Concept Environmental and Social Review Summary

Concept Stage

(ESRS Concept Stage)

Date Prepared/Updated: 10/15/2024 | Report No: ESRSC04527

I. BASIC INFORMATION

A. Basic Operation Data

Operation ID	Product	Operation Acronym	Approval Fiscal Year
P506997	Investment Project Financing (IPF)	TIMPII	2025
Operation Name	Türkiye Second Irrigation Modernization and Water Efficiency Project		
Country/Region Code	Beneficiary country/countries (borrower, recipient)	Region	Practice Area (Lead)
Turkiye	Turkiye	EUROPE AND CENTRAL ASIA	Water
Borrower(s)	Implementing Agency(ies)	Estimated Appraisal Date	Estimated Board Date
Ministry of Treasury and Finance	Directorate General of State Hydraulic Works, Ministry of Agriculture and Forestry.	27-Jan-2025	27-Mar-2025
Estimated Concept Review Date	Total Project Cost		
09-Oct-2024	700,000,000.00		

Proposed Development Objective

The Project Development Objectives (PDOs) are to improve irrigation service delivery and water efficiency in selected irrigation schemes.

B. Is the operation being prepared in a Situation of Urgent Need of Assistance or Capacity Constraints, as per Bank IPF Policy, para. 12?

No

C. Summary Description of Proposed Project Activities

Türkiye has become a water-stressed country and climate change is exacerbating the water stress. Over two thirds of the country's river basins including Istanbul and Ankara face severe water scarcity. Irrigation represents 77 percent of total water use; and almost half of the irrigation water is lost before it reaches the crop fields. According to Türkiye CCDR, a 10 percent reduction in water availability would cost Türkiye 5 percent of GDP, thus around US$50 billion annually. The proposed project, TIMP2, builds on and replicates the ongoing TIMP, with more focus on water efficiency as per the Government's 2023-2033 Water Efficiency Action Plan. It will improve irrigation service delivery and water

conveyance efficiency, through (a) rehabilitation and modernization of distribution infrastructure in selected schemes, and (b) strengthening of capacity of Water User Associations within those schemes.

D. Environmental and Social Overview

D.1 Overview of Environmental and Social Project Settings

Türkiye is located between Asia and Europe, a crossroad of the Balkans, Caucasus, Middle East, and the eastern Mediterranean with an 83 million population and 783,356 km2 area. Located in Eurasia, the country is between the Black, Mediterranean, Marmara, and Aegean Seas, bordering Bulgaria, Greece, Syria, Iraq, Iran, Armenia, and Georgia. Türkiye is an upper-middle-income country, with the world's 19th largest economy with a Gross Domestic Production (GDP) of US$753.7 billion in 2019, according to the Turkish Statistical Institute (TurkStat). Seventy-five percent of its population lives in urban areas, and there are 81 provinces across the country.

Türkiye's geographic and socioeconomic conditions make it particularly vulnerable to climate change – assessed as highly vulnerable in nine out of 10 climate dimensions, compared with the OECD median of 2 out of 10, in the latest Türkiye Country Climate and Development Report (CCDR) (2022). This poses significant risks to Türkiye's water security, with high costs and associated impacts such as extreme flooding and droughts expected to increase in number and intensity. Over two thirds of the country's river basins face severe water scarcity. Irrigation represents 77% of total water use, and almost half of the irrigation water (48%) is lost before it reaches the crop.

The proposed project builds on and replicates the ongoing TIMP in other irrigation schemes distributed over the country, covering total agricultural area of around 100,000 hectares, including: Uluabat Pumping Irrigation, Eskisehir Irrigation, Seyitgazi Irrigation, Inonu Irrigation, Ilgin Pumping Irrigation, Atlanti Irrigation, Aksu Irrigation, Gelendost Irrigation, Sarkikaragac Pumping, Kalealti Irrigation. Additionally, the project will focus on strengthening the capacity of Water User Associations (WUAs) to ensure effective and sustainable water management.

D.2 Overview of Borrower's Institutional Capacity for Managing Environmental and Social Risks and Impacts

The Project will be implemented by a Project Management Unit (PMU) within DSI. DSI has been implementing several projects under the Bank's Safeguards Operational Policies (OPs) as well as the Environmental and Social Framework (ESF) since early 1990s including the Irrigation Rehabilitation Project (P008895), Drainage and On Farm Development Project (P008961), Privatization of Irrigation Project (P009072), Türkiye Irrigation Modernization Project (TIMP) (P158418), Türkiye Resilient Landscape Integration Project - TULIP (P172562) and Türkiye Water Circularity and Efficiency Improvement Project (P174915). Through implementation of these projects as well as its own projects, DSI has developed strong E&S management capacity. It has dedicated environmental and social specialists at headquarter, provincial and district levels. Moreover, DSI has started developing its own Institutional Environmental and Social Management System (I-ESMS). This I-ESMS will include E&S policies, detailed risk management procedure and adequate human resources aligned with the World Bank's ESF. Once developed and operational (expected within one year of this project's effectiveness), the E&S risks assessment and management will be implemented under this ESMS. The ESCP will include provision for adequate E&S specialists to work on E&S risk management of the project until the ESMS is fully functional.

Based on the current selection criteria of the irrigation systems and the relevant upstream dams, Türkiye has reasonable track records with operation and maintenance of the dams similar to project under preparation. Basic dam safety

management practice including surveillance, monitoring, inspection and emergency preparedness etc. is satisfactory; capacity-building programs are welcome by Türkiye government. However, the regulatory framework for dam safety in Türkiye is still weak and needs to be improved. MoAF is considering preparing dam safety management regulations under another WB Project.

II. SCREENING OF POTENTIAL ENVIRONMENTAL AND SOCIAL RISKS AND IMPACTS

A. Environmental and Social Risk Classification (ESRC)

Substantial

A.1 Environmental Risk Rating

Substantial

Environmental risk rating is determined as Substantial. The overall environmental impacts will be positive with improved irrigation service and water conveyance efficiency in selected irrigation schemes. The scale of the modernization under Component 1 is to be medium to large scale. The routine construction impacts are to be relevant to air/noise emissions, waste and soil management, occupational health and safety risks, traffic safety, structural safety of the irrigation scheme structures, and habitat disturbance due to construction. A number of existing upstream dams might be involved by providing water for irrigation systems and/or flood protection for the facilities to be financed under the project. Failure of the existing dams could cause extensive damage to or failure of the irrigation systems and other project facilities and impact on the project-affected downstream communities. The works under Component 2 and 3 are relevant to systems and capacity establishment and , do not pose any adverse environmental impacts. There is no geographical limitation for the project and the sub-project specifics may not be known until appraisal stage. The potential environmental risks and impacts will be mostly relevant to Component 1 activities and be addressed through project scale Environmental and Social Management Framework (ESMF). The sub-projects with adverse impacts on the critical, sensitive habitats and cultural heritage will not be eligible; the exclusion list in the ESMF will screen those out. With the potential dam safety risks the environmental risk is categorized as substantial. The substantial risk rating is determined based on: (i) the sub-projects will not be located in any sensitive areas and those will be ineligible for financing, (ii) the environmental risks and impacts are mostly temporary, reversible, and medium in magnitude, (iii) mitigation measures may be designed relatively readily, (iv) need of support for the Borrower in terms of E&S management.

A.2 Social Risk Rating

Substantial

The social risk rating is classified as Substantial at the concept stage. The Project will finance physical investments such as rrehabilitation and modernization of existing irrigation schemes. The social impacts are expected to be mostly positive. Whilst adverse impacts are expected to be mostly temporary, predictable and/or reversible, it is anticipated that the project will have different levels of impact on project-affected people, including landowners, land users (both formal and informal), agricultural workers (including seasonal migrant workers) and vulnerable groups. The likely social impacts include a) land and livelihoods caused by permanent and temporary land acquisition or easement restrictions; b) impacts on informal users of land; c) labor and working conditions risks; d) community health and safety risks; e) increased sexual exploitation abuse and sexual harassment; f) impacts on cultural heritage and f) risks relating to inadequate stakeholder engagement and grievance management. However, the land acquisition will mainly include temporary or permanent easement of small amounts of land (for irrigation pipelines and distribution points) and no physical and economic displacements are expected.

B. Relevance of Standards and Policies at Concept Stage

B.1 Relevance of Environmental and Social Standards

ESS1 - Assessment and Management of Environmental and Social Risks and Impacts Relevant

Both the environmental and social risks have been rated as "Substantial at the concept stage". The environmental risks are mainly associated with Component 1 including the dam safety risks. There is no geographical limitation for the project and the sub-project specific design and locations may not be known until appraisal stage. The proposed subprojects will be screened against their geographic location and water source for irrigation. In this respect, the potential environmental and social risks will be assessed and managed through a project-level Environmental and Social Management Framework (ESMF) and subsequent sub-project level ESIA and ESMP. The ESMF will lay out the risk screening criteria and methodology for subprojects, provide guidance for ESIA/ESMP and will include relevant standard templates. An Environmental and Social Commitment Plan (ESCP) will also be prepared.

ESS10 - Stakeholder Engagement and Information Disclosure Relevant

Potential direct stakeholders of the project are local communities, seasonal/migrant workers, women, community leaders and refugees. Other stakeholders include public authorities (e.g. AFAD, State Meteorological Services), civil society organizations working on natural resources, ecology and nature protection. DSI will prepare a Stakeholder Engagement Plan (SEP) based on consultations at key ministerial, government agencies, NGOs and community level. The SEP will employ different modalities for engagement with different stakeholders, DSI will hold public consultation meetings (or use other available channels) prior to the project activities to inform these key stakeholders on the project, its impacts and implementation schedule and its grievance mechanism (GM) in order to avoid any negative feedback or misunderstanding from the impacted communities. The SEP, to the satisfaction of the Bank, will be disclosed on DSI's official website and consulted upon prior to project appraisal.

ESS2 - Labor and Working Conditions Relevant

Project workers will include direct workers, contracted workers (e.g. experts, consultants, trainers and contractors' employees and workers), and primary supply workers. Community workers are not anticipated to be engaged in the project. Turkish labor law is comprehensive and mostly consistent with the requirements of ESS 2. National Labor Law includes provisions on non-discrimination, freedom of association, minimum employment age, child and forced labor, OHS, and dispute resolution. Risks related to child/forced labor are not foreseen. Project impacts related to labor and working conditions may include OHS issues and labor influx induced impacts during civil works and worker grievances. A project level Labor Management Procedure (LMP) will be prepared and implemented throughout the project to manage labor related risks and impacts. For the permanent DSI staff working in the, the Civil Servant Law and the OHS measures of LMP will apply. Worker's GRM will be made functional.

ESS3 - Resource Efficiency and Pollution Prevention and Management Relevant

The civil works of the project activities will entail the use of energy, water, and materials such as sand, cement and etc. The potential risks and impacts of sub-project activities include noise, dust and exhaust emissions and the generation of construction wastes and solid wastes and habitat disturbance. In case purchase of any digital

equipment, measures will be taken for e-waste management over the lifecycle of use of this equipment in accordance with national legislation and be detailed in relevant E and S instruments such waste management plans and ESCP. The ESMF will address resource efficiency and pollution prevention and management measures consistent with applicable national regulations, ESS3, WBG's EHS Guidelines, and GIIP, following the ESF's mitigation hierarchy to ensure sustainable use of resources and minimizing adverse impacts on human health and the environment. Risk and impact management and mitigation measures will be elaborated in site-specific instruments.

ESS4 - Community Health and Safety Relevant

The potential risks and impacts on community health and safety (CHS) are traffic and road safety risks, risks of accidents and injuries posed by uncovered or unbarricaded open pits, increased pressure on public services due to influx of construction workers, risk of increased SEA/SH incidents and risks of water/vector-borne and communicable diseases caused by labor influx. The ESMF will assess these risks and impacts including groups that might be vulnerable. To ensure the safety of existing upstream dams and/or DUC, the Borrower will hire independent dam safety expert(s) at a timeline for sufficient to conduct dam safety assessment based on the TOR, to: (i) inspect and evaluate the safety status of the existing dams, (ii) review and evaluate the owners' operation/maintenance procedures; and (iii) provide a written report of findings and recommendations. The potential for financing of the recommendations will be discussed after the assessment is completed.

ESS5 - Land Acquisition, Restrictions on Land Use and Involuntary Resettlement Relevant

This standard is relevant. Potential land-based impacts of the sub projects are minor permanent and temporary land acquisition or easement restrictions affecting agricultural livelihood. The subprojects under Component 1 (Irrigation System Rehabilitation and Modernization) are not yet fully defined,and the details of the land acquisition requirements of these sub-projects are not yet known. A Resettlement Framework (RF) satisfactory to the Bank, will be prepared and disclosed by DSI before Appraisal. Once design is complete, and sub projects are defined, DSI will prepare specific Resettlement Plans for subprojects that will require land. In cases where DSI needs to utilize lands acquired within the last five years, an Ex-Post Social Audit will be conducted to determine if the acquisition was carried out in compliance with ESS 5. In cases of land consolidation, detailed land consolidation report will be prepared and implemented.

ESS6 - Biodiversity Conservation and Sustainable Management of Living Natural Resources Relevant

ESS6 is relevant. Since the project investments will be limited to the modernization and rehabilitation of existing irrigation schemes, they will not impact any designated natural habitats and resources. If there are any cases of (non-designated) natural habitats which overlap with the designated irrigation areas, the project will avoid investments in such areas, and screening criteria will be used to systematically identify such cases. The project activities may take place in rural and peri-urban areas and thus there might be adverse impacts on biodiversity elements due to soil removal and compacting and movement of heavy vehicles (resulting in generation of dust and noise) etc. In the ESMF, there will be specific criteria for site selection that will avoid overlapping of the sub-project locations with sensitive and the sub-projects having adverse impacts on such sensitive habitats will be screened out through the Exclusion list.

ESS7 - Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities — Not Currently Relevant

This standard is not relevant since there are no groups or communities in Turkiye who meet the definition of this standard.

ESS8 - Cultural Heritage — Relevant

ESS8 is relevant. The ESMF will include exclusion criteria to avoid any investments that would adversely affect the cultural heritage sites (both intangible and tangible) and cause temporary and/or permanent access to such sites in accordance with ESS8 and national laws. The ESMF will also include a “Chance Finds Procedure” to be followed duirng the construction.

ESS9 - Financial Intermediaries — Not Currently Relevant

This standard is not relevant since the project will not involve any financial intermediaries.

B.2 Legal Operational Policies that Apply

OP 7.50 Operations on International Waterways	No
OP 7.60 Operations in Disputed Areas	No

B.3 Other Salient Features

Use of Borrower Framework	No
Use of Common Approach	No

C. Overview of Required Environmental and Social Risk Management Activities

C.1 What Borrower environmental and social analyses, instruments, plans and/or frameworks are planned or required by Appraisal?

Preparation, disclosure and consultation on ESMF, LMP, RF and SEP
Preparation and disclosure of the Environmental and Social Commitment Plan (ESCP)
Possible issues to be addressed in the Borrower Environmental and Social Commitment Plan (ESCP):
Development, disclosure and consultation on sub-project specific Bank approved ESA instruments (ESIA reports, ESMPs and RPs) before any bidding documents are disclosed
Inclusion of environmental and social provisions into ToRs of any feasibility or design study to be financed under the Project

Inclusion of relevant environmental and social provisions in bidding documents and ensuring contractors' adherence to the environmental and social instruments
Monitoring and reporting, including incidents and accidents and contractors' monthly reports
Continuous implementation of SEP
Capacity building to enhance the environmental and social performance of the implementing agency on ESF application and ESS compliance.

III. CONTACT POINT

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