Appraisal Environmental and Social Review Summary

Appraisal Stage

(ESRS Appraisal Stage)

Date Prepared/Updated: 04/25/2023 | Report No: ESRSA02756

BASIC INFORMATION

A. Basic Project Data

Country	Region	Project ID	Parent Project ID (if any)
Turkiye	EUROPE AND CENTRAL ASIA	P179345	
Project Name	Türkiye Climate Resilient Forests Project		
Practice Area (Lead)	Financing Instrument	Estimated Appraisal Date	Estimated Board Date
Environment, Natural Resources & the Blue Economy	Investment Project Financing	4/27/2023	6/16/2023
Borrower(s)	Implementing Agency(ies)		
Republic of Türkiye	Directorate General of Forestry (OGM)		

Proposed Development Objective

The Project Development Objective is to strengthen institutional capacity for integrated fire management and to increase resilience of forests and people to wildfires in targeted areas of Türkiye, and to respond promptly and effectively in the event of an Eligible Crisis or Emergency.

Financing (in USD Million)	Amount
Total Project Cost	400.00

B. Is the project 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 [including overview of Country, Sectoral & Institutional Contexts and Relationship to CPF]

The project will support the Government of Türkiye in strengthening resilience against wildfires which are becoming more frequent and severe under climate change. The project seeks to increase institutional capacities for addressing the risk of large damaging wildfires that are on the rise due to demographic, landscape and climate changes. Institutional coordination for managing large wildfires in Türkiye is not fully established as identified during the 2021 forest fires. Other constraints exposed by the 2021 wildfires included the need for increased focus on risk reduction by addressing insufficient fuel management and buffer zone establishment, and the need to increase public

awareness and local capacities for wildfire management. The project will contribute to climate resilient forests using a balanced approach between wildfire suppression and prevention (e.g., fuel management, buffer zones, access roads, together with equipment and technology), improved coordination for wildfires and appropriately skilled workforce capacity, along with restoration and risk reduction interventions that enhance local livelihoods and income generation. The project will apply the 5R principles of Integrated Fire Management (Review and Analysis, Readiness, Risk Reduction, Response, Recovery) as a framework for addressing the institutional, planning, and operational constraints for managing the increasing risk of large wildfires, through a coordinated set of Components aimed at: (i) increasing knowledge and technology on IFM through Review & Analysis; (ii) increasing Readiness for IFM through institutional coordination and capacity building; (iii) scaling-up wildfire Risk Reduction; (iv) strengthening operational systems for Response; and (v) resilient Recovery of landscapes and livelihoods affected by wildfires. These actions are expected to strengthen IFM at the national level and in targeted areas and increase resilience of the forests and rural communities to wildfires. These intermediate outcomes will help reduce Türkiye's vulnerability to forest fires and climate change impacts, conserve and enhance forest carbon stocks, and protect and support the well-being and livelihoods of the rural population. The proposed project is well-aligned with the FY18-21 World Bank country partnership framework (CPF) for Türkiye (Report No. 11096-TR; discussed on August 29, 2017) that was extended through the Program and Learning Review (PLR) (Report No. 14253-TR; discussed on March 12, 2020) to cover the FY22-23 period. The proposed project is particularly well-aligned with the focus area of sustainability, and more specifically the CPF objectives of "increased sustainability of infrastructure assets and natural capital" and "increased sustainability and resilience of cities".

D. Environmental and Social Overview

D.1. Detailed project location(s) and salient physical characteristics relevant to the E&S assessment [geographic, environmental, social]

With an area of 23 million hectares and expanding over the past decades, Türkiye's forests cover about 29.4 percent of the country's landmass. Approximately 12.5 million hectares (or 55 percent) of these forests located along the coastlines of the Mediterranean, Aegean, and Marmara regions and extending up to 160 kilometers inland are at high risk of wildfire. The underlying factors driving their vulnerability to wildfires include the presence of fire-prone species (sixty percent of Türkiye's forests contain species -mainly coniferous- that are sensitive to fires), long-lasting summer droughts that often exceed six months, low relative humidity levels, drying winds, and unfavorable land conditions (80 percent of Türkiye's land is considered rugged). Extensive grazing, agriculture, and intensive timber harvesting have altered Türkiye's landscapes and modified forest fire regimes. Rapid urbanization, modern agribusiness, forest management, and fire suppression dominate the Turkish landscape resulting in a build-up of fine fuels and an increase in forest fire potential. There is a strong spatial overlap between wildfires and socioeconomic vulnerability in Turkiye, with 16,000 villages and 6.2 million people (among the poorest in the country) living in and around forest lands, for which forest resources are an important source of livelihood.

The targeted areas of the project will be the areas of highest priority based on wildfire risk and previously burned areas in need of restoration. Directorate General of Forestry's (OGM) headquarters based in Ankara will have overall management supervision, though implementation will be carried out by the Regional Directorates located in each of the fire sheds based on Integrated Fire Management (IFM) Plans. OGM has initially identified the Regional Directorates of Adana, Antalya, Muğla, İzmir, Balıkesir, Hatay, Çanakkale, Kahramanmaraş and Mersin as priority areas, however, the locations for all the subprojects have not been determined. All of the named regional directorates have forests located along the coastlines of the Mediterranean, Aegean, and Marmara regions and are identified as

"very high risk" in the Forest Fire Risk Map of Türkiye. The underlying factors driving their vulnerability to wildfires include the presence of fire-prone species (sixty percent of Türkiye's forests contain species -mainly coniferous- that are sensitive to fires), long-lasting summer droughts that often exceed six months, low relative humidity levels, drying winds, and unfavorable land conditions. Extensive grazing, agriculture, timber harvesting, and land degradation have also altered Türkiye's landscapes and modified forest fire regimes. Rapid urbanization, modern agribusiness, forest management, and fire suppression presently dominate the Turkish landscape resulting in a build-up of fine fuels and an increase in forest fire potential, which is compounded by climate change. Most wildfires occur in low-altitude forest lands which are typically highly populated areas with rising migration, places with cadastral problems, and popular tourism destinations. Forests and forest fires are at the center of community life, especially in the Mediterranean and Aegean Regions where for example, 68 percent of Muğla and 56 percent of Antalya Provinces are forested.

D. 2. Borrower's Institutional Capacity

OGM will be the sole Implementing Agency of the proposed project. OGM is tasked with the protection and sustainable management of Türkiye's forest resources which are almost entirely (99.9%) owned by the State. It operates through its 21 Departments located in its headquarters in Ankara, 12 Research Institute Directorates, and 28 Regional Directorates of Forestry which oversee 243 Forest Branches and thousands of Forestry Offices spread across the country, with a total of approximately 40,000 staff. The OGM is responsible for dealing with and combating forest fires in the country and has a dedicated Department for Combatting Forest Fires with advanced technological capacities, and has recently (after the 2021 forest fires) established an aviation department. The analysis finds that the legislative systems are over 78% in line with related best practices issued by FAO as per forestry legislation. OGM has gained experience in World Bank ESF policies and procedures as the lead Implementing Agency of the Türkiye Resilient Landscape Integration Project (TULIP, P172562) which became effective in 2021, and previously through the Anatolia and Eastern Anatolia Watershed Projects and has also experience in working with other development partners. It has established adequate preparation arrangements for the project with the assignment by the General Director of a lead Department (Forest Management and Planning), a Project Coordinator (the Head of Department), and a Technical Working Group comprised of the other key Departments that will participate in the project, under the guidance of the Deputy General Director. The Project Implementation Unit (PIU) will be strengthened by hiring dedicated social and environmental specialists in the PIU and hiring or assigning E&S specialists (staff or consultants) to be part of each Regional Directorates (RDs) and also of the implementing agency for each subproject in case they will be different from the RDs.

II. SUMMARY OF ENVIRONMENTAL AND SOCIAL (ES) RISKS AND IMPACTS

A. Environmental and Social Risk Classification (ESRC) — Moderate

Environmental Risk Rating — Moderate

The environmental risk is assessed as Moderate at this stage. The project is expected to generate positive impacts by increasing disaster and climate risk resilience in the forests of Türkiye by promoting biodiversity, reducing soil erosion and landslides and contributing to better air quality. However, during the implementation phase, especially under Components 2.1 and 2.3, there will be environmental risks from activities of minor construction activities such as greenhouses, forest schools, laboratories etc., fuel and forest fire management infrastructure, fuel load management approaches (including community-based) such as silvicultural interventions, grazing, prescribed burning, etc., creating

buffer zones with forest fire-resistant species between forest areas, settlements and agricultural areas, protecting or creating natural openings in forests, , restoration of areas burned by wildfire and other restoration projects, which will be implemented across the country. The potential adverse environmental risks and impacts include: emissions of dust and vehicle exhausts impacting air quality; noise and vibration causing disturbances; generation of waste including hazardous and non-hazardous wastes, excess materials, and other construction wastes in the construction phase; OHS-related risks due to unsafe practices resulting in accidents and injuries, exposure to chemicals including pesticides, noise and vibration,; and influence on ecosystems and habitats, ecological impacts on nearby receptors, biodiversity and rural livelihood resources, impacts on resource utilization (water, energy and raw materials). Those risks will have limited footprints and can be effectively avoided, minimized, or mitigated subject to the establishment of a proper E&S management system within the project. Eventually, these interventions will have a highly positive environmental effect on the project area. However, their design and implementation will require careful consideration of risks related to the identification of areas to be restored/intervened. The Moderate environmental risk rating is justified as these risks are considered predictable and are expected to be temporary and/or reversible given the nature of the activities proposed. The impacts related to the Project are manageable through the application of national laws as well as the use of the Environmental, Health and Safety Guidelines (EHSGs) of the World Bank Group and Good International Industrial Practices (GIIP). Overall, the proposed types of civil works are well known. These risks and impacts are not expected to produce significant or irreversible adverse effects on human health and/or the environment, - they will be minor to moderate, site-specific and temporary. It is also expected that the project will not result in significant adverse cumulative or transboundary impacts. The Borrower has prepared a draft ESMF, Labor Management Plan (LMP) and Stakeholder Engagement Plan (SEP) (including a Grievance Mechanism – GM) as E&S instruments where the environmental and social risks and impacts of the project were assessed throughout the project life cycle so as to meet the requirements of the ESSs in a manner and within a time frame acceptable to the Bank.

Social Risk Rating Moderate

Social risk is rated Moderate. Some project activities could pose community health and safety risks. If the livelihood improvement activities under Component 2 are not well targeted there may also be a risk of unequal access to project benefits for vulnerable groups. Labor risk is low as the activities will be carried out by civil servants, and technical consultants who will be hired in accordance with Bank procurement procedures. The project is expected to require land acquisition or access restrictions on private lands as all activities will take place on public lands.

B. Environment and Social Standards (ESSs) that Apply to the Activities Being Considered

B.1. General Assessment

ESS1 Assessment and Management of Environmental and Social Risks and Impacts

Overview of the relevance of the Standard for the Project:

For Component 1, Sub-component 2.2 and Component 3, the activities will be analytical studies, research activities, training and capacity building activities and provision of equipments. For Component 2.1 and 2.3, the activities are mainly civil-works related which might have adverse environmental and social risks and impacts. The potential adverse environmental risks and impacts could include emissions of dust and vehicle exhausts impacting air quality, equipment maintenance and oil/fuel pollution; noise and vibration causing disturbances; generation of waste; OHS-related risks due to unsafe practices; and influence on ecosystems and habitats. Biodiversity plans within forest

areas—which will be developed within the Proposed Project under Subcomponent 1.1.e. Carrying out studies to increase wildfire and forest resilience)—necessitates biodiversity assessments before the commencement of works under Subcomponent 2.1.b. Fuel load management interventions and Subcomponent 2.2.a. Strengthening the forest fire detection system. Any subproject which will have significant impacts on natural habitats and any activity within critical habitats will be considered as ineligible for financing. The main social risks are largely related to impacts on community health and safety and the possible exclusion of vulnerable groups in consultations and project activities. While a menu of potential project activities and the participating cities are known, the specific sub-projects, footprints and design details are not yet identified. Thus, an Environmental and Social Management Framework (ESMF), which includes risk categorization and environmental and social assessment of project interventions, has been developed and is under review by the Bank. The ESMF establishes a baseline and identifies typical environmental and social risks and impacts, and measures to manage those per the mitigation hierarchy to support the design, construction, and operational phase of the works. The ESMF has been prepared based on the requirements of national laws and regulation, the World Bank's Environmental and Social Framework (ESF) and of EHSGs), and Good International Industrial Practices (GIIP). The ESMF specifies the rules and procedures for the Environmental and Social Assessment of the proposed investments, including guidelines for environmental and social screening, identifying potential impacts, and mitigation and monitoring activities for different types of potential sub-projects.

The ESMF indicates a menu of potential types of sub-projects that will be further determined and detailed based on the Project preparation studies, which will include mechanisms for screening environmental and social risks. This mechanism will ensure consideration of certain aspects of the proposed sub-projects such as site selection and the significance of potential adverse impacts on humans and the environment. Based on the environmental and social screening results and identification of sub-projects, site-specific site-specific E&S assessments or instruments will be prepared, consulted upon and disclosed. The detailed consideration of site-specific risks and impacts will inform and improve subproject interventions to maximize the environmental benefits in the long run. Any activity deemed to be a High risk in the screening will not be eligible for the project financing and excluded from the project scope. Subproject-specific mitigation measures will be an integral part of the bidding packages and will set the environmental and social requirements for contractors and supervision consultants, including for any associated facilities. The sub-project screening study defines the potential environmental and social risks and impacts on which the environmental and social assessment will focus, the methods to be used and the level of effort needed to fully understand the risks and impacts and the options for mitigating them will be identified. E&S instruments that will be used in the Project for the sub-project activities are ESMP, ESMP checklist, other ESF instruments such as OHS plan, waste management plan, and biodiversity action plan which will be identified and prepared by PIU or a consultant company, as needed, after the screening of the sub-projects. Environmental and social supervision and monitoring of the implementation will be carried out by the Regional Directorates of Forestry and PIU, and the supervision consultant if needed. The Project will also support rapid response to future disasters through a funded CERC Component (CERC). A standalone CERC-ESMF will be prepared and disclosed prior to CERC activation and be implemented throughout the CERC component timeframe.

The Environmental and Social Commitment Plan (ESCP) includes requirements to incorporate the relevant aspects of the ESCP, including, inter alia, the relevant E&S instruments, PIU organizational structure, the Labor Management Procedures, and code of conduct, into the Environmental, Social, Health and Safety (ESHS) specifications of the procurement documents and contracts with contractors and supervising firms. ESCP also requires adopting and

implementing an Environmental and Social Management Plan (ESMP), and ESMP Checklists for the sub-projects as set out in the ESMF consistent with the relevant ESSs. Vulnerable groups and high-risk social groups (poor, disabled, children elderly) have been identified during stakeholder mapping, and risks to these groups will be assessed during the conduct of sub-sub-project-specific ESMPs. During project implementation, both Project and World Bank E&S specialists will review TORs and TA outputs to ensure compliance with the ESF, local legislation and GIIP.

ESS10 Stakeholder Engagement and Information Disclosure

The Borrower has prepared a Stakeholder Engagement Plan (SEP) which outlines general principles and a collaborative strategy to identify stakeholders and plan for an engagement process in accordance with ESS10. The SEP preparation process will identify additional direct and indirect stakeholders, particularly at the local level. Key stakeholders include the Disaster and Emergency Management Presidency (AFAD) which leads in preparing for and responding to disasters, including wildfires; the DG of Nature Conservation and National Parks, which is responsible for managing protected areas with large areas of forests; the DG of Meteorology responsible for managing an early warning system issuing 3-day daily fire risk maps; and the DG of Agricultural Reform (TRGM), which leads the implementation of the Strategy for Combatting Agricultural Drought, and coordinates drought surveillance and early warning, among others. In addition to these national institutions, local stakeholders such as governors, municipal and district authorities, forest and rural villages (and their vulnerable population segments such as the elderly) close to the wildfire sites, and the private sector (insurance companies) are also vital stakeholders in forest and wildfire management.

The SEP presents modalities of engagement that are tailored to the needs and characteristics of each stakeholder group. The OGM will ensure that all consultations are inclusive and accessible (both in format and location) and through channels that are suitable in the local context. The SEP will continue to be updated throughout the implementation phase, as needed. If major changes are made to the SEP, a revised SEP will be prepared and publicly disclosed. The SEP includes Grievance Mechanism (GM) procedures to address project-related grievances and suggestions, including a channel for handling sensitive and confidential complaints, such as those related to Sexual Exploitation and Abuse/Sexual Harassment (SEA/SH).

B.2. Specific Risks and Impacts

A brief description of the potential environmental and social risks and impacts relevant to the Project.

ESS2 Labor and Working Conditions

The project will comprise some civil works and various types of project workers. Hence, the ESS2 on Labor and Working Conditions s relevant. Project workers will include: Direct workers including civil servants, contracted workers, and possibly primary supply workers and community workers. The OGM employees who will be assigned to PIU are civil servants. Civil servants involved in project operations, regardless of whether they work full-time or part-time, will continue to work under the terms and conditions of their existing contracts or appointments in the public sector. It is expected that contracted workers will be employees of technical consulting firms and civil works contractors. Should community workers be engaged, the LMP will clarify the terms and conditions of their engagement and ensure that there is no child or forced labor. At this stage where specific sub-projects are not

defined, OGM has prepared Labor Management Procedures, specifying the types of workers in the project. The LMP s based on the Turkish national labor code and relevant international conventions. , The LMP also includes a Code of Conduct for laborers engaged in civil works and sets out the worker's grievance mechanisms for Project workers. OGM will include OHS provisions (such as OHS plan, etc.) in line with the World Bank Group Environment, Health and Safety (EHS) Guidelines in its bidding documents for contractors, including OHS criteria for bid selection.

For civil works under the project, most of the workforce is expected to be local and no significant labor influx is anticipated. The civil works may generate temporary community health and safety risks and impacts, as well as OHS risks among civil works contractors. These risks will be managed by Contractors' Labor Management Procedures, to be prepared before civil works commence. National legislation on the prevention of forced labor is in place and forced labor is not expected under the project.

SEA/SH risks associated with civil works are assessed as low. These will be mitigated by sensitization and training of the project management units and contracted workers on SEA/SH prevention measures, abiding by the ethical behaviors described in the Code of Conduct, and a grievance mechanism adapted to receive SEA/SH complaints.

ESS3 Resource Efficiency and Pollution Prevention and Management

The standard is relevant. During the project resource efficiency and pollution prevention and management measures will be assessed and implemented through the project lifecycle consistent with WBG EHSGs and GIIP. This will involve the sustainable use of resources, minimizing adverse impacts on human health and the environment. The potential risks and impacts associated with sub-project activities during construction and operation phases, including resource utilization and management, noise and dust emissions, wastes & hazardous wastes generation and management have been addressed in the ESMF and will be further elaborated in site-specific ESMP documents, where mitigation hierarchy is adopted and GIIP are followed. Opportunities for energy and resource efficiency will be sought throughout the project preparation and implementation. The site-specific ESMP documents will address WBG EHS General and sector-specific guidelines where appropriate. Resource efficiency and pollution prevention and management measures will be included in the ESMP/ESMP Checklists to be prepared for sub-projects.

ESS4 Community Health and Safety

This standard is relevant. Potential community health and safety risks are associated with Component 2 activities such as air pollution from prescribed burning. These risks are expected to be temporary and reversible, low in magnitude and site-specific which can be easily mitigated through good management practices, will be considered within project ESF instruments which will identify CHS impacts during the construction and operational phases on community health and safety, mitigation measures, monitoring and reporting requirements. The ESMF includes CHS risks and mitigation measures. The site-specific ESMPs or equivalent instruments will include Community Health and Safety Plans as relevant, and an assessment of the risk and impact of the project on the health and safety of the affected communities during the project life cycle, including those who, because of their particular circumstances, may be vulnerable.

The contractors will be required to appoint a focal person who will keep local communities and the relevant stakeholders informed of the project implementation schedule, expected impacts and other issues of interest. The

contracted firms engaged to provide consulting and contractor services will be required to implement the Code of Conduct (CoC) and train their employees on the prohibition of SEA/SH. As a part of stakeholder engagement activities, communities will be made aware of the project CoC and channels in the GMs where they can report SEA/SH cases.

At this stage, no security forces are expected to be utilized for project activities.

ESS5 Land Acquisition, Restrictions on Land Use and Involuntary Resettlement

This standard is currently not relevant as the project is unlikely to require land acquisition, restriction of land use or involuntary resettlement, as project activities will take place on public lands. Should, however, a compelling need for land acquisition arise, Resettlement Action Plans will be prepared.

ESS6 Biodiversity Conservation and Sustainable Management of Living Natural Resources

The standard is relevant because the project activities, to be implemented in a forest environment, might have adverse impacts on biodiversity and rural livelihood resources located within the project area. Such impacts include soil removal, clearance of vegetation and biodiversity loss or fragmentation. The project may also temporarily affect migration patterns, mobility of fauna, nesting and mating season, among other impacts due to the project-related activities in general.

Sites potentially classified as critical habitats according to ESS 6 will be determined by the Borrower once the specific locations for activities are determined. During the screening/scoping of sub-projects, any sub-project which will have significant impacts on natural habitats and any activity within critical habitats will be considered ineligible for financing. ESMF guides the OGM to select sub-project sites by considering nationally and internationally protected areas including Key Biodiversity Areas (KBAs), Important Bird Areas (IBAs), critical habitats, and International Union for Conservation of Nature (IUCN) lists. The studies will also assess the existence of critical habitats, natural habitats, and modified habitats (according to the definitions of ESS6) and the potential risks associated with the proposed activities. Furthermore, the site-specific documents will include an analysis of flora & fauna species, and habitats, and identify any potential biodiversity impacts. Site-specific ESMPs to be prepared will include the identification of modified, critical and natural habitats in the project area, an assessment of any potential risks and impacts from project activities, and measures to avoid or minimize risks and impacts on modified habitats and migration patterns, mobility of fauna, nesting and mating season, etc. Biodiversity plans will be prepared for the forest areas—which will be developed under Subcomponent 1.1.e. Subcomponent 2.1.b. and Subcomponent 2.2.a to consider threats to habitat loss, degradation and fragmentation, pollution and incidental take, etc. The Borrower will implement measures to minimize adverse impacts and restore biodiversity in accordance with the mitigation hierarchy.

ESS7 Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities

This standard is not relevant as there are no indigenous groups in Türkiye who meet the definition of this standard.

ESS8 Cultural Heritage

This standard is relevant as the proposed project activities might generate some adverse impacts on tangible cultural heritage. The ESMF includes a Chance Find Procedure for subprojects that involve excavation or moving of earth. This procedure will be followed in all cases of previously unknown cultural heritage encountered during project activities and will be included in all contracts relating to the construction activities in the project.

ESS9 Financial Intermediaries

No financial intermediaries are expected to be part of project implementation.

C. Legal Operational Policies that Apply

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

B.3. Reliance on Borrower's policy, legal and institutional framework, relevant to the Project risks and impacts

Is this project being prepared for use of Borrower Framework?	No

Areas where "Use of Borrower Framework" is being considered:

None at this stage.

IV. CONTACT POINTS

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Borrower/Client/Recipient

Borrower: Republic of Türkiye

Implementing Agency(ies)

Implementing Agency: Directorate General of Forestry (OGM)

V. FOR MORE INFORMATION CONTACT

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VI. APPROVAL

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