlements in the earthquake-affected provinces, including people living in tent settlements or prefabricated container homes, villages in rural areas, and shelters. This approach will address distributional challenges caused by the earthquake concerning the access to health care and ensure that no-one is left behind, with a focus on vulnerable groups and hard to reach populations. Support to cities with a high influx of the displaced population and transferred patients from the earthquake-affected provinces will be limited to the provision of additional goods to address critical health needs such as medical equipment, prosthesis and orthotic devices for disability support, and physical therapy and rehabilitation (PTR) equipment. The Ministry of Health (MoH) will cover the recurrent costs of operating the facilities and mobile units, including salaries of health workers, costs of other medical supplies, drugs, and non-salary operating expenses, from the general government budget and other sources of financing. To ensure the presence of required health workforce in the field, MoH is conducting the draws for the mandatory state service of recent medical graduates exclusively for the earthquake-affected provinces.⁵⁵ MoH also gives priority to the earthquakeaffected provinces for the appointment of other health workers and assigns staff from other provinces to them.

Subcomponent 2.1: Ensuring continuity of primary-level and hospital-level health services (EUR 105,800,100)

43. This subcomponent will support the establishment of a network of fixed prefabricated family medicine centers supported by mobile PHC units in the earthquake-affected provinces. The prefabricated facilities are needed to replace

⁵⁴ Immediately following the earthquakes, US\$40 million were repurposed under HSSSP for the purchase of medical goods and supplies to address pressingly urgent needs of MoH that have significant and direct effects on public health (such as the prevention of infectious diseases and saving lives). These purchases included e.g., disinfectants and biocidal products, drugs with the active ingredient adrenaline, medical equipment, and devices such as hemodialysis devices, incubators, dialysis devices, and emergency stretchers. The activities under both HSSSP and this Project were selected based on the overall needs list prepared by MoH after the earthquakes and are fully complementary.

⁵⁵The so-called State Service Obligation is mandatory for newly graduated physicians who have completed their (minor) specialization. The service lasts 300 to 600 days depending on the place of duty. Draws for this mandatory service are held every two months.

the collapsed, heavily, and moderately damaged primary health care buildings (Family Medicine Centers) in the earthquake-affected provinces until permanent PHC facilities can be reconstructed. The mobile units will also allow health care providers to provide services to affected population living in tent camps, prefabricated container homes, shelters, and scattered villages in rural areas. In line with MoH's interim strategy to restore PHC services, the subcomponent will finance: (i) the installation of prefabricated, energy efficient, fully equipped family medicine centers for PHC service delivery in the earthquake-affected provinces; and (ii) procurement of mobile health clinics to reach out to the different temporary settlements with large, displaced populations and rural regions in the earthquake-affected provinces. The family medicine centers will be located in safe locations with lower exposure to geological and climaterelated hazards (such as flooding, landslides, etc.), will have weather resistant roofs, adequate drainage, adequate thermal insulation⁵⁶ and efficient lighting for high energy efficiency. They will also include renewable energy sources as technically feasible. The distribution of these facilities is determined by the scale of destruction and the size of the population still residing in the earthquake-affected provinces. MoH expects to use the prefabricated family medicine centers throughout their lifespan, which is estimated to be up to 20 years. Considering the large number of settlements, the dispersion of the population and the population movement between cities and rural areas, mobile health clinics will provide essential health services on-site, including vaccination, maternal and child health care, and preventive screening, and will assist in referring patients to the family medicine centers and hospitals. Management and disposal of medical waste from prefabricated health facilities will be carried out in accordance with existing national legislation.⁵⁷ Medical waste management plans will also be prepared for the Project as part of the Bank's E&S requirements.

44. This subcomponent will also provide medical equipment and furnishings to support the operation of new prefabricated emergency hospitals and existing hospitals in the earthquake-affected provinces and of other hospitals in other provinces that have received a high-influx of displaced population and transferred patients. MoH is constructing eleven seismic resistant steel-structure emergency hospitals (seven 50 bed hospitals, one 150-bed hospital, and three 250-bed hospitals) with its own resources and financing from the Council of Europe Development Bank (CEB). The subcomponent will finance the procurement of furniture, medical equipment, and medical goods required to be carried out simultaneously to the ongoing construction of these emergency hospitals to ensure their immediate operation. In addition to these new emergency hospitals, the subcomponent will also finance the provision of medical equipment for other hospitals in earthquake-affected provinces as well as in other provinces receiving a high influx of displaced population (with at least 5,000 patients from the earthquake-affected provinces as verified by MoH as of June 1, 2023), based on the criteria mutually agreed upon by the World Bank and the MoH. As technically available in the market, all new medical equipment will comply with one of the following energy efficiency ratings/standards: TS60601 or EN 60601 or IEC 60601. These are standards related to basic electrical security for medical devices and equipment belonging to the electrical medical devices group of goods. The medical equipment furnishings provided under this

5 **I**ı

⁵⁶ In Türkiye, Energy Efficiency Law No. 5627 requires prefabricated buildings with a lifespan of over two years to follow the same thermal insulation standards as regular buildings (i.e., TS825), which in practice falls within Class C Energy Performance Certification standards. MoH plans to use the prefabricated family medicine centers for longer than two years and will therefore comply with these standards.

⁵⁷ Ministry of Environment, Urbanization and Climate Change, Regulation on the Management of Medical Waste

⁽https://www.resmigazete.gov.tr/eskiler/2017/01/20170125-2.htm). National regulations do not allow the use of incineration methods for medical wastes containing high levels of mercury and cadmium, radiological wastes containing silver salts, light bulbs and pressure vessels containing heavy metals. In addition, the current regulation on the incineration of waste

⁽https://www.mevzuat.gov.tr/File/GeneratePdf?mevzuatNo=14344&mevzuatTur=KurumVeKurulusYonetmeligi&mevzuatTertip=5) requires that incineration practices must prevent or reduce potential negative effects on the environment, such as pollution of air, soil, surface and groundwater, and odor and noise, and sources of pollution that pose a direct risk to human health.

⁵⁸ The construction period of these prefabricated hospitals is 120 days. The construction of a first batch of these hospitals has already started and is expected to be completed in early June 2023. CEB approved a fast-tracked EUR 250 million loan on April 24, 2023, that will finance short-term fast recovery measures, including the retroactive financing of the construction of up to five of these emergency hospitals, medium-term resilient reconstruction of health infrastructure, and strengthening of the health care system in the affected areas, including operational and staff costs, other services, and goods. The World Bank and CEB have been closely coordinating their project preparation with MoH to ensure complementarity and facilitate implementation.

subcomponent will be critical to enable hospitals to effectively respond to increased demand for health services that may arise from climate hazards like flooding, extreme heat, poor air, and water quality, especially in areas catering to displaced people or compromised infrastructure due to the earthquakes.

Subcomponent 2.2: Providing mobile diagnostic services (EUR 54,994,200)

45. This subcomponent will establish a network of mobile diagnostic services to support the field emergency hospitals and prefabricated PHC facilities in the earthquake-affected provinces. Activities will include the purchase of: (i) mobile units equipped with imaging equipment, (ii) mobile public health laboratories for microbiology and water analysis, (iii) mobile computerized tomography devices, (iv) mobile digital X-ray and ultrasound devices, (v) ambulances and fully equipped medical all-terrain vehicles, and (vi) mobile command control vehicles. The procurement of such mobile units, vehicles, and equipment will include provisions for the most recent energy efficiency standards and the use of alternative, clean, and low-carbon fuel options as technically and financially viable. Microbiology and water analysis by mobile public health laboratories is also aimed to help counter outbreaks of water-borne diseases and pathogens in areas with compromised water supply, drainage, and wastewater treatment that may be exacerbated by extreme weather events (e.g., flooding) as a result of climate change.⁵⁹

Subcomponent 2.3: Supporting access to vaccination, disability services, and medical equipment (EUR 85,040,700)

This subcomponent will finance activities to support MoH to restore its capacity in vaccination and curbing the spread of infectious diseases in the earthquake-affected provinces, and in addressing the needs of people disabled due to the earthquakes. Activities will include: (i) the replacement of damaged provincial and district vaccine warehouses with energy efficient⁶⁰ prefabricated and light steel construction vaccine storage containers to be located in the major cities of Hatay, Malatya, Kahramanmaraş, Adıyaman and Adana that will service as regional vaccine warehouses for the earthquake-affected provinces; (ii) provision of vaccine transport vehicles⁶¹ to ensure timely distribution of vaccines from the regional warehouses to settlements across the earthquake-affected provinces, including container cities, dispersed villages in rural areas, and shelters; (iii) provision of essential medical supplies such as biocidal products and rapid test kits for earthquake-affected provinces; (iv) provision of equipment for disability services, including inter alia, microprocessor prosthesis, orthotics and prosthesis, and battery powered wheelchairs, in both earthquake-affected provinces and other provinces that have received a high influx of displaced population and patients transferred from the earthquake-affected provinces; (v) provision of equipment and capacity building for physical therapy and rehabilitation centers in earthquake-affected provinces and in other Project Provinces that have received a high influx of displaced population and patients transferred from the earthquake-affected provinces; and (vi) home health care services vehicles and related kits and psycho-social support vehicles for earthquake-affected provinces and other Project Provinces that have received a high influx of displaced population and patients transferred from the earthquake-affected provinces. Vaccination efforts and the use of biocidal products are key to avoid outbreaks of waterborne diseases and pathogens with pandemic or epidemic potential, particularly in areas with compromised water and sanitation and at a time when the climate impacts are increasing the risk of pandemics and exacerbating the prevalence and severity of certain

⁵⁹ Mc Michael AJ, Woodruff RE, Hales S. Climate change and human health: present and future risks. Lancet. 2006:367:859–69. Doi: 10.1016/s0140-6736(06)68079-3, https://www.thelancet.com/action/showPdf?pii=S0140-6736%2806%2968079-3; Levy K, Smith SM, Carlton EJ. Climate Change Impacts on Waterborne Diseases: Moving Toward Designing Interventions. Curr Environ Health Rep. 2018 Jun;5(2):272-282. doi: 10.1007/s40572-018-0199-7. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6119235/#R12; Jung, Y.-J.; Khant, N.A.; Kim, H.; Namkoong, S. Impact of Climate Change on Waterborne Diseases: Directions towards Sustainability. Water 2023, 15, 1298. https://www.mdpi.com/2073-

^{4441/15/7/1298#:~:}text=Furthermore%2C%20climate%20change%20may%20increase,typhoid%2C%20may%20become%20more%20common ⁶⁰ As MoH plans to use these vaccine storage facilities for at least 2 years, they are required to follow the same thermal insulation standards as regular buildings (i.e., TS825), which in practice falls within Class C Energy Performance Certification standards.

⁶¹ The procurement of these vehicles will include provisions for the use of alternative, clean and low-carbon fuel options as technically viable.

infectious diseases, posing life-threatening public health risks to large populations. As such, these measures can help improve people's general health resilience against future climate hazards.

Component 3: Rural Housing Reconstruction and Recovery (EUR 264,045,000)

- 47. This component will finance civil works, goods, consulting, and non-consulting services to support two activities related to post-disaster rural housing reconstruction and recovery. First, it will finance the climate and disaster-resilient reconstruction of collapsed, heavily or moderately damaged rural houses, livelihood buildings, and associated repair and/or reconstruction of basic infrastructure and social facilities in villages affected by the earthquakes under the GoT's existing post-disaster housing reconstruction program (described in Box 1). Priority will be given to housing reconstruction; reconstruction of livelihood structures will also be eligible if requested by eligible property owners. Second, the component will provide technical assistance to MoEUCC to strengthen their capacity to support resilient and green recovery and to AFAD to improve post-disaster housing programs to be more inclusive.
- 48. A set of damaged villages will be selected for subcomponent 3.1 considering socio-economic and technical criteria. The damage assessment and property owner eligibility verification process and the identification of safe relocation sites, where needed, are currently ongoing for the affected rural areas. As they are advancing in this process, AFAD and MoEUCC will identify sets of damaged villages to be supported under the Project considering the following criteria: (i) verification of eligible property owners is completed; (ii) high potential for in-situ reconstruction or availability of encumbrance-free relocation sites; (iii) villages are not too dispersed geographically, and (iv) reconstruction in these villages is not yet covered under the ongoing first stage of rural housing reconstruction financed by the GoT's internal finance. Prioritization between identified sets of damaged villages will also consider socio-economic development indicators and complementarities with support that may become available from other development partners. MoEUCC will submit the proposed sets of damaged villages and relocation sites (where applicable) to the World Bank for review and non-objection, ensuring that the rural housing to be reconstructed is in line with the Bank's ESF and with clear ownership. In each selected village, the Project will finance the reconstruction of all housing and livelihood units as requested by eligible property owners as well as associated basic infrastructure and social facilities.

Subcomponent 3.1: Resilient rural housing and village reconstruction (EUR 254,940,000)

- 49. This subcomponent will finance civil works, consulting, and non-consulting services to support resilient and energy efficient rural housing reconstruction and the recovery of earthquake-affected villages under the GoT's existing post-disaster housing reconstruction program. ⁶² It will only finance full disaster and climate resilient reconstruction of collapsed or damaged housing and/or livelihood buildings; repairs and retrofitting activities are not eligible given the poor condition of the existing rural building stock and the difficulties in retrofitting such damaged buildings to higher, more resilient and energy efficient standards. The subcomponent will also finance the disaster and climate resilient rehabilitation and/or reconstruction of infrastructure for basic service provision and of social facilities in the selected villages. Consulting services for the preparation and/or review of technical designs and construction supervision will also be financed under this subcomponent.
- 50. The existing eligibility criteria for the program will be used under this subcomponent, including: (i) rural residential or livelihood buildings must be assessed as being collapsed, severely or moderately damaged by MoEUCC; (ii) damaged residential or livelihood buildings must be located in a rural areas of one of the eligible provinces; (iii) damage must have occurred due to the February 2023 earthquakes; (iv) beneficiaries must be property owners of the affected

⁶² Housing reconstruction may also include reconstruction of collapsed or heavily damaged livelihood facilities (barns and workplaces) when requested by eligible property owners and technically feasible. Eligible property owners who request livelihood facility reconstruction will repay AFAD for them separately, in addition to the housing reconstruction costs.

property (rural residential and/or livelihood buildings) as verified by AFAD; and (v) eligible property owners must opt into the program selecting either in-situ or resettlement option for reconstruction.⁶³ Eligible property owners have a choice to participate in the program and will be consulted about its benefits, cost, and their housing siting and design preferences to enable them to make free and informed decisions. Participating property owners can also register any grievances throughout the process and regarding their reconstructed home with MoEUCC and AFAD through the existing grievance mechanisms.⁶⁴

- For reconstruction of eligible rural houses and livelihood buildings, preference will be given for in-situ 51. reconstruction to the extent possible under the Project, and energy efficiency will be improved in addition to resilience. Where relocation is inevitable due to geological and/or climate hazards (such as flooding, landslides, etc.), resettlement plots for reconstruction shall be on government-owned land and in full compliance with the World Bank's ESF. Eligible property owners whose structures will be reconstructed on government-owned land will maintain the rights of the land they vacate but are not allowed to build structures on that land if it has been designated as prone to geological or climate hazards; in addition, the GoT will transfer the rights of the new land to them. Rural housing and livelihood buildings will be reconstructed in full compliance with the latest building codes or better (ensuring seismic and climate resilience) and incorporate energy efficiency measures through siting, orientation, and design to achieve at least Turkish Class C (or better) Energy Performance Certification, i.e., they will meet the country's building, energy efficiency, and thermal insulation standards or better, with rigorous construction supervision financed through Project resources. 65 Considering that collapsed and damaged rural houses in the earthquake-affected provinces were likely relatively old and/or poorly constructed, they will have had limited thermal insulation and inefficient heating. It is therefore expected that significant energy efficiency gains will be realized by meeting Class C standards compared to baseline conditions. Furthermore, the reconstructed houses will include connections to facilitate installations of renewable energy equipment by the property owners. The Project will also ensure that the smaller housing unit options are offered to eligible beneficiaries to improve affordability for lower income households and further enhance energy efficiency measures.
- The subcomponent will support infrastructure rehabilitation in villages where rural housing is reconstructed insitu and construction of new infrastructure where rural housing is being relocated to safer sites. Eligible investments include water, sanitation, rural roads, street lighting, and social facilities (including community centers, playgrounds, and communal public/green spaces, but excluding religious buildings and police or law enforcement facilities). Design and engineering of village infrastructure will consider site-specific climate risks like flooding and structural strengthening for weather-related events, including extreme rain, snow, wind, heat, and fire. In addition, green and nature-based solutions will be used at village level where technically and financially feasible, which will contribute to improved stormwater management and absorb pollution, including GHGs. Any building constructed will also have Turkish Class C (or better) Energy Performance Certification. In terms of climate change mitigation, where technically and financially feasible, the Project will support energy efficiency measures, especially for water and sanitation infrastructure. Road design will, where feasible, incorporate investments to support non-motorized transport, such as pedestrian paths. Design of social facilities will also consider universal access principles.

⁶³ In cases where the original location of the damaged building is assessed as unsafe by MoEUCC and AFAD, beneficiaries cannot opt for in-situ reconstruction. ⁶⁴ MoEUCC will coordinate with the contractors to fix any defects of the reconstructed houses during the one-year defects liability period of the works contracts. In addition, the contractor continues to be liable for any construction defects for an additional four years. In case of any major defects identified while the building is in use, Turkish Code of Obligations expands the duration of contractor's responsibility up to 20 years.

⁶⁵ While construction of rural houses by homeowners in the earthquake-affected provinces should follow building code requirements that consider climate resilience and energy efficiency, practically the code requirements are not systematically complied with in owner-led design and construction. The GoT-led reconstruction will ensure that the current standards (which are comparable to standards in the EU) are fully complied with and even exceeded to ensure energy efficiency and climate- and seismic- resilient buildings, which is a substantial contribution to mitigation and adaptation efforts.

Subcomponent 3.2: Capacity building for resilient recovery and post-disaster housing support (EUR 9,105,000)

53. This subcomponent will finance goods, consulting and non-consulting services for technical assistance and advisory services to MoEUCC's General Directorate of Construction Affairs and AFAD's General Directorate of Housing and Construction Works to support planning for medium/longer term resilient and energy efficient reconstruction and strengthen the post-disaster housing program. This will include technical assistance to strengthen the implementation of subcomponent 3.1, including with regards to beneficiary engagement into site and house design selection, the inclusion of universal access measures in housing design, enhanced decision support to eligible property owners regarding the housing options and associated costs offered under the program (particularly for vulnerable groups), and connecting beneficiaries to complementary social support programs offered by the government. It will also include technical assistance to strengthen the GoT's post-disaster housing programs for future disasters. Such technical assistance could address, inter alia, the functioning of the damage assessment and entitlement processes, the beneficiary-led housing reconstruction program (including e.g., development of simplified guidelines for resilient and energy efficient housing, training for the dissemination of good construction practices), improvement and integration of geo-enabled systems to manage and monitor post-disaster housing programs, integrated housing and infrastructure planning, review of and development of guidelines on the use of innovative design, construction methods, and materials for multi-hazard resilient, green, and energy efficient housing (with climate change-related risks, adaptation and mitigation considerations taken into account), and the use of recycled and green materials for housing construction, which is critical given the GHG emissions related to building construction.

Component 4: Project Management, Monitoring and Evaluation (EUR 18,210,000, including 4.1: EUR 5,918,250 for ILBANK, 4.2: EUR 6,373,500 for MoH, and 4.3: EUR 5,918,250 MoEUCC)

54. This component will finance consulting and non-consulting services, goods, training, and operating costs for supporting the Implementing Agencies in project management and implementation activities under the Project, including for, but not limited to, monitoring and evaluation, reporting, procurement, financial management, environmental and social management, grievance redress mechanism, citizen engagement, and project communication and outreach. It will also support consulting services and training to strengthen the capacity of the Implementing Agencies to mainstream climate mitigation and adaptation in project activities. It will have three subcomponents, one for each Implementing Agency. The subcomponent for İLBANK will also support technical assistance and capacity strengthening for beneficiary municipalities to facilitate the sustainable operation of the reconstructed/rehabilitated municipal infrastructure and facilities.

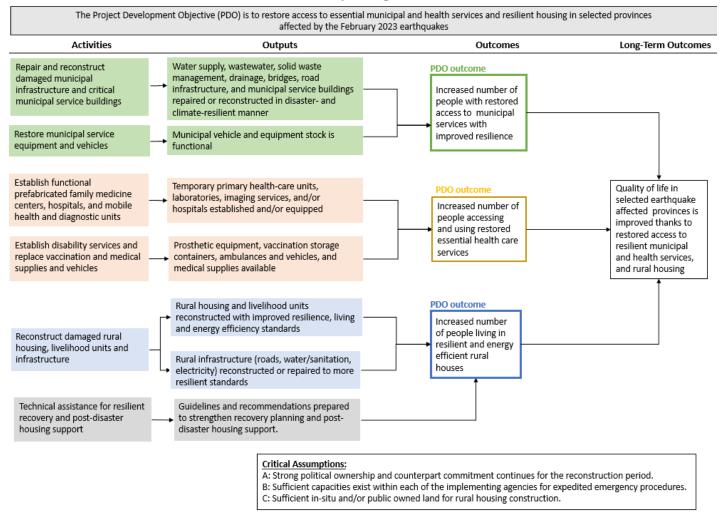
C. Project Beneficiaries

55. The direct beneficiaries of the Project will be: (i) affected people living in selected earthquake-affected provinces who are provided with restored access to municipal services, including both Turkish citizens and SuTPs; (ii) people affected by the earthquakes who are provided with restored health services, including displaced people living in temporary shelters, those that relocated and/or were transferred as patients to other provinces, as well as SuTPs in shelter camps in the earthquake-affected provinces; and (iii) rural households in selected earthquake-affected provinces whose destroyed, heavily or moderately damaged houses, livelihood buildings, and village infrastructure are reconstructed. The total population of the country will also benefit indirectly from the increased capacity of the authorities to build back better infrastructure and respond more efficiently to disasters.

56. Project investments under Component 1 reach about 40 percent of the GoT's initial estimate of municipal infrastructure reconstruction and services restoration needs. These investments are expected to benefit about 30 percent of the population in the earthquake-affected provinces. Investments under the health component meet about 15 percent of the initial cost estimate for short to medium term restoration of primary health care services; however, the Project will support a significant number of the mobile healthcare clinics, vaccine transfer vehicles, container vaccine storage and prefabricated primary healthcare facilities planned by MoH as part of early recovery. Investments in restoration of healthcare services are expected to reach in the range of 25 to 30 percent of the affected population. Rural housing investments will support about 3 percent of rural housing reconstruction needs anticipated by the GoT with a focus on provision of technical assistance to strengthen the affordability and inclusiveness of the program.

D. Results Chain

Theory of Change



⁶⁶ This initial estimate of recovery and reconstruction needs, as assessed by the GoT in March 2023, may significantly increase once detailed assessments of municipal infrastructure damage, including particularly of underground infrastructure, will be finalized.

E. Rationale for Bank Involvement and Role of Partners

- The World Bank has been a leading partner in the thematic areas of DRM, municipal infrastructure, and health in Türkiye for many years, and brings lessons learned from decades of experience in supporting post-disaster recovery and resilience globally.⁶⁷ Over the past 20 years, the Bank has supported post-disaster reconstruction with more resilient infrastructure and with human settlements that provide a better quality of life. The 2022 World Bank's Independent Evaluation Group (IEG) evaluation of the World Bank's disaster risk reduction support found that its post-disaster financing and technical assistance has been transformative in many countries, providing not only support for short-term recovery across sectors but also drawing attention to the importance of investing in longer term resilience (i.e., build back better) as part of the reconstruction process. In Türkiye, the Bank has provided support to recovery and reconstruction programs following major disasters (e.g., the Erzincan Earthquake Rehabilitation and Reconstruction Project (P009099, closed in June 2000), the Marmara Earthquake Emergency Reconstruction Project (MEER, P068368, closed in December 2006), and more recently the Earthquake, Floods, and Wildfire Emergency Reconstruction Project (approved by the Board in June 2022)), disaster risk reduction programs (e.g., the Istanbul Seismic Risk Mitigation and Emergency Preparedness Project (P078359, closed in December 2015, globally known as the best-practice ISMEP Project), the Disaster Risk Management in Schools Project (ongoing), the Seismic Resilience and Energy Efficiency Project (SREEP, P175894, ongoing)⁶⁸, and the Climate and Disaster Resilient Cities Project (approved by the Board in September 2022)), municipal infrastructure investment programs through İLBANK (e.g., the Sustainable Cities Series of Projects (P128605 and P161915, ongoing)), and health sector support programs (e.g., the Health Systems Strengthening and Support Project (ongoing), and the COVID-19 Emergency Response Project (P173988, ongoing)). Investments financed under the proposed Project build on the Bank's lessons learned in Türkiye and globally and will complement the Bank's existing portfolio in relevant sectors in Türkiye, and other projects financed by development partners.
- The World Bank's convening power can facilitate coordination with other development partners and crowd-in additional financing for post-disaster recovery and reconstruction. The World Bank is perceived by the government and other development partners as a leading actor on DRM, given its longstanding reputation, its strong country presence, its operational expertise, and its ability to work across sectors. Following the earthquakes, the Bank has been in close consultation with the GoT and other development partners and IFIs to assess needs and facilitate mobilization of additional resources for reconstruction efforts (see Box 2).⁶⁹ The Bank has also been convening regular IFI coordination meetings to ensure complementarity of efforts. The proposed Project is envisioned to act as a framework to potentially crowd in additional financing for resilient recovery of disaster-affected areas from other development partners and IFIs. For example, the World Bank provided US\$563 million to the ISMEP Project (2005–15) that financed many earthquake risk mitigation measures; as of 2021, the program had attracted over US\$2 billion from seven additional donors.

⁶⁷ Examples include post-disaster projects in Indonesia, Philippines, Croatia, Serbia, Pakistan, India, Nepal, and China, among others, in addition to Türkiye.
⁶⁸ In addition to a World Bank Loan, this Project is supported by a US\$750,000 recipient-executed grant from the Japan-World Bank Program for Mainstreaming Disaster Risk Management in Developing Countries for rapid determination of seismic risky buildings.

⁶⁹ The World Bank is also coordinating with other development partners, including the UN Children's Fund, EU, KfW, and European Bank for Reconstruction and Development, to support the GoT on the education sector through just-in-time technical dialogue and assistance to earthquake recovery efforts.

Box 2: Mobilization of Resources for Reconstruction and Coordination with Development Partners

Donor support and financing are essential to support the enormous reconstruction and recovery needs in Türkiye after the devastating February 2023 earthquakes. On March 20, 2023, a total of EUR 6.05 billion in grants and loans were pledged for Türkiye by the international community during the International Donors' Conference "Together for the People in Türkiye and Syria", which was co-hosted by the President of the European Commission and the Prime Minister of Sweden in Brussels. Donor support and pledges confirmed by countries and international organizations during the conference* are listed below:

	Grants (EUR)	Loans (EUR)
European Commission and Member States:	1,200.0 million	50.0 million
International Organizations:		
- World Bank		1,700.0 million
- European Bank for Reconstruction and Development		1,500.0 million
- Council of Europe Development Bank	3.0 million	500.0 million
- International Labor Organization	2.4 million	
- Islamic Development Bank	1.4 million	
- European Investment Bank**	0.3 million	500.0 million
- Black Sea Trade and Development Bank		550.0 million
- United Nations High Commissioner for Refugees	50.2 million***	

^{*} European Commission figures available at: https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/stronger-europe-world/donors-conference-turkive-and-syria en

The GoT has estimated the reconstruction and recovery needs at US\$10.2 billion for rural housing, US\$4.3 billion for health, and US\$12.9 billion for public infrastructure and buildings. Given the scale and extent of the financing required, the GoT is also in consultation with other development partners and IFIs, including the Islamic Development Bank, Asian Infrastructure Investment Bank, European Investment Bank, European Bank for Reconstruction and Development, Agence Française de Développement, and KfW Development Bank, to explore potential parallel co-financing to complement the World Bank financing under this proposed Project. The CEB approved a fast-track EUR 250 million loan on April 24, 2023, to support the GoT in its efforts to recover critical health services in the short term as well as the resilient reconstruction of health infrastructure over the medium term, which is fully coordinated with the health activities to be supported under the proposed Project. Furthermore, JICA anticipates providing parallel co-financing in a sizeable amount (yet to be determined) to the proposed Project and discussions are ongoing.

F. Lessons Learned and Reflected in the Project Design

- 59. The Project incorporates lessons learned from the World Bank's involvement in multisector post-disaster recovery and reconstruction as well as the World Bank's operational program in Türkiye. The proposed Project draws on experience from the ISMEP and MEER projects, as well as the Sri Lanka Tsunami Emergency Project, the China Wenchuan Emergency Project, and the Sindh Flood Emergency Rehabilitation Project, among others. The key lessons learnt that informed the design of the Project are outlined below.
- 60. The use of a framework approach, guided by key recovery principles and clear investment eligibility and selection criteria, provides necessary flexibility for emergency projects. A common feature in emergency recovery projects is a flexible project design that allows the selection of specific investments to be conducted during implementation, especially as the government continues to mobilize financing and support for various elements of the reconstruction program from different development partners. This approach also allows smaller and less complicated subprojects to be implemented rapidly in the short term, with more time for larger and more complex subprojects.

^{**} Subject to approval of the European Investment Bank governing bodies

^{***} This refers to the amount received in response to UNHCR's humanitarian appeal. It was not taken into account to calculate the total amount of pledges.

- 61. The post-disaster recovery and reconstruction phase requires a balance between short-term interventions to restore essential services and long-term reconstruction. The provision of temporary facilities and mobile units is critical to quickly restore access to essential services, such as health care, for the affected population in the aftermath of a disaster. Such temporary facilities allow for the continuous provision of services while permanent reconstruction activities are planned and executed, which may take up to several years.
- 62. The recovery and reconstruction process offers an opportunity to "build back better" and to offset the distributional impacts of disasters. Global knowledge suggests that old and low-quality construction is generally more vulnerable to damage than more recent capital. When a disaster hits, the destruction of low-quality assets allows the possibility of "building back better," thereby contributing to long term resilience to natural hazards and climate change and to greater energy efficiency. The Bank's strategy of building government capacity through technical assistance and by improving the technical standards for infrastructure and rural housing reconstruction will help improve the preparedness and reduce the vulnerability of communities to future natural disasters and strengthen the country's resilience to hazards and climate change. Care will also be taken to avoid unsustainable lock-ins or "build back the next disaster", such as rehabilitation or reconstruction of damaged infrastructure in locations that are susceptible to other hazards or reinforce unsustainable land uses or the construction of carbon-intensive buildings.
- Given the urgency for expedient and effective implementation, to the extent possible, emergency recovery projects can capitalize on the comparative advantage of using counterpart institutions that have proven implementation capacities and the ability to coordinate with other institutions. In addition, intensive implementation support to implementing agencies by World Bank teams with a strong local presence has proven effective in challenging post-disaster contexts, including Hands-on Enhanced Implementation Support (HEIS) to expedite emergency procurement and support implementation of contracts with quality assurance. The proposed Project builds on existing capacity and implementation arrangements used for ongoing Bank-financed operations in the municipal, health, and building sectors in Türkiye (İLBANK, MoH, and MoEUCC), paired with extensive implementation support by the Bank (including HEIS at the government's request). This combination also has the added benefit of being able to improve the capacity of these institutions to respond to future disasters.
- 64. Consultative approaches in rural housing reconstruction increase ownership and satisfaction of beneficiaries. For the rural housing component, a homeowner driven approach to select the type of house to be reconstructed, coupled with clear communication and information about the housing program, its financial implications, and its benefits, as well as the hazards risk assessment for the community, fosters ownership among participants and leads to stronger results and better decision-making for the location of housing reconstruction (in situ versus relocation to safer, more resilient sites). This approach builds on lessons from the MEER project, in which the rural housing reconstruction program allowed families to select from several approved designs that included seismic resistant features. Examples from Japan⁷² also show the importance of communication in raising awareness to enable households to understand the natural hazard risks prevalent in their community to help them take better informed decisions related to emergency preparedness and investment planning.

⁷⁰ Hallegatte, Stephane, Adrien Vogt-Schilb, Mook Bangalore, and Julie Rozenberg. 2017. Unbreakable: Building the Resilience of the Poor in the Face of Natural Disasters. Climate Change and Development Series. Washington, DC: World Bank.

⁷¹ https://openknowledge.worldbank.org/handle/10986/10280

⁷² https://www.gfdrr.org/sites/default/files/publication/121516_drmhubtokyo_Preparedness_Map_for_Community_Resilience_Earthquakes.pdf

III. IMPLEMENTATION ARRANGEMENTS

A. Institutional and Implementation Arrangements

65. The Project will have one Loan Agreement with three implementing agencies, each of which has existing experience managing World Bank-financed projects and scalable capacity to implement this emergency Project. The Loan Agreement will be signed between the World Bank and the Republic of Türkiye with İller Bankası A.Ş. (İLBANK) as implementing agency for Component 1, the MoH as implementing agency for Component 2, and the MoEUCC as implementing agency for Component 3. All Implementing Agencies will benefit from project management and monitoring and evaluation support under Component 4. The institutional and implementation arrangements build upon existing structures in the implementing agencies that have proven implementation capacities and ability to work well with other institutions. In addition, each implementing agency will be able to launch project activities independently from one another, allowing greater flexibility to advance activities by component based on readiness (for further details on implementation readiness see Section IV.A. Technical and Economic Analysis). To facilitate overall coordination, joint monitoring meetings will be held with representatives from İLBANK, MoH, MoEUCC, AFAD, and other relevant institutions during implementation support missions.

Institutional and Implementation Arrangements for Components 1 and 4.1 – İLBANK

- 66. The responsibility for overall management and implementation of Component 1 will lie with İLBANK. İLBANK is a state-owned development and investment bank established in 1933 and has two core functions: (i) to support infrastructure development at the sub-national level through loans, grants, and technical assistance, and (ii) to transfer central tax revenues to local authorities in Türkiye. As the government's municipal lending vehicle, İLBANK has a long experience in managing implementation of municipal infrastructure investments and demonstrated its capacity to act as a financial intermediary (FI) for municipal service projects with IFI financing, including through World Bank-financed operations such as the Municipal Services Project (P081880), the Sustainable Cities Series of Projects, and the Municipal Services Improvement Project (P169996). Given the impact of the February 2023 earthquakes, the public finance and debt management law (Law No. 4749) was amended enabling MoTF to allocate external finance, on a non-repayable basis, to institutions and organizations other than the public administration within the scope of the general budget (such as ILBANK) for reconstruction, infrastructure, and superstructure works in disaster-affected areas. In addition, given the urgency of the reconstruction process and the sheer extent of the damage sustained at the municipal level, including to municipal administration facilities and staff, the GoT requested İLBANK to implement Component 1 on behalf of, and in close coordination with, earthquake-affected municipalities. Recognizing İLBANK's legal personality as a special-budget incorporated company, the World Bank will require a Project Agreement with LBANK to make the proceeds of the Loan for Components 1 and 4.1 available to İLBANK and to ensure İLBANK's implementation of these components in accordance with the terms of the Loan Agreement.
- 67. Under this Project, İLBANK's International Relations Department will act as an implementing agency rather than Financial Intermediary (FI) for Component 1, coordinating closely with the Project's beneficiary municipalities and their affiliated utilities. İLBANK's International Relations Department has a Project Management Unit (PMU) that was first established in 2005 and has since continuously coordinated and supervised the implementation of World Bank-financed projects in an FI modality. Hence, the Department has a strong track record and experience with the Bank's policies and procedures. However, for this specific Project, İLBANK will act as an Implementing Agency on behalf of the beneficiary municipalities and affiliated utilities in the earthquake-affected areas. Therefore, a new Project Implementation Unit (PIU) exclusively tasked with the implementation of this Project will be established under İLBANK's International Relations Department with functions and responsibilities acceptable to the Bank within 30 days of the Loan Effective Date. The

iLBANK PIU will be directly responsible for procurement, financial, contract, E&S management, as well as monitoring, evaluation, and reporting for all activities under Component 1. Accordingly, the PIU will: (a) identify eligible investments under the proposed Project (based on the eligibility and selection criteria detailed in Annex 2 and the POM, and in accordance with the Project's E&S instruments); (b) carry out the procurement of works, goods, and services required under the Project; (c) administer funds and maintain separate accounting records in accordance with its own financial regulations, rules, policies and procedures; (d) prepare periodic progress reports; (e) develop and implement the Project's E&S instruments, ensuring compliance with the Bank's ESF and participatory planning processes in coordination with relevant municipalities and their affiliated utilities; and (f) ensure adequate stakeholder and citizen engagement in coordination with relevant municipalities and their affiliated utilities.

- 68. The new PIU under İLBANK will be led by a Project Manager and will be composed of highly qualified staff who will be exclusively dedicated for the implementation of the proposed Project. To strengthen its implementation capacity, İLBANK will both (i) reassign some of the existing staff with experience in Bank policies and procedures from the PMU to the new PIU, and (ii) recruit additional professionals with experience in technical, procurement, contract management, financial management, E&S management, and monitoring and evaluation to enable the dedicated human capacity for the timely implementation of this emergency operation. İLBANK will mobilize at least one Project Manager responsible for coordinating overall implementation of Component 1, one financial management specialist, three procurement specialists, one environmental specialist, one occupational health and safety specialist (OHS), one social specialists, one technical specialist, and one monitoring and evaluation (M&E) specialist to be fully dedicated to the newly established PIU in Ankara, all with terms of reference and qualifications satisfactory to the Bank (including previous experience with Bank-financed operations) within 30 days of the Loan Effective Date. In addition, İLBANK will assign or mobilize an adequate number of technical, environmental, social, and OHS specialists for the PIU to be located in offices in the earthquake-affected provinces, all with terms of reference and qualifications satisfactory to the Bank, to ensure the proper monitoring of both construction supervision consultants and contractors in the field. İLBANK may hire a project management consultant to mobilize these specialists.
- ILBANK will sign protocols with beneficiary municipalities or their affiliated utilities, as relevant, defining their 69. respective rights and liabilities. As the İLBANK PIU will implement Component 1 on behalf of earthquake-affected municipalities or affiliated utilities (for the purposes of this PAD, hereinafter reference to municipality will also include their affiliated utilities as relevant), the PIU will need to ensure appropriate and close coordination with beneficiary municipalities throughout project implementation, including on technical aspects (e.g., prioritization, technical specifications, and designs of infrastructure), procurement, E&S considerations, and legal aspects regarding subproject implementation and handover will need to be clearly defined. The protocols will govern the relationship between İLBANK and the beneficiary municipalities covering, at a minimum: the granting by the municipality to İLBANK of the right to work within the municipality to carry out the activities under Component 1, including İLBANK's access of the relevant municipal infrastructure and facilities, relevant municipal staff, and any critical information necessary to enable İLBANK (and its consultants) to carry out Project activities; the municipality's agreement for İLBANK to make decisions on their behalf with respect to design and supervision of the civil works; the terms for the municipality's (informed) involvement on the environmental, social, and technical aspects throughout implementation to ensure ownership; the rights of the municipality to own and operate the rehabilitated and/or reconstructed infrastructure and/or facilities; the commitment of the municipality to operate and maintain the rehabilitated and/or reconstructed infrastructure and/or facilities consistent with sound technical, environmental, and social standards and the Anti-Corruption Guidelines; the understanding between ILBANK and the municipality on the party(ies) that will be legally responsible for activities under Component 1 (i.e., responsibility for the civil works and other related contracts, and any liabilities incurred in connection with these activities) and responsibilities for providing any additional funds that may be needed to carry out the responsibilities under the ESCP (including potential compensation for resettlement) both during and after the

reconstruction and/or rehabilitation, and any related indemnifications; the granting by the municipality to İLBANK of the right to obtain all information as İLBANK, the World Bank, or other representatives of the Borrower may reasonably request relating to the implementation of Components 1 and 4a activities; the granting by the municipality to İLBANK of the right to inspect by itself or jointly with representatives of the World Bank and/or the Borrower, the sites and expenditures financed by the Project, their operation, and any relevant records and documents; and the recognition by the municipality of İLBANK's right, on behalf of the Borrower, to suspend and/or terminate the use of the Loan proceeds under the Project for such activities upon the failure by the municipality to perform any of its obligations under the protocol. İLBANK is currently drafting a template protocol that will be submitted to the Bank for review and no-objection. The template protocol will be included in the Project Operations Manual (POM). İLBANK should sign protocols in form and substance satisfactory to the Bank with beneficiary municipalities prior to launching bids for works contracts in the respective municipality.

70. **POM**. İLBANK shall prepare and adopt a POM for Components 1 and 4.1 in substance and form satisfactory to the World Bank prior to any disbursement under Component 1. The POM will set forth the organizational structure for the implementation of Component 1 and clear roles and duties of the involved actors in accordance with Bank procedures.

Institutional and Implementation Arrangements for Components 2 and 4.2 – MoH

- 71. The responsibility for overall management and implementation of Component 2 will lie with the MoH through its existing Project Management Support Unit (PMSU). The PMSU has experience in implementing Bank-financed operations such as the HSSSP and COVID-19 Emergency Response Project in collaboration with technical specialists from the relevant General Directorates in MoH and technical consultants. For this Project, the General Directorate of Public Health, the General Directorate of Public Hospitals, and the General Directorate of Emergency Health Services will be the implementing units for the activities under Component 2 within their mandate. The PMSU will oversee the preparation of the consolidated annual workplan, procurement plan, and financial report for Component 2 and will assist the General Directorates of MoH in monitoring compliance with Bank environmental and social standards (ESS) and fiduciary policies. The PMSU will report regularly to the Vice Minister of Health in charge of this operation and the ongoing HSSSP and COVID-19 Emergency Response Project.
- 72. Regarding the procurement and financial management system, MoH implementing units will be responsible for budgeting and executing their own investments and preparing the documentation for processing the related payments. The accounting and reporting in project currency, however, will be the responsibility of the PMSU. The implementing units will prepare their annual expenditure plans and budget estimations under the coordination of the PMSU. The budget for Component 2 will be included in the annual budget of the MoH, and a designated account will be established at the Central Bank of the Republic of Türkiye that will be managed by the PMSU.
- 73. The existing PMSU is adequately staffed but will be further strengthened to ensure timely implementation of Project activities in addition to ongoing operations. The PMSU is currently staffed with 31 professionals (14 civil servants and 17 individual consultants) including a project director, a legal consultant, three procurement specialists, four FM specialists, two environmental and social specialists, one expert for technical devices, and two project assistants. The internal processes established for the HSSSP and COVID-19 Emergency Response Project will be replicated for the proposed Project to avoid delays in implementation and initial set-up. As the Project activities will add additional workload to procurement teams in MoH, the General Directorate of Public Hospitals and the General Directorate of Emergency Health Services will each be strengthened with at least one additional procurement specialist. The PMSU will maintain qualified environmental and social specialists through project implementation.

74. **POM.** MoH shall update/customize and adopt the existing POM for the COVID-19 operation to address the needs of Component 2 and 4.2 in substance and form satisfactory to the Bank within 30 days after the Loan Effective Date. The POM will set forth the organizational structure for the implementation of Component 2 and clear roles and duties of the involved actors in accordance with Bank procedures.

Institutional and Implementation Arrangements for Component 3 and 4.3 – MoEUCC

- The responsibility for overall management and implementation of Component 3 will lie with MoEUCC's General Directorate for Construction Affairs (GDCA), in close collaboration with AFAD's General Directorate for Housing and Construction Works. GDCA currently has two PIUs with experience in implementing Bank-financed projects, which are responsible for the implementation of the ongoing SREEP and Energy Efficiency in Public Buildings Project (P162762). A new PIU will be established under GDCA for implementation of activities under this Project. This PIU will be responsible for: (i) raising awareness about the Project activities and communicating with stakeholders; (ii) carrying out consultations with beneficiary property owners and communities throughout project implementation and addressing grievances in a timely manner; (ii) procurement of civil works, consulting services, and goods; (iii) financial management; (iv) compliance with the ESF; and (v) monitoring and reporting. The PIU will work collaboratively with AFAD and relevant general directorates in MoEUCC as needed (e.g., General Directorate of Spatial Planning, General Directorate of Infrastructure and Urban Transformation Services, etc.). Prior to establishment of the new PIU, the existing SREEP PIU will be responsible for kick-starting implementation of this Project.
- The GDCA PIU for this Project will be led by a Project Manager and will be composed of highly qualified staff with experience in Bank policies and procedures. GDCA will assign and recruit highly qualified professionals with experience in technical, procurement, contract management, financial management, E&S management, and monitoring and evaluation to the PIU. The PIU shall also have sufficient decentralized capacity for optimum supervision of technical, E&S aspects on the ground. GDCA will mobilize at least a Project Manager responsible for all project coordination activities, one financial management specialist, three procurement specialists, one environmental specialist, one OHS, one social specialists, one civil engineer, and one M&E specialist for the PIU office in Ankara, all with terms of reference and qualifications satisfactory to the Bank (including previous experience with Bank-financed projects) within 30 days of the Loan Effective Date. In addition, GDCA will also assign or mobilize an adequate number of technical, environmental, social, and OHS specialists for the PIU to be located in the earthquake-affected provinces, all with terms of reference and qualifications satisfactory to the Bank.
- 77. **MoEUCC through its GDCA will sign a protocol with AFAD defining their respective roles and responsibilities in the implementation of Component 3.** The protocol will set forth the functions to be undertaken by MoEUCC and by AFAD for the implementation of project activities in line with relevant national regulations⁷³ and the Bank's policies and procedures. As part of its ongoing organizational and legal mandates under the national regulations, AFAD's General Directorate for Housing and Construction Works will carry out the following tasks in close coordination with the MoEUCC's GDCA for relevant aspects: selection of the rural housing sites; identification of property owners of collapsed, heavily or moderately damaged rural houses who are eligible for the post-disaster rural housing reconstruction program; conducting of consultations to receive consent of the eligible property owners to participate in the rural housing reconstruction program; facilitating the selection of relocation sites for villages where necessary; and transferring the titles of the reconstructed rural houses to eligible property owners and follow up on their repayment of the soft loan. The details of the coordination between GDCA and AFAD regarding these tasks will be set forth in the protocol. The

⁷³ Including Law No. 7269 on Measures to be Taken and Aids to be Provided Due to Disasters Affecting Public Life and Presidential Decree No. 4 regulating the post-disaster duties and responsibilities of AFAD, and Law No. 7452 regarding the Adoption of the Presidential Decree Concerning Settlement and Construction in the Event of State of Emergency.

protocol shall also include: (i) AFAD's agreement to work with MoEUCC to propose sets of damaged villages for proposed financing under Component 3 and for submission to the World Bank for review and no-objection; (ii) the agreement of AFAD and MoEUCC to coordinate regarding the preparation of the Terms of Reference and technical specifications for technical assistance and capacity building activities under subcomponent 3.2, as relevant, for which procurement will be undertaken by the GDCA PIU; and (iii) the agreement of AFAD and MoEUCC to carry out all Project related activities in accordance with the World Bank's Anti-Corruption Guidelines. The protocol shall be in form and substance satisfactory to the World Bank and will need to be signed prior to any disbursement under Component 3.

78. **POM.** GDCA shall prepare and adopt a POM for Components 3 and 4.3 in substance and form satisfactory to the Bank prior to any disbursement under Component 3. The POM will set forth the organizational structure for the implementation of Component 3 and clear roles and duties of the involved actors in accordance with Bank procedures.

B. Results Monitoring and Evaluation Arrangements

- 79. The Results Framework and M&E arrangements as set out in this PAD provide the basis for monitoring progress towards the PDO. Project implementation progress will be monitored based on completed procurements, disbursements, and achievement of the results indicators. The progress on the health related PDO indicator will also be substantiated with qualitative and quantitative information obtained from the field during implementation to provide a better understanding about and adequate context for the performance regarding this indicator.
- 80. **Project results indicators and activities tracking:** The PDO-level and intermediate results indicators, including annual targets, are presented in Section VII. The PIUs at İLBANK and MoEUCC will maintain their respective databases that include all relevant data for project activities required to track these indicators. The databases shall be updated on a biannual basis. Similarly, the PMSU at MoH will compile and report all relevant data for project activities required to track these indicators from its existing health information systems. The PIUs and PMSU will report progress towards PDO-level and intermediate results indicators to the World Bank at least on a biannual basis.
- 81. **Periodic reporting:** The PIUs at İLBANK and MoEUCC, and the PMSU at MoH will be required to submit biannual progress reports to its management and the Bank for review, which will inform the implementation support missions conducted by the Bank every six months. The reports shall present consolidated information on project performance, including physical and financial progress, social and environmental monitoring, and results. The reports will also include data on grievances and resolutions to enable timely corrective action.

C. Sustainability

82. **Technical sustainability**. The proposed Project will adopt a "build back better" approach to the rehabilitation and reconstruction of damaged infrastructure and housing. The Project finances reconstruction of damaged infrastructure and buildings to the standards of current codes. In addition to the seismic integrity of the construction, the Project will generate significant energy saving gains through higher energy efficiency standards. Project financed rehabilitation and reconstruction of municipal infrastructure, municipal service buildings (such as fire stations), and rural housing and livelihood structures will use global good practice and experiences for seismic and climate change resilience. This will include improved engineering standards, designs, siting, and orientation, with due recognition of affordability and technical viability constraints. All newly constructed buildings shall be in accordance with Turkish building codes, Class C (or better) Energy Performance Certification⁷⁴, engineering norms and construction regulations. Modifications to current

⁷⁴ Class C certification requires that a building achieve an energy performance index with an energy consumption of 80-99 kWh/m² per year and GHG emission of 80-99 kg eq. CO₂/m² per year, fully meeting required construction and insulation standards in Türkiye.

building designs for rural housing will also be proposed to improve affordability without compromising the safety of inhabitants. The Project will also support on-site construction monitoring support to improve the long-term climate resilience of public infrastructure and housing. The health investments are necessary to provide continuity of health services after the disaster until reconstruction of permanent housing and health centers can be complete. They will bring high social and health benefits.

- 83. **Institutional.** The Project will support the establishment of two new PIUs under existing Implementing Agencies (İLBANK and MoEUCC), which will be adequately staffed, thus strengthening existing institutional capacity to design and implement seismic and climate resilient post disaster investments without jeopardizing the implementation of existing World Bank-financed projects. Working through the existing PMSU at MoH can increase continued commitment for sustainable project implementation. The Project will support İLBANK to establish capacity to implement investments on behalf of beneficiary municipalities rather than following its usual operating modality as a financial intermediary; once in place, this new implementation approach can also be used to channel funds from other IFIs for municipal infrastructure reconstruction. The technical assistance and advisory services provided to AFAD and MoEUCC will support long-term recovery and improve preparedness for future disasters.
- 84. **Financial sustainability**. Investments in infrastructure, especially water and sanitation, will include energy efficiency measures and reduce non-revenue water, which will improve the overall operating efficiency and cost of operating these services. In addition, given the emergency, the costs of municipal infrastructure reconstruction are being borne by the national government rather than the local authorities. The GoT reconstructs collapsed, heavily or moderately damaged rural homes and transfers them to eligible property owners with a repayment obligation at favorable terms (2-year grace period, then interest free repayment over 18 years). Additionally, in terms of Law 7269, there could be further discounts to beneficiaries which would improve affordability. The Project will also expand the house design options, including smaller units than are currently offered. This will further contribute to affordability for lower income households.

IV. PROJECT APPRAISAL SUMMARY

A. Technical and Economic Analysis

Technical Analysis

85. The Project will promote the integration of seismic and climate risk considerations across the lifetime of infrastructure investments, helping to save lives and livelihoods, and reduce economic losses in the long run. The rehabilitation and reconstruction activities financed under the Project will follow build-back-better principles, which include improved design standards, sizing, siting, construction quality, gender sensitivity, and disability inclusion, with due recognition of affordability and technical viability constraints. The latest building codes in Türkiye that came into force in January 2019 (known as TBEC-2018) are considered largely appropriate by engineers and meet relevant international benchmarks, but challenges exist. Key challenges include the implementation of, and compliance with, seismic strengthening standards due to several factors including: lower capacity of community and stakeholders to apply construction practices; construction culture that does not adhere to relevant standards; and need for improvement in monitoring and compliance systems. This Project will help address some of these challenges by advancing the reconstruction of buildings and infrastructure based on technically sound designs in compliance with the latest seismic standards, financing rigorous construction supervision, and increasing the community's awareness of seismic standards. Additionally, the strengthened designs would reduce repair and reconstruction costs following future disasters.

- 86. The Bank has assessed the government's post-disaster rural housing reconstruction program and found it to be adequate in terms of its technical design, inclusivity of coverage, and transparency. However, there are areas for improvement supported by the project to enhance social and environmental measures, beneficiary consultations, and cost efficiency/affordability of beneficiaries. The Project will prioritize in-situ rural housing reconstruction. Resettlement may be inevitable in some locations due to the existence of geomorphological and climate hazard risks that cannot be reduced sufficiently through mitigation measures. In these instances, AFAD and MoEUCC will identify alternative safe locations on government land, in compliance to the World Bank's ESF, that are as close as possible to the pre-existing rural villages that were destroyed by the earthquakes. Immediate post-disaster reconstruction is being undertaken parallel to verification of eligible property owners. To improve beneficiary targeting and strengthen stakeholder engagement, the Project will only support reconstruction where eligible property owners have been verified and all objections settled. Robust grievance redress mechanisms are already in place for the program that will be further strengthened as needed to ensure timely response to beneficiary and stakeholder grievances under the Project. The housing designs currently being constructed have been assessed as seismically resilient and will have Turkish Class C (or better) Energy Performance Certification. However, some concerns remain on affordability, especially for poor households. Current designs offer five variations of comparable size. The Project will support additional designs, offering beneficiaries more choices – especially smaller housing units to improve affordability. The technical assistance and advisory services will support further exploration of alternative construction methods and materials, such as recycled steel and concrete, to further enhance long-term sustainable reconstruction.
- 87. Given the situation of urgent need, implementation readiness will be key to ensuring timely Project implementation. In terms of implementation capacity, the MoH PMSU is already in place, while both İLBANK and MoEUCC will leverage existing staff managing ongoing Bank-financed projects for the new PIUs; MoEUCC has also already started mobilizing additional technical staff for the ongoing first phase of rural housing reconstruction. In addition, the Implementing Agencies are preparing terms of reference to launch the recruitment of additional qualified consultants as quickly as possible. In terms of procurement, the Bank has already reviewed critical procurement packages identified by MoH and MoEUCC and is providing HEIS for ongoing market assessments, preparation of Project Procurement Strategies for Development (PPSD), procurement plans, and draft bidding documents. Component 2 is expected to be a quick disburser; MoH is finalizing the technical specifications for the health equipment, goods, and facilities and plans to initiate advanced procurement for most activities with the aim to sign contracts for about US\$200 million before Project effectiveness. The Bank has also assessed and found acceptable a sample of the rural housing architectural and structural designs prepared by MoEUCC and some civil works contracts under this component are expected to start in the first year of Project implementation. İLBANK is preparing the priority list and technical specifications of municipal vehicles and equipment to be procured centrally during early implementation. ILBANK and MoEUCC are also preparing the draft protocols to be signed with beneficiary municipalities and AFAD, respectively. Finally, the Implementing Agencies are expediting the preparation of required E&S documents with guidance from the Bank and the preparation of their POMs, drawing from POMs of existing Bank-financed projects that they manage.

Economic and Financial Analysis

88. The economic analysis utilized a blend of Cost-Benefit Analysis and Business Continuity Plan considering that Project activities will contribute to restoring GDP lost during the earthquakes in the affected region. The eleven affected provinces were estimated to enjoy a total GDP share of 9.4 percent based on 2021 national accounts. This regional GDP share was assumed to be applicable to 2023 for which the country-wide GDP was forecasted at US\$956 billion. The analysis modelled "with-Project" and "without-Project" scenarios for GDP restoration. The "with-Project"

⁷⁵ Macro Poverty Outlook for Europe and Central Asia, Türkiye Data Sheet, The World Bank

scenario shows that over a 20-year period, GDP recovery is faster and higher, attributable to Project investments and anticipated parallel investment by other IFIs.

- 89. The economic assessment further indicates that the proposed interventions are economically viable and beneficial. The results of the economic analysis conducted during project preparation are summarized in Table 1 below. The aggregate potential contribution margin of the Project has been calculated to be around 11.5 percent, ⁷⁶ which corresponds to US\$10.33 billion. Several options have been considered to run the sensitivity analysis. Below are the results of scenarios involving a 20 percent cost increase and a 20 percent benefit decrease. Due to the urgent nature of the operation, the estimations are based on a simplified framework-type economic analysis of the proposed Project.
- 90. Under all Project components, Project benefits are assumed to accrue to the restoration of the GDP in the affected provinces, which effectively translates into restoration of livelihood activities. The baseline scenario yields an economic rate of return (ERR) of 22.3 percent and positive net present value (NPV) of US\$1.46 billion. The efficiency parameters remain robust under plus and minus 20 percent variation for the costs and benefits, respectively. There is a clear rationale for public intervention in the aftermath of a disaster. Other rehabilitation/reconstruction services will be financed by the GoT but implemented mainly through the private sector and seek to employ local labor, leading to wider economic benefits for affected communities.

10000	, or =00111	
Description	ERR	NPV (Million US\$) at 8 percent
Baseline	22.3%	1,459
Sensitivity Analysis	·	
(a) 20 percent increase in investment costs	19.7%	1,332
(b) 20 percent decrease in benefits	19.1%	1,039
(c) both (a) and (b)	16.7%	912

Table 1: Summary of Economic Analysis

B. Fiduciary

(i) Financial Management

- 91. The residual Financial Management (FM) risk of the Project is assessed as Moderate subject to completion of mitigation measures by the Implementing Agencies. All Implementing Agencies, namely İLBANK, MoH and MoEUCC, are currently implementing World Bank-financed projects and have established capacity and systems, which will be tailored, updated, or strengthened as described in Annex 1. Overall FM arrangements related to staffing, budgeting, financial reporting, internal control and internal auditing, flow of funds, and audits are deemed adequate to provide reasonable assurance on the proper use of project funds for achievement of the PDO. The main FM risk factors are budget allocation and delayed tailoring of existing FM systems. Presidency of Strategy and Budget Office (SBO) has confirmed their endorsement to include the Project as a framework in the investment program. To mitigate the risk of delays in tailoring the FM systems, the respective implementing PIUs will dedicate a qualified FM staff for the Project to complete all preparatory work for implementation.
- 92. The investments that are proposed to be financed by the World Bank loan must be included in the government's annual investment program. As the Project is an emergency operation prepared under condensed procedures, all project preparation has taken place following the approval of the government's 2023 budget. SBO has completed the off-cycle

⁷⁶ Contribution of the subsectors (total 11.50 percent of the GDP) to the GDP was calculated from the latest Input-Output tables and assumed to be constant over the Project horizon.

inclusion of Project in the investment program as a framework project and will ensure that sufficient allocation is provided in the institutional budgets for 2023 expenditures.

- 93. The main FM covenants for the Project are as follows:
 - İLBANK, MoH, and MoEUCC will maintain financial management systems acceptable to the Bank.
 - İLBANK, MoH, and MoEUCC will prepare the interim un-audited financial reports for the project on a quarterly basis and submit these to the Bank no later than 45 days after the end of each period.
 - The project financial statements which will be prepared separately by İLBANK, MoH and MoEUCC will be
 audited by independent auditors acceptable to the Bank with the terms of reference also acceptable to the
 Bank. The annual audited financial statements of the project will be submitted to the Bank within six months
 of the end of the fiscal year and will be published by respective PIUs as per the Access to Information Policy
 of the World Bank.

(ii) Procurement

- 94. **Applicable Regulations and Anticorruption Guidelines.** The World Bank Procurement Regulations for IPF Borrowers November 2020 ("Procurement Regulations") will apply to the proposed Project. A General Procurement Notice was published on the World Bank's external website and United Nations Development Business online on May 4, 2023, before initiating any project procurement. The Bank'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.
- 95. **Project Procurement Strategy for Development (PPSD).** The Procurement Regulations require the Borrower to develop a PPSD for the Project through implementing agencies. However, as per paragraph 12, Section III of the World Bank Policy on IPF for Situations of Urgent Need of Assistance or Capacity Constraints, a simplified PPSD is acceptable, and the procurement plan is deferred to the implementation phase. Due to the scale of destruction, preparation of detailed PPSD and procurement plan is expected to take time. İLBANK, MoH, and MoEUCC have prepared high-level simplified PPSDs for their respective project components. Overall, the Project will finance the procurement of municipal infrastructure, vehicles/equipment, and consulting services (under Component 1), prefabricated family medicine centers, medical equipment, ambulance, specialized vehicles, medical supplies, furniture, and consulting service (under Component 2) and rural housing and consulting services (under Component 3). Under the health component, all the major procurement packages have been identified, and MoH has carried out a preliminary market assessment. As per MoH's initial market assessment, there are an adequate number of qualified bidders to deliver required goods and supplies, including installation, within a reasonable time. In the case of rural housing under Component 3, MoEUCC has an ongoing program and already awarded several contracts for the construction of new rural houses using a defined set of architectural designs. MoEUCC's preliminary market assessment showed an adequate number of local bidders to perform this task with about seven packages following open bidding with national competition. In the case of İLBANK, considering that earthquakes caused widespread damage across 11 provinces, it is not possible to identify infrastructure procurement packages as detailed assessment is still ongoing. The finalization of the PPSDs is deferred to the project implementation stage as ILBANK needs more time to complete detailed need assessment, and the other two agencies need to complete detailed market analysis.
- 96. **General challenges in procurement and contract management under emergency operations:** In the past, Bankfinanced emergency projects in different countries, including Türkiye, faced planning and implementation challenges in procurement processes and contract implementation, which led to slow implementation of contracts and hence poor disbursements. Key reasons for this were: (i) issues regarding the capacity of the borrowers for design and project

implementation; (ii) disruption in the supply chain and capacity constraints of the supplier/contractors; (iii) delays in internal approvals within Government; (iv) high-priced bid and less capable winning bidders in competitive bidding due to the lack of market analysis and bidders' capacity assessment; (v) too many small contracts that were difficult to manage; (vi) integrity risks (irregularities, wrongdoing) in the bidding process and contract implementation; (vii) inadequate monitoring of contract implementation; and (ix) inadequate consideration of sustainability in the procurement and contract management.

- 97. Innovation in project procurement design and contracting strategy: To ensure an effective procurement process and contract implementation in timely manner under the proposed Project, the following proactive measures have been agreed: (i) the Bank will provide HEIS to support PIUs in developing technical specifications/ToRs and procurement process at the request of Government. The Bank will hire procurement consultant(s) and local medical equipment expert to supplement PIU capacity; (ii) each Implementing Agency will strengthen procurement capacity by hiring at least two qualified procurement staff. Where possible, implementing agencies will assign procurement specialists from existing projects; (iii) conduct quick but effective market analysis and based on that innovative procurement packaging (fewer and larger value contracts); (iv) conduct prospective bidders capacity assessment and, based on that, set the qualification requirements for the bidding documents to ensure adequate competition and value for money procurement; (v) raise bidders awareness on Bank procurement procedures; (vi) include rated criteria / pointing system to encourage SMEs participation, green procurement and other aspects to ensure building back better; (vii) provide customized training for Implementing Agencies and bid evaluation committee; (viii) advanced procurement actions for few high value identified packages; (ix) use of existing PIUs and Bank-financed projects in the Implementing Agencies to kick-start preparation of procurement activities; (x) bi-weekly co-ordination meeting between Implementing Agencies and the Bank on procurement progress of high value contracts and solving issues and monitoring business standard responses to review of procurement documents; and (xi) use of technology in contract monitoring.
- 98. **Type of contracts and sequencing of procurement:** MoH is responsible for the procurement of about EUR 245 million, primarily goods procurement covering prefabricated family medicine centers, ambulances, different types of specialized health care vehicles, container vaccine storage, furniture, and medical equipment for prefabricated and existing hospitals, etc. MoH plans to initiate advanced procurement for most of their activities with the aim to sign contracts by effectiveness. MoEUCC is responsible for the procurement of about seven packages for rural housing reconstruction (totaling nearly EUR 255 million). MoEUCC can initiate bidding processes for works after finalizing the Environmental and Social Management Framework (which is already under preparation). Finally, İLBANK is responsible for the procurement of EUR 382 million, mostly works procurement related to repair and reconstruction of municipalities structure and facilities and some goods procurement (municipal services equipment and vehicles). For the works, İLBANK is expected to need some time for detailed needs and engineering assessments, construction design, meeting ESF requirements, and procurement process. As per the procurement and contracting strategy, İLBANK plans to conduct procurement of municipal equipment/vehicles in the first year.
- 99. **Procurement risk assessment.** The Procurement risk for the Project is assessed substantial after considering the proposed mitigation measures. Key risk factors include (i) market readiness with an increased level of activities financed by the Bank, other IFIs, and the GoT, (ii) disrupted supply chain and logistics in the earthquake-affected provinces that will impact procurement supply chains, (iii) complexity of the project and procurement packages involving three diversified sectors, (iv) capacity of the municipal assemblies to determine their procurement needs, (v) new PIUs will take time to be trained and get familiar with World Bank procurement procedures, and (vi) internal government bureaucracy to take procurement decisions (it takes on average 250 days to award a contract under non-emergency Bank-financed projects in Türkiye), and (vii) integrity risks increased by emergency situations with increased funds flow. Detailed risk mitigation measures are listed in Table 3 in Annex 1.

C. Legal Operational Policies

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

100. The Project triggers OP 7.50 (Projects on International Waterways) as Project activities involve the rehabilitation and reconstruction of water and sanitation infrastructure which may use and/or risk potential pollution of the Asi and the Dicle/Firat Rivers which are waterways as defined in the World Bank's Operational Policy 7.50. Since the proposed Project is an emergency recovery operation processed in a situation of urgent need of assistance, the exact scope of the works will be identified during the early stages of project implementation in a manner acceptable to the World Bank. At the same time, the proposed Project will not include the construction of any new schemes that use or risk polluting international waterways and/or activities that otherwise adversely affect the quantity or quality of the water flowing to other riparians. Therefore, an exception to the notification requirement under paragraph 7(a) was approved by the Regional Vice President on April 27, 2023.

D. Environmental and Social

- While the E&S risks and impacts are not expected to be significant or irreversible and all three Implementing Agencies have strong capacity and long-term experience of implementing environmental and social (E&S) mitigation measures in World Bank-financed projects, both E&S risks have been rated as Substantial for the Project, mainly due to the post-emergency context. The Project will have positive impacts as it will enable İLBANK, MoH, and MoEUCC to undertake urgent rehabilitation in the earthquake-affected provinces including resilient reconstruction of municipal infrastructure, installation of prefabricated family medicine centers with furnishings and equipment, and resilient reconstruction of collapsed/heavily/moderately damaged rural houses. During the implementation phase, there will be E&S risks and adverse impacts caused by the construction/reconstruction activities. These impacts will include: emissions of dust and vehicle exhausts; noise and vibration causing disturbances; generation of waste; risks and impacts associated with the operation of municipal solid waste management facilities to be reconstructed under the Project; OHS-related risks (i.e., due to possible unsafe practices or due to contractors/workers' crews having to implement the activities in destroyed areas with potentially limited access to safe drinking water, sanitary and hygienic conditions); fire and life safety risks; traffic and road-related risks from increased traffic volume and movement of heavy-duty vehicles; closure of roads and blockades of sidewalks; risks associated with labor influx that may impact community health and safety; and difficulties in engaging stakeholders due to the post-earthquake emergency nature of the Project. In addition, while preference will be given to in-situ reconstruction of rural houses (Component 3), land acquisition and resettlement may occur in some cases. Another key risk is that eligible vulnerable households may not be able to access housing reconstruction services due to lack of their own financial capacity. The sexual exploitation and abuse/sexual harassment (SEA/SH) risk of the Project is assessed as Moderate given that the Project will be implemented in eleven provinces that have been heavily affected by earthquakes, including in hard-to-reach areas. It may be very challenging to monitor Project activities by the PIU. In addition, in many areas, the service providers may not have adequate institutional set up to address SEA/SH related incidents (due to destruction of buildings and disruption of services due to the earthquakes).
- 102. These adverse impacts of the Project are not, however, expected to be significant or irreversible and can be managed if due mitigation is applied. These are also not expected to result in significant adverse cumulative or transboundary impacts. Each PIU will prepare one Environmental and Social Management Framework (ESMF), one Labor Management Procedure (LMP) and one Stakeholder Engagement Plan (SEP) for its respective component. The ESMFs will

establish requirements and procedures for the identification, assessment and management of the environmental and social risks and impacts of sub-projects, including screening and exclusion criteria for selection and classification of sub-projects in terms of environmental and social risk, and to guide the preparation and implementation of sub-project specific instruments, including site specific Environmental and Social Impact Assessments and the fit-for-purpose ESMPs for substantial risk sub-Projects, and ESMP checklists and/or E&S codes of practices for low to moderate risk sub-projects. High risk sub-projects will be excluded from the Project scope. The ESMFs will also include chance find procedure, a project-level waste management plan (medical waste management plan for Component 2), emergency procedure, traffic management plan, etc. In addition, İLBANK and MoEUCC will prepare Resettlement Frameworks for their respective components and subsequent Resettlement Plans as required. The Project will implement SEA/SH mitigation measures, including SEA/SH response mechanisms (utilizing the survivor-centric approach) as part of the generic and sub-project specific ESMPs; a Code of Conduct for workers; a mechanism to report SEA/SH grievances; and training and awareness sessions for project workers and affected communities. These E&S management measures for each Implementing Agency were included in the Project-level Environmental and Social Commitment Plan (ESCP) agreed between the Implementing Agencies and the World Bank.

- 103. There will be three implementing agencies for this project (İLBANK, MoH and MoEUCC). In addition, AFAD will carry out tasks as part of its ongoing organizational and legal mandates in close collaboration with the MoEUCC PIU regarding the identification of and consultation with property owners who are eligible for the post-disaster rural reconstruction program supported under Component 2. While İLBANK and MoEUCC will establish additional PIUs with adequate human resources, MoH will strengthen its existing PMSU to implement their respective components. All three Implementing Agencies have adequate experience to implement environmental and social management measures following the Bank's ESF as they have been implementing several projects financed by the World Bank. The ESCP specifies that both PIUs and the PMSU will recruit or assign, on a full-time basis, highly qualified professionals with previous experience in implementing Bank-financed projects and with good knowledge of the ESSs, including one environmental and one social specialist for each PIU and for the PMSU, and one OHS specialist for each PIU, who will ensure proper supervision and monitoring of project components in compliance with the relevant ESSs. The PIUs/PMSU will be directly responsible for the environmental and social management and compliance, as well as for the monitoring, evaluation, and reporting for project activities under their respective components; and ensure that works that have physical impacts do not begin without the required Project's E&S instruments in place and the necessary E&S clauses in contract documents.
- 104. All three agencies have robust Grievance Redress Mechanisms (GRM) that will be utilized to address concerns and complaints promptly and transparently with no cost or discrimination toward project-affected communities. Implementing staff and local-level coordination structures will be oriented on their roles and responsibilities to address grievances, particularly around exclusion and manipulation of targeting and entitlements. Channels will be developed to allow for community M&E of site-specific project activities such as through social audits or citizen feedback platforms. All these measures are expected to help deepen citizen engagement and reinforce community cohesion. The GRM is also expected to provide early warnings on emerging environmental, social, and health and safety, risks.

E. Gender, Citizen Engagement, and Climate Change

Gender gap analysis, project actions, and monitoring

105. **Gender gap analysis.** The February 6 earthquakes affected a population of 14 million in 11 provinces out of which 2.4 million were estimated to be women of reproductive age⁷⁷ and 130,000 were estimated to be pregnant. Pregnancy

⁷⁷ UNFPA Türkiye/Syria Earthquake, Joint Situation Report, March 20, 2023, https://turkiye.unfpa.org/en/turkiye-earthquake-situation-report-no-6

⁷⁸ 2023 Kahramanmaraş and Hatay Earthquakes Report, Strategy and Budget Office, Government of Türkiye, March 2023.

and childbirth make women particularly vulnerable after a disaster. Reproductive health services for expectant and nursing mothers are important in evacuation and post-disaster shelters. To illustrate, after Typhoon Haiyan, it was discovered that more than 230,000 pregnant women were affected by the typhoon. Ten days after the disaster, the United Nations Population Fund reported that nearly 900 women were giving birth each day, with around 130 likely to experience potentially life-threatening complications. In Türkiye, 25,000 deliveries are expected in any single month calling for immediate attention from the perspective of health care provision. The earthquake destroyed or caused major damage to many primary and secondary care health facilities and caused significant service disruptions, including mother and child health (MCH) services such as antenatal care (ANC) and child immunization. MCH is a critical building block of any health system and good MCH is one of the main determinants of the better health outcomes. To maintain the country's remarkable MCH performance before the earthquake, these services need to be immediately restored and access to MCH needs to be facilitated. The importance of prioritizing MCH services is also reflected in the GoT's earthquake assessment report that highlights health as a fundamental human right and prioritizes the restoration of access to essential and quality health services with a particular focus on women of reproductive age and children in the health sector recovery vision⁷⁹. PHC and hospital level services to be supported under the Project will also include treatment and care for women on GBV, as this is under the scope of work for family physicians and specialist physicians as per the relevant regulation.⁸⁰ Both the General Directorate of Public Health and General Directorate of Public Hospitals have prepared and are currently implementing clearly defined working algorithms to provide care and guidance to women who are subject to GBV. 81 These existing procedures will also be implemented under the Project.

106. **Proposed actions to close the gap**. In line with the Project's support to restore health services in the earthquake-affected area, the following activities are proposed to address the gender gap described above:

- The Project will support the procurement of prefabricated Family Medicine Centers that will provide MCH services.
- The Project will support the procurement of mobile health clinics to reach out to the different settlements with large and displaced populations to provide MCH services.
- The Project will support home health care and psycho-social support, including counseling for GBV, through mobile units.
- The Project will support restoring MoH's capacity in vaccination by replacing damaged provincial and district
 vaccine warehouses with prefabricated vaccine storage containers that will service as regional vaccine
 warehouses located in the major cities of Hatay, Malatya and Kahramanmaraş, Adıyaman and Adana. The Project
 will also support the procurement of vaccine transport vehicles to ensure timely distribution to settlements and
 rural areas.

107. **Indicators.** The gender gap will be monitored with a specific indicator in the results framework for MCH, namely, ANC coverage (percentage of women who received any ANC from a skilled provider).

Citizen engagement

108. Effective and demonstrable Citizen Engagement (CE) will be central to project implementation. Given the communication and engagement limitations posed by the post-disaster scenario, careful planning is needed to reduce any risk of exclusion of vulnerable groups, especially regarding the rural housing component. To measure effectiveness

⁷⁹ United Nations Population Fund, "Türkiye/Syria Earthquake. Joint Situation Report #1", updated March 20, 2023,

https://eeca.unfpa.org/sites/default/files/pub-pdf/earthquake_joint_sitrep_1_-_f5.pdf 3

⁸⁰ Law no. 6284, Article 40, Coordination among Institutions,

https://www.mevzuat.gov.tr/File/GeneratePdf?mevzuatNo=17030&mevzuatTur=KurumVeKurulusYonetmeliqi&mevzuatTertip=5)

⁸¹ Working Algorithm for Public Hospitals (issued by the General Directorate of Public Hospitals, March 2022) and Working Algorithm for Family Physicians (issued by the General Directorate of Public Health).

of citizen feedback mechanisms established under the Project, indicators are included in the Results Framework measuring the percentage of registered grievances related to the delivery of project benefits that are addressed per component. As such, the Project considers CE as a cross-cutting issue for all components, particularly in activities related to rural housing that will engage communities early in Project implementation, through beneficiary and community consultation about their choices within the options of safe locations, as well as the design of their future homes. The SEPs prepared by the three Implementing Agencies will ensure the participation of all stakeholders, to understand the needs of the affected populations, ensure transparency and coordination between government entities, the PIUs, and communities, and receive feedback and grievances. The Project will use both the GoT's existing national grievance systems for Turkish citizens and foreigners, which have online platforms that track closing of the feedback loop with citizens, as well as existing communication channels of each Implementing Agency that also track timely response to grievances and will be adapted for purposes of the Project as needed. Existing CE online platforms may be further improved during implementation considering best practice examples. The SEPs also set out the nature and periodicity of stakeholder consultations, which will be used to measure and improve CE. As part of the post-disaster response, informing and receiving feedback from citizens in real time can provide insight into how the crisis is affecting women, SuTPs, persons with disabilities, the elderly, and other vulnerable populations, enabling real-time course correction. A communications strategy will be embedded as part of the consultative and accountability processes, including the GRMs of each Implementing Agency.

109. Additionally, the proposed Project will include mechanisms to promote equal access and feedback from diverse population groups as well as improve data collection and awareness of gender-specific needs. The selected consultative and feedback mechanisms will be detailed in the POMs and E&S documentation. The Project will collect and use gender-disaggregated data to design and enhance social benefits and, where required, mitigate negative gender impacts. Throughout the consultation phase and implementation, the Project will ensure that the needs of women in terms of safety, hygiene, and employment opportunities are addressed.

Climate change mitigation and adaptation

- 110. **Climate change.** Türkiye's geographic, climatic, and socioeconomic conditions make it highly vulnerable to the impacts of climate change and other natural and environmental hazards, making adaptation and resilience high priorities. Türkiye has high vulnerability in 9 of 10 climate vulnerability dimensions, compared with a median of 2 of 10 in other countries in the Organization for Economic Co-operation and Development.⁸² This vulnerability is due to a combination of climate factors, population exposure (for example, the share of the population exposed to floods and forest fires), and socioeconomic factors (such as the share of agriculture in the economy). Regarding mitigation, Türkiye's commitment is to bring its GHG emissions 41 percent below business-as-usual levels by 2030. The energy sector—which includes transport, industrial sectors, power, and building—is the country's most significant contributor to GHG emissions, amounting to 75 percent of total emissions.⁸³ The building sector (residential as well as non-residential) is significantly less energy efficient than the EU average and is among mitigation priority areas.
- 111. This Project has been screened by the World Bank for short- and long-term climate and disaster risks and has been assessed for its contribution to climate change adaptation and mitigation. The proposed Project will contribute to the GoT's climate change objectives and World Bank climate targets by financing investments that maximize climate co-benefits. All municipal infrastructure investments and rural housing reconstructed will be designed to be resilient to climate-induced hazards (such as flood, wind, extreme heat) by using best practice climate-resilient design and building standards, significantly improving baseline conditions. For example, repairs and reconstruction of municipal bridges will

⁸² Türkiye Country Climate and Development Report, World Bank. June 2022

⁸³ World Bank Group Country Climate and Development Report, Türkiye, June 2022

consider the additional capacity for water flow generated by more intense rainfall events as the climate warms using 500-year return period scenarios. In addition, the Project will apply the current building codes, which have been significantly improved, for climate-resilient infrastructure and energy-efficient buildings. See Annex 4 for details on climate co-benefit adaptation and mitigation measures supported under the Project.

V. GRIEVANCE REDRESS SERVICES

112. **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 https://www.worldbank.org/GRS. For information on how to submit complaints to the Bank's Accountability Mechanism, please visit https://accountability.worldbank.org.

VI. KEY RISKS

- 113. The overall residual risk of the Project is considered Substantial based on adopted and planned mitigation measures. The risk ratings will be monitored and assessed during implementation and revised as necessary. Those categories with inherent substantial risk rating and their mitigation measures are discussed below.
- 114. **Macroeconomic risks are rated Substantial.** The main macroeconomic risks for the Project stem from an uncertain outlook and volatility in macro-financial conditions with risks related to continued depreciation and volatility of the currency and renewed inflationary pressures that could raise the level and uncertainty of reconstruction costs. Macro-financial conditions have become increasingly challenging. The lira lost 30 percent of its value in 2022 and the annual consumer price index inflation rate in Türkiye peaked at 85.5 percent in October 2022 before easing to 43.7 percent in April 2023 due largely to the base effect and government actions to decrease inflationary pressures. Construction costs have risen more steeply, reaching 78.4 percent by December 2022, before decreasing to 60.7 percent in March 2023. Inflationary pressures could regain momentum this year following recent fiscal expansion, earthquake-induced disruptions to logistics and supply chains, and significant construction needs post-earthquake that may push up input prices. The availability of labor, construction material, and equipment may also be limited due to surging demand post-earthquake. The macro risks should be mitigated by pursuing a macro policy framework supporting macro stabilization and buffer accumulation. The Bank will continue to conduct macro-financial analysis, maintain policy dialogue with economic agencies, and offer technical assistance as requested by the government. However, this risk is not under the control of the Project; thus, the residual risk remains Substantial.
- 115. **Residual risks associated with institutional capacity for implementation are Moderate.** All three Implementing Agencies have substantial experience in implementing World Bank-financed projects. The risks stem mainly from (i) the considerable increase in the Agencies' workload due to this proposed emergency operation, in addition to continuing to manage their ongoing Bank-financed operations; (ii) Agencies' capacity to absorb additional financing for post-disaster

recovery activities that is expected from other development partners and IFIs; and (iii) constraints related to the mobilization of sufficient additional suitably skilled labor for the Agencies (e.g., procurement, financial management, social and environment specialists) in the post-disaster context. These aspects may lead to delays in implementation. In addition, İLBANK is used to working with the World Bank and municipalities as an FI but will now act as an implementing agency for the first time, which requires some adjustments. To mitigate these risks, the Project will support capacity strengthening of the three Agencies through enabling the mobilization of additional technical, procurement, environmental, and social, and financial management consultants for their respective PIUs. In addition, the Bank will provide hands-on enhanced implementation support to the PIUs at their request, continuous technical assistance under the Bank-executed Trust Funds from GFDRR, as well as regular training of PIU staff on fiduciary and ESF management during project implementation, especially in its start-up phase. Considering the mitigation measures, the residual institutional capacity risks are rated as Moderate.

- 116. The residual fiduciary risks are rated Substantial. The inherent procurement risk of the Project at appraisal stage has been determined as High and the inherent financial management risk as Moderate. All three Implementing Agencies have experience with World Bank-financed operations. All Agencies have established FM capacity and systems that will need to be adapted in line with the needs of the Project. Given the need to implement the urgent earthquake recovery and reconstruction activities under the Project in addition to existing Bank-financed operations, the Implementing Agencies will need to strengthen procurement capacity to apply expedited and simplified emergency procurement procedures appropriately to ensure value for money procurement, quality assurance of procured goods or works, and timely implementation of project activities. They will also need to manage significant disruption in the supply chain of the earthquake recovery and reconstruction-related goods and difficulties with logistics with roads and ports affected. Consequently, the residual fiduciary risk is rated Substantial.
- 117. The environmental and social risk is rated Substantial. Potentially significant environmental risks and impacts may include, inter alia: (a) air and noise pollution; (b) generation, management, and disposal of general and medical wastes; (c) fire and life safety risks; (d) sludge generation and disposal from potential water and sanitation works; (e) traffic risks; (f) diverse impacts on lands and land use; and (g) various health and safety risks to project workers and local communities. Although the Project will have both short and long-term beneficial social impacts, given the magnitude of the earthquake and the contextual challenges that could frame response activities, the Project also poses several crosscutting social risks, including: (a) possible exclusion of vulnerable populations and groups whose interests are traditionally underrepresented, such as women, the elderly, youth, persons with disabilities; (c) potentially inadequate management of GBV risks, which may be severely augmented during disaster contexts; (d) labor influx risks, despite project efforts to promote local hiring of workers; (e) the potential for involuntary resettlement and the potential lack of availability of public land for resettlement, and; (f) difficulties in engaging stakeholders. The Project's E&S risks will be mitigated through: (a) the development, consultation, and application of Project's E&S instruments, as detailed in Section IV.D of this PAD; (b) strengthening of E&S technical and institutional capacity by the three Implementing Agencies maintaining three E&S officers each; (c) ensuring that works that have physical impacts do not begin without the required Project's E&S instruments in place and disclosed, and the necessary E&S clauses included in contract documents; and (d) the implementation of a robust CE, GRM, and SEP to ensure the participation of all stakeholders, understand the needs of the affected populations, ensure transparency and coordination between government entities, and receive and address feedback and grievances. In addition, in-situ rural housing reconstruction will be prioritized to limit the risk of insufficient public land for resettlement.

VII. RESULTS FRAMEWORK AND MONITORING

Results Framework

COUNTRY: Turkiye

Türkiye Earthquake Recovery and Reconstruction Project

Project Development Objectives(s)

The Project Development Objective is to restore access to essential municipal and health services and resilient housing in selected provinces affected by the February 2023 earthquakes in Türkiye.

Project Development Objective Indicators

Indicator Name	РВС	Baseline		Intermed	iate Targets		End Target
			1	2	3	4	
Restoration of Municipal Infra	structu	ire and Services					
People provided with restored access to municipal infrastructure and services with improved climate and disaster resilience under the Project (Number (Thousand))		0.00	0.00	750.00	1,050.00	2,400.00	3,100.00
Of which women (Percentage)		0.00	0.00	49.70	49.70	49.70	49.70
Restoration of Health Services	;						
People provided with access to restored essential health services under the Project		0.00	2,910.00	2,911.00	2,912.10	2,913.20	2,914.40

Indicator Name	PBC	Baseline		Intermediate Targets				
			1	2	3	4		
(Number (Thousand))								
Of which women (Percentage)		0.00	49.70	49.70	49.70	49.70	49.70	
Rural Housing Reconstruction	and Re	ecovery						
People benefiting from disaster and climate resilient, and energy efficient rural housing and village infrastructure reconstructed under the Project. (Number)		0.00	1,200.00	4,700.00	6,300.00	7,000.00	7,000.00	
Of which women (Percentage)		0.00	49.70	49.70	49.70	49.70	49.70	

Intermediate Results Indicators by Components

Indicator Name	РВС	BC Baseline		Intermediate Targets				
			1	2	3	4		
Component 1 - Restoration of	Munic	ipal Infrastructure and Ser	vices					
Municipal water supply, sewerage, storm water, and/or road network infrastructure rehabilitated or reconstructed with improved resilience (Kilometers)		0.00	0.00	100.00	200.00	400.00	500.00	
Municipal water and wastewater treatment and solid waste facilities and/or		0.00	0.00	3.00	6.00	13.00	17.00	

Indicator Name	PBC	Baseline		Inte	ermediate Targets		End Target
			1	2	3	4	
bridges and junctions rehabilitated or reconstructed with improved resilience (Number)							
Local authorities provided with municipal service vehicles and/ or equipment (Number)		0.00	19.00	19.00	19.00	19.00	19.00
Municipal service buildings (fire stations) repaired or reconstructed with climate/disaster resilient and energy efficient design standards and/or equipped with emergency response equipment (Number)		0.00	0.00	6.00	9.00	12.00	15.00
Component 2 - Restoration of	Health	Services					
People benefiting from primary care mobile health units within the scope of the Project (Number (Thousand))		0.00	1,800.00	1,800.00	1,800.00	1,800.00	1,800.00
Water samples analyzed in the field by the mobile water analysis laboratory (Number)		0.00	3,200.00	3,200.00	3,200.00	3,200.00	3,200.00
Patients benefiting from Physical Therapy Rehabilitation (PTR) centers (Number)		0.00	50,000.00	50,000.00	50,000.00	50,000.00	50,000.00
Pregnant women receiving antenatal care from a qualified provider (Percentage)		62.00	66.00	70.00	70.00	70.00	70.00
Component 3 -Rural Housing R	econst	truction and Recove	ery				
Rural residential and livelihood units reconstructed in		0.00	350.00	1,350.00	1,800.00	2,000.00	2,000.00

Indicator Name	PBC	Baseline		In	termediate Targets		End Target
			1	2	3	4	
compliance with climate/disaster resilient and energy efficient design standards (Number)							
Villages benefiting from climate and disaster resilient infrastructure rehabilitation or reconstruction (Number)		0.00	7.00	25.00	40.00	45.00	45.00
AFAD and MoEUCC post disaster housing support processes, systems or programs reviewed and improved (Yes/No)		No	No	Yes	Yes	Yes	Yes
Beneficiaries who report that the Project has established effective engagement processes (Percentage)		0.00	0.00	50.00	75.00	80.00	80.00
Of which women (Percentage)		0.00	0.00	25.00	30.00	30.00	30.00
Component 4 - Project Manag	ement,	Monitoring and Ev	aluation				
Grievances addressed by ILBANK in accordance with the stipulated service standards (Percentage)		0.00	75.00	85.00	95.00	95.00	95.00
Grievances addressed by MoH in accordance with the stipulated service standards (Percentage)		0.00	75.00	85.00	95.00	95.00	95.00
Grievances addressed by MoEUCC in accordance with the stipulated service standards (Percentage)		0.00	75.00	85.00	95.00	95.00	95.00

Monitoring & Evaluation Plan: PDO Indicators								
Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection			
People provided with restored access to municipal infrastructure and services with improved climate and disaster resilience under the Project	Measures the population in earthquake-affected provinces benefitting from improved municipal infrastructure and services following the rehabilitation and reconstruction of damaged municipal infrastructure and service buildings under the Project.	Biannual	Technical and progress reports	Technical reports and progress reports, drawing on data from municipal infrastructure and services activities financed under the Project.	ILBANK PIU			
Of which women	Measures the share of women benefiting from the rehabilitated and reconstructed municipal infrastructure and service buildings	Biannual	Technical and progress reports	Technical reports and progress reports, drawing on data from municipal infrastructure and services activities financed under the project.	ILBANK PIU			
People provided with access to restored essential health services under the Project	Measures the number of people who benefit from restored health services each year through the provision of prefabricated	Annual	Technical and progress reports	Technical reports and progress reports, drawing on data from buildings and equipment financed	MoH PMSU through General Directorate of Public Hospitals and General Directorate of Public			

	health units, mobile health and diagnostic facilities, equipment and products (such as rapid test kits). The yearly targets are not cumulative.			under the Project	Health
Of which women	Measures the number of women benefiting from the restored health services.	Annual	Technical and progress reports	Technical reports and progress reports, drawing on data from buildings and equipment financed under the Project	MoH PMSU through General Directorate of Public Hospitals and General Directorate of Public Health
People benefiting from disaster and climate resilient, and energy efficient rural housing and village infrastructure reconstructed under the Project.	Measures the number of people benefiting from disaster and climate resilient, and energy efficient rural housing and village infrastructure reconstructed under the Project.	Biannual	Technical and progress reports	Technical reports and progress reports, drawing on data from buildings financed under the Project.	MoEUCC PIU
Of which women	Measures the number of women benefiting from reconstructed rural housing and village infrastructure.	Biannual	Technical and progress reports	Technical reports and progress reports, drawing on data from buildings financed under the project	MoEUCC PIU

Monitoring & Evaluation Plan: Intermediate Results Indicators								
Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection			
Municipal water supply, sewerage, storm water, and/or road network infrastructure rehabilitated or reconstructed with improved resilience	This indicator measures the length of municipal water supply, sewerage, storm water, and/or road network infrastructure that has been rehabilitated or reconstructed in compliance with modern design standards, including seismic-resilient construction and reinforcement, under the Project.	Annual	Technical and progress reports	Data from technical and progress reports	ILBANK PIU			
Municipal water and wastewater treatment and solid waste facilities and/or bridges and junctions rehabilitated or reconstructed with improved resilience	This indicator measures the number of water and wastewater treatment plants, and/or bridges and junctions that have been rehabilitated or reconstructed in compliance with modern design standards and with restored operational capacity, as well as the number of temporary water and sanitation facilities, as applicable, under the Project.	Annual	Technical and progress reports	Data drawn from technical and progress reports	ILBANK PIU			
Local authorities provided with municipal service vehicles and/ or equipment	This indicator measures the number of local authorities	Annual	Technical and progress	Data from technical and progress reports	ILBANK PIU			

	provided with municipal service vehicles and/or equipment		reports		
Municipal service buildings (fire stations) repaired or reconstructed with climate/disaster resilient and energy efficient design standards and/or equipped with emergency response equipment	This indicator measures the number of municipal fire stations and other municipal service buildings repaired or reconstructed with climate/disaster resilient and energy efficient design standards, and/or equipped with emergency response equipment, including prefabricated facilities, as applicable, under the Project.	Annual	Technical and progress reports	Data drawn from technical and progress reports	ILBANK PIU
People benefiting from primary care mobile health units within the scope of the Project	Measures the number of people benefiting from health services provided by mobile health units. The yearly targets are not cumulative.	Annual	Technical and progress reports	Technical and progress reports	MoH PMSU through GD Public Health
Water samples analyzed in the field by the mobile water analysis laboratory	This indicator measures the number of water samples analyzed by the fully equipped mobile water analysis laboratory	Biannual	Lab analysis reports	Data from analysis reports prepared from mobile labs and equipment financed under the project.	MoH PMSU through GD Public Health
Patients benefiting from Physical Therapy Rehabilitation (PTR) centers	Measures the number of patients benefiting from the	Annual	Technical and progress	Data from technical and progress reports	MoH PMSU through GD

	PTR centers		reports		Public Hospitals
Pregnant women receiving antenatal care from a qualified provider	This indicator measures the percentage of pregnant women who receive antenatal care (ANC) from a qualified provider, (either from a doctor, nurse or midwife)	Annual	Progress reports	Data from Progress reports prepared by the General Directorate of Public Health	Data from MoH PMSU through General Directorate of Public Health
Rural residential and livelihood units reconstructed in compliance with climate/disaster resilient and energy efficient design standards	This indicator measures the number of rural residential and livelihood units (barns and workspaces) reconstructed in compliance with climate and disaster resilient and energy efficient design standards under the Project.	Annual	Technical and progress reports	Technical and progress reports	MoEUCC PIU
Villages benefiting from climate and disaster resilient infrastructure rehabilitation or reconstruction	Measures the number of villages benefiting from climate and disaster resilient infrastructure rehabilitation or reconstruction under the Project	Annual	Technical and progress reports	Data from technical and progress reports	MoEUCC PIU
AFAD and MoEUCC post disaster housing support processes, systems or programs reviewed and improved	Measures whether AFAD and MoEUCC post-disaster housing support processes, systems and/or programs have been reviewed and improved with support from the Project	Annual	Progress reports	Data drawn from progress reports	MoEUCC PIU

Beneficiaries who report that the Project has established effective engagement processes	This indicator will monitor the percentage of beneficiaries who report that the Project has established effective engagement processes. This will be measured through citizen feedback interviews (surveys via online and short message service).	Annual	Progress reports	Data from progress reports	MoEUCC PIU
Of which women	This indicator measures the percentage of women beneficiaries who report that the Project has established effective engagement processes	Annual	Progress reports	Data from progress reports	MoEUCC PIU
Grievances addressed by ILBANK in accordance with the stipulated service standards	This indicator measures the number of grievances on Component 1 addressed and responded to by ILBANK in accordance with stipulated service standards.	Annual	Reports on grievance redress	Data drawn from reports on ILBANK's grievance redress system.	ILBANK PIU
Grievances addressed by MoH in accordance with the stipulated service standards	ordance with the stipulated service		Reports on grievance redress	Data drawn from reports on MoH's grievance redress system.	MoH PMSU
Grievances addressed by MoEUCC in accordance with the stipulated service standards	This indicator measures the number of grievances on Component 3 addressed and responded to by	Annual	Reports on grievance redress	Data drawn from reports on MoEUCC's grievance redress system	MoEUCC PIU

MoEUCC in accordance with stipulated service standards.		

ANNEX 1: Implementation Arrangements and Support Plan

COUNTRY: Turkiye
Türkiye Earthquake Recovery and Reconstruction Project

A. Implementation Arrangements

1. The GoT will be responsible for overall Project implementation through three Implementing Agencies (İLBANK, MoH, MoEUCC). İLBANK will be responsible for the implementation of Component 1 and will establish a new PIU under its International Relations Department. İLBANK will sign protocols with beneficiary municipalities to ensure adequate involvement and ownership. MoH will be responsible for the implementation of Component 2 through its existing PMSU that will work closely with the relevant General Directorates. MoEUCC's GDCA will be responsible for the implementation of Component 3 in close collaboration with AFAD. MoEUCC will sign a protocol with AFAD setting forth the respective roles and responsibilities in the implementation of Component 3.

Financial Management

Implementing Agencies and FM responsibilities

- 2. MoEUCC and MOH are general budget institutions and are subject to the Public Financial Management and Control Law No. 5018. İLBANK is subject to the regulations and supervision by the Banking Regulation and Supervision Agency.
- 3. In the World Bank-financed projects currently under implementation, İLBANK acts as a financial intermediary. In this Project, İLBANK will be a direct Implementing Agency. It Bank will establish a new PIU under its International Relations Department that will be exclusively tasked with the implementation of the respective components under the proposed Project. The existing PMU at İLBANK has a dedicated financial management unit responsible for FM functions of all foreign financed projects. There are currently 20 staff working in this department and İLBANK will assign/recruit at least one FM specialist for the PIU to work solely on the FM aspects of the proposed Project. Payments to suppliers will be registered directly by İLBANK upon submission of acceptable approval documents. The PIU in İLBANK will be responsible for planning, procurements, payment processing, management of the Designated Account and project accounting and reporting.
- 4. The PMSU in MoH will be responsible for the coordination of the respective components including financial management. The General Directorates of Public Health, of Public Hospitals, and of Emergency Health Services will be the implementing general directorates and will conduct the technical activities.
- 5. MoEUCC's GDCA will assume overall responsibility as the implementing agency for the respective components under the proposed Project. GDCA already has in place two PIUs that are implementing the ongoing Energy Efficiency in Public Buildings and the SREEP Projects. They are also preparing the pipeline Scaling-up Distributed Solar PVs Project. GDCA will establish a new PIU for the implementation of activities under this Project. Prior to the establishment of the new PIU, the existing SREEP PIU will be responsible for implementation of the proposed Project. The existing FM team will be responsible for FM operations and payment processing for project expenditures.

⁸⁴ The recent change made to the Debt Law 4749 (dated March 15, 2023) made it possible for MoTF to allocate external finance for reconstruction, infrastructure, and superstructure activities in disaster areas, on a non-repayable basis, to institutions that are outside of the general budget (such as İLBANK) as well. For projects not related to disaster reconstruction, İLBANK borrows directly from the World Bank with sovereign guarantee.

Planning and Budgeting

6. The investments proposed to be financed by the World Bank loan must be included in the annual investment program. The Project is an emergency operation and therefore all preparations regarding the Project have taken place following the approval of the 2023 budget. SBO has completed the off-cycle inclusion of Project in the investment program as a framework project and will ensure that sufficient allocation is provided in the institutional budgets for 2023 expenditures. İLBANK will also have the project in its investment program and an allocation will be made through MoTF's budget on an annual basis. İLBANK will coordinate with the MoTF to determine the annual allocation amount and İLBANK will ensure that annual disbursements from the loan will not exceed its budgetary allocation under MoTF. SBO has decided to include Component 3 in the investment program of MoEUCC, which will be the implementing agency for this component. A corresponding budget allocation under code 7 reserved for foreign financing will be included in the MoEUCC budget.

Funds Flow and Disbursement Arrangements

- 7. There will be three designated accounts for the Project, under the names of İLBANK, MoH, and MoEUCC. All payments to contractors, suppliers and consultants will either be made directly from the loan account or from the designated accounts with the authorization of the personnel responsible. Traditional disbursement methods will be utilized.
- 8. The Loan proceeds will be disbursed by the World Bank in line with the World Bank Disbursement Guidelines for Investment Project Financing (dated February 2017), using traditional disbursement methods including the advance, direct payment, reimbursement, and special commitment disbursement methods. MoTF will open separate designated accounts for each PIU at the Central Bank of Türkiye. Additional detailed procedures will be included in the Disbursement and Financial Information Letter. Full documentation in support of Statement of Expenditures will be retained by the Implementing Agency for at least seven years after the Bank has received the audit report for the fiscal year in which the last withdrawal from the Loan Account was made. This information will be made available for review during supervision by Bank staff and for annual audits.

Accounting Systems

- 9. İLBANK has a web-based information system (IL_BIS) that links all its departments, allowing them to execute, monitor and report using the same data source. All its regional offices are also connected to the central IL_BIS system. Project accounting for the current loans is integrated into this system using sub-accounts that were created under the Bank's main chart of accounts. The PMU staff prepares the payment orders and the accounting entries into the Bank's main accounting system are made by the Accounting Department's staff. Financial Interim Unaudited Financial (IFRs) Reports are also generated from the system. The Project will rely on the same systems and the accounting and reporting for the Project will be fully integrated into the IL_BIS system. İLBANK will conduct the necessary modifications/additions to the IL_BIS system and these arrangements are expected to be in place before project effectiveness.
- 10. At MoH, the project expenditures will be recorded in both government accounting system in Turkish Liras and PMSU accounting system (LOGO) in Euros. The accounts kept in the government system are subject to the Public Financial Management and Control Law No. 5018. LOGO accounting system used in PMSU is used for the HSSSP and Covid 19 Projects and will also be used for the proposed Project. The software has adequate security levels and the IFRs as well as the year-end financial reports will be automatically generated from the system.
- 11. At MoEUCC, the PIU at GDCA will maintain detailed accounts of the Project in the loan currency in the accounting software in addition to the government accounting system mandatory for all line agencies. MoEUCC will tailor the

accounting software currently utilized for the SREEP for the proposed Project. The accounting software has the capability of keeping records of multiple projects. The accounting entries will be based on the information received from the Central Bank payment confirmations (Ek-3). The software has adequate security levels and facilitates reporting in foreign currency and the IFRs as well as the end of the year financial reports will be generated automatically from the system.

Internal Controls

- 12. İLBANK has robust systems, manuals and guidelines regulating the internal controls environment. The accounting and reporting systems at İLBANK are geared toward producing statements and information as required by Turkish laws and regulations. Additionally, İLBANK has developed and executed specific internal control procedures for the implementation of foreign-financed projects. İLBANK will have a more involved role in the implementation of the proposed Project as they will act as an Implementing Agency rather than a FI. As part of the POM, the current FM manual utilized by İLBANK for World Bank-financed projects will be further detailed to integrate İLBANK's role in implementation. İLBANK will be responsible for approving progress payments and processing payment orders from the designated account.
- 13. Payments to the suppliers will be registered directly by İLBANK upon submission of acceptable approval documents. The PIU in İLBANK will be responsible for planning, procurements, payment processing, management of the designated account and project accounting and reporting. The PMU at İLBANK has a dedicated financial management unit responsible for FM functions of all foreign financed projects. There are currently 20 staff working in this unit and İLBANK will assign at least one FM specialist to work solely on the FM aspects of this Project. The qualifications and experience of the current staff are satisfactory to the Bank. They have worked in the implementation of the Municipal Services Project and are currently working for various Bank-financed Projects, including the Sustainable Cities Series of Project and the Municipal Services Improvement Project. The experience they have gained in the implementation of these projects will be utilized in conducting the financial management arrangements of the Project. The POM will define the details about the roles and responsibilities of İLBANK and the municipalities.
- 14. At the MoH, for current active World Bank-financed projects, the PMSU is responsible for the FM of the Project. The PMSU functions are overseen by the Deputy Minister to whom the PMSU Director reports. MoH implementing units (general directorates) are responsible for budgeting and executing their own investments and preparing the documentation for processing of the related payments, whereas the accounting and reporting for the project is the responsibility of the PMSU. The accounting entries to the system maintained by the PMSU are made based on the payment confirmation of the Central Bank. The PMSU has installed an integrated payment monitoring system where several stages of the procurement processes are recorded. These entities must include the serial number provided by the system in preparing the payment order which is required for processing the payment from the designated account at the Central Bank. The serial number is assigned by the system only after the required information (to which the PMSU has online access) is entered. The accountants in the PMSU also reconcile journal vouchers with the Central Bank records on a regular basis. The same internal control procedures will be adopted for this Project.
- 15. At MoEUCC, as with the current active project implemented by GDCA, the GDCA PIU will be responsible for all stages of procurement. The construction supervision will be conducted by the PIU with both staff in regional offices and staff assigned from the center. These staff will also be responsible for approving the progress payments. The final approval of the invoices will be the responsibility of GDCA. GDCA will send payment orders together with the supporting documents to the MoTF Accounting Office in MoEUCC. The accountants at the MoTF Accounting Office will enter the transactions into the Government's centralized accounting system (KBS) and will approve the payment order for processing from the designated account at the Central Bank of Türkiye. The Central Bank will register the payment from

the designated account based on the approval of the MoTF Accounting Office accountants. The transactions will be entered into KBS in TRYTL equivalent and will also be recorded under the account code dedicated to the project.

Financial Reporting

16. The IFRs will be prepared separately by the Implementing Agency on a quarterly basis and will be submitted to the Bank no later than 45 days after the end of the quarter. The agreed formats of the IFRs will be attached to the minutes of negotiations and they will be like the ones used by the entities for their current projects under implementation.

External Auditing

- 17. The Implementing Agencies will prepare project financial statements separately for the part of the Project they are implementing. Consolidated financial statements will not be required as there will be three designated accounts and strict differentiation between the project transactions of İLBANK, MoH, and MoEUCC. As part of the World Bank's auditing requirements, project financial statements will be subject to external and independent auditing. The first set of audit reports will be submitted to the Bank before June 30th of the year following the calendar year in which the first disbursement from the loan or grant has been made. The project financial statements will be audited by the Treasury Controllers in accordance with International Auditing Standards. The Terms of Reference for the Audit will be attached to the minutes of negotiations.
- 18. The project financial statements are required to be made publicly available in accordance with the World Bank Access to Information Policy and guidelines. The following chart identifies the audit reports and their due dates:

Type of Audit Report	Due Date
Project Financial Statements for İLBANK	Within six months after the end of each calendar year, and at project closing.
Project Financial Statements for MoH.	Within six months after the end of each calendar year, and at project closing.
Project Financial Statements for MoEUCC	Within six months after the end of each calendar year, and at project closing.

Supervision Plan

19. During project implementation, the Bank will supervise the Project's financial management arrangements in each implementing agency as follows: (i) during the Bank's supervision missions financial management and disbursement arrangements will be reviewed to ensure compliance with the Bank's minimum requirements, and (ii) project's quarterly interim un-audited financial reports as well as the project's annual audited financial statements and auditor's management letter will be reviewed.

Action Plan

Action	Responsibility	Deadline		
Operations manual for the project including financial management arrangements will be prepared	(a) İLBANK (b) MoH (c) MoEUCC	(a) prior to disbursement under Component 1(b) 30 days after the Loan Effective Date(c) prior to disbursement under Component 3		
iLBANK, MoH and MoEUCC will hire/assign FM experts to work on project preparation	ILBANK, MoH and MoEUCC	At implementation		
Accounting softwares will be customized for the project purposes	MoH and MoEUCC	At implementation		
Project Financial management manual will be prepared	ILBANK and MoEUCC	At implementation		

Procurement Arrangements

- 20. **Applicable Regulations and Anticorruption Guidelines.** The World Bank Procurement Regulations for IPF Borrowers November 2020 ("Procurement Regulations") will apply to the proposed Project. A General Procurement Notice was published on the World Bank's external website and United Nations Development Business online on May 4, 2023, before initiating any project procurement. The Bank'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.
- Project Procurement Strategy for Development (PPSD). The Procurement Regulations require the Borrower to 21. develop a PPSD for the Project through the Implementing Agencies. However, as per paragraph 12, Section III of the World Bank Policy on IPF for Situations of Urgent Need of Assistance or Capacity Constraints, a simplified PPSD is acceptable, and the procurement plan is deferred to the implementation phase. Due to the scale of destruction, preparation of detailed PPSD and procurement plan is expected to take time. İLBANK, MoH, and MoEUCC have prepared high-level simplified PPSDs for their respective project components. Overall, the Project will finance the procurement of municipal infrastructure, vehicles/equipment, and consulting services (under Component 1), prefabricated family medicine centers, medical equipment, ambulance, specialized vehicles, and furniture and consulting service (under Component 2) and rural housing and consulting services (under Component 3). Under the health component, all the major procurement packages have been identified, and MoH has carried out a preliminary market assessment. As per MoH's initial market assessment, there are an adequate number of qualified bidders to deliver required goods and supplies, including installation, within a reasonable time. In the case of rural housing under Component 3, MoEUCC has an ongoing program and already awarded several contracts for the construction of new rural houses using a defined set of architectural designs. MoEUCC's preliminary market assessment showed an adequate number of local bidders to perform this task with about seven packages following open bidding with national competition. In the case of İLBANK, considering that earthquakes caused widespread damage across 11 provinces, it is not possible to identify infrastructure procurement packages as detailed assessment is still ongoing. The finalization of the PPSDs is deferred to the project implementation stage as ILBANK needs more time to complete detailed need assessment, and the other two agencies need to complete detailed market analysis.
- 22. All three implementing agencies agreed that their respective PPSDs would describe how procurement activities will support project operations for the achievement of the PDOs and deliver value for money. The PPSD will be linked to the overall project implementation strategy by ensuring proper sequencing of procurement activities. It will provide information on institutional arrangements for procurement, roles and responsibilities, appropriate procurement methods, procurement due diligence, and other requirements needed for carrying out procurement. Before approval of the procurement plan, Implementing Agencies will submit to the Bank supplementary notes to the PPSD supporting the proposed procurement approach.
- 23. General challenges in procurement and contract management under emergency operations: In the past, Bankfinanced emergency projects in different countries including Türkiye, faced planning and implementation challenges in procurement processes and contract implementation, which led to slow implementation of contracts and hence poor disbursements. Key reasons for this were: (i) issues regarding the capacity of the borrowers for design and project implementation; (ii) disruption in the supply chain and capacity constraints of the supplier/contractors; and (iii) delays in internal approvals within Government. In case of Türkiye, it takes around 250 days to award a -contract under Bank financed Projects; (iv) high-priced bid and less capable winning bidders in competitive bidding due to the lack of market analysis and bidders' capacity assessment; (v) too many small contracts that were difficult to manage; (vi) integrity risks

(irregularities, wrongdoing) in the bidding process and contract implementation; (vii) inadequate monitoring of contract implementation; and (ix) inadequate consideration of sustainability in the procurement and contract management.

- 24. Innovation in project procurement design and contracting strategy: To ensure an effective procurement process and contract implementation in timely manner under the proposed Project, the following proactive measures have been agreed: (i) the Bank will provide HEIS to support PIUs in developing technical specifications/ToRs and procurement process at the request of Government. Bank will hire a procurement consultant(s) and local medical equipment expert to supplement PIU capacity; (ii) each Implementing Agency will strengthen procurement capacity by hiring at least two qualified procurement staff. Where possible, implementing agencies will assign procurement specialists from existing projects; (iii) conduct quick but effective market analysis and based on that innovative procurement packaging (fewer and larger value contracts); (iv) conduct prospective bidders capacity assessment and, based on that, set the qualification requirements for the bidding documents to ensure adequate competition and value for money procurement; (v) raise bidders awareness on Bank procurement procedures; (vi) include rated criteria / pointing system to encourage SMEs participation, green procurement and other aspects to ensure building back better; (vii) provide customized training for Implementing Agencies and bid evaluation committee; (viii) advanced procurement actions for few high value identified packages; (ix) use of existing PIUs and Bank-financed projects in the Implementing Agencies to kick-start preparation of procurement activities; (x) bi-weekly co-ordination meeting between Implementing Agencies and the Bank on procurement progress of high value contracts and solving issues and monitoring business standard responses to review of procurement documents; and (xi) use of technology in contract monitoring.
- 25. **Type of contracts and sequencing of procurement:** MoH is responsible for the procurement of about EUR 245 million, primarily goods procurement covering prefabricated family medicine centers, ambulances, different types of specialized health care vehicles, container vaccine storage, furniture, and medical equipment for prefabricated hospitals, etc. MoH plans to initiate advanced procurement for most of their activities with the aim to sign contracts by effectiveness. MoEUCC is responsible for the procurement of about seven packages for rural housing reconstruction (totaling nearly EUR 255 million). MoEUCC can initiate bidding processes for works after finalizing the Environmental and Social Management Framework (which is already under preparation). Finally, İLBANK is responsible for the procurement of EUR 382 million, mostly works procurement related to repair and reconstruction of municipalities structure and facilities and some goods procurement (municipal services equipment and vehicles). For the works, İLBANK is expected to need some time for detailed needs and engineering assessments, construction design, meeting ESF requirements, and procurement process. As per the procurement and contracting strategy, İLBANK plans complete procurement of municipal equipment/vehicles in the first year.
- 26. **Procurement Plan and procurement tracking**. The Procurement Regulations require the Implementing Agencies to use the Bank's STEP online procurement tracking tool to prepare, clear, and update its procurement plans, and conduct all procurement transactions. All three implementing Agencies will create their respective procurement plans through STEP prior to initiating any procurement. The PPSD and the underlying Procurement Plan will be updated at least annually or via supplementary notes to the PPSD as required to reflect actual project implementation needs, i.e., adding new activities to the Procurement Plan. The Procurement Plan and their updates shall be subject to the Bank's review and approval. All three implementing agencies will be given STEP access in the Project portal. All procurement-related complaints will be recorded in the STEP Complaint module by the respective implementing agency. The contracts data will be recorded in the STEP Contract Management module by the respective implementing agency.
- 27. The quantities and estimated costs for the goods, works, consulting services, and non-consulting services that are known at the time of negotiations are included in the initial procurement plan, Table 1.

Table 1. Contracts Agreed by the Bank

This list of contracts is indicative and may change during the implementation of the Project.

Activity Description	Reference No.	Category	Procure- ment Method	Market Approach (national/internat.)	Contract Type	Estimated Contract Signing Date	Estimated Contract Completion Date
Microprocessor Prosthesis	ERL/KHGM/2024/G/RFB/1	Goods	RFB	International Open	Lump- sum	Aug 23	Aug 24
Battery Powered Wheelchairs (App. 7780)	ERL/KHGM/2024/G/RFB/2	Goods	RFB	National/International Open	Lump- sum	Aug 23	Feb 24
Orthotics and Prosthesis	ERL/KHGM/2024/G/RFB/3	Goods	RFB	International Open	Lump- sum	Aug 23	Aug 24
Strengthening PTR capacities (6 centers)	ERL/KHGM/2024/G/RFB/4	Goods	RFB	International Open	Lump- sum	Sept 23	Sept 24
Home Health Care Services Vehicles (App. 105)	ERL/KHGM/2024/G/RFB/5	Goods	RFB	National/International Open	Lump- sum	Aug 23	Feb 24
Home Health Care Services Kits (App.525)	ERL/KHGM/2024/G/RFQ/1	Goods	RFQ	National/International Open/Limited	Lump- sum	July 23	Jan 24
300 Ambulances	ERL/ASHGM/2024/G/RFB/2	Goods	RFB	International/National Open (lots)	Lump- sum	Aug 23	Aug 24
350 prefabricated Family Medicine Centers	ERL/HSGM/2024/G/RFB/1	Goods	RFB	National Open	Lump- sum	Jan 24	Jan 25
Mobile imaging and laboratory equipment and vehicles	ERL/KHGM/2024/G/RFB/6	Goods	RFB	International Open	Lump- sum	July 23	Jan 24
2 mobile Public Health Laboratories for Microbiology and Water Analysis	ERL/HSGM/2024/G/RFB/2	Goods	RFB	National/International Open	Lump- sum	Aug 23	Feb 24
250 Mobile Health Clinics	ERL/HSGM/2024/G/RFB/3	Goods	RFB	National/International Open (lots)	Lump- sum	Aug 23	Aug 24
20 Vaccine Transport Vehicles	ERL/HSGM/2024/G/RFQ/3	Goods	RFQ	National/Open/Limited	Lump- sum	Aug 23	Feb 24
15 Container Vaccine Storages	ERL/HSGM2024/G/RFB/4	Goods	RFB	National /Open	Lump- sum	Aug 23	Feb 24
Rapid Test Kits	ERL/HSGM/2023/G/RFB/1	Goods	RFB	National/Open	Lump- sum	July 23	Nov 23
250 Fully Equipped Medical All-Terrain Vehicles	ERL/ASHGM/2024/G/RFB/1	Goods	RFB	International Open	Lump- sum	Sept 23	Sept 24
Mobile Command Control Vehicles	ERL/ASHGM/2024/G/RFQ/1	Goods	RFQ	National/Open/ Limited	Lump- sum	Sept 23	Aug 24

Biocidal products and workforce	ERL/HSGM/2024/G/RFB/5	Goods	RFB	National/Open	Lump- sum	July 23	Oct 23
50 Psychosocial Support Vehicles	ERL/KHGM/2024/G/RFQ/2	Goods	RFQ	National/Open/ Limited	Lump- sum	Aug 23	Aug 24
Medical Devices, Equipment and Furnishings for seven 50 Inpatient Hospital	ERL/KHGM/2024/G/RFB/7	Goods	RFB	International Open (lots)	Lump- sum	Aug 23	Jan 24
Medical Devices, Equipment and Furnishings for one 150 Inpatient Hospital	ERL/KHGM/2024/G/RFB/8	Goods	RFB	National/International Open (lots)	Lump- sum	Aug 23	Jan 24
Medical Devices, Equipment and Furnishings for three 250 Inpatient Hospital	ERL/KHGM/2024/G/RFB/9	Goods	RFB	International Open/ Limited (lots)	Lump- sum	July 23	Dec 23

- 28. All the selection methods defined in the Procurement Regulations can be used under the project; however, priority will be given to streamlined and simple procedures and to those that ensure expedited delivery under the project. These include: Direct Selection, Request for Quotations, Framework Agreements (including tapping into existing ones) and Consultant's Qualifications-based Selection. Procurement will follow either an international or national approach. The thresholds for selection methods and their market approaches will be given in the Textual Part of the Procurement Plan and recorded in the STEP both for initial response and for the reconstruction phases.
- 29. The proposed procurement approach prioritizes fast track emergency procurement for the required goods, works, and services. The following are key measures to fast-track procurement: (i) bidding/proposal preparation periods during the immediate response and recovery phases of an emergency may be reduced to 15 business days for international competition and 7 business days for national competition and 3 business days for a Request for Quotations, depending on the value and complexity of the requested scope of bid and capacity of firms (local and international) to prepare responsive bids in the proposed periods; (ii) bid securities will not be mandatorily required for national competition. Where necessary, bid securing declaration will be used; (iii) high advance payment of up to 40percent with Bank or insurance guarantees will be applied and released in stages; (iv) slice and package will be used with the objective of increasing the participation of domestic bidders and ensuring the security of supply. Tender packages will be split into small lots with the provision of cross discounts where appropriate during the award. Qualification requirements relating to turnover and similar experiences will be lowered based on quick market analysis; (v) implementing agencies may waive need for performance security for contracts with short duration of up to 90 days and for works contracts they may rely on retention monies; (vi) introduce incentives for sustainable procurement (use of rated criteria for International Competitive Procurement is mandatory) to promote green procurement, advantages to MSMEs and promote job creation in the affected regions for all contracts above use of procurement procedures at the national market or where implementing agencies and Bank determine it would be beneficial to the Project; (vii) use of Force Account for repair of infrastructure where works are scattered or restoration of live utilities where bidding may not be practical; (viii) the Bank will provide HEIS at the request of Government in conducting market assessment and identifying potential suppliers and preparation of bidding documents. Bank will not provide such support to the evaluation of tenders, response to clarifications/ complaints by bidders or contract award decisions; and (ix) standstill period will not apply in any procurement under the project; (x) for international bidding, simplified bidding document will be used based on Bank's Standard / Sample Procurement Documents. For the procurements at the national market, the Turkish Translation of the Bank's SPDs or any other document agreed by the Bank may be used.

- 30. Procurement of second-hand goods may be considered under the project where justified and needed to respond to an emergency. A procurement process for goods will not mix second-hand goods with new goods. The technical requirements/specifications will describe the minimum characteristics of the items that could be offered second-hand that is, age and condition (e.g., refurbished, like new, or acceptable if showing normal wear and tear); and the warranty and defect liability provisions in the contract will be written or adapted to apply to second-hand goods. Any risk mitigation measures that may be necessary in relation to the procurement and use of secondhand goods will be reflected in the PPSD.
- 31. Advance procurement. Paragraph 5.1 of the World Bank Procurement Regulations permits the Borrower to proceed with the procurement process before signing of the Legal Agreement. In such cases, if the eventual contracts are to be eligible for World Bank financing, the procurement procedures, including advertising, shall be consistent with Sections I, II, and III of the Procurement Regulations, which cover the World Bank's Core Procurement Principles of economy, efficiency, transparency, fairness, fit-for-purpose, value for money, and integrity. With this understanding, the selection of consultant companies and PIU consultants may be initiated immediately after project negotiations upon publication of the General Procurement Notice. It is envisaged that the proposed approach will accelerate the selection of consultant companies and will support to deliver the PDO. The selected consultants will also provide services to relevant municipalities/utilities for the quality assurance of the works and timely completion of the contracts within their original contract prices.
- 32. **Procurement risk assessment**. The Procurement risk for the Project is considered substantial after considering the proposed mitigation measures. Key risks factors include (i) market readiness with an increased level of activities financed by the Bank, other IFIs, and the Government, (ii) disrupted supply chain and logistics in the earthquake affected regions that will impact procurement supply chains, (iii) complexity of the project and procurement packages involving three diversified sectors, (iv) capacity of the municipal assemblies to determine their procurement needs, (v) new PIUs will take time to be trained and get familiar with World Bank procurement procedures, and (vi) internal government bureaucracy to take procurement decisions. It takes 250 days to award a contract under Bank-financed projects, and (vii) integrity risks increased by emergency situations with increased funds flow. To mitigate such risks, detailed risk mitigation measures are mentioned in Table 2.
- 33. **İLBANK** will undertake the responsibility of Component 1 of the project implementation and coordination through its International Relations Department. Under this Department, a PMU was originally established in 2005 for the Bank-financed Municipal Services Project and has been continuously operational throughout the Sustainable Cities Series of Projects, the Municipal Services Improvement Project, and the Earthquakes, Floods, and Wildfire Emergency Reconstruction Project. Hence, PMU is experienced in Bank-financed projects and familiar with World Bank procurement procedures and contract management. However, İLBANK was the Financial Intermediary in these projects and actual procurements of the projects were performed by the relevant project beneficiaries.
- 34. Considering that the İLBANK PMU is managing several ongoing projects (in an FI modality) and has limited procurement resources for project implementation, for this emergency project İLBANK has proposed to establish a separate PIU designated only for this project. The PIU will be supported with at least three procurement specialists experienced in Bank procurement and a project management consultant firm that will be staffed with procurement and technical experts who will take part in the preparation of the biding documents, bid evaluation reports and contract implementation.
- 35. **MoH will undertake the responsibility of the Component 2 of the project implementation**. Procurement implementation will be undertaken by the existing PMSU in MoH and the participating MoH General Directorates of

Public Hospitals, of Public Health, and of Emergency Health Services. The PMSU will oversee the procurements implemented by the General Directorates. The MoH is experienced in carrying out Bank Financed projects through the ongoing World Bank-financed HSSSP and COVID-19 Emergency Response Project. It has been agreed that the internal processes established for the ongoing HSSSP and COVID-19 Emergency Response Project will be replicated for the proposed project to avoid delays in implementation and initial set-up. Currently, the PMSU is supported by one experienced procurement specialist, and the General Directorate of Public Health is supported by another experienced procurement specialist. Given that the procurement activities under the Project will add additional workload to the procurement teams in MoH, it has been agreed that the General Directorate of Public Hospitals and the General Directorate of Emergency Health Services will each employ additional procurement specialists dedicated to this Project. Moreover, both General Directorates will be supported by technical experts who will participate in the preparation of the bidding documents, bid evaluation reports and contract implementation.

36. MoEUCC will undertake responsibility of the Component 3 of the project implementation. The Procurement Implementation will be undertaken by the GDCA. Currently, MoEUCC is implementing 3 Bank financed projects, of which two are being implemented by GDCA and the other one by the General Directorate for Infrastructure and Urban Transformation Services. MoEUCC has developed experience under Bank Procurement Regulations. Under the GDCA, the Department of Externally Resourced Investments is implementing the Energy Efficiency in Public Buildings Project whereas the Department of Internationally Financed Seismic Strengthening is implementing the SREEP. Both Departments are fully occupied with the implementation of their respective ongoing Projects. Given that this Project will add additional workload to the implementation units in these Departments, the Ministry agreed to establish a separate implementation unit under the GDCA supported with 3 procurement specialists experienced in Bank financed procurements. It is planned that all procurements under the Component 3 will be performed centrally by this PIU and the signed contracts will be managed both by the technical teams established in this PIU as well as the technical experts dedicated for this project in the relevant provincial directorates of the MoEUCC at the earthquake-affected provinces.

Table 2. Identified Procurement Risks and Agreed Action Plan

Action No.	Identified Risk	Mitigation Measure	Responsible Party	Time Frame
1.	Market readiness with an increased level of activities financed by the Bank, other IFIs, and the Government. High bid price and lack of completion for high-value procurements. Large scale of the earthquake creates shortages of supply and services (this may result in increased prices and cost, particularly for materials and equipment that are at high demand such as construction materials for buildings and equipment for infrastructure, and health equipment.	Conduct a quick updated market analysis, update cost estimation and bidder's awareness before initiating the bidding process. Set the qualification requirements based on market analysis. The implementing agencies may change their procurement strategy and use other modalities based on the finding of the market analysis. Before entering into contracts all implementing agencies will compare the prices with available market prices.	MoEUCC/ iLBANK/MoH	Throughout the project.
2.	Disrupted supply chain and logistics in the earthquake-affected provinces that will impact procurement supply chains	As part of market analyses, the current supply chain and logistics situation will be assessed for all procurement packages and, based on that, appropriate procurement strategy will be developed	MoEUCC/ iLBANK/MoH	1 st year of the project.
3.	Complexity of the project and procurement packages involving three diversified sectors	Enhance the capacity of each of the implementing agencies and close coordination and follow-up.	MoEUCC/ ILBANK/MoH	Throughout the project.

4.	Inadequate capacity of the municipal assemblies to determine their procurement	İLBANK will assign additional resources to assess the procurement needs of the	İLBANK	Immediately
5.	Inadequate procurement capacity of MoEUCC to comply with urgent procurement needs.	Provide HEIS by the World Bank through a highly experienced procurement consultant.	World Bank	Already appointed and will continue up to 12 months from the date of project appraisal
6.	İLBANK is implementing five World Bank financed projects and the projects financed by other IFIs simultaneously. The teams in the PMU are overloaded. PMU may not be able to meet the procurement deadlines.	İLBANK will establish a separate PIU for this project supported with at least 3 experienced procurement specialists.	İLBANK	Immediately after project negotiations (within the first month).
7.	MoEUCC is implementing 3 World Bank financed projects. Teams in the implementation units are overloaded.	MoEUCC will establish a separate PIU for this project supported by at least 3 experienced procurement specialists.	MoEUCC	Immediately after project negotiations (within the first month).
8.	MoH is implementing 2 World Bank financed projects. Teams in the implementation units are overloaded.	MoH will strengthen procurement team with at least 2 additional procurement specialists: one of them will be employed by the General Directorate of Public Health, and the other by the General Directorate of Emergency Health Services. PIUs in the Directorates will be supported by the PMSU procurement specialists.	МоН	Immediately after project negotiations (within the first month).
9.	Internal government bureaucracy to take procurement decisions	Close monitoring and follow-up on time- bound action plan for major procurement packages by the Implementing Agencies and the World Bank	MoEUCC/ iLBANK/MoH	Throughout the project.
10.	Integrity risks increased by emergency situations with increased funds flow. Increased risk of fraud & corruption (abuse of simplified procurement procedures, false delivery certification, inflated invoices). These risks are elevated by the large scale of the earthquake, which creates shortages of supplies and necessary services.	All implementing agencies will increase the supervision capacity of their PIUs and participating line DGs by increasing the number of fiduciary and technical staff. Implementing agencies will be required to publish Beneficial Ownership of contractors/suppliers winning contracts above US\$1 million.	MoEUCC/ iLBANK/MoH	Immediately after project negotiations (within the first month).
11.	Increased perception of fraud & corruption in implementation due to use of noncompetitive procurement procedures.	For any direct contract above US\$10 million, Implementing agencies will be required to hire an independent observer in the contract negotiation process. Evaluation committees for tenders above US\$5 million will be required to sign a declaration of interest.	MoEUCC/ iLBANK/MoH	Throughout the project.
12.	Incomplete environmental and social safeguard studies may delay commencement of the contract implementation.	If applicable, all E&S studies will be completed before signing of the contracts	MoEUCC/ iLBANK/MoH	Throughout the project.
13.	New PIUs will take time to be trained and get familiar with World Bank procurement	PIUs will work closely with World Bank procurement specialist/HEIS consultant.	MoEUCC/ iLBANK/MoH	Throughout the project.

	procedure and possible misinterpretation of the Procurement Regulations and terms and conditions of the contracts. It may cause noncompliance and time and cost overruns in contract implementation.			
14.	Potential wrongdoing by the bidders	(a) Conduct customized training on fraud and corruption for stakeholders. (b) Bidder awareness of fraud and corruption and its remedial measures.	MoEUCC/ iLBANK/MoH	Throughout the project.
15.	Inadequate quality of procured goods and construction works.	Hire a local Medical Equipment Technical Expert (consultant) for technical due diligence, including frequent field visits for health procurement, and a local civil engineer (consultant) for works contracts implementation due diligence, including frequent field visits	World Bank	Throughout the project.
16.	(a) High maintenance cost; (b) time overrun to implement the contract; (c) Less lifetime of the product (d) Low quality of the finished product; (e) High cost of ownership over the life of the product; and (f) Negative impact in terms of social and environment aspects	(a) Introduce Key Performance Indicators (KPIs) in the contracts. (b) Use electronic project management tools to monitor the critical path and critical activities and take proactive measures to mitigate the risk of implementation delay. (c) Introduce remote supervision using electronic tools.	MoEUCC/ iLBANK/MoH	Throughout the project.

- 37. Given the emergency nature of the project, the limited implementation time, difficulties with logistics with roads and ports affected, and the significant disruption in the supply chain of the earthquake recovery and reconstruction related goods, the overall residual procurement risk for the Project is assessed as Substantial. The assessment will be recorded in the Procurement Risk Assessment and Management System of the Bank.
- 38. **Procurement supervision frequency.** The World Bank will review the procurement arrangements performed by implementing agencies, including contract packaging, applicable procedures, and the scheduling of the procurement processes, for their conformity with the Legal Agreement. Those procurements without ex-ante due diligence by the World Bank will be subject to ex-post due diligence on a sampling basis in accordance with the procedures set forth in Paragraph 4 of the Annex II to the Procurement Regulations. A post review of the procurement documents will normally be undertaken annually during the World Bank's supervision mission, or the World Bank may request to review any particular contract at any time. In such cases, the PIUs shall provide the World Bank with the relevant documentation for its review.
- 39. **Complaint review.** The procurement complaints other than those covered under Annex III of the Procurement Regulations are to be handled by MoEUCC/İLBANK/MoH in accordance with the procedures agreed by the Bank and stipulated in the PPSD/POM. Immediately upon receipt, the complaints will be recorded in the STEP complaint module by the relevant Implementing Agency. The Implementing Agencies will not proceed with the next stage/phase of the procurement process, including with awarding a contract without satisfactory resolution of the complaint(s).

B. Implementation Support Plan and Resource Requirements

40. The World Bank will provide implementation support to the implementing agencies over the life of the Project. This support will include at least one implementation support mission per semester, including site visits as appropriate, to monitor implementation progress and achievement of results and review technical, procurement, FM, and ESF aspects

of the Project. The findings and recommendations of these missions will be shared with İLBANK, MoH, and MoEUCC, and recorded in Aide Memoires. In between the implementation support missions, the Bank team will maintain close contact with the PIUs at İLBANK and MoEUCC and the PMSU at MoH, which will manage day-to-day implementation of the Project, and will have periodic discussions as needed to provide timely advice on any technical, FM, procurement, and ESF issues. The implementation support provided by the Bank will cover the following areas:

- (a) **Strategic support.** Implementation support will include continuous policy dialogue and work in partnership with İLBANK, MoH, and MoEUCC, and other relevant Project stakeholders, including MoTF, SBO, and AFAD as well as other IFIs supporting earthquake recovery activities in Türkiye. This dialogue will allow to discuss strategic alignment of the different Project activities, especially at the planning level, with relevant stakeholders and facilitate synergies between the different Project components as well as with other Projects supporting the earthquake reconstruction in Türkiye.
- (b) **Technical Support**. The Bank team will provide technical support and review to İLBANK, MoH, and MoEUCC to ensure the technical quality of bidding documents, ToRs, evaluation reports, reports delivered by consultants, and other documentation produced under the Project. During construction works, regular site visits will be carried out jointly between the World Bank and the relevant implementing agency to ensure that technical contractual obligations are met. The Bank will also organize relevant knowledge exchanges with other countries to support recovery and reconstruction efforts for this Project and more broadly.
- (c) **Fiduciary Support.** Procurement and FM support will be provided to (i) perform desk reviews of project IFRs and audit reports, following up on any issues raised by auditors, as appropriate; (ii) assess the performance of control systems and arrangements; (iii) provide training and guidance on carrying out procurement processes in compliance with the applicable Procurement Regulations and Anticorruption Guidelines and the POM; (iv) review procurement documents of prior review contracts and provide timely feedback to the implementing agencies; (vi) carry out the post review of procurement actions; and (vii) help monitor project progress against the Procurement Plan and identified performance indicators of the contracts.
- (d) **Environmental and Social Framework Support.** The World Bank will have dedicated staff to oversee implementation and monitoring of the ESMPs, the SEP, and other relevant plans.
- (e) **Operational Support.** The World Bank's implementation support team will ensure compliance with the agreements in place, as well as coordination with the clients and among World Bank team members.
- 41. **Mid-Term Review (MTR).** An MTR will be carried out about two years into project implementation to assess overall progress towards meeting the development objectives and to address any changes to project design or implementation required to meet the objectives.
- 42. **Implementation Completion and Results Reports (ICR)** will be drafted by the Bank and the Borrower, through the Implementing Agencies, within six months of project completion to satisfy accountability needs and provide lessons from completed operations. ICRs are tailored to enhance development effectiveness through a continuous process of self-evaluation, lesson learning and application, sharing of knowledge, and being accountable for results. The lessons learned from the ICR are expected to improve the quality and effectiveness of similar World Bank-financed operations, while borrower/stakeholder participation in the ICR process is expected to inform design, preparation, and implementation of follow-up projects.
- 43. The following implementation support plan reflects the preliminary estimates of the skills, timing, and resources requirements over the life of the Project. Implementation support will be provided by the Bank team, consisting of staff with relevant competencies in operations, procurement, finance, ESF, and technical content on

municipal infrastructure, health, housing, civil engineering, and DRM. Keeping in mind the need to maintain flexibility over project activities, the skill requirements may change over time to ensure that they continue to meet the implementation support needs of the Project. Implementation support will be provided in the form of direct support from the Bank team, and additional consultants will be mobilized by the Bank to provide further technical assistance as needed.

Table 3. Implementation Support Plan

Time	Focus	Skills Needed	Partner Role
First 6 months	 Provide support to: Successful start of the Project across all components Establishment of FM system, M&E system, and grievance mechanism in line with World Bank standards Prioritization of activities Finalization of ESF documents Procurement Monitor implementation of project activities 	All skills	 Task team to support smooth start-up Ensure the implementation of ESS are on track Support PIUs
6–60 months	 Ensure adequate implementation support of all aspects of the Project Monitor implementation of project activities, including site visits Support final evaluation and ICR 	All skills	Ensure ESF is on trackSupport PIUsProvide technical assistance

Table 4. Skills Mix Required

Skills Needed	Number of Staff Weeks	Number of Trips	Comments
Task Team Leader/ Co-Task Team Leaders	40	10	International or field-based staff
Technical Specialist (DRM)	30	10	International or field-based staff
Technical Specialist (Water and Sanitation)	25	10	International or field-based staff
Technical Specialist (Housing)	25	10	International or field-based staff
Technical Specialist (Health)	25	10	International or field-based staff
Environmental Specialist	20	Local travel as needed	Field-based staff
Economist (M&E)	10	5	International or field-based staff
Social Specialist (including community engagement and gender aspects)	30	Local travel as needed	Field-based staff
Procurement Specialist	50	Local travel as needed	Field-based staff
FM Specialist	6	Local travel as needed	Field-based staff

ANNEX 2: Eligibility and Selection Framework for Component 1

- 1. The following framework for eligibility and selection has been developed for investments proposed to be financed under Component 1. Based on damage sustained in the February 2023 earthquakes, municipalities located in the eleven provinces declared as disaster zones after the February 2023 earthquakes will be eligible under Component 1 (Adana, Adıyaman, Diyarbakir, Elazığ, Gaziantep, Hatay, Kahramanmaraş, Kilis, Malatya, Osmaniye, and Şanlıurfa, i.e., the earthquake-affected provinces). Given that the municipal needs exceed the financing available under Component 1, selected municipalities may be prioritized considering the relative level of damage and relative size of the affected population, socio-economic development indicators, and complementarities with financing available from other development partners and IFIs. Selected municipalities will be proposed by the GoT, through ILBANK in consultation with SBO, and reviewed by the World Bank.
- 2. Framework for subproject selection. A framework approach has been developed because the exact scope of the investments will be finalized by early implementation, as the prioritization of investments requires participatory planning and appropriate coordination between İLBANK and beneficiary municipalities on technical aspects (e.g., technical specifications for equipment). The framework provides criteria set for eligibility and selection of investments under Component 1 according to relevance to the PDO, readiness for implementation, E&S considerations and risks, costs and available budget, and sustainability.
- **3. Potential Investments.** An overall longlist of potential municipal investments in the earthquake-affected provinces is being identified by İLBANK in close consultation with affected municipalities, which will be used both for this Project and financing that may become available from other development partners and IFIs. İLBANK will screen the longlist to propose a shortlist of municipal investments for potential inclusion under the Project according to the eligibility and selection criteria below and considering complementarities with financing provided by other development partners. İLBANK will submit the proposed shortlist of municipal investments to the World Bank for review and non-objection, including elements demonstrating that it adheres to the eligibility and selection criteria as outlined below.
- **4. Eligibility Criteria.** The following eligibility criteria have been agreed for screening the potential investments:
 - **a.** Eligible investments will need to be located within earthquake-affected provinces.
 - **b.** Eligible investments shall contribute to the restoration of municipal services related to one of the following areas:
 - i. Rehabilitation and resilient reconstruction of existing municipal water, sanitation, wastewater, drainage, and solid waste management infrastructure damaged by the earthquakes i.e., water and sewage networks, water transmission lines, water treatment plants, wastewater treatment plants, and waste transfer stations; in affected areas that are within the basins of waterways⁸⁵ as defined in the World Bank OP 7.50, eligible water and sanitation activities are limited to the rehabilitation and reconstruction of existing schemes that, in the judgement of the Bank, (i) will not exceed the original scheme, change its nature, or so alter or expand its scope and extent as to make it appear a new or different scheme; (ii) will not adversely change the quality or quantity of water flows to the other riparians; and (iii) will not be adversely affected by the other riparians' possible water use;
 - ii. Rehabilitation and resilient reconstruction of municipal roads, bridges, underpasses, and allied associated infrastructure damaged by the earthquakes;

⁸⁵ The Asi (Orontes) River, shared by Lebanon, Syria, and Türkiye; the Fırat (Euphrates) River, shared by Iraq, Syria and Türkiye; and the Dicle (Tigris) River, shared by Iran, Iraq, Syria and Türkiye are considered waterways as defined in the World Bank Operational Policy 7.50.

- iii. Restoring and increasing emergency response capacity and resilience through repair and/or reconstruction of damaged municipal fire stations and/or acquisition of vehicles, equipment etc., for fire and emergency response services;
- iv. Restoring and increasing municipal capacity for the provision of other critical services through repair and/or reconstruction of other damaged municipal service buildings, and acquisition of vehicles and equipment (e.g., solid waste collection vehicles, buses, street sweeping, etc.);
- **c.** Eligible investments shall be determined to be:
 - i. In alignment with reconstruction and recovery plans, spatial plans and zoning plans, as may be relevant, for the affected settlements: and
 - ii. In compliance with national technical standards and specifications.
- **d.** Ineligible investments and activities are those that:
 - i. Are inconsistent with the Bank's Environmental and Social Standards and the requirements set forth in the ESCP;
 - ii. Have high-risk environment or social impacts as per the Environmental and Social Risk Classification under the World Bank's ESF;
 - iii. Will trigger Safety of Dams OP 4.37;
 - iv. Will have impact on any Critical Natural Habitats or Cultural Heritage areas;
 - v. Include administrative services and facilities for specific groups instead of public use (e.g., facilities/services for political parties, trade unions) or for religious infrastructure facilities or services;
 - vi. Include services or facilities related to defense, judiciary, law enforcement, security, correctional facilities, and other related areas;
- vii. Invest in facilities with commercial character, including private, commercial, tourism, and entertainment facilities; and.
- viii. Will construct new water and sanitation schemes that use or risk polluting the water of waterways as defined in the World Bank OP7.50.
- **5. Prioritization.** Eligible investments that contribute to, or meet, one or several of the following characteristics will be prioritized during implementation:
 - i. Readiness for implementation, which may be evidenced by completed engineering assessments of sustained damage and recommended solutions, completed feasibility and design studies, environment, and/or social assessments if/as available, etc.;
 - ii. Repair of lightly damaged infrastructure and facilities that can be completed and enable provision of services rapidly;
 - iii. Addressing existing climate and disasters whilst also including targeted approaches to strengthen resilience against future disaster and climate change risks; and
 - iv. Include demonstrative impacts for increased inclusion, such as improving universal access, etc.
- **6. Investment preparation and submission.** For each investment, İLBANK will prepare the relevant technical assessments, technical specifications, feasibility studies^{86,} and other necessary reports that cover technical, environmental, social, financial, and economic aspects. E&S documents will also be prepared by İLBANK in accordance with the World Bank's ESF. Prior to commencement of any bidding process and civil works, İLBANK will submit the relevant technical documentation for the subproject for World Bank review and non-objection on a rolling basis, with approved and disclosed environment and social documentation.

⁸⁶ On a case-by-case basis and considering assessments of damages sustained and the nature of the proposed works, a feasibility study may not be required for certain types of works, such as works that involve in-situ rehabilitation or repair works to restore critical access to existing water network services.

ANNEX 3: Guiding Principles for Reconstruction

The following guiding principles will be applied to all Project activities as technically applicable and feasible.

Green: Interventions under this Project contribute to climate mitigation through:

- Energy Efficiency. Reconstructed municipal fire station buildings will achieve Class C energy efficiency standard. Prefabricated health facilities will connect to permanent and temporary energy supply where this has been established and incorporate passive design measures and material choices that improve the energy efficiency of structures. Prefabricated family medicine centers will also follow the same thermal insulation standards as regular buildings (i.e., TS825), which is an application of ISO 9164:1989 on thermal insulation⁸⁷ and in practice falls within Class C Energy Performance Certification standards. Reconstructed rural houses will be expected to achieve Turkish Class C (or better) Energy Performance Certification. The design of water and wastewater treatment plants to be reconstructed should maximize energy efficiency.
- Harnessing renewable energy. Municipal fire stations will integrate renewable energy features where technically and
 financially feasible, which will improve operational continuity in emergencies and disasters and reduce energy
 consumption and operating costs. Reconstructed rural houses will incorporate design interventions that support
 beneficiary-led future installation of renewable energy sources and energy efficient equipment to reduce energy
 consumption and ensure continued energy provision.
- Promotion of clean fuel options for vehicles. Municipal and health fleet will include specifications for cleaner fuel options, taking technical and financial viability into consideration
- Reduced Water Consumption through low flush toilets, water efficient taps and showerheads, rainwater capture and grey water re-use, etc. will be critical for cities and rural areas in the future where droughts such as the 2020 drought are expected to become more frequent.
- Promoting nature based (green solutions). Parks, green spaces, wetlands and increase of permeable surfaces can
 reduce rainfall run-off which in turn recharges groundwater systems, reduces watering requirements, and can reduce
 stormwater discharge, and therefore flooding.
- Pedestrian and Cycle Friendly Infrastructure. Bridges, roads, and parks will have sufficient space/lanes for pedestrians and cyclists.

Resilient: Interventions under this Project contribute to disaster resilience and climate adaptation through:

- Site Specific Considerations for Multi-hazard Resistance: Location for the construction of buildings and infrastructure to consider multi-hazard vulnerability (i.e., landslides, floods, fault-lines, liquefaction etc.)
- Adequate Seismic Resistance: Meets seismic strength according to Turkish Building Earthquake Code (TBEC-2018).
- Adequate Storm Resistance: meets building code for wind and snow loading.
- Flood resilience. Sizing of stormwater and sewerage system will consider future climate predictions, and reconstructed buildings will not be located in areas with high flood risk.
- Adequate and appropriate heating and cooling systems. Regulations prescribe indoor temperatures and humidity levels for hot and cold seasons to ensure comfort and health of building occupants.
- Fire Safety. Ensuring that constructed buildings have appropriate fire detection and warning systems, egress, evacuation routes, and for public buildings fire suppression systems (such as sprinklers).

⁸⁷ http://www1.mmo.org.tr/resimler/dosya_ekler/cf3e258fbdf3eb7_ek.pdf

• Adequate Air Quality and Ventilation. Buildings ensure sufficient airflow and circulation to reduce transmission of respiratory diseases and long-term adverse health impacts from indoor pollution (e.g., from cooking).

Inclusive: Interventions under this Project support inclusivity when they support:

- Universal Access. According to the UN Convention on the Rights of Persons with Disabilities, universal design means "the design of products, environments, programs, and services to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design. "Universal design" shall not exclude assistive devices for particular groups of persons with disabilities where this is needed." Universal design to support people with differentiated physical abilities will be provided in all municipal and prefabricated buildings and community centers supported under the Project. In rural housing, the needs of the disabled will be integrated into housing design options.
- Affordability. Expanding house design options to include smaller units to meet wider beneficiary preference and affordability range.

ANNEX 4: Anticipated Climate Co-benefit Adaptation and Mitigation Measures

Description of financed activities	Anticipated Mitigation Climate Co-Benefits	Anticipated Adaptation Climate Co-Benefits	Amount (M EUR)
Component 1: Restorat	tion of Municipal Infrastructure and Services (EUF	R 382,410,000)	
Subcomponent 1.1: Res	silient rehabilitation and reconstruction of munici	pal infrastructure	291.36
Rehabilitation and reconstruction of municipal water and sanitation/ wastewater networks and treatment plants damaged by the earthquakes	Reconstruction or rehabilitation of wastewater systems and treatment plants will provide energy efficiency improvements through e.g., deployment of low-energy-consumption technologies or pumping equipment and reduction of water losses, which will contribute to significantly reduced energy use and contribute to GHG reductions. In addition to project savings of estimated baseline energy consumption of approximately 20 percent, this would lead to GHG sequestration through rehabilitated and expanded resilient piped utility water system that replace tanker use or other coping mechanisms. For the emissions timeline of 30 years, it is reasonable to estimate that the interventions would result in a substantial reduction of GHG emissions of approximately 20 percent.	Reconstruction or rehabilitation of climate resilient water and wastewater systems and treatment plants whose design and engineering will consider site-specific climate risks (e.g., flooding) and structural strengthening for extreme weather-related events, including extreme rain, snow, wind, heat, and fire.	236.73
Rehabilitation and reconstruction of stormwater drainage infrastructure damaged by the earthquakes	Creation of permeable and green public spaces along stormwater drainage infrastructure to absorb CO ₂ emissions, water, and heat, reducing the urban heat island effect and energy demand for cooling.	Design and engineering of drainage infrastructure will consider extreme weather events and flooding risk.	54.63
Rehabilitation and reconstruction of municipal roads, bridges, underpasses, and associated infrastructure damaged by the earthquakes	Design and engineering of municipal road infrastructure will consider energy-efficient streetlighting and improved access for non-motorized mobility (including e.g., pedestrian, and non-motorized vehicle lanes) to support the reduction of air pollution and GHG emissions. Streetscapes will also consider using local and light-colored materials for roads and sidewalks that help to reflect heat and reduce urban heat island. Similarly, complementary permeable or green public spaces alongside the roads help absorb heat and increased tree canopy will absorb air pollution, including GHGs. Reconstruction activities will ensure deforestation and future sprawl is avoided.	Design and engineering of municipal roads, bridges, underpasses will consider site-specific climate risks (such as increased river and stream flow associated with more intense rainfall events) and structural strengthening for extreme weather-related events, including extreme rain, snow, wind, heat, and fire. Reconstructed municipal bridges, roads, and underpasses will also pilot the use of ultra-high-performance concrete or similar water and weather-resistant materials. Resilient roads and are also critical for connectivity and evacuation during climate-related disasters such as flooding or fires. In addition, complementary permeable and green public spaces help absorb rainwater run-off and reduce pressure on drainage systems during extreme weather events. During hot and sunny days, they also provide natural shading and cooling from trees and green spaces to increase comfort of people in the street and use of street and reduce	0

Description of financed activities	Anticipated Mitigation Climate Co-Benefits	Anticipated Adaptation Climate Co-Benefits	Amount (M EUR)
		exposure to heat stroke	
Subcomponent 1.2: Res	ilient recovery of municipal service facilities	<u> </u>	91.05
Rehabilitation and reconstruction of municipal service buildings (especially fire stations) collapsed or damaged due to the earthquakes	Municipal service buildings (such as fire stations) will integrate energy-efficient insulation, improved lighting, modern and efficient heating, and cooling systems, integration of rooftop solar and other renewable energy solutions and green roofs where technically possible. Energy efficiency designs will follow Turkish Class C (or better) Energy Performance Certification standards. The rehabilitated/reconstructed buildings will have a service life between 30 to 50 years.	Rehabilitated/reconstructed and fully equipped municipal fire stations with improved structural design and a service life between 30 to 50 years will provide restored municipal emergency and disaster response capacity to protect lives, livelihoods, and assets, especially in future climate-related disasters. Moreover, with floods and wildfires on the increase in Türkiye, investments in emergency response are critical. Reconstructed municipal service buildings (including fire stations) will be located in areas that are not susceptible to flooding or other climate-related risks. They will also be structurally strengthened to withstand snow and wind loading, have improved thermal insulation to ensure functionality during extreme heat and cold events, and integrate other features like sloped roof and improved drainage to increase their climate resilience. Fire safety within buildings will also be increased. While permanent buildings are being repaired/rebuilt, temporary emergency response facilities may be used to provide municipal firefighting services to ensure that the municipalities are better prepared to respond	91.05 13.66 (all expected to be used for fire station buildings with a service life of 30-50 years)
Rehabilitation or reconstruction of municipal solid waste management facilities (e.g., transfer stations) damaged by the earthquakes	The Project will prioritize reconstruction of municipal solid waste management facilities located within a reasonable distance to where waste is generated to reduce CO ₂ emissions from waste transport. The design of solid waste management facilities will, where feasible, enable temporary storage, bulking or transfer	climate change-related events and impact of extreme weather and climate hazards in the short-term. Solid waste management facilities to be reconstructed will not be located in areas that are vulnerable to climate risks such as flooding. They will also be designed to prevent leachate impact after heavy precipitation events and incorporate resilience measures, such as improved collection and recycling.	0
Purchase of equipment required to restore the provision of firefighting, emergency response, and other critical	of segregated waste, and composting of waste to reduce methane. It will also integrate renewable energy features, where feasible. Equipment and vehicles (ambulances, fire trucks, waste collection trucks, street sweepers) necessary for the provision of essential services will use alternative, clean fuel low-carbon options considering technical and financial viability. Vehicles (especially those for solid waste collection) will incorporate GPS to	Restored municipal fire-fighting capacity through the provision of required equipment and vehicles is critical to protect lives, livelihoods, and assets especially in climate-related disasters (e.g., floods and wildfires) that are expected to increase with climate change. Restored solid waste collection capacity is critical	77.39

⁸⁸ Turkish Class C (or better) Energy Performance Certification standards require that a building achieve an energy performance index with an energy consumption of 80-99 kWh/m² per year and GHG emission of 80-99 kg eq. CO2/m² per year.

Description of financed activities	Anticipated Mitigation Climate Co-Benefits	Anticipated Adaptation Climate Co-Benefits	Amount (M EUR)
municipal services (e.g., solid waste collection).	minimize deflection and optimize service routes.	to ensure that stormwater drainage infrastructure is free of solid waste and debris and can fulfill its function as needed in climate-related events (e.g., extreme rain).	
Component 2: Restora	tion of Health Services (EUR 245,835,000)		
Subcomponent 2.1: En	suring continuity of primary-level and hospital-lev	rel health services	105.8
Establishment of a network of fixed prefabricated family medicine centers	Prefabricated health family medicine centers will have high energy efficiency ratings and will be required to follow the same thermal insulation standards as regular buildings (i.e., TS825), which is an application of ISO 9164:1989 on thermal insulation ⁸⁹ and in practice falls within Class C Energy Performance Certification standards. They will also incorporate renewable energy features to the extent possible. MoH intends to use the prefabricated family medicine centers throughout their lifespan, which is estimated to be up to 20 years.	are not susceptible to flooding and other climate- related risks will have climate resilient features like sloped roofs, improved siting to reduce the need for heating and cooling, and adequate drainage. Climate hazards like flooding, extreme heat and poor air and water quality, increase demand for health services, especially in areas catering to displaced people or compromised infrastructure	27.3
Provision of support network of mobile PHC units	Mobile PHC units will use alternative, clean fuel low-carbon options as technical and financially viable/available in the market.	Climate hazards like flooding, extreme heat and poor air and water quality, increase demand for health services, especially in areas catering to displaced people or compromised infrastructure due to the earthquakes.	22.76
Provision of furnishings and medical equipment for prefabricated emergency, existing, and other hospitals in provinces that have received a high influx of displaced population and transferred patients.	As technically available in the market, all new equipment will comply with one of the following energy efficiency ratings/standards: TS60601 or EN 60601 or IEC 60601. These are standards related to basic electrical security for medical devices and equipment belonging to the electrical medical devices group of goods. The use of these standards under the project will bring improvement to the current practices which currently do not require the mandatory use of such standards.		55.72 (of which 46.62 fo medica equipme nt and 9.1 fo furnishir
Subcomponent 2.2: Pro	oviding mobile diagnostic services		54.99
Establish a network of mobile diagnostic services to support health centers.	Mobile diagnostic units (providing imaging, x-ray, tomography, and laboratory services), ambulances and other vehicles will use alternative, clean fuel low-carbon options as technical and financially viable/available in the market.	Climate hazards like flooding, extreme heat and poor air and water quality, increase demand for health services, especially in areas catering to displaced people or compromised infrastructure due to the earthquakes. Microbiology and water analysis by mobile public health laboratories helps counter outbreaks of pathogens and water-borne illnesses in areas with compromised water supply, drainage, and wastewater treatment that may be exacerbated by extreme weather events as a result of climate change.	54.99

 $^{^{89}\} http://www1.mmo.org.tr/resimler/dosya_ekler/cf3e258fbdf3eb7_ek.pdf$

Description of	Anticipated Mitigation Climate Co-Benefits	Anticipated Adaptation Climate Co-Benefits	Amount
financed activities			(M EUR)
Subcomponent 2.3: Sup	pporting access to vaccination, disability services,	and medical equipment	85.04
Activities to restore MoH's capacity in vaccination, address the needs of people disabled due to the earthquakes, and curb the spread of infectious diseases.	Prefabricated vaccine storage containers will meet the same thermal insulation standards as regular buildings (i.e., TS825), which is an application of ISO 9164:1989 on thermal insulation ⁹⁰ and in practice falls within Class C Energy Performance Certification standards. Vaccine transport, home healthcare and psycho-social support vehicles will use alternative, clean fuel low-carbon options as technical and financially viable/available in the market. Other equipment with Energy Star efficiency ratings as available for the respective equipment.	Vaccination efforts and use of biocidal products counter outbreaks of pathogens and water-borne illnesses in areas with compromised water supply, drainage and wastewater treatment that may be exacerbated by extreme weather events as a result of climate change.	85.04
Component 3: Rural Ho	using Reconstruction and Recovery (EUR 264,045,	.000)	
Subcomponent 3.1: Res	silient rural housing and village reconstruction		254.94
Resilient and energy- efficient reconstruction of rural housing and livelihood buildings	Energy efficiency design for rural houses and livelihood facilities will follow Turkish Class C (or better) Energy Performance Certification standards, promoting the integration of energy efficiency measures into resilient housing design. As collapsed and damage rural houses in the earthquake-affected provinces are likely to be relatively old (built before modern building standards) and/or poorly constructed, they will have had limited thermal insulation prior to the earthquakes. Moreover, while construction of rural houses by homeowners in the earthquake-affected provinces should theoretically follow building code requirements that consider energy efficiency, practically the code requirements are not systematically complied with in owner-led housing design and construction. The GoT-led reconstruction will ensure that the current standards (which are comparable to standards in the EU) are fully complied with and even exceeded to ensure energy efficient buildings, which is a substantial contribution to mitigation efforts. It is expected that significant energy efficiency gains from the baseline building conditions will be achieved by meeting Class C standards through improvements such as use of efficient building materials, adequate insulation of walls, floors, windows, and roofs to prevent heat loss during winter (typically in the region of 20 percent) and heat gain during summer, efficient lighting,	Rural residential and livelihood buildings will be strengthened (roofs, walls) to withstand storm events (snow and wind loading), as well as improved to ensure functionality during extreme heat and cold events – which are expected to increase with climate change. Fire safety within residential buildings will also be increased. While construction of rural houses by homeowners in the earthquake-affected provinces should theoretically follow building code requirements that consider climate resilience, practically the code requirements are not systematically complied with in owner-led housing design and construction. The GoT-led reconstruction will ensure that the current standards (which are comparable to standards in the EU) are fully complied with and even exceeded to ensure climate and seismic-resilient buildings, which is a substantial contribution to adaptation efforts Rural housing and livelihood facilities will be assessed to ensure that they are not located in areas prone to multi-hazard risks, including climate-related hazards.	209.42

 $^{90}\ http://www1.mmo.org.tr/resimler/dosya_ekler/cf3e258fbdf3eb7_ek.pdf$

Description of financed activities	Anticipated Mitigation Climate Co-Benefits	Anticipated Adaptation Climate Co-Benefits	Amount (M EUR)
	and incorporation of passive solar design principles. The design for rural houses also integrates connections to facilitate the installation of renewable energy equipment by the homeowners.		
Repair and/or reconstruction of village infrastructure and social facilities	Where technically and financially feasible, use of green, nature-based solutions at the village level that reduce heat island effects and absorb air pollution, including GHGs. Village level road design will, where feasible, support non-motorized transport, such as pedestrian paths to reduce GHG emissions. Social facility buildings will integrate energy-efficient insulation, energy efficient lighting (such as LED), modern and efficient heating, and cooling systems; exploration of rooftop solar and other renewable energy solutions; and green roofs where possible. Energy efficiency designs will follow Turkish Class C (or better) Energy Performance Certification standards.	Design and engineering of village infrastructure will consider site-specific climate risks (e.g., flooding) and structural strengthening for extreme weather-related events, including extreme rain, snow, wind, heat, and fire. Resilient roads are also critical for connectivity and evacuation during climate-related disasters such as flooding or fires. In addition, permeable and green public spaces help absorb rainwater run-off and reduce pressure on drainage systems during extreme weather events. During hot and sunny days, they also provide natural shading and cooling from trees. Social facility buildings will be assessed to ensure that they are not located in areas prone to multihazards risks, including climate-related hazards. They will have enhanced climate resilience through the use of the most recent construction codes, including to withstand to snow and wind loading and improved functionality during extreme heat or cold events. Fire safety within buildings will also be increased.	45.52
Subcomponent 3.2: Cap	oacity building for resilient recovery foundations an	d post-disaster housing support	9.11
Technical assistance and advisory services to AFAD and MoEUCC to support planning for medium/longer term resilient reconstruction and strengthen post-disaster housing programs.	Strengthening the technical capacity of participating agencies on climate-smart post-disaster housing support and recovery planning, including e.g., providing smaller housing unit designs that consume less energy, develop guidelines on energy efficient housing construction practices for homeowners, review construction methods and materials to increase energy efficiency of housing (including the use of recyclable or other low carbon materials), etc.	Strengthening the technical capacity of participating agencies on climate and disaster resilience measures, e.g., the review of construction practices and materials to increase multi-hazard resilience, integrated housing, and infrastructure planning sensitive to multi-hazard risks.	9.11
Component 4: Project	Management, Monitoring and Evaluation (EUR 18	,210,000)	
Project Management	Institutional strengthening through training to strengthen the capacity of the Project Implementation Agencies to mainstream climate mitigation in project implementation	Institutional strengthening through training to strengthen the capacity of the Project Implementation Agencies to mainstream climate adaptation in project implementation	18.21

This map was produced by the Cartography Unit of the World Bank Group. The boundaries, colors, denominations and any other information shown on this map do not imply, on the part of the World Bank Group, any judgment on the legislatus of any territory, or any endorsement or acceptance of such boundaries. TÜRKIYE EARTHQUAKE RECOVERY AND RECONSTRUCTION PROJECT IBRD 47202 | APRIL 2023 PROVINCES AFFECTED BY FEBRUARY 6TH EARTHQUAKES PROVINCE BOUNDARIES MORE-DEVELOPED INTERNATIONAL BOUNDARIES TRANSITION PROVINCES CONTAINING DAMAGED CITY CENTERS LESS DEVELOPED BUILDINGS DUE TO THE FEBRUARY **EARTHQUAKES** NATIONAL CAPITAL BULGARIA Black Sea **GEORGIA** Zonguldak Kastamonu Ardahan Kars nkırı **ARMENIA** Tokat O Gümüşhane . 🍮 ANKARA **o**Yozgat **⊙** Ağrı Erzincan Kütahya 0 Mus 0 **IRAN** © Elâzığ Malatya • Van Bitlis 0 Kahramanmaras-⊙ Hakkârîî 0 Şırnak Şanlıurfa Osmaniye Gaziantep Hatay (Antakya) IRAQ SYRIAN ARAB REPUBLIC

ANNEX 5: Map of Earthquake-Affected Provinces

The categorization of provinces into more-developed, transition, and less developed is based on World Bank calculations using national accounts data from the Turkish Statistical Institute.

ANNEX 6: Team List

Bank Staff Name	Role	Specialization	Unit
Bontje Marie Zaengerling	Task Team Leader (ADM Responsible)	Urban	SCAUR
Salih Bugra Erdurmus	Co-Task Team Leader	DRM	SCAUR
Nadwa Rafeh	Co-Task Team Leader	Health	HECHN
Sema Safir Sumer	Human Development Specialist	Human Development	HECHN
Yondela Tembakazi Silimela	Sr. Urban Specialist	Urban	SCAUR
Guillermo A. Siercke	Disaster Risk Management Specialist	DRM	SCAUR
Ahmet Kindap	Sr. Urban Specialist	Urban	SCAUR
Tafadzwa Irvine Dube	Sr. Disaster Risk Management Specialist	DRM	SCAUR
Zoe Elena Trohanis	Lead Disaster Risk Management Specialist	DRM	GFDRR
Alanna Simpson	Lead Disaster Risk Management Specialist	DRM	SCAUR
Joanna Mclean Masic	Lead Urban Specialist	Urban	SURDR
Mary Elinor Boyer	Disaster Risk Management Specialist	DRM	GFDRR
Sanyu Lutalo	Sr. Water Supply and Sanitation Specialist	Water & Sanitation	SCAWA
Ferdous Jahan	Sr. Social Development Specialist (ADM Responsible)	Social	SCASO
Oksan Gurtuna Haliloglu	Social Development Specialist	Social	SCASO
Gulana Enar Hajiyeva	Sr. Environmental Specialist (ADM Responsible)	Environment	SCAEN
Emre Dolek	Environmental Specialist	Environment	SCAEN
Tanvir Hossain	Sr. Procurement Specialist (ADM Responsible)	Procurement	EECRU
Tomris Oksar	Sr. Procurement Specialist	Procurement	EECRU
Salih Kemal Kalyoncu	Sr. Procurement Specialist	Procurement	EECRU
Ayse Seda Aroymak	Sr. Financial Management Specialist (ADM Responsible)	FM	EECG2
Zeynep Lalik	Sr. Financial Management Specialist	FM	EECG2
Lisa Lui	Lead Counsel	Legal	LEGLE
Laurent Debroux	Sector Leader	Sustainable Development	SCADR
Hans Anand Beck	Lead Country Economist	Economy	EECDR
Heba Elgazzar	Program Leader	Human Development	HECDR
Stephan Claude Frederic Garnier	Lead Energy Specialist	Energy	IECDR
Maiada Mahmoud Abdel Fattah Kassem	Sr. Finance Officer	Finance	WFACS
Ma Dessirie Kalinski	Finance Analyst	Finance	WFACS
Yasemin Orucu	Sr. Energy Specialist	Energy	IECE1
Murad Gurmeric	Sr. Transport Engineer	Transport	IECT1
İdil Savucu	Consultant	Urban & DRM	SCAUR
Dr. Volkan Recai Cetin	Consultant	Economic Analysis	SCAUR
Burcu Degirmencioglu	Team Member		ECCTR
Selcuk Ruscuklu	Team Member		ECCTR
Sasa Eichberger	Sr. Environmental Specialist	Climate Change	SCAEN
Fahad M A M Alfahad	Environmental Analyst	Climate Change	SCAEN
Arjola Limani	Gender Analyst	Gender	
Extended Team Name	Role	Specialization	Location
Prof. Dr. Mustafa Erdik	Consultant	Earthquake Engineering	İstanbul
Mehmet Emin Akdogan	Consultant	Civil Engineering	Ankara
Prof. Dr. Haluk Sucuoglu	Consultant	Civil Engineering	Ankara
Suha Satana	Consultant	Economic Analysis	Ankara